

Empowering local and regional authorities to design clean energy transition plans

Taxonomy of social energy plans, strategies and policies from EU level down to municipal level

September 2024



## **Document Control Page**

Project Title	Empowering local and regional authorities to design clean energy transition plans through Capacity and Knowledge building actions		
Project Acronym	ENTRACK Project Number		101120704
Granting Authority	European Climate, Infrastructure and Environment Executive Agency	Type and Topic of Action	LIFE Project Grants LIFE-2022-CET-LOCAL
Project Start Date	1/11/2023	Project End Date	October 2026
Deliverable Number and Title	D2.1 Taxonomy of social energy plans, strategies and policies from EU level down to municipal level	Version	1.0
Planned Submission date	30/06/2024	Actual Submission date	27/09/2024
Туре	Public	WP	WP2 - Understanding local social energy and stakeholders engagement for social energy co- design
Lead Beneficiary	NOVA	Authors	Carolina Castro (NOVA), Katherine Mahoney (NOVA), Rita Lopes (NOVA), João Pedro Gouveia (NOVA)
		Contributors	Frederica Ragazzo, Virginia Dicuonzo, Luigi Acquaviva, Jeremy Clero, Laia Tarradas Mascarreras, Mercè Almuni Calull, Cristina Ramos Santamaría, Rafael Ceia, Hugo Saldanha, Ana Lacão, Diamantino Conceição,
Dissemination Level	Public (PU)	Peer Reviewer (s)	n/a



# Taxonomy of social energy plans, strategies and policies from EU level down to municipal level

#### Disclaimer

Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Climate, Infrastructure, and Environment executive agency (CINEA). Neither the European Union nor the European Climate, Infrastructure, and Environment executive agency can be held responsible for them.

#### ©Copyright Message

©ENTRACK Consortium, 2023-2026. This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both. Reproduction is authorised provided the source is acknowledged.



## List of Abbreviations and Acronyms

Abbreviation/ Acronym	Meaning			
AUE	Spanish Urban Agenda			
CINEA	European Climate, Infrastructure, and Environment executive agency			
CoP	Community of practise			
EC	European Commission			
EED	Energy Efficiency Directive			
ELPPE	Portuguese National Long-Term Strategy to Combat Energy Poverty			
ELPRE	Portuguese National Long-Term Strategy for the Renovation of Portugal's Buildings			
ENCP	Portuguese National Strategy to Combat Poverty			
ENTRACK	Empowering local and regional authorities to design clean energy transition plans			
EPBD	Energy Performance of Buildings Directive			
ETS2	Updated Emission Trading System			
EU	European Union			
GHG	Greenhouse Gas			
INECP	Spanish Integrated National Energy and Climate Plan			
KPIs	Key performance indicators			
MRP	Municipality Regions partnership			
MS	Member State			
MS50	Greek National Long-Term Strategy			
NASCC	Greek National Adaptation Strategy to Climate Change			
NECP	Greek National Energy and Climate Plan			
NECPs	National Energy and Climate Plans			
NGPH	Portuguese New Generation of Housing Policies			
NLTRS	National Long-Term Renovation Strategy			
NUTS	Nomenclature of Territorial Units			



PAC	Spanish Common Agricultural Policy and the Strategic Plan	
PNACC	Spanish Climate Change Adaptation Plan	
PNACC	Italian Climate Change Adaptation Plan	
PNEC	Portuguese National Energy and Climate Plan	
PNH	Portuguese National Housing Programme	
PNIEC	Italian Integrated National Energy and Climate Plan	
PNIRE	Italian National Plan on Charging Infrastructure	
PNPOT	Portuguese National Spatial Planning Policy Programme	
PNRR	Italian Recovery and Resilience Plan	
PROTA	Regional Spatial Planning Plan	
PRR	Portuguese Recovery and Resilience Plan	
PRTR	Spanish Recovery, Transformation, and Resilience Plan	
RED	Renewable Energy Directive	
RES	Renewable Energy Resources	
SCPs	Social Climate Plans	
SDGs	United Nations' Sustainable Development Goals	
SECAP	Sustainable Energy and Climate Action Plan	
SNSvS	Italian National Strategy for Sustainable Development	
SRSvS	Campania Regional Strategy for Sustainable Development	
SUMPs	Sustainable Urban Mobility Plans	
TJTPs	Territorial Just Transition Plans	
WP	Work Package	



## **ENTRACK** consortium

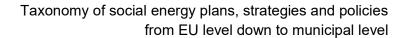
The ENTRACK consortium consists of the following organisations:

#	Role	Short name	Participant organisation name	Country
1	COO	AISFOR	AISFOR SRL	IT
1. 1	AE	RETE	RETE ASSIST- ETS	IT
2	BEN	KILOWATT	KILOWATT SOC COOP	IT
3	BEN	Piano di Sorrento	COMUNE DI PIANO DI SORRENTO	IT
4	BEN	Vico Equense	COMUNE DI VICO EQUENSE	IT
5	BEN	ECOSERVEIS	ASSOCIACIÓ ECOSERVEIS	ES
6	BEN	ASSOCIACIO PER LA GESTIO DEL PROGRAMA LEADER RIPOLLES GES BISAURA	ASSOCIACIO PER LA GESTIO DEL PROGRAMA LEADER RIPOLLES GES BISAURA	ES
7	BEN	NOVA	UNIVERSIDADE NOVA DE LISBOA	PT
8	BEN	AREANATEJO	AREANATEJO- AGÊNCIA REGIONAL DE ENERGIA E AMBIENTE DO NORTE ALENTEJANO E TEJO	PT
9	BEN	MUNICIPALITY OF AVDERA	DIMOS AVDIRON	EL
10	BEN	TOPEIROS	DIMOS TOPEIROU	EL
11	BEN	E3-MODELLING AE	E3-MODELLING AE	EL
12	BEN	IEECP	INSTITUTE FOR EUROPEAN ENERGY AND CLIMATE POLICY STICHTING	EL



## **Table of Contents**

L	IST OF	ABBREVIATIONS AND ACRONYMS	4
•	LIS1	OF FIGURES	9
•	LIS1	OF TABLES	10
E	XECUT	TIVE SUMMARY	11
1	INT	RODUCTION	12
	1.1	The ENTRACK Project	13
	1.2	Intended Readership	14
	1.3	Contribution to other ENTRACK activities	14
2	MET	THODOLOGY	15
3	SOC	CIAL ENERGY POLICY IDENTIFICATION AND MAPPING	20
	3.1	EU policies intersecting the social energy domains	20
	3.1.1.	Mapping and visualisation	21
	3.1.2.	Overview	22
	3.2	Portuguese social energy policies	24
	3.2.1	Mapping and visualisation	25
	3.2.2.	Overview	27
	3.3	Spanish social energy policies	28
	3.3.1	Mapping and visualisation	28
	3.3.2.	Overview	31
	3.4	Italian social energy policies	33
	3.4.1	Mapping and visualisation	33
	3.4.2	Overview	36
	3.5	Greek social energy policies	37
	3.5.1	Mapping and visualisation	37
	3.5.2.	Overview	40
4	POL	ICY INTEGRATION AND ANALYSIS	42
	4.1	Policy structure	42
	4.2	Policy interrelations	43





	4.3	Policy categorisation	44
5	CON	ICLUSION	47
R	EFERE	NCES	49
A	PPEND	DIX 1: TABLE OF EU, NATIONAL, REGIONAL AND MUNICIPAL SOCIAL ENER	≀GY
P	OLICIE	S	51



## List of Figures

FIGURE 2.1 - METHODOLOGICAL FRAMEWORK FOR SOCIAL ENERGY POLICY CATEGORISATION AND MAPPING. 17
FIGURE 3.1 - EU POLICY MAP OF EUROPEAN STRATEGIES, PLANS, REGULATIONS, DIRECTIVES, LEGISLATIVE
PACKAGES, ACTION PROGRAMMES, AGENDAS, FRAMEWORKS, PACTS, INITIATIVES, RECOMMENDATIONS, AND
COMMUNICATIONS, ACROSS SIX SECTORS, INCLUDING INTERNATIONAL, NATIONAL, LOCAL AND AMENDED
POLICIES21
FIGURE 3.2 - PORTUGUESE POLICY MAP OF NATIONAL, REGIONAL (NUTS II AND NUTS III) AND LOCAL
STRATEGIES, PLANS, LAWS, AGENDAS, AND POLICIES ACROSS SIX SECTORS, INCLUDING INTERNATIONAL AND
EUROPEAN POLICIES
FIGURE 3.3 - SPANISH POLICY MAP OF NATIONAL, REGIONAL (NUTS II AND NUTS III) AND LOCAL STRATEGIES,
PLANS, LAWS, AGENDAS, AND POLICIES ACROSS SIX SECTORS, INCLUDING INTERNATIONAL AND EUROPEAN
POLICIES
FIGURE 3.4 - ITALIAN POLICY MAP OF NATIONAL AND REGIONAL (NUTS II AND NUTS III) STRATEGIES, PLANS,
PROGRAMMES, LAWS, AND ACTION PROGRAMMES ACROSS SIX SECTORS, INCLUDING INTERNATIONAL AND
EUROPEAN POLICIES
FIGURE 3.5 - GREEK POLICY MAP OF NATIONAL, REGIONAL (NUTS II) AND LOCAL STRATEGIES, PLANS, LAWS,
FRAMEWORKS, AND ACTION PROGRAMMES, ACROSS SIX SECTORS, INCLUDING INTERNATIONAL AND EUROPEAN
POLICIES40



## List of Tables

Table 2.1 - Map legend key
Table 3.1 - Breakdown of EU policy categorisation and policy interrelations
TABLE 3.2 - Breakdown of Portuguese policy categorisation and policy interrelations25
Table 3.4 - Breakdown of Spanish policy categorisation and policy interrelations
TABLE 3.5 - Breakdown of Italian Policy Categorisation and Policy Interrelations
Table 3.6 - Breakdown of Greek policy categorisation and policy interrelations
TABLE A.1 - EUROPEAN STRATEGIES, PLANS, REGULATIONS, DIRECTIVES, LEGISLATIVE PACKAGES, ACTION
PROGRAMMES, AGENDAS, FRAMEWORKS, PACTS, INITIATIVES, RECOMMENDATIONS, AND COMMUNICATIONS.
EACH ENTRY INCLUDES ITS IDENTIFICATION, A BRIEF DESCRIPTION, GOALS, MANDATORY ACTIONS TO BE TAKEN,
AND INTERACTIONS WITH OTHER POLICIES. REGARDING IMPLEMENTATION, IMPORTANT INTERMEDIATE
OBJECTIVES ARE MARKED WITH AN * (FIRST) OR AN ** (SECOND)
Table A.2 - Portuguese strategies, plans, action plans, action programmes, strategic
PROGRAMMES, ROADMAPS, AND LAWS. EACH ENTRY INCLUDES ITS IDENTIFICATION, BRIEF DESCRIPTION, GOALS,
MANDATORY ACTIONS TO BE TAKEN, INTERACTIONS WITH OTHER POLICIES, DIRECT/INDIRECT IMPACTS ON THE
POPULATION, AND STAKEHOLDERS' INVOLVEMENT IN ITS DEVELOPMENT AND IMPLEMENTATION (WHO AND HOW).
REGARDING IMPLEMENTATION, IMPORTANT INTERMEDIATE OBJECTIVES ARE MARKED WITH AN *
TABLE A.3 - SPANISH STRATEGIES, PLANS, LAWS, AGENDAS, AND POLICIES. EACH ENTRY INCLUDES ITS
IDENTIFICATION, BRIEF DESCRIPTION, GOALS, MANDATORY ACTIONS TO BE TAKEN, INTERACTIONS WITH OTHER
POLICIES, DIRECT/INDIRECT IMPACTS ON THE POPULATION, AND STAKEHOLDERS' INVOLVEMENT IN ITS
DEVELOPMENT AND IMPLEMENTATION (WHO AND HOW). REGARDING IMPLEMENTATION, IMPORTANT
INTERMEDIATE OBJECTIVES ARE MARKED WITH AN *
TABLE A.4 - ITALIAN STRATEGIES, PLANS, PROGRAMMES, LAWS, AND ACTION PROGRAMMES. EACH ENTRY
INCLUDES ITS IDENTIFICATION, BRIEF DESCRIPTION, GOALS, MANDATORY ACTIONS TO BE TAKEN, INTERACTIONS
WITH OTHER POLICIES, DIRECT/INDIRECT IMPACTS ON THE POPULATION, AND STAKEHOLDERS' INVOLVEMENT IN
ITS DEVELOPMENT AND IMPLEMENTATION (WHO AND HOW). REGARDING IMPLEMENTATION, IMPORTANT
INTERMEDIATE OBJECTIVES ARE MARKED WITH AN *
TABLE A.5 - GREEK STRATEGIES, PLANS, LAWS, FRAMEWORKS, AND ACTION PROGRAMMES. EACH ENTRY
INCLUDES ITS IDENTIFICATION, BRIEF DESCRIPTION, GOALS, MANDATORY ACTIONS TO BE TAKEN, INTERACTIONS
WITH OTHER POLICIES, DIRECT/INDIRECT IMPACTS ON THE POPULATION, STAKEHOLDERS' INVOLVEMENT IN ITS
DEVELOPMENT AND IMPLEMENTATION (WHO AND HOW). REGARDING IMPLEMENTATION, IMPORTANT
INTERMEDIATE OBJECTIVES ARE MARKED WITH AN * (FIRST) OR AN ** (SECOND)



## **Executive Summary**

The present document presents a comprehensive taxonomy and analysis of social energy policies from the European Union (EU) level down to the municipal level. As the EU continues to lead global efforts in addressing climate change and promoting sustainable energy, understanding social energy policies' multi-level governance and intricate interconnections is crucial for effective policy implementation and achieving social energy objectives.

This report aims to map the complex social energy policy context in the Southern Mediterranean countries of Portugal, Spain, Italy and Greece, as well as at the EU level. This categorisation exercise reveals the pivotal role of The Paris Agreement and the UN 2030 Sustainability Agenda in shaping the social energy policy context, where in each of the cases studied, the development of social energy policies can be linked to these two foundational international policies. This is noteworthy when considering criticisms of the value of international policy initiatives, demonstrating their seminal influence at the EU and Member State levels.

The specific policy structure of each of the cases varied, where in general, a top-down structure was observed, with limited evidence of local or regional policies influencing national or EU-level policies. This top-down structure reflects only the policies and specific cases included in our analysis and is, to some extent, indicative that international policies or laws will not necessarily refer to local policies, even if they are influenced by them. Nonetheless, the predominance of the top-down structure observed is an important consideration given that local and regional actors generally have closer proximity to citizens and aim to implement a "citizen-led" approach to the green transition in Europe. Policies falling specifically into the social energy policy domain tended to be higher-level policies. Thus, another critical step is to consider the integration of this sector into lower-level policy initiatives.

The analysis also revealed the presence of different types of interrelations between different policies, namely relationships between policies could be "Direct", implying a cause/effect relationship or "Parallel" where policies had related scopes but were not the cause or the result of another policy. Identifying these distinct relationship types between different policies is a novel contribution of this report and represents an important area of future research. Based on these early findings, the results of this report suggest that a high proportion of parallel policies may suggest a comprehensive coverage of a policy issue but may result in duplication and inefficient resource allocation. Alternatively, a strong presence of Direct policies does not necessarily result in less duplication but suggests more intentional policy pathways with a clearly sequential policy structure.

For all the case studies, the most frequently occurring policies were those in the environment and climate change category. This reflects the broad scope of this policy category, which was identifiable at all spatial scales.

With Southern Europe's regions particularly susceptible to climate change, sharing several common social vulnerabilities and significant renewable energy resources, these initial findings are a valuable contribution to ongoing policy discourse and developments in this area. Specifically, a first glimpse into the social energy policy domain is particularly important in the current energy crisis scenario and the unfolding of just and inclusive energy transitions.



#### 1 Introduction

The European Union (EU) has set ambitious targets for reducing greenhouse gas (GHG) emissions, increasing the share of renewable energy, and improving energy efficiency. These objectives necessitate coordinated efforts across multiple governance levels and sectors, and regional and local authorities play an essential position in enforcing their implementation, as they are closer to the citizens and local realities.

This report sets the scene on policy taxonomies relevant to the ENTRACK project (see 1.1) by mapping the complex landscape of social energy policies at different levels of governance (EU, national, regional, and local) for different sectors (directly or indirectly qualified as social energy-related). It also aims to provide a visualisation of the interactions among these levels of governance, illustrating how they interact and depend on each other. Visually representing the transposition of social energy policies from European and national policy to the local levels is essential for informing the co-construction of local plans. Identifying which policy elements have been successfully or unsuccessfully transposed helps to clarify local priorities and challenges. Combining these insights with local expertise of unique social energy characteristics promotes a more just approach to the energy transition, better reflecting the values and realities of the municipalities and regions where the ENTRACK project operates.

For the purpose of this study, the term policy may include instruments, plans, programmes and directives which generally express the intention to achieve a particular outcome or set of outcomes. The approach applied was deliberately flexible to accommodate the most representative policy mapping possible. For example, a directive is a specific legal tool, that can be composed of different policies that aim to achieve its overarching objectives (e.g., the Electricity Market Design Directive is made up of policies related to energy poverty, consumer rights, community energy and *prosumerism*). To facilitate a clear policy visualisation the Directive has been mapped as a standalone policy (as in Figure 3.1).

The results do not provide a fully comprehensive overview of the dynamics of EU social energy policies; rather, they provide a snapshot of the social energy context of each case at the time when the analysis was undertaken and provide an essential foundation for future work exploring this emergent area.

Promoting a just energy transition is a cornerstone of contemporary European policy discourse (Sunderland, 2024). Specifically, the energy transition is tasked with redressing inequalities in the current energy system rather than exacerbating them (EC, 2023). Notably, the delivery of a just transition bridges both the social and the energy policy domains and has implications at different scales. For example, the overarching benefits of tackling climate change (to which the energy system is a significant contributor) include improving citizen health and well-being (Geng *et al.*, 2023). However, at the local and regional levels, short term impacts may arise, like job losses, e.g., in the fossil fuel industry, which presents social challenges (Hanson, 2023). These issues have highlighted the need for greater levels of interaction with those negatively affected by the transition, and with the groups most vulnerable to the effects of climate change. These challenges call for policy co-design activities that are able to incorporate mapping and granular analysis of the policy context (COM/2021/801 final). Thus, the following policy taxonomy and corresponding analysis aim to respond to these calls, providing innovative insights into the realities of Southern Mediterranean social energy policies, through the



mapping of the main policies in place in this area, starting with the EU, and then exploring the cases of Portugal, Italy, Spain and Greece. Analysis of selected pilot areas in these regions is also included.

This document is organised into five chapters and one appendix, starting with an introduction that outlines the study's background, objectives, and scope. The methodology chapter details the research approach, data collection methods, analysis techniques, and tools used. The social energy policy identification and mapping (Chapter 3) examine social energy policies at the EU, Portuguese, Spanish, Italian and Greek levels, consisting of mapping, visualisations, and overviews. Policy integration and analysis focus on interconnections, best practices, and challenges within member states. The document concludes with a summary of key findings, followed by appendices with tables listing the policies studied and a description of their scope.

### 1.1 The ENTRACK Project

ENTRACK is an EU project funded under the LIFE programme for technical support to clean energy transition plans and strategies in municipalities and regions. It aims to accelerate the transition to a climate-neutral society by increasing the energy policy capacities of eight Mediterranean small-medium-sized rural pilot municipalities with a ready-to-use and replicable methodology.

ENTRACK fits into the broader context of decarbonising the energy system, taking into account its social and human dimensions of a just and fair transition. Employing participatory, bottom-up approaches, drawing on inputs from a series of participatory citizen activities and policy actors at the municipal level, will support the design of more just social energy policies. A comprehensive taxonomy of European and national social energy policy landscapes is an integral complementary step for co-designing these policies.

The project supports two local authorities in each of the four Mediterranean countries (Greece, Italy, Portugal, and Spain), situated within rural areas, to co-design social energy policy that responds to the specific needs of citizens, especially those in a vulnerable situation. Throughout the design and implementation of energy transition plans, the municipalities will be supported by modelling tools for impact assessment.

More specifically, ENTRACK-specific objectives are to:

- Increase the capacity of policymakers at the regional and local level through the
  creation and running of Municipality–Region Partnerships (MRPs), the definition of a
  replicable ENTRACK methodology to enable local policy actors to co-design social
  energy policies within the MRP framework, and a ready-to-use policy guidance
  ENTRACK kit with tools to support the effective co-design of social energy strategies.
- Ensure multi-level governance alignment and harmonisation of energy policies, including through this taxonomy of social energy policies operating at different governance levels and an integrated set of activities to support the multi-actor (and multi-governance level) collaboration.
- Contribute to achieving European and national targets regarding sustainable energy, providing policymakers with up-to-date knowledge regarding the design of energy plans, monitoring the impact of the project through selected Key Performance



Indicators related to energy (such as targets on emissions reductions and building renovation rates), and contributing to the establishment of synergies with other topics, such as energy poverty mitigation, renovation of buildings and job creation.

### 1.2 Intended Readership

This document targets a diverse audience, including policymakers, researchers, and stakeholders involved in the energy and social sectors at the EU and at the national, regional, and municipal levels. It aims to provide valuable information for those responsible for developing, implementing and analysing social energy plans, strategies and policies. In addition, it serves as a resource for academic researchers studying multi-level governance and the integration of social energy initiatives. By offering a comprehensive taxonomy and detailed analysis, this document aims to support informed decision-making and promote collaboration among various levels of governance.

#### 1.3 Contribution to other ENTRACK activities

This Taxonomy is the starting point for the design of future policies and the tracking of ongoing policies. It thus relates to ENTRACK's upcoming *Report on the framework of energy plans - barriers and strengths - contributions to a code design process*<sup>1</sup> and the ENTRACK training *Designing social energy policy codes*. On the one hand, the Taxonomy identifies the actors directly involved in or targeted by social energy plans, strategies and policies, which relates directly to the report *Stakeholder matrix and pathways*, which is the basis for deciding on the list of stakeholders to invite and engage to the MRPs and CoPs activities and meetings. On the other hand, the report to be developed on *Stakeholder matrix and pathways of engagement* sets the scene for future interactions with policymakers/other stakeholders to gather more information about ongoing local initiatives/projects/plans/policies and thus feed into the Taxonomy.

<sup>&</sup>lt;sup>1</sup> All published ENTRACK reports can be found on <a href="https://entrack-project.eu/public-deliverables/">https://entrack-project.eu/public-deliverables/</a>



## 2 Methodology

The methodology followed (as shown in Figure 2.1) included a structured approach to collecting, categorising, and mapping social energy policies across four different Member States (MS) and the European Union (EU). Initially, extensive desktop research was conducted to gather relevant data on social energy policies across the MS and EU levels. This foundational step enabled the subsequent identification and categorisation of these policies.

In addition to the desktop research and project partners' expertise (steps 1 and 2 in Figure 1), interviews were conducted with key stakeholders in each MS as part of the ENTRACK Project, which helped to identify regional and local policies that might have been overlooked in broader analyses. Once identified, the policies were categorised based on seventeen criteria, which are listed below.

- Policies (policy name)
- Document number
- Type (policy, strategy, plan, law, action programme, funding programme, agenda, roadmap)
- Sector (e.g. energy, environment and climate change, social, transport)
- Target area(s) (e.g. buildings/energy poverty/energy efficiency/housing/mobility)
- Brief description
- Goals
- Key performance indicators (KPIs)
- Mandatory actions to be taken
- Responsible for taking action
- Budget allocated
- Interaction with other policies
- Direct/Indirect impacts on the population
- Date of approval
- Date of revision
- Timeline of implementation (including intermediate targets)
- Link (website details)

Excel datasheets were the primary tool to structure and analyse the categorisation data, ensuring the information was organised and accessible for further analysis. It should be noted that the policy categorisation process employed was considered appropriate for meeting the aims of this particular study. In general, however, attributing policies to a specific sector is complex, where policies with a broad scope and a series of goals may bridge several sectors. For instance, given its wide scope, all policies contributing to the economic sector and emissions reductions (such as REPowerEU) could arguably be placed within the sustainable development category. In this instance, the policy categorisation process retained a tight focus on the policies' underlying aims. It involved at least one round of verification within the project partner team.

The next step (step 4) involved the preliminary mapping of social energy policies and their interrelationships. This process illustrated the connections and overlaps between policies across different sectors and governance levels, visually representing the policy landscape. Excel and the Kumu software were used in tandem for this task, with each tool playing a vital role in visualising and mapping the data. The Kumu software was considered an appropriate



tool because it can organise complex data into clear relationship maps. In this instance, systems maps were used to depict the intricate social energy system in the European context, which is multi-scalar and multi-sectoral<sup>2</sup>. The symbol, label and description of each entry in the map legends are shown in Table 2.1.

As the research progressed, the policy categorisation underwent several iterations and refinement (step 5). For example, funding programs, as they were not, in fact, policies, were eliminated from the analysis but kept in the body of the text. This iterative process involved revising the initial categorisation to better reflect the complexities and interdependencies of the policies.

The final step (step 5) was the creation of detailed maps that visually represented the social energy policies. These maps, generated using the Kumu software, highlighted the refined categorisations and interrelationships, offering a clear and comprehensive overview of the policy landscape. Throughout the process, Excel and the Kumu software were utilised extensively, with iterative feedback between the two tools ensuring that the complexity of the policies was captured accurately.

-

<sup>&</sup>lt;sup>2</sup> https://kumu.io/



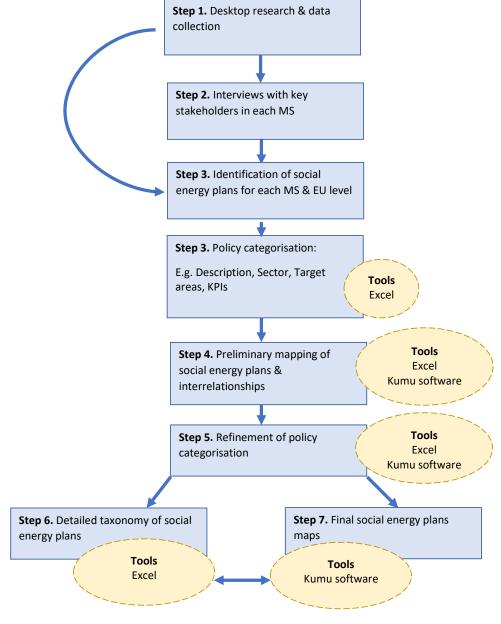


Figure 2.1 - Methodological framework for social energy policy categorisation and mapping.

Table 2.1 - Map legend key.

Legend symbol	Legend label	Summary legend description
	Direct connection	Used to describe policies with a direct cause/effect relationship.
	Parallel policy	Used to describe complementary policies with related goals, objective and scope but which are not obviously the cause or effect of one another.
	International	International scale policies, e.g., Paris Agreement.



•	EU	European scale policies, e.g., European Green Deal.	
	National	Policies applying at the national scale.	
	NUTS II	Nomenclature of Territorial Units (NUTS) for Statistics developed by Eurostat and employed across the EU; NUTS II refers to basic regions applying for regional policies.	
	NUTS III	Nomenclature of Territorial Units (NUTS) for Statistics developed by Eurostat and employed across the EU; NUTS III refers to policies applying in small regions.	
•	Local	Policies applying at the local scale.	
	Sustainable development	Policies identifying sustainable development and related content as their main scope.	
	Economy & territorial cohesion	Policies identifying economic and territorial issues as their main scope, e.g., themes such as economic growth and agriculture.	
	Environment & climate change	Policies identifying themes of environment and climate change as their main scope, e.g., emissions reductions targets.	
	Energy	Policies identifying energy change as their main scope, e.g., increasing incorporation of renewables in the energy profile.	
	Social	Policies identifying social issues as their main scope, e.g., employment gains and losses occurring as a result of the energy transition.	
	Social/Energy	Policies identifying issues at the crux of the social and energy policy domains as their main scope, e.g., energy poverty.	
	Transport	Policies identifying transportation as their main scope, e.g., sustainable mobility.	
	Amended	Policies which have been amended following revisions, e.g., electricity directives.	



During the analysis, it became clear that two distinct relationship types existed between the policies; these were categorised as "direct connections" or "parallel policies". The distinction between these relationship types is differentiated by the two arrow types shown in the legend of each map. Direct connection arrows represent policies with a clear "cause/effect" relationship. This cause/effect relationship may occur through policy transposition, inclusion in a policy package, or alignment of main objectives with a preceding policy at a higher or equivalent governance level. For example, under the Governance Regulation, EU Member States must develop integrated National Energy and Climate Plans (NECPs) and National Long-Term Renovation Strategies (NLTRS). Therefore, direct arrows connect the Governance Regulation with each country's NECPs and NLTRS.

Parallel connection arrows link indirectly related policies, often through their implementation phases or during revisions. These relationships can be unidirectional—where one policy influences another without reciprocal influence—or bidirectional—where two policies mutually influence each other. For instance, the unidirectional connection between the Catalan Strategy for Adapting to Climate Change and Gombrèn's Sustainable Energy and Climate Action Plan (SECAP) reflects how regional strategies influence local action plans. In contrast, the Spanish Just Transition Strategy and the Spanish National Strategy Against Energy Poverty are bidirectionally connected, as both are implemented under the same overarching framework, the Strategic Framework for Energy and Climate.

The maps also detail levels of governance at the various international, European, national, NUTS II, NUTS III, and local scales. NUTS refers to the nomenclature of territorial units for statistics, with NUTS II describing basic regions and NUTS III describing small regions (EUROSTAT, 2024a). Since different sectors are part of and influence social energy policies, they are categorised as sustainable development, economy and territorial cohesion, environment and climate change, energy, social, social/energy, and transport. Some national specificities and differences are also reflected within each sector.

The broader European policy map focuses primarily on international to local levels, omitting regional levels (NUTS II and NUTS III), which are included in national maps to emphasise the interconnections between national, regional, and local policies.

Finally, the sector categorisation process was based on identifying relevant European and national policies that contribute to or are impacted by the just energy transition, energy poverty, and the principle of "leaving no one behind." This includes policies bridging the energy and social sectors, collectively called the social/energy sector. The European Union's commitment to a fair and inclusive future, as outlined in the EU Green Deal and the European Pillar of Social Rights, underscores the importance of integrating social and environmental policies to ensure that the transition to sustainability is equitable and benefits all segments of society.



## 3 Social energy policy identification and mapping

The following sections present the results of analysing the social energy policies at the European scale and in the Southern Mediterranean countries included in this study; each subsection includes a corresponding social energy policy map. Firstly, the results of the European analysis are presented, providing an overview of the overarching policy framework guiding social energy policies in each Member State. Subsequently, the social energy policy maps for each of the Southern Mediterranean case studies are presented, outlining the unique policy structure of each case.

These sections also detail the breakdown of the number of policies, the relevant policy categories, the number of policy interconnections and the corresponding split between Directed and Parallel policies. It is important to note that a high or low number of policies and interrelations is not definitively positive or negative; rather, these comparisons generate insights into each case's social energy governance structure, which are built upon to develop the analysis sections.

### **3.1** EU policies intersecting the social energy domains

Energy production and consumption significantly contribute to GHG emissions in Europe, with the ratio of fossil fuels available in the gross energy supply at 70.9% (EUROSTAT, 2024b). In 2022, the share of renewables in gross final energy consumption was 23%, representing a 1.1% increase from 2021 (EUROSTAT, 2023a). The share of renewables in energy consumption in 2022 was 23%; the increase of renewables in the energy consumption profile has been growing steadily over the last 20 years, and the current target aims to increase this share to 32% by 2030. In 2023, renewable energy was the main source of electricity in the EU, accounting for 44.7% of all electricity production (EUROSTAT, 2024b).

Despite these encouraging shifts in the right direction, there is still some way to go to achieve the deep decarbonisation of the energy system necessary to reach carbon neutrality goals. Key challenges include the required 9% increase in the share of renewables in energy consumption in the next six years (where between 2013-2022, the share of renewables in energy consumption increased by only 6.3%) (EUROSTAT, 2024c). Additionally, increased shares of renewables in energy consumption are comparatively reduced in southern Mediterranean countries, with only Portugal breaking into the top ten countries with the highest share in the EU (ranking sixth), Greece ranking twelfth, Spain thirteenth and Italy seventeenth of the EU 27. There are also significant gaps between the share in the leading country (Sweden), with a 66% share of renewables in energy consumption, with Portugal at 34.7%, Greece at 22.7%, Spain at 22.1%, and Italy at 19.1% (EUROSTAT, 2024c). These gaps are an important reflection when considering established links between economic prosperity and uptake of renewable energy (IEA, 2024) and economic instability in the southern Mediterranean. Specifically, this region was severely affected by the eurozone crisis, reductions in tourism during the COVID pandemic and is currently struggling through the energy crisis (Morillas et al., 2022; Sorgi, 2024).

In light of these challenges, the EU has established multiple policies integrating various sectors, such as the social and energy sectors, ensuring that the transition to a low-carbon economy is inclusive and equitable. Section 3. maps out these policies in each studied country,



which is crucial for understanding their complex interactions, as described further in the overview of section 3.1.2.

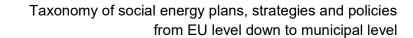
### 3.1.1. Mapping and visualisation

The EU policy map, represented by Figure 3.1, provides a comprehensive visual representation of forty interconnected policies, highlighting the strategies, plans, and regulations that guide the EU towards a sustainable, inclusive, and resilient future. Table A.1 of Appendix 1 summarises each policy, providing a brief description, an overview of its primary goals, and mandatory actions (including legally binding actions). The Table also details the interconnections of each policy, listing linked policies in each case. Table 3.1 provides the breakdown of the number of policies per category and the relationship types. The Table shows that most policies fall into either the environment and climate change or the energy policy categories at fourteen and fifteen policies, respectively. The high presence of the policy category is noteworthy and indicates energy's crucial role in achieving European climate change mitigation goals. The presence of the policy categories of sustainable development, economy and territorial cohesion, social and social/energy is comparatively reduced. However, as already stated in previous sections, the naming and allocation of categories was guided by research team expertise and was specific to the aims of this study. Additionally, there are some policies that could fall into more than one category, which affects the number of policies per category shown in Table 3.1.

Table 3.1 also shows that direct policy connections far outnumber parallel policies. This reveals a top-down sequential structure to the EU policies included in this study; this observation is substantiated in the map, which shows the pathways of these policies emerging from the Paris Agreement and the UN 2020 Sustainability Agenda. Finally, the EU map shows policies at the international, EU and national scales, which is consistent with the focus of the analysis in this instance, i.e., to map policies relevant to the social energy domain at the EU level.

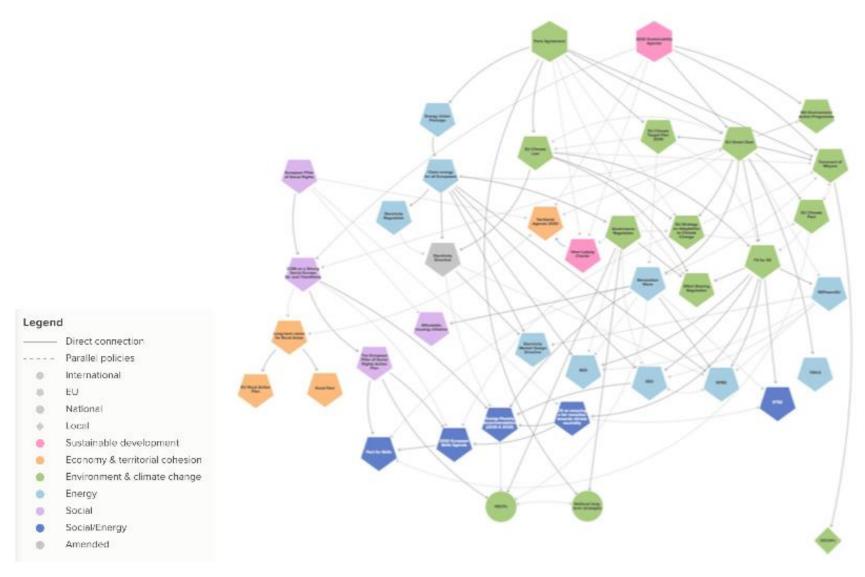
**Table 3.1 -** Breakdown of EU policy categorisation and policy interrelations.

Policy category	Category name	Number of policies
	Sustainable	
	development	2
	Energy	10
	Environment &	
	climate change	14
	Social/Energy	5
	Transport	0
	Economy & territorial	
	cohesion	4
	Social	4
	Amended	1
	Total number of policies	40
Relationship type	Parallel policies	32





Direct of	connection		55
Total	number	of	87
relationships			



**Figure 3.1 -** EU policy map of European strategies, plans, regulations, directives, legislative packages, action programmes, agendas, frameworks, pacts, initiatives, recommendations, and communications, across six sectors, including international, national, local and amended policies.

#### 3.1.2. Overview

The EU policy map (Figure 3.1) provides a comprehensive visual representation of forty identified European interconnected policies, such as strategies, plans and regulations, that guide the European Union towards a sustainable, inclusive, and resilient future. It also encompasses important interrelated international, national, local and amended policies. This intricate network underscores the efforts across various sectors such as energy, social policy, environment and climate change, and sustainable development. It highlights how these policies work together to achieve common goals, including the just transition: ensuring that no one is left behind in the transition to a sustainable and resilient future.

Critically, this diversity of policies represents the range of sectors that are potentially relevant at the local scale. Local actors are identified as integral contributors to co-designed social energy policies in pivotal European decarbonisation policies such as the REPowerEU plan and the European Green Deal (COM/2019/640 final). Local actors and policies are seen as particularly important in issues such as overcoming barriers to renovation (COM/2019/640 final), the design of tailor-made energy-saving measures (COM/2022/230 final) and supporting the development of new skills in the "green jobs" employment sector (COM/2020/662 final).

The origins of all these EU policies can be traced to two key international policies: the United Nations' 2030 Agenda for Sustainable Development and the 2015 Paris Agreement. These policies demonstrate their critical influence on European policy developments and emphasise the EU's commitment to international sustainability and climate action.

In 2015, the EU launched the Energy Union Package, marking a significant step towards creating an integrated and secure energy market across the continent. This package emphasizes the importance of diversifying energy sources, suppliers, and routes and transmission systems, and promotes energy efficiency and a transition to a low-carbon economy. It directly connects with the "Clean energy for all Europeans" package and the Paris Agreement, which set the foundation for many of the EU's subsequent climate policies.

The EU Green Deal (henceforth: Green Deal) serves as the overarching framework, integrating various policies such as the 2030 Climate Target Plan, the European Climate Pact, the Renovation Wave, and the Covenant of Mayors. The Covenant of Mayors predates the Green Deal, and the main links between them are commitments to meeting or exceeding EU targets (thus, a Parallel relationship is shown in the map in this instance, depicting the complementary nature of these policies). The Covenant of Mayors is an important contributor to many local policies, a relationship which is reflected in the maps in the following sections.

Central to the Green Deal is the commitment to fulfilling the objectives of the Paris Agreement and implementing the United Nations' 2030 Agenda for Sustainable Development. The Green Deal sets the goal for Europe's economy and society to become climate-neutral by 2050, with comprehensive action across various sectors necessary to achieve this aim. This goal was written into law by the Regulation (EU) 2021/1119 (henceforth: EU Climate Law), which also introduced new legal obligations for Member States related to the 2030 Climate Target Plan: the increase of the 2030 GHG emissions reduction target from 40% to 55% compared to 1990 levels.

Furthermore, the related Fit for 55 package, a key component of the Green Deal, comprises a set of legislative adaptations covering wide-ranging policy areas (including renewable energy and building energy performance) such as the updated ETS (ETS2), the EPBD, the RED, and



the EED. During the development of these directives and regulations, the COVID crisis arose, followed by the war in Ukraine. The final version of the directives was the REPowerEU Plan, aiming to rapidly and completely phase out dependency on Russian fossil fuels through energy efficiency, diversification of supply and an acceleration of the energy transition. The REPowerEU plan came complete with financing tools from the Recovery and Resilience Facility, which provides, amongst other measures, funds that can be dedicated to the energy transition. REPowerEU also sets an objective to have a national energy and climate plan for each Member State. The "Clean energy for all Europeans" package included the revision of three of these directives, as well as: the Electricity Regulation, which has an article on the just transition; and the Electricity Market Design Directive, which mandates that Member States ensure that vulnerable households and those affected by energy poverty are protected from electricity disconnections.

To achieve the desired target of reducing emissions by at least 55% by 2030, the EU must reduce GHG emissions from buildings by 60%, implying a 14% reduction in building energy consumption and a reduction of 18% of the energy used for heating and cooling. To this end, the Renovation Wave strategy, another key component of the Green Deal, aims to double the current renovation rate, directly influencing the revision of the EPBD and the EC Recommendations on Energy Poverty. The strategy also includes an Affordable Housing Initiative for 100 districts, which ensures that social housing benefits from energy-efficiency renovations, linking with the European Pillar of Social Rights (EC, 2024).

The EU social policies and the concept of a just transition are central to the European Pillar of Social Rights, which focuses on social equity, labour market access, and fair working conditions. This framework interacts with the Territorial Agenda 2030, Energy Poverty Recommendations, Affordable Housing Initiative, and the Council Recommendation on ensuring a fair transition towards climate neutrality. These connections ensure that social policies support the green transition and address energy poverty, highlighting the importance of inclusive growth.

The EU's commitment to a just transition is a key theme linking energy and social policies, ensuring the shift to a low-carbon economy is inclusive and equitable. The Green Deal acknowledges that there is the need for a socially just transition, which must be reflected in policies at the EU and national levels, and the European Pillar of Social Rights (henceforth: Pillar) emphasises fair working conditions, social protection, and inclusion. The EC Communication on a Strong Social Europe for Just Transitions set out on the road towards an Action Plan to implement the Pillar. The Action Plan, as the Council Recommendation on ensuring a fair transition towards climate neutrality from the Fit for 55, relates to the Pact for Skills and the 2020 European Skills Agenda, which focus on the importance of upskilling and reskilling the workforce for the green economy. These initiatives ensure that workers are prepared for new job opportunities by providing training and lifelong learning opportunities, helping workers adapt to changes in the labour market and supporting a fair transition. Additionally, the Energy Poverty Recommendations address energy poverty by reducing the energy burden on low-income households, relating to the EED, the EC Communication on a Strong Social Europe for Just Transitions, and the Council Recommendation on ensuring a fair transition towards climate neutrality. These initiatives tackle important contemporary challenges pertaining to so-called "winners" and "losers" in the energy transition where often those with lower incomes, lower education levels and those closer to retirement age are those considered more likely to be disadvantaged by the energy transition (Gambhir et al., 2018; SETIS, 2018; Hanson, 2023).



Economic and territorial cohesion is promoted through the Territorial Agenda 2030, which seeks to reduce disparities across the EU by promoting balanced regional development. The implementation of this agenda is connected with the implementation of the Long-term Vision for Rural Areas, aiming to empower rural communities, improve connectivity, and enhance resilience. It includes the Rural Pact and the EU Rural Action Plan. The Long-term Vision was referred to as an initiative in the EC Communication on a Strong Social Europe for Just Transitions, aligning with broader EU strategies like the Green Deal and the European Pillar of Social Rights by ensuring that rural areas contribute to and benefit from the green transition.

Key regulatory and monitoring frameworks like the Governance Regulation set common rules for planning, reporting, and monitoring EU climate and energy policies. This regulation is part of the "Clean energy for all Europeans" package, introduces the National Energy and Climate Plans (NECPs), and interacts with the Effort Sharing Regulation and the New Leipzig Charter, ensuring coordinated and transparent progress towards climate goals. The Effort Sharing Regulation establishes national emissions reduction targets, supports the Fit for 55 package and the EU Climate Law, and promotes a fair distribution of efforts among Member States.

At national and local scales, various plans and strategies interact to advance the EU's sustainability and climate goals. Under the Governance Regulation, EU countries were required to develop integrated NECPs and National Long-Term Strategies, which must be updated to reflect increased ambition and ensure consistency between them. At the municipal and local level, the non-mandatory Sustainable Energy and Climate Action Plans (SECAPs), developed under the Covenant of Mayors, address specific community needs regarding climate change mitigation, adaptation and energy poverty. The alignment between the NECPs and the SECAPs is essential for coherent national and local climate action.

Moreover, the Social Climate Plans (SCPs) and Territorial Just Transition Plans (TJTPs), backed by the Social Climate Fund (established by the ETS2) and the Just Transition Fund (a component of the NextGenerationEU initiative), should also be aligned with the NECPs. The Social Climate Fund supports vulnerable households and micro-enterprises and transports users through income support and investments in energy efficiency and decarbonisation, with plans due by June 2025. The Just Transition Fund aims to ensure no one is left behind during the transition, aiding workers and communities impacted by the closure of carbon-intensive industries. TJTPs must be aligned with the objectives of the European Green Deal and integrated into national strategies like the NECPs, identify affected territories, and outline actions to achieve EU 2030 and 2050 climate goals, involving municipalities and cities in the process.

The EU policy map highlights a complex network of policies aimed at fostering a sustainable, inclusive, and resilient European Union. By ensuring that energy, social, economic, and environmental policies are interconnected, the EU can promote a cohesive approach to achieving its ambitious climate and sustainability goals. This integrated framework enables collaborative efforts across all levels of governance, sectors, and communities, driving the transition towards a greener, cleaner and more equitable future for all Europeans.

## **3.2** Portuguese social energy policies

Section 3.2.1 maps out the Portuguese policies, essential for visualising their complex interactions, as further explained in the overview provided in section 3.2.2.



### 3.2.1 Mapping and visualisation

Figure 3.2 represents the Portuguese policy map, offering a comprehensive visualisation of forty-two interconnected strategies, plans, action plans, action programmes, strategic programmes, roadmaps, and laws that steer the country towards a sustainable, just, and climate-resilient future. The brief description, goals, mandatory actions to be taken, interactions with other policies, direct/Indirect impacts on the population, and stakeholders' involvement in the development and implementation (who and how) of each one of these policies are outlined in Table A.2 of Appendix 1. Table 3.2 provides the breakdown of the number of policies per category and the relationship types shown in the map. The Portuguese map is consistent with the EU map in that the policy pathways are traceable to the UN 2030 Sustainability Agenda and the Paris Agreement. In the Portuguese case, the highest number of policies appear in the environment and climate change sector (fifteen policies), with a relatively high representation of policies in the economy and territorial cohesion (eight policies) and energy categories (eight policies). Portugal has a higher number of energy policies compared to the other countries. In the Portuguese case, this relatively high presence of energy policies is consistent with the country's rapid uptake of renewable energy (Eurostat, 2023). These policies are generally detectable at the national or EU policy level, although the map shows two NUTS II and one NUTS III level energy policies.

The relatively high number of policies in the economy and territorial cohesion is potentially significant in the Portuguese case, where purchasing power is concentrated in the urban centres of Porto and Lisbon (IEFP, 2017). The Portuguese map shows only one social energy policy, the National Strategy for the Combat of Energy Poverty. This appears at the national level. However, there are a series of social policies detectable at both the national and the local levels, and there are no identified social policies at the regional levels.

The Portuguese map shows an almost even split between directed and parallel policies. Generally, the parallel relationships occur between national policies both across and within the energy and environment and climate change category. Parallel relationships are visible between the economy and territorial cohesion category and the environment and climate change category. There are also parallel "intra" relations between the economy and territorial cohesion policy category at the regional (NUTS II and NUTS III levels). Direct policy links show connections from the international level through to the local level, with the UN 2030 Sustainability Agenda directly linking to local social policies, including housing strategies.

**Table 3.2 -** Breakdown of Portuguese policy categorisation and policy interrelations.

Policy category	Category name	Number of policies
	Sustainable development	1
	Energy	8
	Environment & climate change	15
	Social/Energy	1
	Transport	1
	Economy & territorial cohesion	8
	Social	7



	Amended	1
	Total number of policies	42
Relationship	Parallel policies	46
type	Direct connection	48
	Total number of relationships	93

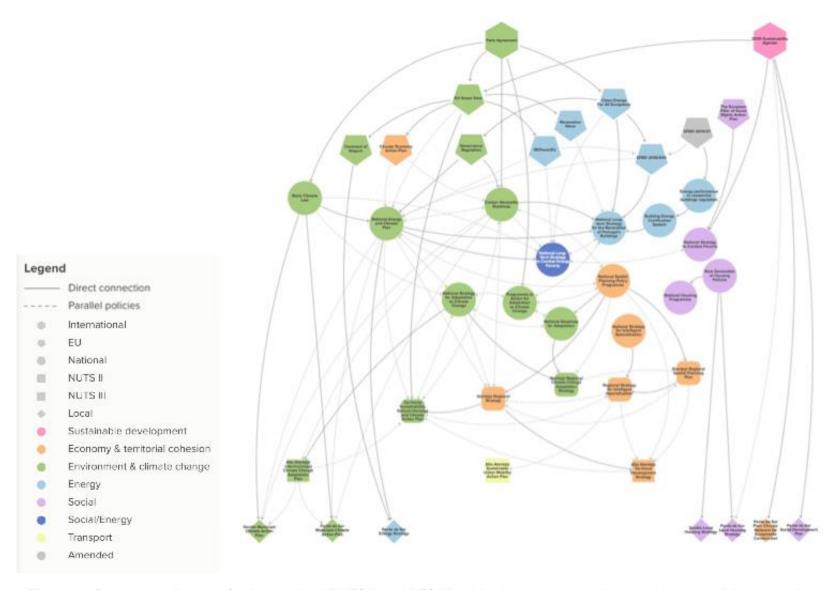


Figure 3.2 - Portuguese policy map of national, regional (NUTS II and NUTS III) and local strategies, plans, laws, agendas, and policies across six sectors, including international and European policies.

#### 3.2.2.Overview

Portugal's approach to climate action and sustainability is defined by a cohesive network of national, regional, and local strategies aligning with EU directives and policies while addressing the country's priorities. The environment and climate change sector stands out with fifteen policies, including the Basic Climate Law, the Carbon Neutrality Roadmap, the National Strategy for Adaptation to Climate Change, and the National Energy and Climate Plan (PNEC). These policies establish a robust legislative and strategic framework for decarbonisation and climate adaptation, aiming to achieve carbon neutrality by 2045 (this target was initially set for 2050), in line with the guidelines set out in the Basic Climate Law, which is present in the revised PNEC and Carbon Neutrality Roadmap. They integrate climate resilience across various sectors, including energy, agriculture, and adaptation to climate change. The Basic Climate Law serves as a foundational legal framework for climate governance, setting national targets and requiring local and regional climate action plans, such as those in Gavião and Ponte de Sor, to align with this sector's national and regional policies.

The energy sector features eight policies which highlight Portugal's focus on energy efficiency and renovation of buildings, such as the National Long-Term Strategy for the Renovation of Portugal's Buildings (ELPRE), which is related to three environment and climate change policies and the National Long-Term Strategy to Combat Energy Poverty (ELPPE), which linked to the social/energy sector. The alignment of energy efficiency policies with housing renovation strategies (ELPRE) strengthens the effort to combat energy poverty while also improving housing conditions. Despite the strong national focus, there is no regional integration of energy or social energy policies, and there is only one local energy strategy (Ponte de Sor Energy Strategy, with no relation to national energy policies).

One of the most significant strengths of the Portuguese policy map is the strong interconnectedness between strategies that tackle energy poverty, building renovation, and social welfare. The ELPPE is closely linked with the ELPRE and the National Strategy to Combat Poverty (ENCP), linking efforts to reduce energy poverty with enhancing housing conditions and contributions to social inclusion. As they are closely interlinked, these strategies should be related to the Social and housing policies of the National Housing Programme (PNH) and the New Generation of Housing Policies (NGPH), which focus on affordable, energy-efficient housing and better living conditions for low-income families.

The economy and territorial cohesion sector includes eleven policies, emphasising the importance of spatial planning, urban development, and regional economic growth. Key policies include the National Spatial Planning Policy Programme (PNPOT) and regional strategies such as the Alentejo Regional Spatial Planning Plan (PROTA) and the Alentejo Regional Strategy.

To leverage EU funding for economic recovery and sustainable development, Portugal has developed the Plano de Recuperação e Resiliência (PRR), its Recovery and Resilience Plan. This plan integrates climate resilience measures alongside investments in digitalisation, the green energy transition, and social infrastructure, supported by the EU's Recovery and Resilience Facility (RRF). The PRR also led to the creation of two funding streams focused on home energy efficiency improvements. The first, "Edifícios Mais Sustentáveis" or "More Sustainable Buildings", reimburses homeowners for part of the cost of renovation measures post-installation. The second, the "Vale Eficiência" or "Efficiency Voucher", initially provides homeowners with a voucher of €1300 + VAT to fund renovation works in their homes



(Recuperar Portugal, 2023). Both programmes have seen updates in follow-up versions launched in mid-late 2023, with revised eligibility criteria or increased budget per family for the scheme targeting the energy poor. Notably, the PRR is linked with the European Just Transition Fund, which is a political response to inequalities arising from energy transitions (European Council of the European Union, 2024). This indicates a vital example of a social policy arising from the EU's chosen energy policy trajectory and the interdependent nature of these two policy domains.

In response to the social impacts of climate policies, Portugal is developing its Social Climate Plan and Territorial Just Transition Plan. These plans aim to mitigate inequalities and support vulnerable communities affected by the green transition, ensuring that economic opportunities and social protections are integrated into climate action initiatives.

Despite the overall strength of intersectoral policy linkages, certain areas remain underdeveloped, particularly at the regional and local levels. While national policies exhibit strong connections, there is a lack of direct linkages between national and local policies. Moreover, specific categories, such as social/energy, are underrepresented, which may hinder the comprehensive addressing of energy poverty across all regions. Additionally, agriculture policy, important in the interface between environment and climate change and economy and territorial cohesion sectors, could have been considered, although agriculture is covered within broader frameworks such as the Carbon Neutrality Roadmap, the National Strategy for Adaptation to Climate Change, and the PNPOT,

In summary, Portugal's policy framework showcases a strong commitment to addressing climate, energy, and social challenges through interconnected strategies. Its strengths lie in its comprehensive approach to decarbonisation, climate adaptation, energy efficiency, and social inclusion. To ensure a more equitable energy transition, regional and local policy integration and targeted measures remain crucial for delivering the full benefits of these strategies across the country.

## 3.3 Spanish social energy policies

Section 3.3.1 maps out the Spanish policies, essential for visualising their complex interactions, as further explained in the overview provided in section 3.3.2.

## 3.3.1 Mapping and visualisation

Figure 3.3 represents the Spanish policy map, offering a comprehensive visualisation of twenty-seven identified interconnected strategies, plans, laws, agendas, and policies that steer the country towards a sustainable, just, and climate-resilient future. Table A.3 of Appendix 1 outlines the brief description, goals, mandatory actions to be taken, interactions with other policies, direct and indirect impacts on the population, and stakeholders' involvement in the development and implementation (who and how) of each one of these policies.

Table 3.3 shows the number of policies per category and the relationship types. Like with the EU map, the origins of these policies are traceable to the Paris Agreement and the UN 2030 Sustainability Agenda. In this case, most policies fall into the environment and climate change category. In the Spanish case, the number of social energy policies equals the number of



sustainable development policies (with three policies respectively). Notably, in the Spanish policy map, no policies fall into the social category, despite several policies in the social/energy category.

The map reveals the devolved nature of the studied region in Spain compared to the level of legislative powers in the areas studied in other countries (although some Italian regions also have devolved powers, no such cases are included in this study). Catalan law reflects the national policy structure, adapting the national strategies to the local level and providing funding and more concrete local measures. Sometimes, the regional strategies pre-date the equivalent national policies or are unique to the region<sup>3</sup>. These are thus visible laws between the national and smaller-scale regional and local policies. Examples include a National Plan for implementing the 2030 Agenda and the national Spanish Sustainable Development Strategy 2030. Furthermore, there are both Spanish and Catalonian Urban Agendas. Spain is the only country that has produced a dedicated national strategy for the just energy transition.

Like the EU policy map, there is a higher number of directed policies than parallel policies. However, there are more Parallel policies on the Spanish map than on the EU map. These parallel relationships can be observed mainly between environment and climate change policies, between social energy policies and between environment and climate change policies and social energy policies, with only one parallel connection occurring between an energy policy and environment and climate change policy.

**Table 3.3 -** Breakdown of Spanish policy categorisation and policy interrelations.

Policy category	Category name	Number of policies
	Sustainable development	3
	Energy	5
	Environment & climate change	11
	Social/Energy	3
	Transport	1
	Economy & territorial cohesion	4
	Social	0
	Amended	0
	Total number of policies	27
Relationship type	Parallel policies	16
	Direct connection	40
	Total number of relationships	56

<sup>&</sup>lt;sup>3</sup> Such as the ban to disconnections for those in energy poverty.

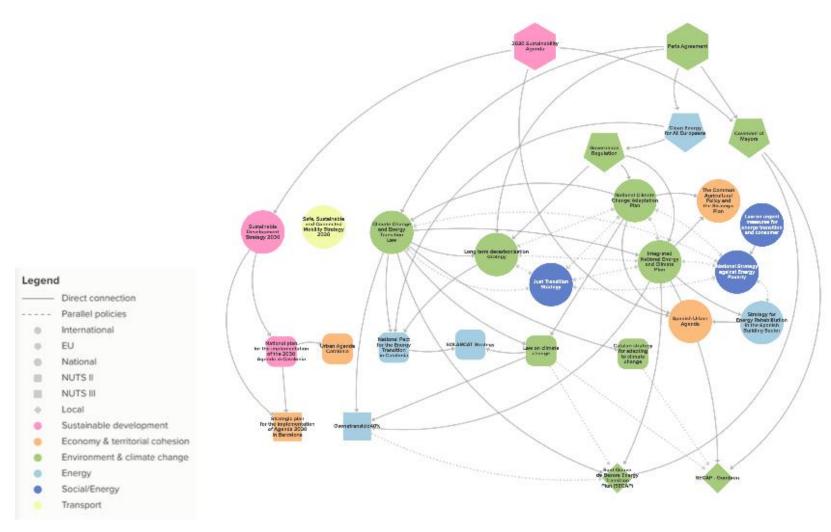


Figure 3.3 - Spanish policy map of national, regional (NUTS II and NUTS III) and local strategies, plans, laws, agendas, and policies across six sectors, including international and European policies.

#### 3.3.2. Overview

The Spanish policy map in Figure 3.3 illustrates a comprehensive and interconnected framework of strategies, plans, laws, agendas, and policies that shape Spain's approach to sustainable development, energy transition, climate change adaptation, and social equity. The map highlights how these policies, across various levels of governance, from national to regional and local, interact to achieve overarching objectives such as decarbonisation, sustainability, and the promotion of social justice.

Key national policies like the Climate Change and Energy Transition Law and the Integrated National Energy and Climate Plan (INECP) are central to Spain's efforts to align with the Paris Agreement. These policies are supported by regional and local policies, such as Catalonia's Energy Transition Law, the Catalan Strategy for Adapting to Climate Change, and the Sustainable Energy and Climate Action Plans (SECAPs), ensuring that specific regional and local needs are addressed while maintaining coherence with national and European objectives.

In February 2019, the Spanish government presented the Strategic Framework for Energy and Climate to the Council of Ministers, establishing it as the key tool for achieving the fundamental objective of decarbonising the economy in alignment with the Paris Agreement. This framework consolidates the main Spanish policies, including the Climate Change and Energy Transition Law, the INECP, the Just Transition Strategy, the National Climate Change Adaptation Plan (PNACC), and the National Strategy Against Energy Poverty. Currently, the Spanish government is drafting the National Strategy Against Energy Poverty, which has not yet been made public (as of the date of this publication). This upcoming strategy aims to explicitly address energy prices while focusing on combating inequalities and creating opportunities.

The INECP is at the heart of Spain's energy transition efforts, aiming for a 42% share of renewables in final energy use, a 39.5% improvement in energy efficiency, and 74% renewable energy in electricity generation by 2030. Complementing the INECP, the PNACC provides a roadmap for enhancing Spain's resilience to the impacts of climate change. This plan is crucial for mitigating risks, protecting natural environments, and ensuring that adaptation measures are integrated across all levels of government and society. The Long-term Decarbonisation Strategy further supports these efforts by setting a clear trajectory towards achieving climate neutrality by 2050.

Regarding the social and energy sectors, the Just Transition Strategy and the National Strategy Against Energy Poverty are pivotal policies addressing the energy transition's social implications. The Just Transition Strategy ensures that the shift to a low-carbon economy is socially equitable, focusing on creating jobs in the green economy, promoting gender equality, and revitalising rural areas. Meanwhile, the National Strategy Against Energy Poverty targets the critical issue of energy poverty by improving energy efficiency in housing and providing support to vulnerable consumers, thereby ensuring that the benefits of the energy transition are accessible to all population segments.

The transport sector is addressed through the Safe, Sustainable, and Connected Mobility Strategy 2030, which aims to decarbonise the transport sector, a significant source of GHG emissions in Spain, and promote clean, efficient, and sustainable transportation systems. The Sustainable Mobility Law, which will regulate the necessary aspects to achieve the strategy's objectives, is not yet official as of this publication. In February 2024, the draft law was



resubmitted to the Spanish Parliament for urgent processing, aiming for approval within the year to meet the commitments made with the European Commission under the Spanish Recovery, Transformation, and Resilience Plan (PRTR).

The Spanish policies on economy and territorial cohesion are interrelated with the sustainability goals or the climate and energy objectives. The Common Agricultural Policy and the Strategic Plan (PAC) are related to the PNACC and the INECP, which are vital in supporting sustainable agriculture and rural development, ensuring that these areas contribute to and benefit from the broader goals of climate action and economic resilience.

On the urban front, the Spanish Urban Agenda (AUE) focuses on sustainable urban development, aligning with the international 2030 Sustainability Agenda, the INECP, and the Strategy for Energy Rehabilitation in the Spanish Building Sector to create more equitable, inclusive, and resilient cities. The national Sustainable Development Strategy 2030, related to the international 2030 Sustainability Agenda, further integrates these efforts by addressing the interdependencies between economic, social, and environmental spheres, promoting a holistic approach to sustainability that encompasses both urban and rural areas, and relating to the National plan for the implementation of the 2030 Agenda in Catalonia.

Among Catalonia's regional and local policies, the National plan for the implementation of the 2030 Agenda in Catalonia serves as a strategic document aimed at promoting sustainable development within the region, aligning with broader national and international frameworks and relating to six other policies (five from the same NUTS II and one from Barcelona's NUTS III). One is the SOLARCAT Strategy, which promotes solar energy integration across Catalonia, supporting the transition to renewable energy and reducing dependence on fossil fuels. The Strategic Plan for the Implementation of Agenda 2030 in Barcelona focuses on localising the Sustainable Development Goals within the province of Barcelona, adapting global and national targets to the specific context and challenges of the area. Additionally, SECAPs, developed under the Covenant of Mayors initiative, are crucial at the municipal level (Gombrèn and Sant Quirze de Besora), outlining concrete actions for mitigating and adapting to climate change. These plans are particularly important for rural and smaller municipalities, where they guide efforts to reduce greenhouse gas emissions, improve energy efficiency, and enhance resilience to climate impacts.

An important focus of this analysis is the existence of a Just Transition Strategy; Spain is the only country among those analysed in this report to produce such a strategy. Spain has acknowledged the importance of a fair distribution of opportunities and resources during the transition to a low-carbon economy, making it a leader in integrating social considerations into climate policy. This strategy not only addresses the reduction of GHG emissions but also focuses on creating green jobs, promoting gender equality, and revitalising rural areas.

From the analysis, it is possible to recognise a lack of integration and coordination among the national economy, territorial cohesion, and sustainability policies, namely the PAC, the AUE, and the Sustainable Development Strategy 2030, lacking the necessary interconnection to allow for a more cohesive strategy. Moreover, there is a weakness in Spain's approach to sustainable transportation where the Safe, Sustainable, and Connected Mobility Strategy 2030 is not well connected with other key climate and sustainability policies. This policy is crucial for advancing sustainable mobility and reducing emissions in the transport sector. Still, it is primarily linked to the Spanish PRTR, a funding programme rather than a policy framework directly aligned with broader climate and energy goals.



In summary, while Spain's policy landscape is marked by a comprehensive and ambitious framework addressing various aspects of sustainability, the energy transition, and social equity, it is not without its challenges. The integration of social considerations, mainly through the Just Transition Strategy, is a notable strength. Still, the effectiveness of these policies could be significantly enhanced through better integration and coordination across different sectors.

### 3.4 Italian social energy policies

Section 3.1.1 outlines the Italian policies and plays a key role in showing the detailed links between them, as described in the overview presented in section 3.1.2.

### 3.4.1 Mapping and visualisation

Figure 3.4 represents the Italian policy map, offering a comprehensive visualisation of thirty-three identified interconnected strategies, plans, programmes, laws, and action programmes that steer the country towards a sustainable, just, and climate-resilient future. The brief description, goals, mandatory actions to be taken, interactions with other policies, direct/indirect impacts on the population, and stakeholders' involvement in the development and implementation (who and how) of each one of these policies are outlined in Table A.4 of Appendix 1.

Table 3.4 shows the number of policies per category and the relationship types shown in the map. Like in the Spanish case, the Italian map has the highest number of policies in the Environment and Climate Change category (ten policies). Once again, the Italian analysis shows the top-down influence of the Paris Agreement and the UN 2030 Sustainability Agenda. The Italian map presents a relatively high number of economy and territorial cohesion policies compared with the maps for the EU, Spain and Greece, with only Portugal presenting a higher number of policies falling into this category. In Italy there was a relatively high number (four policies) of transport policies intersecting the social energy domain, which is the same number as Spain. Transport policies do not appear in either the Greek or the Portuguese policy maps. In the Italian case, this includes engagement with the EU-level Transport 2050 Strategy. Despite this high representation of the transport category, the map reveals that these policies have few interconnections, with two being completely unconnected from other policies. Interestingly, Italy does not present policies in the social/energy category. Instead, one policy is detectable in the social category and six in the energy category.

The Italian map and Table 3.4 show that, like the EU and Spanish cases, Italy has more direct than parallel connections. The parallel relationships observed exist between different national policies, some within the environment and climate change category, and some between environment and climate change and economy and territorial cohesion, and between environment and climate change and sustainable development. At the regional (NUTS II) level, these parallel relationships exist between environment and climate change and sustainable development and between sustainable development and economy and territorial cohesion. Direct relationships generally apply between different levels of governance, i.e., between EU and national policies, between national and regional policies or represent links between policies with a broader scope, e.g., the National Strategy for the Circular Economy and policies which address specific subsets of these broader agendas, in this case through the direct relationship with the National Waste Management Programme.



**Table 3.4 -** Breakdown of Italian policy categorisation and policy interrelations.

Policy category	Category name	Number of policies
	Sustainable development	3
	Energy	7
	Environment & climate change	11
	Social/Energy	0
	Transport	4
	Economy & territorial cohesion	7
	Social	1
	Amended	0
	Total number of policies	33
Relationship type	Parallel policies	16
	Direct connection	34
	Total number of relationships	50

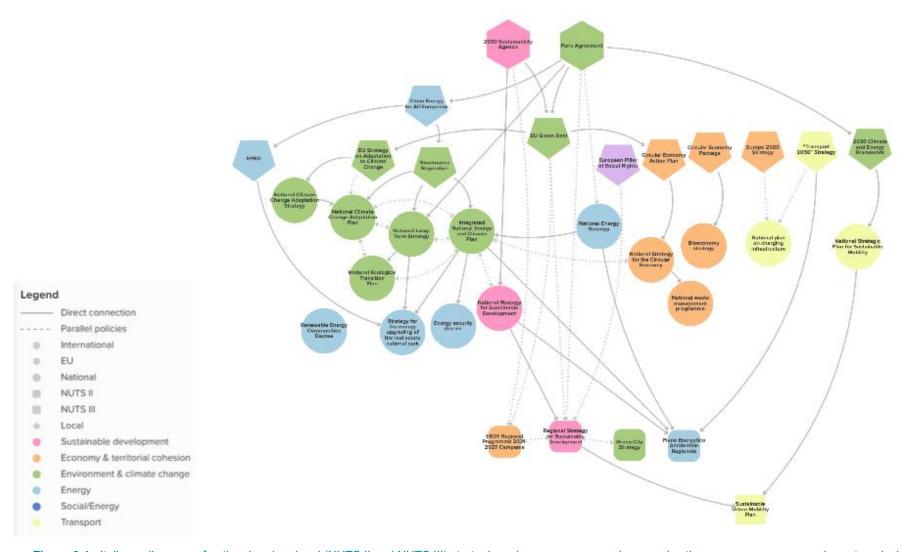


Figure 3.4 - Italian policy map of national and regional (NUTS II and NUTS III) strategies, plans, programmes, laws, and action programmes across six sectors, including international and European policies.

#### 3.4.2 Overview

The Italian policy map (Figure 3.4) provides a comprehensive visualisation of thirty-three interconnected strategies, plans, programs, laws, and action programs, highlighting Italy's multifaceted approach to addressing sustainable development, environmental protection, energy transition, and sustainable mobility. This policy framework demonstrates how different sectors—such as energy, environment and climate change, transport, and sustainable development—are interrelated to achieve Italy's overarching decarbonisation goals.

Italy's commitment to environmental protection and climate action is reflected in four key national policies: the Integrated National Energy and Climate Plan (PNIEC), the National Climate Change Adaptation Plan (PNACC), the National Long-Term Strategy (NLTS), and the National Ecological Transition Plan. The first three are all interconnected in their implementation and with direct stipulations according to the European Governance Regulation. Connected with all of them is the National Ecological Transition, serving as a coordination and update tool for climate change mitigation and adaptation policies and ensuring that Italy's ecological transition aligns with the long-term objectives set forth by the NLTS and the National Recovery and Resilience Plan (PNRR). This interconnected approach strengthens Italy's efforts to achieve climate neutrality by 2050, providing a coherent framework that integrates various environmental and energy policies.

In the energy sector, the PNIEC plays a pivotal role in connecting energy policies with environmental and climate change goals. Built on the foundation of the 2017 Italian Energy Strategy, the PNIEC sets ambitious targets for renewable energy adoption and energy efficiency improvements. Complementing this plan are the Energy Security Decree and the Strategy for the Energy Upgrading of the Real Estate National Park, which focuses on ensuring a stable energy supply and enhancing the energy efficiency of buildings, respectively. While the Renewable Energy Communities Decree is an important national policy promoting collective energy production and consumption at the community level, it remains insufficiently integrated with other national and regional policies. At the regional level, the Campania Regional Environmental Energy Plan aligns with the 2017 National Energy Strategy. Still, it lacks connection with other energy-focused policies, highlighting a gap in regional-national policy integration.

In the transport sector, the National Strategic Plan for Sustainable Mobility and the National Plan on Charging Infrastructure (PNIRE) are crucial for decarbonising transportation and promoting electric mobility. These plans prioritise renewing the public transport fleet, improving air quality, and expanding electric vehicle infrastructure. However, a significant weakness is the lack of integration between these transport policies and other climate and sustainability initiatives, which could limit their impact on Italy's broader decarbonisation objectives. The relevant relationship shown on the map is between the National Strategic Plan for Sustainable Mobility and Naples' Sustainable Urban Mobility Plan.

Italy's move towards a circular economy is reflected in the National Strategy for the Circular Economy and the National Waste Management Programme. These policies promote resource reuse, recycling, and recovery, thereby minimising waste and reducing environmental impact. However, despite their common goals, these policies are not well-connected with each other or the Bioeconomy Strategy, which seeks to enhance the sustainable use of biological resources across various sectors.



Italy's sustainability efforts are reflected in national and regional policies integrating economic development with environmental protection and social equity. The National Strategy for Sustainable Development (SNSvS) serves as Italy's overarching framework, aligning with the United Nations' Sustainable Development Goals (SDGs) and focusing on sustainable economic welfare, climate action, biodiversity protection, and social inclusion. The SNSvS is related to the Campania Regional Strategy for Sustainable Development (SRSvS), which is also connected with international and European policies, as well as the Green City Strategy and the ERDF Regional Programme 2021-2027. The SRSvS emphasises economic competitiveness, social equity, and environmental protection by enhancing biodiversity, advancing digital innovation, and promoting renewable energy. It also encourages the use of public transport or shared mobility and renewing the public and private car fleet with low-emission electric or hydrogen vehicles related to the Naples' Sustainable Urban Mobility Plan.

One of the most relevant strengths of Italy's policy framework is the National Ecological Transition Plan, which is a singular policy connecting various environmental policies and providing a solid foundation for Italy's ecological transition, with clear goals and coordinated actions across multiple sectors. Additionally, regional strategies like the SNSvS and the SRSvS demonstrate Italy's efforts to tailor sustainability initiatives to local contexts, fostering economic competitiveness, social equity, environmental protection, energy efficiency in public transport and shared mobility.

Despite the strengths, the lack of integration between certain policies (e.g. between the transport sector and the other sectors) undermines the coherence and effectiveness of Italy's overall sustainability strategy. Furthermore, the absence of local policies, particularly in areas like Piano di Sorrento, underscores a significant gap in the policy framework. Finally, another critical limitation is the absence of more policies specifically addressing just transition and the social sector, which is essential to ensure that all segments of society benefit from Italy's sustainability and decarbonisation efforts.

Italy's policy map illustrates a comprehensive approach to sustainable development, environmental protection, and the energy transition. While the interconnectedness of key national policies provides a strong foundation for achieving long-term climate goals, the lack of integration between some policies poses challenges to the overall effectiveness of Italy's sustainability efforts. Addressing these weaknesses and developing more policies focused on just transition and the social sector will ensure that Italy's transition to a sustainable and low-carbon future is coherent and inclusive.

#### 3.5 Greek social energy policies

Section 3.5.1 maps out the Italian policies, essential for visualising their complex interactions, as further explained in the overview provided in section 3.5.2.

#### 3.5.1 Mapping and visualisation

The Greek policy framework, as depicted in Figure 3.5, consists of twenty-three identified strategies that are interrelated, including plans, laws, frameworks, and action programmes. A brief description of each policy and the corresponding goals, mandatory actions to be taken, interactions with other policies, direct/indirect impacts on the population, and stakeholders'



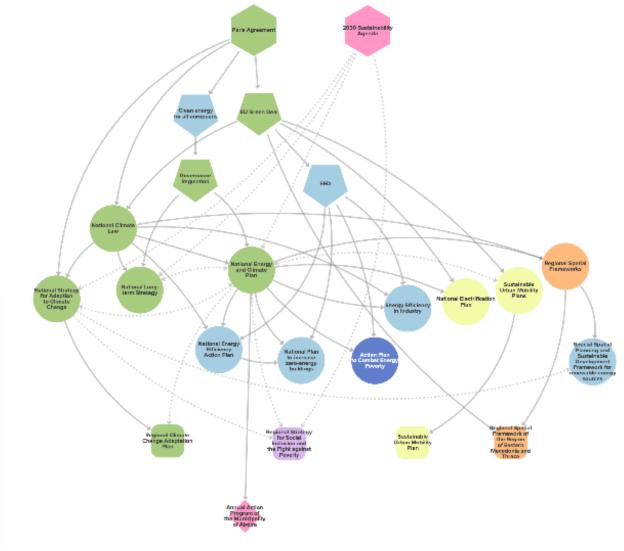
involvement in the development and implementation (who and how) are outlined in Table A.5 of Appendix 1.

Table 3.5 lists the number of policies per category and the relationship types displayed in the Greek policy map. Like the Italian and Spanish cases, the Greek map shows the highest concentration of policies within the environment and climate change category, reflecting the country's strong focus on decarbonisation, energy transition, and climate resilience, driven by top-down influences like the EU Green Deal and the Paris Agreement. Compared to other countries like Portugal and Italy, Greece shows a lower representation in the economy and territorial cohesion category, with fewer policies specifically targeting regional economic integration or cohesion.

In terms of relationships, the Greek map and Table 3.5 reveal a greater number of direct relationships compared to parallel policies, as with the EU, Spanish and Italian maps. Direct relationships are predominant between national and regional policies, as well as between EU and national policies, demonstrating a hierarchical structure in the way policies propagate from international agreements, such as the Paris Agreement, to regional and local levels. The Parallel relationships that are observed exist between the 2030 Sustainability Agenda and national and regional policies, between different national policies and between national and regional policies.

**Table 3.5 -** Breakdown of Greek policy categorisation and policy interrelations.

Policy category	Category name	Number of policies
	Sustainable	2
	development	
	Energy	6
	Environment &	8
	climate change	
	Social/Energy	1
	Transport	3
	Economy & territorial cohesion	2
	Social	1
	Amended	0
	Total number of policies	23
Relationship type	Parallel policies	9
	Direct connection	34
	Total number of relationships	43



Legend



Figure 3.5 - Greek policy map of national, regional (NUTS II) and local strategies, plans, laws, frameworks, and action programmes, across six sectors, including international and European policies.

#### 3.5.2. Overview

The Greek policy map (Figure 3.5) provides a detailed visualisation of twenty-three interconnected strategies, plans, laws, frameworks, and action programs, reflecting Greece's approach to addressing climate resilience, energy transition, social inclusion and sustainable development. This policy framework demonstrates how different sectors—such as energy, environment and climate change, transport, and social policies—interrelate to ensure the country's transition to a sustainable, low-carbon economy while addressing both mitigation and adaptation needs.

The country's contribution to environmental protection and climate action is showcased through four central national policies from the environment and climate change sector: the National Climate Law, the National Energy and Climate Plan (NECP), the National Long-Term Strategy (MS50), and the National Adaptation Strategy to Climate Change (NASCC). The National Climate Law sets the legal foundation for Greece's climate neutrality by 2050, with specific emission reduction targets for 2030 and 2040. The NECP outlines a comprehensive plan for achieving these goals by promoting renewable energy, phasing out lignite by 2028, and enhancing energy efficiency across sectors. The MS50 extends these efforts towards 2050, focusing on electrification, advanced energy storage, and carbon capture technologies. In line with these mitigation efforts, the NASCC focuses on building Greece's resilience to climate impacts. It provides the framework for regional adaptation plans, addressing sectors such as water resources, biodiversity, and infrastructure, ensuring that climate risks are minimised in vulnerable areas. Together, these policies are aligned with the EU Green Deal and the Paris Agreement, forming the backbone of Greece's climate action, which is interlinked with the other policies of the other sectors and levels of governance on the map.

In the energy sector, the NECP plays a fundamental role in setting ambitious targets for renewable energy adoption and energy efficiency improvements by 2030. The National Energy Efficiency Action Plan supports these efforts by coordinating with other national and EU policies to improve energy efficiency and support economic and environmental goals, while the National Plan to Increase Zero-Energy Buildings mandates nearly zero-energy standards for public and private buildings. Complementary to this, the Energy Efficiency in Industry policy encourages audits and technological upgrades in large industries to improve energy performance. Moreover, the Special Spatial Planning and Sustainable Development Framework for Renewable Energy Resources (RES framework), which promotes the integration of renewable energy projects, is a part of the Regional Spatial Frameworks and has only an (indirect) connection with another policy (the NASCC). However, there is a gap in the integration of these energy policies with regional and local frameworks. For example, although the Regional Spatial Framework for Eastern Macedonia and Thrace supports renewable energy projects, such as wind and solar farms, it is not fully linked to national energy policies, being only related to the Regional Spatial Frameworks, a national economic and territorial cohesion policy that relates to the NECP and the National Climate Law.

Greece's efforts to address social equity within the energy transition are reflected in the Action Plan to Combat Energy Poverty, which aims to reduce energy poverty by 50% by 2025 through energy efficiency improvements for vulnerable households and financial support for energy costs. Similarly, the Regional Strategy for Social Inclusion and the Fight Against Poverty in Eastern Macedonia and Thrace (Social sector) promotes employment and social inclusion, indirectly supporting broader sustainability goals.



The transport sector is addressed through the National Electrification Plan and the Sustainable Urban Mobility Plans (SUMPs). These policies aim to decarbonise the transport system by promoting electric vehicles, expanding charging infrastructure, and reducing car dependency in urban areas. The SUMPs directly align with the NECP by focusing on reducing emissions in transportation but remain distinct as they operate primarily within urban mobility planning. At the regional level, the Sustainable Urban Mobility Plan for Eastern Macedonia and Thrace promotes similar goals, particularly in rural areas, but lacks broader integration with national climate and energy policies.

Regional policies such as the Regional Climate Change Adaptation Plan for Eastern Macedonia and Thrace emphasise localised measures to adapt to climate impacts, including water management, disaster risk reduction, and energy efficiency improvements. The plan closely aligns with the National Adaptation Strategy to Climate Change (NASCC), which provides a broader framework for climate resilience across Greece.

Unrelated to regional policies, the Annual Action Programme of the Municipality of Avdira is only related to the NECP and is the only Greek policy in the sustainable development sector, focusing on retrofitting public buildings for energy efficiency, expanding electric vehicle usage, and improving waste management.

Greece's efforts in the energy sector are well-developed, with the NECP playing a crucial role in setting ambitious targets for renewable energy and energy efficiency and connecting it to the environment and climate change sector. However, weaknesses emerge from the lack of integration between national, regional, and local policies, as does the fact that there is only one local policy. For example, the Regional Spatial Framework for Eastern Macedonia and Thrace, while promoting renewable energy, is disconnected from broader national energy policies. Additionally, there is limited coordination between transport policies and the broader energy and climate agenda.

In conclusion, Greece's policy map reflects a well-rounded approach to sustainable development, climate resilience, and the energy transition, with an alignment between key national policies and international climate commitments. However, the lack of integration between national, regional, and local policies, the limited connection between policies in the transport and energy sectors, and the fact that certain sectors, such as social/energy and social, are underrepresented weakens the framework's ability to deliver a just and inclusive energy transition. Strengthening the coordination between different governance levels and sectors and developing more inclusive policies that address the social dimensions of energy transition will be crucial to ensuring that Greece's path towards a sustainable and low-carbon future is both coherent and equitable.



#### 4 Policy integration and analysis

This report developed a series of social energy policy maps based on a combination of data collection techniques outlined in Section 2. An important part of this data collection was the policy categorisation process which resulted in the Tables in Appendix 1. This Table represents a valuable resource for EU policy actors, providing a comprehensive overview of the EU social energy policy setting and adding detail to the maps presented in the previous sections.

Collecting and synthesizing the data presented in the Table was a substantial task, where tasks such as categorising the policy type, target areas, goals and KPIs required several stages of verification and refinement by the research team. In consistency with the maps and tables presented in the previous sections the policies shown in Appendix 1 show a strong representation of environmental and climate change and energy policies, with the next most frequent policy section being economy and territorial cohesion. Across the national and EU levels, there is a higher abundance of environment and climate change and energy policies than social or social energy policies.

The maps represented a refined version of the data in the Appendix 1 Tables. These maps revealed some variance in the policy structures, policy categories and policy interrelations between the cases studied. The following subsections provide a detailed analysis of the similarities and differences between the cases explored, areas of effective policy integration and policy gaps and reflections for future work in this area.

#### **4.1** Policy structure

Overall, a review of the EU and Southern Mediterranean social energy policies revealed the importance of international climate change and sustainability policies for driving both European and national social energy policy frameworks. In each map the origins of national and EU policies can be traced to either the 2015 Paris Agreement or the UN 2030 Sustainability Agenda. Evaluations of these policies have revealed challenges to their success, such as socalled "implementation gaps" where countries have not achieved their pledged contributions through the policies implemented (in the case of The Paris Agreement) (Roelfsema *et al.*, 2020). Our analysis shows that in Portugal, Spain, Greece and the EU, the Paris Agreement directly results in corresponding climate laws, namely the Portuguese Basic Climate Law (Figure 3.2), the Spanish Climate Change and Energy Transition Law (Figure 3.3), the National Climate Law (Figure 3.5) and the EU Climate Law (Figure 3.1).

In the case of the UN 2030 Sustainability Agenda, there is increasing concern about the probability of achieving the goals in the face of a series of unprecedented crises (Leal Filho *et al.*, 2023). Despite this, the analysis conducted in this report demonstrates their pivotal role as guiding documents, establishing pathways for European and national policymakers to follow. The maps presented in the previous sections reveal several instances where these international policies directly bring about local and regional policies. Thus, demonstrating their significance not only in influencing national policy responses but in their capacity to shape smaller scale policies.

Between them, The Paris Agreement and UN 2030 Sustainability Agenda include targets to reduce emissions, transition away from fossil fuels, and tackle social inequities, thus setting a broader framework for more targeted policies to respond to. It is from these more targeted



responses at European and national levels that we see the social energy policy domain emerge. At the EU level, these policies form the intersection between climate goals, social rights, implementation of energy transition laws and the sufficient meeting of energetic needs. For example, in the cases of Portugal and Spain pathways leading to the social/energy sector are linked to social policy initiatives such as the European Pillar of Social Rights, as well as environment and climate change policies such as NECP plans.

The emergence of the social energy policy sector is an encouraging step in the scope of delivering a just transition, where policy silos and a prevalent "energy-centric" approach to energy policy is considered problematic (Cox *et al.*, 2019). Despite this, there is a higher abundance of environment and climate change and energy policies across the national and EU levels than social or social energy policies. This is not categorically negative and is, to some extent, reflective that the social/energy sector can be considered a subset of broader environmental and energy policy agendas.

When comparing the levels of governance represented in the policy maps, certain differences become evident. In the EU map, for instance, regional levels are absent, while the Italian map does not feature policies at the local level. The Greek policy map similarly lacks representation at the NUTS III level. In contrast, the Portuguese and Spanish maps are the most complete regarding policy coverage, featuring all levels of governance.

Overall, the maps revealed a "top-down" policy structure in the EU and Southern Mediterranean cases, where international and national policies resulted in the creation of smaller-scale policies. This reflects the centralised governance structure of these countries, with decisions made at EU level being transposed into national policy and down into regional (NUTS II and NUTS III) and local policy scales. In the Spanish case, this is different due to Catalonia's comparatively autonomous nature. While a top-down policy transposition sequence is natural to a certain extent, it may clash with European policy rhetoric centred on a "citizen-led" transitions, where citizens are better placed to interact with local policy actors than national or international actors. It should be noted that while the maps reflect this predominantly top-down structure, there are examples outside the scope of this study where regional policy has influenced national or EU policy, for example, the pioneering of electricity sharing from public buildings in Greece, which has now been embedded into EU policy. In Portugal, the so-called local scale pilot "Transition Point" (a One Stop Shop initiative offering energy efficiency and bill advice) (FCG, 2024) has influenced national policy approaches to energy poverty (República Portuguesa, 2024). Furthermore, there are occasions where the transposition or influence of higher-level policy issues to regional or local scales is not appropriate and vice versa. For instance, in the case of transport, it is more relevant for higherlevel policies to focus on inter-city and inter-regional connections and for local and city-level plans to focus on urban mobility. These reflections highlight the importance of this comprehensive analysis to inform and shape co-creative processes in policy design at local level.

#### 4.2 Policy interrelations

Our assessment of policy interrelations revealed that in all cases, the number of parallel policies was less than the number of direct policies. The EU presented the lowest ratio of parallel policies (Table 3.1). There are advantages and disadvantages associated with the comparative proportions of direct and parallel policies. On the one hand, a high proportion of



parallel policies suggests a comprehensive approach to various policy issues, namely multiple policies tackling related goals, which may increase the chance of achieving the desired outcomes. Alternatively, a high degree of overlap between different policy scopes may not be efficient from the perspective of resource prioritisation and may lead to a lack of focus, where policy objectives and actor responsibilities become duplicated and/or confused. This is attested by policy mix analysis in the area of energy efficiency, exposing the inefficiency of having more than one policy targeting the same measure (Rosenow *et al.*, 2016). In Portugal and Italy, bureaucracy has been identified as a policy barrier in the rollout of renewable community energy models (Musolino *et al.*, 2023; Scharnigg and Sareen, 2023), with calls for implementing policies with fewer bureaucratic hurdles to increase the market share of alternative energy models (Delicado *et al.*, 2023).

On this logic, a high proportion of Direct connections suggests less duplication as these connection types indicate a cause/effect relationship, with additional policies being created in response to preceding policies. In the maps, policies "caused" by preceding policies often concentrated on more specific policy foci than the original policies, for example, as shown in the EU map (Figure 3.1). The EU Green Deal, focusing on emissions, decoupling and leaving no one behind (COM/2019/640 final), results in the Renovation Wave targeting emissions from the building sector. On several occasions, a policy was the result of two or more preceding policies; this is observed in the EU map in the case of the Fit for 55 package, which is caused by the EU Green Deal and the EU Climate Law. Fit for 55 then goes on to contribute to several additional policies, including the Effort Sharing Regulation and Directives on renewable energy, building energy performance and energy efficiency. Thus, direct connection pathways do not necessarily imply less overlap between policy objectives. With the resultant policies addressing specific nuances of the preceding policies, however, direct connections represent more intentional pathways, with the creation of new policies in response to specific needs outlined by one or more previous policies.

Considering the above, our preliminary distinction and mapping of the relationship types that exist between policies lays valuable foundations for future work evaluating the efficiency of energy transition policies in Europe. Specifically, our framing of parallel and direct policy connections gives deeper insights into how policy goals work together and instances where they may overlap. Exploring instances of these overlaps and revealing instances where policy goals are duplicated is ultimately informative for improving policy efficacy. Specifically, our analysis indicates that a higher proportion of Parallel policies may indicate less intentional policy pathways, which is a useful point of departure for future research.

#### **4.3** Policy categorisation

In terms of the policy categories identified across the EU and Southern Mediterranean cases policies falling into the environment and climate change category were the most frequent (Tables 3.1-3.5). In all the maps, environment and climate change was the most frequently occurring policy category. It is crucial to reiterate that our evaluations of the frequency with which a particular policy category occurs do not indicate "good" or "bad" policy practice. Instead, it provides insights into the policy interests of the case in question and general trends related to European policy focus. Additionally, while a particular country may present a higher or lower frequency of policies, this does not necessarily correspond to implementation and tangible results on the ground.



The strong presence of environmental and climate change policies across the case studies reflects the all-encompassing nature of this policy category, which includes the plethora of topics related to climate change. This explains the general pattern of the environment and climate change policies generally feeding into or "causing" policies from other categories, including energy. This occurrence is observable in the maps (Figures 3.1, 3.3, 3.4 and 3.5) for the EU, Spain, Italy, and Greece. In Portugal, there were more energy policies occurring independently of environment and climate change policies. This feeding of energy policies, targeting areas such as decarbonisation strategies, renewable energy policies and building renovation strategies, reflects the broad nature of the environment and climate change category and its significance in shaping a policy profile that responds to the breadth of environmental and climate change issues.

The previous subsections detail the key role of the UN 2030 Sustainability Agenda (in the sustainable development sector) as a framing policy, where all case study maps feature the UN 2030 Sustainability Agenda. With three policies each falling into this category, Spain and Italy present the highest frequency of sustainable development policies. In the Spanish and Italian cases, respectively, national and NUTS II level sustainable development policies feature, with a NUTS II level policy also appearing on the Portuguese map. In the EU map, the EU-level New Leipzig Charter features in addition to the UN 2030 Sustainability Agenda in the sustainable development category. Greece presents the only local-level sustainable development policy. In the cases of Spain, the EU and Portugal, these policies "cause" policies in the economy and territorial cohesion category, with a parallel connection identified between the Italian NECP and the National Strategy for Sustainable Development.

In recent years, the framing of the North/South divide has been questioned, and issues of inequality and social division have come to the fore in European policy (Bhowmick & Ghosh, 2022). Linked to this are challenges concerning the uneven distribution of energy transition benefits, where those on lower incomes often have a reduced capacity to invest in measures such as energy efficiency equipment and renewable energy technologies (Mahoney *et al.*, 2022). Such problems can overlap with regional income disparities and, from an energy justice perspective, can be viewed as an unjust distribution of the benefits and burdens of the energy transition (McHarg, 2020). In this sense, the links between the sustainable development and economy and territorial cohesion policies identified in the maps are well justified.

Earlier sections describe the lower number of social energy policies compared to energy policies, arguing that the social/energy category can be considered as a subset of the energy category. A lower number of social energy policies compared to energy policies may also be attributable to a greater focus on the technical aspects of the energy transition (Selvakkumaran et al., 2021) and the comparative recentness of social energy policy issues such as energy poverty (Vondung & Thema, 2019) compared with climate change and drives for sustainable development (Palinkas, 1998). Notably, while the European map includes five European social energy policies, in the Southern Mediterranean maps, policies in this sector are only detectable at the national level. Once again, this may be attributable to the recent emergence of the social energy policy domain, but it may also be related to the way in which the social/energy sector has been defined in this report, highlighting the need for more exploration of this topic in the future. The observed scalar differences in the presence of social energy policies are an important consideration given that the potential for economic and employment gains is a significant incentive in the Southern Mediterranean.



These potential gains are mainly due to specific characteristics shared by these countries, including economies with a high dependence on tourism, being significantly impacted by the 2008 crisis and challenges with the emigration of skilled workers (Pacifico *et al.*, 2016). Therefore, the significant renewable potential in these countries, often in the form of solar energy, presents an attractive opportunity to develop more resilient economies. The lack of dedicated regional and local policies addressing employment and economic challenges has been recognised as a weakness in the scope of a just transition delivery in Portugal (Mahoney *et al.*, 2022). The dearth of social energy policies at regional and local levels in Southern Mediterranean Member States is, therefore, an important future area of policy focus for local and regional authorities.

Finally, we observe that the number of social policies is generally low in the maps (between 0 and 2 policies per case study); the exception is Portugal, which presents seven social policies (Figure 3.2). In the Portuguese case, these policies apply in the EU on national and local scales, with no regional social policies identified for this assessment scope. The ELPPE is Portugal's only social energy policy.

In the remaining countries, social policies apply at the EU level (Spain), the NUTS II level (Greece), and the EU level on the EU map. Dedicated Social policies were not identified in the scope of this study for Spain. The Spanish map instead includes three social energy policies. Building on the previous analyses of social energy policies, we find that Italy presents only one social policy but no social energy policies. Therefore, we expose potential gaps in the Spanish and Italian cases, referring to a lack of social policies in the Spanish case and the lack or reduced presence of social energy policies in the Italian and Portuguese cases.



#### **5** Conclusion

This report reveals a complex pattern of various policy sectors relevant to the social energy domain across the EU and Southern Mediterranean regions. The analysis examines the policy interrelations between and within these different sectors, exposing two different relationship types that can exist between policies in the European setting, which we label direct and parallel policy connections. The report provides a first glimpse into the implications of these different policy relationship types. Specifically, the results suggest that a high presence of parallel policies may signify a high degree of overlap between the goals and objectives of multiple policies, which can be negative from the perspective of efficient resource management. Direct policy connections did not necessarily imply less duplication of policy goals but did suggest more intentional policy pathways. These initial inferences set the foundation for further research into different types of policy interactions.

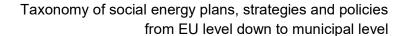
From a structural perspective, the findings revealed a predominantly top-down approach to policymaking in the EU and the Southern Mediterranean case studies, with a limited capacity for smaller-scale policies to influence larger ones. This might be considered unsurprising in the EU's policy structure and the generally centrist governmental structure of the countries studied. Additionally, the complexities of EU policymaking may mask the influence of lower-level policy on higher-level policy. Thus, focusing more on how policy influence may be transposed from the bottom-up would be a beneficial follow-up to this work. Additionally, explorations of how involved citizens are in policy-making would be valuable for assessing the practicalities of "citizen-led" transitions. This ideal lies at the heart of contemporary policy discourse.

The analysis also charts the emergence of the social/energy policy sector in EU policy, generally finding that such policies are shaped by broader policy framings, including sustainable development and environment and climate change policies. For all the case studies, the most frequently occurring policies were those in the environment and climate change category. This reflects the broad scope of this policy category, which was identifiable at all spatial scales.

From these broader policy categories, the social energy domain emerged; the development of these policies bridged the intersection between goals targeting GHG emissions, the provision of energy for consumers, and social rights. All but one of our case studies (Italy) presented policies in the social/energy sector. Demonstrating the growing importance of this policy domain. The social energy policies categorised in our Southern Mediterranean case studies are applied at larger spatial scales, either national or EU levels; therefore, integrating social energy policies at smaller spatial scales is a key next step for policy actors.

The emergence of social energy policies represents a significant development in the European policy landscape, marking a shift towards integrating social considerations, such as energy poverty and just transitions, into broader energy and climate frameworks. However, social energy policies remain underdeveloped at regional and local levels despite this positive trend. All the countries rely heavily on national policies to address social energy concerns, leaving a critical gap in ensuring that local needs and contexts are adequately addressed. This lack of localised policies weakens the ability of these nations to implement truly inclusive energy transitions that reflect the diversity of their populations; therefore, integrating social energy policies at smaller spatial scales is a key next step for policy actors.

In addition, the present report underscores the need for better policy integration within the transport and energy sectors. For instance, the disconnection between transport policies and





broader climate and energy frameworks, as seen in Greece and Italy, poses a significant barrier to achieving comprehensive decarbonisation strategies. Strengthening these linkages will be essential to align national and regional efforts with EU climate targets, particularly in sectors with high emissions like transport.

This report contributes to the analysis of the policy system in the EU and in the four countries studied, which is an important step in advancing knowledge about EU policy dynamics and identifying policy gaps which ultimately inform improved development of local social energy policy. Specifically, by mapping out the dynamics of these policies, a clear and understandable "snapshot" of the degree of policy integration (or lack thereof) is provided, which is a valuable resource for actors in the social energy policy domain. This overview also gives insights into areas of policy overlap, which is insightful from the perspective of resource allocation.

In conclusion, this report calls for a more integrated and balanced approach to social energy policies across the EU and Southern Mediterranean countries. While the emergence of social energy policies is a positive step, there is a need to bridge the gap between national frameworks and regional or local implementation. Localised policy integration is critical to ensuring that energy transitions are not only environmentally sustainable but also socially equitable.



#### References

- Agência Portuguesa do Ambiente (APA). (2019b). Plano Nacional Energia E Clima 2021-2030 (PNEC 2030). Agência Portuguesa do Ambiente. Available at: <a href="https://apambiente.pt/">https://apambiente.pt/</a> zdata/Alteracoes
- Agência Portuguesa do Ambiente (APA). (2019a). Roteiro Nacional De Baixo Carbono 2050 –
  Opções De Transição Para Uma Economia De Baixo Carbono Competitiva Em 2050. Agência
  Portuguesa do Ambiente. Available at:
  https://www.apambiente.pt/ zdata/DESTAQUES/2012/RNBC COMPLETO 2050 V04.pdf
- Bhowmick, S., Ghosh, N, eds. (2022). Sustainable Development in Action: Examining North-South Divergences. New Delhi: ORF and Global Policy Journal,
- Delicado, A., Pallarès-Blanch, M., García-Marín, R., del Valle, C., Prados, M, J. (2023). "David against Goliath? Challenges and opportunities for energy cooperatives in Southern Europe" Energy Research & Social Science. 103. 103220
- Direção Geral de Energia e Geologia. (DGEG). (2024). Políticas de proteção ao consumidor de energia. DGEG. Available at: <a href="https://www.dgeg.gov.pt/pt/areas-transversais/politicas-de-protecao-ao-consumidor-de-energia/tarifa-social-de-energia/">https://www.dgeg.gov.pt/pt/areas-transversais/politicas-de-protecao-ao-consumidor-de-energia/tarifa-social-de-energia/</a>
- Cox, E., Royston, S., Selby, S. (2019). "From exports to exercise: How non-energy policies affect energy systems". *Energy Research & Social Science*. 55. pp. 179-188
- Direção Geral de Energia e Geologia (DGEG). (2023). Estatísticas Tarifa Social de Energia.
   DGEG. Available at: https://www.dgeg.gov.pt/pt/areas-transversais/politicas-de-protecao-ao-consumidor-de-energia/tarifa-social-de-energia/estatisticas/
- European Commission (EC). (2019). Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions. The European Green Deal. 11th December 2019. (COM/2019/ 640 final)
- European Commission (EC) (2020). Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions A Renovation Wave For Europe - Greening Our Buildings, Creating Jobs, Improving Lives. 14th October 2020. (COM/2020/ 662 final)
- European Commission (EC). (2021). Accompanying the Proposal for a Council Recommendation on ensuring a fair transition towards climate neutrality. 14<sup>th</sup> December 2021. (COM/2021 801 final)
- European Commission (EC). (2022). Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions REpower EU plan. 18th May 2022. (COM/2022/ 230 final)
- European Commission (EC). (2023). The Just Transition Mechanism: making sure no one is left behind. European Commission. Available at: <a href="https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/finance-and-green-deal/just-transition-mechanism\_en">https://commission.europa.eu/strategy-and-policy/priorities-2019-2024/european-green-deal/finance-and-green-deal/just-transition-mechanism\_en</a>
- European Commission. (2024). Renovation Wave: doubling the renovation rate to cut emissions, boost recovery and reduce energy poverty. European Commission. Available at: https://ec.europa.eu/commission/presscorner/detail/en/IP 20 1835
- EUROSTAT. (2023a). Renewable energy statistics. EUROSTAT, December 2023. Available at:
   https://ec.europa.eu/eurostat/statistics explained/index.php?title=Renewable\_energy\_statistics#Share\_of\_renewable\_energy\_more\_t
   han\_doubled\_between\_2004\_and\_2022
- EUROSTAT. (2023b). Renewables take the lead in power generation in 2023. EUROSTAT. Available at: https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20240627-1
- EUROSTAT. (2024a). *NUTS Nomenclature of territorial units for statistics, Overview.* EUROSTAT. Available at: https://ec.europa.eu/eurostat/web/nuts/overview



- EUROSTAT. (2024b). Fossil fuel reliance in EU increased slightly in 2022. EUROSTAT. Available at: https://ec.europa.eu/eurostat/web/products-eurostat-news/w/ddn-20240130-2
- EUROSTAT. (2024c). Shedding light on energy in Europe 2024 edition. EUROSTAT. Available at: <a href="https://ec.europa.eu/eurostat/web/interactive-publications/energy-2024">https://ec.europa.eu/eurostat/web/interactive-publications/energy-2024</a>
- FCG. (2024). A New Way to Mitigate Energy Poverty: Lessons from the Transition Point 'One-Stop Shop' Pilot. Fundação Calouste Gulbenkian. Based on the unpublished impact report for the Transition Point project produced by João Pedro Gouveia, Miguel Mendes, Miguel Macias Sequeira, Pedro Palma (CENSE, NOVA University of Lisbon -FCT)
- Gambhir, A., Green, F., Pearson, P, J, G. (2018). "Towards a just and equitable low-carbon energy transition" Grantham Institute Briefing paper No. 26. Available at: <a href="https://www.imperial.ac.uk/media/imperialcollege/granthaminstitute/public/publications/briefing-papers/26.-Towards-a-just-and-equitable-low-carbon-energy-transition.pdf">https://www.imperial.ac.uk/media/imperialcollege/granthaminstitute/public/publications/briefing-papers/26.-Towards-a-just-and-equitable-low-carbon-energy-transition.pdf</a>
- Geng, L, M., Zhou, S., Sarkis, J. (2023). "Clean energy transitions and health". Heliyon. 31;9
   (11)
- Hanson, G, H. (2023). "Local Labor Market Impacts of the Energy Transition: Prospects And Policies" NBER Working Paper Series. Working Paper 30871. Available at: <a href="http://www.nber.org/papers/w30871">http://www.nber.org/papers/w30871</a>
- International Energy Agency (IEA). Portugal. International Energy Agency. Available at: https://www.iea.org/countries/portugal
- International Energy Agency (IEA) (2024). *Clean energy is boosting economic growth*, Paris. Available at: https://www.iea.org/commentaries/clean-energy-is-boosting-economic-growth,
- Instituto do Emprego e Formação Profissional (IEFP). (2017). Situação do Mercado do Emprego. Relatório Anual 2017. Instituto do Emprego e Formação Profissional. Available at: https://www.iefp.pt/documents/10181/278393/Relat%C3%B3rio+Anual+Mercado+de+Empreg o+2017.pdf/e9b25f29-77d9-4143-8013-f7ff99f29fde). (2021). Portugal
- Leal Filho, W., Trevisan, L, V., Rampasso, I, S., Anholon, R., Dinis, M, A, P., Brandli, L, L., Sierra, J., Salvia, A., L., Pretorius, R., Nicolau, M., Eustachio, J, H, P, P., Mazutti, J. (2023).
   "When the alarm bells ring: Why the UN sustainable development goals may not be achieved by 2030". *Journal of Cleaner Production*. 407. 137108
- Mahoney, K., Gouveia, J., P., Lopes, R., Sareen, S. (2022). "Clean, green and the unseen: The CompeSA framework | Assessing Competing Sustainability Agendas in Carbon Neutrality Policy Pathways" Global Transitions. 4. pp.45-57; <a href="https://doi.org/10.1016/j.glt.2022.10.004">https://doi.org/10.1016/j.glt.2022.10.004</a>
- McHarg, A. (2020). Energy Justice In: Energy Justice and Energy Law. Edited by Del Guayo, I.,
   Godden, L., Zillman, D, N. Montoya, M, F., González, J. Oxford University Press
- Morillas, P., Gomart, T., Nelli Feroci, F., Pagoulatos, G., Powell, C., Severiano Teixeira, N. (2022). What Role Should Southern Europe Play After the Pandemic and The War In Ukraine? Towards A Shared Agenda for EU Reform. CIDOB, IFRI, IAI, ELIAMEP, Real Instituto Elcano, IPRI NOVA. April 2022. Available at: https://www.cidob.org/sites/default/files/2024-06/271\_THINK%20TANKS\_ANG.pdf
- Musolino, M., Maggio, G., D'Aleo, E., Nicita, A. (2023). "Three case studies to explore relevant features of emerging renewable energy communities in Italy" *Renewable Energy*. 210. pp. 540-555
- Pacifico, D., Thévenot, C. (2016). Faces Of Joblessness In Portugal: Anatomy Of Employment Barriers. Organisation for Economic Co-operation and Development. Available at: <a href="https://www.oecd.org/els/soc/Faces-of-Joblessness-in-Portugal.pdf">https://www.oecd.org/els/soc/Faces-of-Joblessness-in-Portugal.pdf</a>
- Palinkas, P. (1998). "The Climate Change Policy: The Position of The European Union" Energy & Environment. 9. 4. pp. 449-461
- Odeh, L, E. (2010). "A Comparative Analysis of Global North and Global South Economies". Journal of Sustainable Development in Africa. 12. 3. ISSN: 1520-5509
- Oshiro, K., Vrontisi, Z., Chen, W., Iyer. G, C., Edmonds, J., Kannavou, M., Jiang, K., Mathur, R., Safonov, G., Vishwanathan, S, S. (2020). "Taking stock of national climate policies to evaluate implementation of the Paris Agreement". Nature Communications. 2096. 11



- Observatório da Energia. (2024). Estudo #1 Aplicação Da Tarifa Social De Energia Em Portugal Política Energética. Observatório da Energia. 3rd April 2024. Available at: <a href="https://www.observatoriodaenergia.pt/pt/comunicar-energia/post/6146/estudo-1-aplicacao-da-tarifa-social-de-energia-em-portugal/">https://www.observatoriodaenergia.pt/pt/comunicar-energia/post/6146/estudo-1-aplicacao-da-tarifa-social-de-energia-em-portugal/</a>
- Recuperar Portugal. (2023). Investimento TC-C13-i01 i01: Eficiência energética em edifícios residenciais (300 M€). Plano de Recuperação e Resiliência, República Portuguesa. Available at: <a href="https://recuperarportugal.gov.pt/2021/06/13/investimento-tc-c13-i01/">https://recuperarportugal.gov.pt/2021/06/13/investimento-tc-c13-i01/</a>
- República Portuguesa. (2024). Estratégia Nacional De Longo Prazo Para O Combate À
  Pobreza Energética 2022-2050. República Portuguesa. January 2024. Available at:
  <a href="https://www.dgeg.gov.pt/pt/areastransversais/relacoesinternacionais/politicaenergetica/estrategia-nacional-de-longo-prazo-para-o-combate-a-pobreza-energetica/">https://www.dgeg.gov.pt/pt/areastransversais/relacoesinternacionais/politicaenergetica/estrategia-nacional-de-longo-prazo-para-o-combate-a-pobreza-energetica/</a>
- Roelfsema, M., van Soest, H, L., Harmsen, M., van Vuuren, D, P., Bertram, C., den Elzen, M., Höhne, N., Iacobuta, G., Krey, V., Kriegler, E., Luderer, G., Riahi, K., Riahi, F., Després, J., Drouet, L., Emmerling, J., Frank, S., Fricko, P., Gidden, M., Humpenöder, F., Huppmann, D., Fujimori, S., Fragkiadakis, S., Gi, K., Keramidas, K., Köberle, A, C., Aleluia Reis, L., Rochedo, P., Schaeffer, R.,
- Rosenow, J., Fawcett, T, Eyre, N., Oikonomou, V. (2016). "Energy efficiency and the policy mix" Building Research & Information. 44. 5-6. pp. 562–574
- Scharnigg, R., Sareen, S. (2023). "Accountability implications for intermediaries in upscaling: Energy community rollouts in Portugal" *Technological Forecasting & Social Change*. 197. 122911
- Selvakkumaran, S., Ahlgren, E. (2021). "Understanding social innovation in local energy transitions processes: A multi-case study" Global Transitions. 3. pp. 1-12
- SETIS. (2018). Jobs and Skills in the Energy Transition. European Commission SETIS Magazine. No. 19 – December 2018. ISSN 2467-3811
- Sorgi, G. (2024). Risk of 'lost decade' as EU countries face economic cliff edge. Politico, Brussels, March 19<sup>th</sup> 2024. Available at: https://www.politico.eu/article/eu-countries-economy-spending-rules-budget-pandemic-funds/
- Sunderland, L. (2024). New action on energy poverty: Implementing the new EU provisions. Regulatory Assistance Project. Brussels, July 2024. Available at: https://www.raponline.org/wp-content/uploads/2024/07/rap-sunderland-new-action-on-energy-poverty-2024-July.pdf
- Vondung, F., Thema, J. (2019). "Energy poverty in the EU indicators as a base for policy action." ECEEE Summer Study 2019 Partners. pp. 569-578

# Appendix 1: Table of EU, National, Regional and Municipal social energy policies

- **Table A.1** European strategies, plans, regulations, directives, legislative packages, action programmes, agendas, frameworks, pacts, initiatives, recommendations, and communications. Regarding implementation, important intermediate objectives are marked with an \* (first) or an \*\* (second).
- **Table A.2** Portuguese strategies, plans, action plans, action programmes, strategic programmes, roadmaps, and laws. Each entry includes its identification, brief description, goals, mandatory actions to be taken, interactions with other policies, direct/Indirect impacts on the population, and stakeholders' involvement in its development and implementation (who and how). Regarding implementation, important intermediate objectives are marked with an \*.
- Table A.3 Spanish strategies, plans, laws, agendas, and policies. Each entry includes its identification, brief description, goals, mandatory actions to be taken, interactions with other policies, direct/Indirect impacts on the population, and stakeholders' involvement in its development and implementation (who and how). Regarding implementation, important intermediate objectives are marked with an \*.
- Table A.4 Italian strategies, plans, programmes, laws, and action programmes. Each
  entry includes its identification, brief description, goals, mandatory actions to be taken,
  interactions with other policies, direct/Indirect impacts on the population, and
  stakeholders' involvement in its development and implementation (who and how).
   Regarding implementation, important intermediate objectives are marked with an \*.
- Table A.5 Greek strategies, plans, laws, frameworks, and action programmes. Each entry includes its identification, brief description, goals, mandatory actions to be taken, interactions with other policies, direct/Indirect impacts on the population, and stakeholders' involvement in its development and implementation (who and how). Regarding implementation, important intermediate objectives are marked with an \* (first) or an \*\* (second).

**Table A.1 -** European strategies, plans, regulations, directives, legislative packages, action programmes, agendas, frameworks, pacts, initiatives, recommendations, and communications. Each entry includes its identification, a brief description, goals, mandatory actions to be taken, and interactions with other policies. Regarding implementation, important intermediate objectives are marked with an \* (first) or an \*\* (second).

Name, reference,	Brief Description	Goals	Mandatory actions to be taken	Interaction with other policies
dates,			·	
type,				
sector,				
target area(s)				
target area(s)				
Energy Union Package	The Energy Union Package is an	It has the five following mutually-reinforcing and	Infrastructure Development: construct	Related to the Paris Agreement.
COM/2015/080	ambitious strategy by the European	closely interrelated dimensions designed to bring	infrastructure necessary to deliver new sources of	Implemented by the "Clean energy for all
launched: 25 February	Union aimed at transforming its energy	greater energy security, sustainability and	gas and enhance energy security.	Europeans" package.
2015	system to be more secure, sustainable,	competitiveness.	Solidarity Measures: establish mechanisms for	
	competitive, and affordable. The	- Energy Security, Solidarity, and Trust: enhance	joint approaches to energy supply shortages or	
Type: strategy	strategy seeks to create an integrated	energy security by diversifying sources, suppliers,	disruptions, reinforcing the spirit of solidarity	
	energy market across the EU, ensuring	and routes, and by fostering solidarity and trust	among Member States.	
Sector: energy	energy flows freely across borders,	among Member States.	Transparent and Competitive Markets: ensure	
	promoting energy efficiency, and	- A Fully Integrated European Energy Market: create	transparency in energy markets and competition,	
Target areas (s): energy	transitioning to a low-carbon economy.	a competitive and transparent energy market with	removing market barriers and fostering cross-	
infrastructure; energy	It emphasizes solidarity and trust	effective regulation at the EU level.	border energy flows.	
efficiency	among Member States and aims to	- Energy Efficiency: promote energy efficiency to	Energy Efficiency Programs: implement programs	
	position the EU as a strong player in	reduce demand and support sustainable growth.	to improve energy efficiency, focusing on building	
	global energy markets.	- Decarbonization of the Economy: achieve a low-	renovation and energy-saving technologies.	
		carbon economy through the reduction of	Decarbonization Policies: implement the 2030	
		greenhouse gas emissions and the adoption of	climate and energy framework, aiming for at least	
		renewable energy sources, in line with the Paris Agreement.	a 40% reduction in greenhouse gas emissions by 2030.	
		- Research, Innovation, and Competitiveness: invest	Innovation and Research Funding: invest in	
		in research and innovation to develop new energy	research and development of low-carbon and	
		technologies and support the competitiveness of	energy-efficient technologies.	
		European companies.	It refers to the need for an integrated governance	
		' '	mechanism to ensure that energy-related actions	
			at Union, regional, national and local level all	
			contribute to the Energy Union's objectives,	
			thereby broadening the scope of governance —	
			beyond the 2030 Framework for Climate and	
			Energy — to all five dimensions of the package.	



The European Pillar of	It is a framework designed to deliver	Equal Opportunities and Access to the Labor	n/a	Directly related to the European Pillar of Social
Social Rights	new and more effective rights for	Market:		Rights Action Plan, with the Commission
proclaimed: 2017	citizens by focusing on three main	. Education, training, and life-long learning		communication on a Strong Social Europe for
implementation: 2030	areas: equal opportunities and access	. Gender equality		Just Transitions in between.
	to the labour market, fair working	. Equal opportunities		Connection with the Territorial Agenda 2030,
Type: framework	conditions, and social protection and	. Active support to employment		the Energy Poverty Recommendations (2020 &
	inclusion, encompassing 20 key	Fair Working Conditions		2023), the Affordable housing initiative, and the
Sector: social	principles. The Pillar was proclaimed by	. Secure and adaptable employment		Council Recommendation on ensuring a fair
	the Council of the European Union, the	. Wages		transition towards climate neutrality.
Target areas (s): just	European Parliament and the	. Information about employment conditions and		
transition	Commission at the Gothenburg Summit	protection in case of dismissals		
	in November 2017, was presented by	. Social dialogue and involvement of workers		
	the Commission in March 2021, and	. Work-life balance		
	was welcomed by the EU leaders in	. Healthy, safe and well-adapted work environment		
	May 2021 and by the European Council	and data protection		
	in June 2021.	Social Protection and Inclusion		
		. Childcare and support to children		
		. Social protection		
		. Unemployment benefits		
		. Minimum income		
		. Old-age income and pensions		
		. Health care		
		. Inclusion of people with disabilities		
		. Long-term care		
		. Housing and assistance for the homeless		
		. Access to essential services		



### Governance Regulation (EU) 2018/1999

approved: 11 December 2018

implementation: 2030

Type: regulation

**Sector:** environment & climate change

Target areas (s): decarbonisation; energy efficiency; energy security The Governance Regulation of the Energy Union and Climate Action sets common rules for planning, reporting and monitoring, and ensures that EU planning and reporting synchronised with the ambition cycles the Paris Agreement. It includes the necessary elements to track progress in the implementation of EU climate legislation, such as the Effort Sharing Regulation and the LULUCF Regulation. It also lays down a monitoring mechanism for greenhouse gas emissions and other climate information so that the EU will be able to comply with its reporting obligations under the UNFCCC and Paris Agreement.

(a) implement strategies and measures designed to meet the objectives and targets of the Energy Union and the long-term Union greenhouse gas emissions commitments consistent with the Paris Agreement, and for the first ten-year period, from 2021 to 2030, in particular the Union's 2030 targets for energy and climate;

(b) stimulate cooperation between Member States, including, where appropriate, at regional level, designed to achieve the objectives and targets of the Energy Union;

(c) ensure the timeliness, transparency, accuracy, consistency, comparability and completeness of reporting by the Union and its Member States to the UNFCCC and Paris Agreement secretariat; (d) contribute to greater regulatory certainty as well as contribute to greater investor certainty and help take full advantage of opportunities for economic development, investment stimulation, job creation and social cohesion.

EU Member States develop integrated national energy and climate plans based on a common template. Member States will need to update their NECPs by the end of June 2023 in a draft form and by 30 June 2024 in a final form to reflect an increased ambition. Until then, Member States can adapt national policies and measures at any time, provided such changes are included in the biennial integrated national energy and climate progress reports to the Commission. Member States are also required to develop national long-term strategies and ensure consistency between these strategies and their national energy and climate Member States should report on actions that they undertake to phase out energy subsidies, in fossil particular for Each Member State should establish a permanent multi-level energy dialogue, bringing together all relevant stakeholders to discuss the different options envisaged for energy and climate policies, ensuring involvement of social partners in the preparation of the integrated NECPs, and limiting administrative complexity when fulfilling their obligations with regard to public consultation.

Part of the Clean energy for all Europeans package, and therefore relation to the Energy Union and the Paris Agreement. Direct relation to the NECPS, the Effort Sharing Regulation, and the New Leipzig Charter. Connection with the EED, the RED, and the National long-term strategies.



"Clean energy for all Europeans" package adopted: 22 May 2019 implementation: 2021\* |

2050

Type: initiative

Sector: energy

Target areas (s): energy

transition

Package consists of 8 laws politically agreed upon in 2019 Member States have 1-2 years to put these in place. New rules benefit consumers, environment & economy. Underlines EU leadership in tackling global warming & towards carbon neutrality in 2050.

Contribute to EU's long term strategy of achieving carbon neutrality by 2050.

The package consists of 8 new laws (4 regulations & 4 directives): Energy Performance in Buildings Directive (EU) 2018/844: Renewable Energy Directive (EU) 2018/2001; Energy Efficiency Directive (EU) 2018/2002: Governance of the Energy Union Regulation (EU) 2018/1999; Electricity Regulation (EU) 2019/943: Electricity Directive (EU) 2019/944; Risk Preparedness Regulation (EU) 2019/941: ACER Regulation (EU) 2019/942: MS´s are legally bound to apply the regulations, MS´s must transpose the Directives into national laws.

A significant step towards implementing the Energy Union strategy, and delivering the Paris Agreement. REPowerEU plan, Energy Efficiency Directive, Renewable Energy Directive, EU 2050 long-term strategy, Fit for 55, EU Green Deal, European Climate Law, Energy Performance in Buildings Directive (EU) 2018/844, Electricity Regulation (EU) 2019/943: Electricity Directive (EU) 2019/944; Governance of the Energy Union Regulation (EU) 2018/1999.



### Electricity Regulation (EU) 2019/943

approved: 5 June 2019 implementation: 2030

Type: regulation

Sector: energy

Target areas (s): internal market for electricity; just transition; renewable energy This Regulation revises the rules and principles of the EU's internal electricity market. It aims to ensure the market's proper functioning and competitiveness, support the decarbonisation of the EU energy sector, remove barriers to cross-border trade, and enable the transition to clean energy in line with the Paris Agreement.

Efficient Market Functioning: create an efficient and competitive electricity market. Decarbonisation: support the transition to renewable energy sources and reduce carbon emissions. Cross-Border Trade: remove barriers to cross-border electricity Consumer Empowerment: enable consumers to actively participate in the energy market. Market-Based Incentives: encourage market-based incentives for decarbonised electricity generation. Security of Supply: ensure stable and secure energy supplies across EU. Fair Competition: promote fair competition and protect against market abuses.

Market Operation: ensure that electricity markets operate according to the principles of free price formation, market flexibility, and customer empowerment.

Renewable Energy Support: implement priority dispatch and balancing rules for renewable Cross-Border Cooperation: harmonize crossborder transmission charges and allocate interconnection capacities. Just Transition Support: assist Member States with strategies for reducing fossil fuel dependence and addressing social and economic impacts. Article 4 on Just transition: "The Commission shall support Member States that put in place a national strategy for the progressive reduction of existing coal and other solid fossil fuel generation and mining capacity through all available means to enable a just transition in regions affected by structural change. The Commission shall assist Member States in addressing the social and economic impacts of the clean energy transition. The Commission shall work in close partnership with the stakeholders in coal and carbon-intensive regions, shall facilitate the access to and use of available funds and programmes, and shall encourage the exchange of good practices, including discussions on industrial roadmaps and reskilling needs."

Part of the "Clean energy for all Europeans" package. It is connected with the Electricity Directive (EU) 2019/943, and therefore with the Electricity Market Design Directive (EU) 2024/1711.



<b>Electricity Directive</b>	
(EU) 2019/944	

approved: 5 June 2019 implementation: 2030

Type: directive

Sector: energy

Target areas (s): internal market for electricity

Highlights the need for competitive cross border electricity markets, recognises that current scenario (aiming to decarbonise the energy system) presents opportunities and challenges for market participants. Underlines that technological developments create new pathways for consumers to participate and for crossborder co-operation. Thus, there is a need to adapt union market rules to new reality.

Respond to the shifting paradigm of the electricity market in the context of decarbonisation, securing common rules for true internal market and broad supply of electricity that is accessible to all.

Need for Member states to ensure that no undue barriers exist in terms of electricity market entry. Should also ensure that household are supplied with electricity at competitive and transparent prices. Policy tools such as targeted social policy measures should be used to safeguard affordability of electricity.

REPowerEU plan, Paris Agreement, European Climate Law, Energy Performance of Buildings Directive.

#### **EU Green Deal**

COM (2019) 640 final approved: 11 December 2019

implementation: 2030\* |

2050

Type: strategy

**Sector:** environment & climate change

Target areas (s): climate neutrality; energy efficiency It sets out a new growth strategy for the

States the urgency of considering the risk of EP in the transition to a clean, affordable and secure energy system, which should include measures concerning access, carbon pricing and energy efficiency. It acknowledges that there is the need for a socially just transition must also be reflected in policies at EU and national level.

Transform the EU into a sustainable, fairer and more prosperous society, with a modern, resource-efficient and competitive economy, where there are no net emissions of greenhouse gases in 2050 and where economic growth is decoupled from resource use. Increase EU's climate ambition and make Europe the first climate-neutral continent by 2050.

It mandates a comprehensive set of actions to achieve climate neutrality by 2050, including enacting a climate law, strengthening the Emissions Trading System, increasing renewable energy use, improving energy efficiency, and promoting a circular economy. It also focuses on renovating buildings for energy efficiency, developing sustainable mobility solutions, protecting biodiversity, promoting sustainable food systems, and achieving zero pollution. The Deal emphasizes policy integration, public engagement, and global cooperation to ensure a fair, inclusive, and sustainable transition for all regions and communities.

The main overall EU policy framework; implementation of the United Nation's 2030 Agenda and the sustainable development goals. Reaching the objectives of the Paris Agreement is at Direct relation to: the Fit for 55, the European Climate Pact, the EU Climate Target Plan 2030, the 8th Environment Action Programme, the Renovation Wave, the Convenant of Mayors, the EU Strategy on Adaptation to Climate Change, the Effort Sharing Regulation, the Regulation on Connection with the REPowerEU and the European Climate Law.



			l .	
Commission	It presents EU level initiatives that	Equal opportunities and jobs for all (skills and	n/a	It sets out the road towards an Action Plan to
communication on a	support the implementation of the	training, educational reform, labour market		implement the European Pillar of Social Rights,
Strong Social Europe	European Pillar of Social Rights and	integration)		launching the consultation process on the
for Just Transitions	launches a broad discussion with all EU	Fair working conditions (minimum wage, social		European Pillar of Social Rights Action Plan.
COM/2020/14 final	countries, and regions, and with all our	dialogue)		It is connected with the European Green Deal
approved: 14 January	partners.	Social protection and inclusion (unemployment		and the UN 2030 Agenda.
2020	Emphasises that implementing the	benefits, fighting poverty)		
implementation: 2021	European Green Deal will give Europe	Promoting European values in the world (global		
	the tools to strive for more when it	influence and trade policies)		
Type: EC Communication	comes to upward convergence, social			
	fairness and shared prosperity.			
Sector: social				
Target areas (s): just				
transition				



#### European Skills Agenda COM (2020) 274 final

approved: 1st July 2020 implementation: 2025

Type: agenda

Sector: social; energy

Target areas (s): just transition

It sets ambitious, quantitative objectives for upskilling (improving existing skills) and reskilling (training in new skills) to be achieved within the next 5 years. Its 12 actions focus on skills for jobs by partnering up with Member States, companies and social partners to work together for change, by empowering people to embark on lifelong learning, and by using the EU budget as a catalyst to unlock public and private investment in people's skills.

The aim is to ensure that the right to training and lifelong learning, enshrined in the European Pillar of Social Rights, becomes a reality all across Europe, from cities to remote and rural areas, to the benefit of everyone.

It aims to improve the relevance of skills in the EU to strengthen sustainable competitiveness, ensure social fairness and build our resilience. It does this through 12 "actions": A Pact for Skills; Strengthening skills intelligence; EU support for strategic national upskilling action; Proposal for a Council Recommendation on Vocational Education and Training for sustainable competitiveness, social fairness and resilience; Rolling out the European universities initiative and upskilling scientists; Skills to support the green and digital transitions; Increasing STEM graduates and fostering entrepreneurial and transversal skills; Skills for Life; Initiative on Individual Learning Accounts; A European approach to micro-credentials; New Europass Platform; Improving the enabling framework to unlock Member States' and private investments in skills.

Commission propose to businesses, social partners and other stakeholders to WORK TOGETHER, under an ambitious Pact for Skills: . develop SKILLS FOR JOBS, thanks to a forwardlooking approach to skills development, based on sound skills intelligence and modern and dynamic education and training provision that links directly with labour market and societal needs: . EMPOWER PEOPLE to build up their skills by developing innovative tools, making learning pathways more flexible and accessible. To bring this ambition to life, the Commission proposes ambitious quantitative objectives that will allow to measure progress on an annual basis.

Member States and all stakeholders are called to help bring about a skills revolution and make full use of the unprecedented opportunities offered by Next Generation EU. Directly related to the implementation of the European Pillar of Social Rights Action Plan and connected with the European Green Deal.



### The 2030 Climate Target Plan

COM (2020) 562 final approved: 17 September 2020

implementation: 2030

Type: plan

**Sector:** environment & climate change

Target areas (s): climate neutrality

It is a strategic initiative aimed at changing the emissions reduction trajectory to achieve climate neutrality by 2050, presenting an EU-wide and economy-wide greenhouse emissions reduction target of at least 55%, including emissions and removals, by 2030 compared to 1990. It sets out necessary actions across all sectors of the economy, including energy, industry, transport, and agriculture, to transition to a sustainable and climate-resilient future. It also foresees the launch of reviews of key legislative instruments to achieve the increased ambition.

- 1. Achieve at least a 55% reduction in net greenhouse gas emissions by 2030 compared to 1990 levels, setting the EU on a clear path to climate neutrality by 2050.
- 2. Integrate climate action across various sectors and policy areas to ensure cohesive and comprehensive progress towards emission reduction targets.
- Promote sustainable economic growth and job creation through investments in green technologies, renewable energy, and energy efficiency.
   Increase the share of renewable energy in the EU's energy mix and improve energy efficiency to reduce dependency on fossil fuels.
- 5. Encourage research, development, and deployment of innovative technologies that can help reduce emissions and support the green transition.
- 6. Address social and economic impacts of the transition to ensure that it is fair and inclusive, leaving no one behind.
- 7. Strengthen the EU's resilience to climate change impacts through adaptive measures and strategies.

EU institutions: ensures that EU-wide policies are aligned with the target, monitors progress, and enforces compliance; shapes the legal framework.

Member States: implementing national measures to meet their specific targets; develop and execute NECPs.

Companies across different sectors are required to reduce emissions and adopt more sustainable practices, such as transitioning to renewable energy sources and improving energy efficiency.

Regional and local governments play a critical role in implementing climate action plans.

It emphasizes the importance of engaging the citizens, civil society and stakeholders in the transition, ensuring that actions are socially fair and economically feasible.

It is a pivotal element of the European Green Deal; it is in line with the objective of Paris Agreement signed under the UNFCCC; the European Climate Law provides the legal and regulatory framework to ensure its goals are met



#### Renovation Wave

COM (2020) 662 final approved: 14 October 2020

implementation: 2030\* | 2040\* | 2050

Type: strategy

Sector: energy

Target areas (s): buildings

It identifies 3 focus areas: tackling EP and worst performing buildings; renovation of public buildings; decarbonisation of heating and cooling.

It addresses the necessary elements to achieve and sustain higher renovation rates, including regulatory strengthening. It foresees adequate financial instruments, for instance to facilitate de-risking and incentivising the measurement of actual energy savings, and other facilitating measures, such as fostering training in the required skills.

Building on the existing framework and the long-term renovation strategies, it identifies other measures to remove the main barriers to building renovation and reinforce the pull factors for faster and deeper renovations. The objective is to at least double the annual energy renovation rate of residential and non-residential buildings by 2030 and to foster deep energy renovations. Mobilising forces at all levels towards these goals will result in 35 million building units renovated by 2030. The increased rate and depth of renovation will have to be maintained also post- 2030 to reach EU-wide climate neutrality by 2050.

The development of tailor-made financial measures, especially for low-income and structurally excluded households, is crucial to speed up the process and increase the scale of renovation.

To achieve the 55% emission reduction target, by 2030 the EU should reduce buildings' greenhouse gas emissions by 60%, their final energy consumption by 14% and energy consumption for and coolina By the EC: Considering a 'deep renovation' standard as part of the 2021 EPBD revision. Updating national roadmaps for training construction workers through the Build Up Skills Initiative and the 2020 European Skills Agenda. Scale up technical assistance and make it closer to regional and local actors, in particular by strengthening the ELENA and using the technical assistance window under the RRF. Additionally, it involves revising energy audit requirements and extending renovation requirements to all public administration levels in the EED, strengthening renewable heating and cooling introducina minimum renewable proportions in buildings, and facilitating access to waste and renewable heat into energy systems (revisions of the RED, the EED and the EU ETS). Furthermore, it supports energy communities and local actions through the European Smart Cities Marketplace and the Covenant of Mayors, and launches the Affordable Housing Initiative to boost energy efficiency in affordable housing sectors. Work in partnership with the Committee of the Regions and local and municipal authorities through the Climate Pact.

Key initiative of the European Green Deal; connection with the 2030 Climate Target Plan and the Climate Pact; the EPBD is its key initiative; launches the Affordable Housing Initiative: related to the revision of the EED, the RED and the EU ETS: directly related to the 2020's EC Recommendation on EP and with the 2023's connected Recommendation on EP: connection with the Covenant of Mayors, the Build Up Skills Initiative, the European Skills Agenda, the **ELENA** RRF. and the Necessary resources to be made available by EU the recovery instrument NextGenerationEU, together with the EU Multiannual Financial Framework: monitoring and reporting mechanisms provided in the Governance of the Energy Union and Climate Action will monitor progress on renovation.

Connected with the national long-term strategies and the NECPs.



Commission Recommendation on Energy Poverty (2020)	It aims to assist EU Member States in addressing energy poverty through a systematic approach, focusing on	Mitigate Energy Poverty: Reduce the number of households experiencing energy poverty.     Support Vulnerable Consumers: Provide targeted	Utilize Commission guidance on energy poverty indicators in NECPs.  Regularly update and refine the indicators in the	Jointly adopted with the Renovation Wave. Connected with the Nacional Social Climate Plans and the Electricity Directive.
(EU) 2020/1563	defining, measuring, and mitigating the	support to energy-poor and vulnerable consumers.	Annex to monitor and address energy poverty	One of the initiative that the Commission has
approved: 14 October	issue. It emphasizes the importance of	3. Promote Energy Market Liberalization: Ensure the	effectively.	put forward to implement the pillar of "Access
2020	coordinated efforts at all administrative levels and the integration of energy and	benefits of energy market liberalization are shared across all societal sections, especially the most	Develop policies that integrate energy and social measures, focusing on energy efficiency	to essential services", the 20th principle of the European Pillar of Social Rights.
Type: EC	social policies to support vulnerable	needy.	improvements, especially in housing.	
Recommendation	households.	4. Facilitate Green Transition: Ensure a fair, inclusive, and sustainable green transition.	Ensure meaningful public participation and broad stakeholder engagement in policy development.	
Sector: energy; social			Deploy EU funding programs to tackle energy poverty, prioritizing measures for vulnerable	
Target areas (s): energy			groups.	
poverty			Allocate public funds to low-income households	
			and explore financing solutions like energy	
			performance contracts to reduce upfront renovation costs.	
Pact for Skills	Members of the Pact have access to	It aims to support public and private organisations	All members of the Pact sign up to the Charter and	Connection with the Renovation Wave.
launched: 10 November	knowledge on upskilling and reskilling	with upskilling and reskilling, so they can thrive	agree to uphold its four key principles:	The Pact is the first of the flagship actions
2020	needs, advice on relevant funding	through the green and digital transitions.		under the European Skills Agenda and is firmly
implementation: 2025	instruments to boost the skills of adults in their regions and countries, and		promoting a culture of lifelong learning for all building strong skill partnerships	anchored in the European Pillar of Social Rights.
Type: pact	partnership opportunities within our growing community.		monitoring skill supply/demand and anticipating skill needs	
Sector: social; energy			working against discrimination and for gender equality and equal opportunities.	
Target areas (s): just			equality and equal opportunities.	
transition				



New Leipzig Charter adopted: 30 November 2020

implementation: 2030

Type: initiative

**Sector:** sustainable development

Target areas (s): sustainable urban development It represents a significant update in the framework for sustainable urban development in Europe, providing a policy framework to envision and realise the European and global agreements at the urban scale.

dimensions to create resilient, sustainable, and inclusive cities. Foster community building and inclusiveness at the neighbourhood level, particularly in areas facing socio-economic challenges. Encourage cooperation and coordination between cities and surrounding rural areas for policies on housing, mobility, services, and infrastructure. Ensure equal opportunities and environmental justice for all, combat global warming, and maintain a diversified economy for job creation. Uphold principles of participation, co-creation, multilevel governance, and place-based approaches to empower cities and regions.

social, ecological,

economic

Integrate

Cities should develop and apply strategies integrating various sectoral policies, ensuring balanced urban growth. Collaboration across local, regional, national, and European levels is essential to address urban challenges effectively. National and EU institutions must provide financial and regulatory frameworks, facilitating cities' efforts in sustainable urban development. Involve citizens, civil society, and private sectors in urban development processes to enhance local democracy and innovative Enhance digital infrastructure and skills to support smart city strategies and ensure inclusive digital transformation.

Connected with the 2030 Agenda for Sustainable Development, in particular Sustainable Development Goal 11 which is dedicated to making cities inclusive, safe, resilient and sustainable, the New Urban Agenda, the Paris Agreement, and the EU Green Deal. It supports the objectives of the Territorial Agenda 2030.



**Territorial Agenda 2030** 

approved: 1st December 2020

implementation: 2030

Type: agenda

**Sector:** economy & territorial cohesion

Target areas (s): spatial planning; just transition; green transition

The Territorial Agenda 2030 provides an action-oriented framework to promote territorial cohesion in Europe: a future for all places. It underlines the importance of and provides orientation for strategic spatial planning and calls for strengthening the territorial dimension of sector policies at all governance levels.

It seeks to promote an inclusive and sustainable future for all places and to help achieve Sustainable Development Goals in Europe, addressing: quality of life; public services; demographic and societal imbalances; digitalisation and the 4th industrial revolution; employment and economic development. It defines two overarching objectives, a Just Europe and a Green Europe, which have six priorities for developing the European territory as a whole, along with all its places. A Just Europe that offers future perspectives for all places

- better balanced territorial development utilising Europe's diversity;
- convergent local and regional development, less inequality between places;
- easier living and working across national borders;
   A Green Europe that protects common livelihoods and shapes societal transition:
- better ecological livelihoods, climate-neutral and resilient towns, cities and regions;
   strong and sustainable local economies in a globalised
- sustainable digital and physical connectivity of places.

It mandates cooperation among Member States, sub-national authorities, and European institutions to promote territorial cohesion. Key actions include:

- Member States: strengthen intergovernmental cooperation, review progress biannually, and integrate Territorial Agenda priorities into national policies;
- Sub-national Authorities: apply the Agenda in local planning, cooperate with neighbouring regions, and engage in policy debates;
- European Commission: promote territorial cohesion and integrate it into EU policies, emphasizing stakeholder involvement and impact assessments:
- European Parliament, Committee of the Regions, and Economic and Social Committee: advocate for Territorial Agenda priorities, inform members, and encourage cooperation and pilot actions:
- European Investment Bank: reflect Agenda priorities in financing and advisory services, supporting sustainable investments and pilot projects;
- Associations: inform and encourage members to apply the Agenda and participate in policy discussions.

It considers various agendas and policies, such as the United Nations 2030 Agenda for Sustainable Development and the Sustainable Development Goals, the New Leipzig Charter, and the European Pillar of Social Rights. The European Green Deal with its Sustainable Europe Investment Plan and Just Transition Mechanism, as well as related EU sector policies and work on Long-term vision for rural areas, offer the opportunity to promote synergies between the Territorial Agenda and overarching EU strategies and policies.



#### **EU Climate Pact**

COM (2020) 788 final approved: 9 December 2020

implementation: 2050

Type: pact

**Sector:** environment & climate change

Target areas (s): climate action; just transition

It is an initiative by the European Commission aimed at engaging various stakeholders and civil society in climate action and promoting sustainable behaviour. It provides a platform for individuals and organizations to learn about climate change, develop solutions, and connect with others to amplify their impact. The Pact encourages participation through Climate Pact Ambassadors and facilitates the sharing of information, best practices, and joint actions.

Raise Awareness: increase understanding of climate change and its impacts. Promote Action: encourage individuals and organizations to commit to specific climate actions. Support Green Skills: facilitate the development of green skills and employment in the green economy. Foster Community Engagement: create a vibrant community space for sharing information, debating, and acting on climate issues. Build a Climate Movement: support the growth and consolidation of a European climate movement.

Engage Stakeholders: involve organizations and sectors crucial for the transition to a climate-friendly economy in initiatives like the Pact for Skills.

Spread Best Practices: disseminate success stories and good practices from various European initiatives and member Leverage Funding: quide stakeholders in utilizing the European Social Fund Plus, the Recovery and Resilience Facility, and other funding mechanisms for green skills development. Promote Just Transition: encourage the use of the Just Transition Fund and Mechanism to support re-skilling and job creation in transitioning regions. Enhance Education: support higher education institutions in developing programs on environmental and climate impacts, and promote flexible educational formats.

Part of the European Green Deal. Connection with the Covenant of Mayors and the Pact of Skills. It will empower individual citizens, who will play a key role in the success of the EU strategy on adaptation to climate change.



#### **EU Strategy on Adaptation to Climate** Change

COM (2021) 82 final approved: 25 February 2021

implementation: 2050

Type: strategy

Sector: environment & climate change

Target areas (s): various sectors concerning adaptation

The new strategy sets out how the European Union can adapt to the unavoidable impacts of climate change and become climate resilient by 2050.

Faster, smarter, more systemic adaptation and stepping up international action for climate resilience. The EU has set a target of at least 30% for climate action, including adaptation, in the Multiannual Financial Framework for 2021-2027, and of at least 37% under the Recovery and Resilience

Member States will continue to be the main implementation partners - and more ambitious and more proactive EU-level action will help them meet their adaptation The implementing regulation on the Governance of the Energy Union and Climate Action stipulates the structure, format, submission processes and review of adaptation information reported by Member States.

The Commission will work closely with Member States on the implementation of this strategy, and to better align international and EU adaptation action, and will ensure that the strategy is implemented in close concert with the other elements of the EU Green The Commission will step up support to planning and implementation of local adaptation and launch an adaptation support facility under the EU Covenant of Mayors, and support the reskilling and requalification of workers for a just and fair resilience with education and training through the European Social Fund Plus and the European Skills Agenda. The European Climate Pact will empower

individual citizens, who will play a key role in the

success of the adaptation strategy.

The EU Green Deal points to more ambitious adaptation action that builds on the 2013 EU Adaptation Strategy. It is in line with the Paris Agreement and the proposed European Climate Law: "given the systemic nature of adaptation policy, adaptation action will be implemented in an integrated manner with other European Green

Deal initiatives such as the Biodiversity Strategy, Renovation Wave, Farm to Fork Strategy, the Circular Economy and Zero Pollution Action Plans, Forest Strategy, Soil Strategy, Smart and Sustainable Mobility Strategy, and Renewed Sustainable Finance Strategy." Connection with the Governance Regulation,

the EU Covenant of Mayors, the European Social Fund Plus, the European Skills Agenda, and the European Climate Pact.



# The European Pillar of Social Rights Action Plan

published: 4 March 2021 implementation: 2030

Type: plan

Sector: social

Target areas (s): just transition

It promotes just transitions, access to training and essential services including energy, mobility and housing for all. It highlights that unity, coordination and solidarity are needed to move forward towards a greener and more digital decade in which Europeans can thrive.

It proposes three EU headline targets for 2030 in the areas of employment, skills and social protection, namely:

- at least 78% of the population aged 20 to 64 employed;
- at least 60% of adults participating in training every vear:
- reducing the number of people at risk of poverty or social exclusion by at least 15 million.

The Commission encourages member states of the European Union (EU) to improve social standards and ensure more equitable societies, aligning national policies with the principles outlined in the European Pillar of Social Rights. Here are some key actions:

- Integrate the principles of the Pillar into their national reform programs and national budgets, by setting national targets and adopting specific measures to address social and employment challenges.
- 2. Develop and implement comprehensive social rights strategies, which may include reforms in areas like education, healthcare, and housing to ensure that the social rights are effectively promoted and protected.

  3. Involve relevant stakeholders, including social.
- Involve relevant stakeholders, including social partners, civil society, and local authorities, in the planning and implementation of policies related to the Pillar, ensuring that policies are inclusive and consider diverse perspectives.
- 4. Strengthening social protection systems to provide adequate and effective support to people, particularly in times of economic hardship or unemployment, is a critical requirement.

Action Plan for the implementation of the European Pillar of Social Rights. Directly related to the Pact for Skills, the EU Skills Agenda, the Commission Recommendation on Energy Poverty and the Council Recommendation on fair transition.



Commi	ssi	on I	Long-	term
Vision	for	the	EU's	Rural
Areas				

COM (2021) 345 final approved: 30 June 2021 implementation: 2040

Type: initiative

**Sector:** economy & territorial cohesion

Target areas (s): rural

areas

It outlines the challenges and opportunities for rural regions, proposing strategies to make these areas stronger, connected, resilient, and prosperous by 2040.

Towards stronger, connected, resilient and prosperous rural areas by 2040.

The Vision and Action Plan identify four areas of action, supported by flagship initiatives, to enable:

Stronger: focus on empowering rural communities, improving access to services and facilitating social innovation;

Connected: to improve connectivity both in terms of transport and digital access;

Resilient: preserving natural resources and greening farming activities to counter climate change while also ensuring social resilience through offering access to training courses and diverse quality job opportunities;

Prosperous: to diversify economic activities and improve the value added of farming and agri-food activities and agri-tourism.

By mid-2023, the Commission will take stock of what actions have been carried out and programmed in support schemes for rural areas financed by the EU and Member States in the 2021-2027 programming period for the CAP and Cohesion Policy Funds and will highlight gaps where necessary. A set of reflections on possible orientations for enhanced support action and financing for rural areas, as well as on the ways forward, will be included in a public report by the first quarter 2024, based on the implementation of the EU Rural Action Plan. The discussions around the report will feed the reflection on the preparation of the proposals for the 2028-2034 programming period.

Referred as an initiative in the Communication on a Strong Social Europe for Just Transitions. The Rural Pact and EU Rural Action Plan are the key components to achieve these goals.

#### **EU Rural Action Plan**

approved: 30 June 2021 implementation: 2040

Type: plan

areas

**Sector:** economy & territorial cohesion

Target areas (s): rural

The Action Plan is part of the European Commission's long-term vision for rural areas, aiming to ensure sustainable, cohesive, and integrated rural development. It focuses on empowering rural communities, improving connectivity, enhancing resilience, and fostering prosperity.

Stronger Rural Communities: empower rural communities, improve access to services, and facilitate social innovation.

Connected Rural Areas: improve both digital and transport connectivity.

Resilient Rural Areas: preserve natural resources, promote sustainable farming, counter climate change, and ensure social resilience.

Prosperous Rural Areas: diversify economic activities and enhance the value-added of farming, agri-food activities, and agri-tourism.

Integration of policies: ensure that various EU policies like the Common Agricultural Policy (CAP) and Cohesion Policy support rural development.

Regular updates and monitoring: the Commission will support, monitor, and regularly update the Action Plan to ensure its relevance. Rural proofing: review EU policies to assess their impact on rural jobs, growth, and sustainable development.

Data collection and analysis: establish a rural observatory to improve data collection and analysis on rural areas.

Part of the Long-Term Vision for EU's rural areas. The Common Agricultural Policy (CAP) and the Cohesion Policy will be fundamental in supporting and implementing this Action Plan,

while being accompanied by several other EU

policy areas that together will turn this Vision

into a reality.



	T			
Rural Pact	It provides a framework for cooperation	It aims at fostering mutual inspiration between all	Participating in the Pact means: contributing to	Part of the Long-Term Vision for EU's rural
launched: 2021	between public authorities, civil society,	levels of governance and mobilise public authorities	keep rural areas high on the political agenda;	areas.
implementation: 2040	businesses, academia and citizens, at	and stakeholders to act on the needs and	sharing promising initiatives and learning from	
	the European, national, regional and	aspirations of rural residents.	others; getting priority access to collaborative	
Type: pact	local level. It contributes to achieving	The Rural Pact has three objectives: amplifying	platform and events; being informed on	
	the shared goals of the Long-Term	rural voices and bringing them higher on the political	developments on all themes of interest to rural life,	
Sector: economy &	Vision for Rural Areas by facilitating	agenda; structuring and enabling networking,	including consultations. The Rural Pact Support	
territorial cohesion	interaction on rural matters.	collaboration & mutual learning; encouraging and	Office (RPSO) provides facilitation and	
		monitoring voluntary commitments to act for the	networking services to the Rural Pact and its	
Target areas (s): rural		vision.	community, aiming to achieve the objectives of the	
areas			Rural Pact and the long-term vision for EU's rural	
			areas. The RPSO actively seeks synergies and	
			complementarities with other EU policy networks	
			and initiatives dedicated to rural development,	
			aiming to foster stronger, connected, prosperous,	
			and resilient rural areas throughout Europe.	
EU Climate Law	Writes into law the goal set out in the	Climate neutrality of the EU by 2050.	Achievement of targets by 2050 and 2030.	Connection with the European Green Deal; in
(EU) 2021/1119	European Green Deal for Europe's		EU institutions and Member States shall ensure	line with the objective of Paris Agreement
approved: 30 June 2021	economy and society to become	by 2030.	continuous progress in enhancing adaptive	signed under the UNFCCC to keep the global
implementation: 2030*	climate-neutral by 2050 and sets the		capacity, strengthening resilience and reducing	temperature increase to well below 2°C and
2050	intermediate target of reducing net		vulnerability to climate change in accordance with	pursue efforts to keep it to 1.5°C; 2030 Climate
	greenhouse gas emissions by at least		the Paris Agreement.	Target Plan; amended the European Climate
Type: regulation	55% by 2030, compared to 1990 levels.		Member States' adaptation policies shall take into	Law.
<b>3.</b> 0			account the particular vulnerability of the relevant	
Sector: environment &			sectors, integrate adaptation to climate change in	
climate change			a consistent manner in all policy areas, and focus,	
omnato onango			in particular, on the most vulnerable and impacted	
Target areas (s): climate			populations and sectors.	
neutrality			populations and societs.	
,				
	l .			



	TΩ		

COM (2021) 550 final approved: 14 July 2021 implementation: 2030

Type: legislative package

**Sector:** environment & climate change

Target areas (s): climate neutrality

It is a set of proposals to revise and update EU legislation and to put in place new initiatives with the aim of ensuring that EU policies are in line with the climate goals agreed by the Council and the European Parliament, It enhances eight existing laws and introduces five new initiatives, striking a balance between pricing, targets, standards, and support measures to drive towards the 2030 target and beyond. It includes interconnected proposals designed to ensure a fair, competitive, and green transition across various sectors such as climate, energy, transport, buildings, land use, and forestry.

Goal of reducing EU emissions by at least 55% by 2030. Delivering the EU's 2030 Climate Target on the way to climate neutrality.

Help Member States alleviate energy poverty, and to empower and protect vulnerable customers.

EU institutions: propose and monitor legislation, coordinate funding, adopt and amend legislation and ensure compliance (revision of the ETS, the RED and the EED). Member States: implement laws and policies, develop and submit plans, allocate national funding.

Local and Regional Authorities: implement local measures, engage with communities. Businesses and Industry: comply with regulations, invest in clean technologies. Financial Institutions: provide financing for green projects.

Civil Society: advocate for climate action and raise awareness (citizens of all regions and ages will be closely involved in the implementation, for instance through the European Climate Pact).

A key component of the European Green Deal, being related to the EU Climate Law. Direct implementation in the REPowerEU plan. Directly related to the ETS2, the EPBD, the RED, the EED, and the Effort Sharing Regulation.

Connection with the European Climate Pact and the EU's 2030 Climate Target plan.

#### Covenant of Mayors for Climate and Energy

launched: 2008 official commitment document: 2021 implementation: 2030\* | 2050

Type: initiative

**Sector:** environment & climate change

Target areas (s): decarbonisation; just transition; adaptation; energy poverty The EU Covenant of Mayors for Climate & Energy is an initiative supported by the European Commission bringing together thousands of local governments that want to secure a better future for their citizens. By joining the initiative, they voluntarily commit to implementing EU climate and energy objectives (keeping global temperature rise below 1.5°C - Paris Agreement; reducing their GHG emissions by at least the 55% by 2030 compared to 1990 levels - European Climate Law).

Reducing GHG emissions by 55% by 2030. Climate neutrality by 2050, with a minimum GHG reduction target of 80%.

Strengthening resilience and prepare for the adverse impacts of climate change.

Tackle energy poverty as one key action to ensure a just transition.

Mayors and local leaders are requested to: - commit to set mid- and long-term targets (consistent with the EU objectives, and at least as ambitious as national targets), with the goal of 2050; achieving climate neutrality by - engage with citizens, business and government at all levels to implement this vision; - act now to get on track and accelerate the necessary transition: - network with fellow Mayors and local leaders to inspiration from each other.

Local authorities joining the initiative commit to submitting a Sustainable Energy and Climate Action Plan (SECAP) within two years after formally signing up to the initiative. This action plan is a key implementation tool for the Covenant signatories.

Connection with: EU Climate Law, EU Climate Target Plan 2030, EU Climate Pact, Next Generation EU, Local plans (SECAPs) and actions.

Framing policies of three pillars (Mitigation, Adaptation and Energy Poverty) identified as Paris Agreement and 2030 Sustainability Agenda and the European Green Deal.



#### Affordable housing initiative

launched: 16 September

implementation: 2030

Type: initiative

Sector: social

Target areas (s): energy

efficiency

Initiative is part of the commission's renovation wave strategy for Europe, aiming to green buildings, create employment & improve lives. As part of strategy the initiative works to make sure social and affordable housing facilities also benefit from the renovation wave. It will guarantee local social and affordable housing projects' access to necessary technical and innovation capacity.

Ensure social housing facilities also benefit from renovation wave. Pilot the renovation of 100 lighthouse social and affordable housing districts.

Following an integrated approach, the renovation of social and affordable housing shall:
- combine technologies, such as digital, smart energy efficient solutions, circular and modular renovation tool-kits and eco-design, use of renewables as energy sources, etc.;
- use and develop human-centred business models, promote social innovation and frameworks to empower residents (coinvesting, resident owned services...);
- ensure that renovated units remain affordable;
- follow a district-level approach: economies of

scale, transform entire neighbourhoods and

create new business opportunities.

It is part of the Renovation Wave, and it is a flagship of the New European Bauhaus. In line with the European Pillar of Social Rights, the Energy Efficiency Directive (EED), the Energy Performance of Buildings Directive (EPBD), and the REPowerEU.



#### 8th Environment Action Programme (EU) 2022/591

approved: 6th April 2022 implementation: 2030\* | 2050

Type: action programme

**Sector:** environment & climate change

Target areas (s): climate neutrality; circular economy; regeneration; biodiversity

8th Environment Action Programme (EAP) is a legal framework implementing the EU's environmental and climate objectives The action programme reiterates the EU's long-term vision to 2050 of living well and within planetary boundaries. It sets out priority objectives for 2030 and the conditions needed to achieve these. It calls for active engagement of all stakeholders at all levels of governance, to ensure that EU climate and environment laws are effectively implemented.

There are six priority objectives to 2030:

- achieving the 2030 greenhouse gas emission reduction target and climate neutrality by 2050;
   enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change;
- advancing towards a regenerative growth model, decoupling economic growth from resource use and environmental degradation, and accelerating the transition to а circular - pursuing a zero-pollution ambition, including for air, water and soil and protecting the health and wellof beina Europeans: - protecting, preserving and restoring biodiversity, enhancing natural capital; - reducing environmental and climate pressures related to production and consumption (particularly in the areas of energy, industry, buildings and infrastructure, mobility, tourism, international trade

and the food system).

The EC, supported by the European Environmental Agency (EEA) and the European Chemicals Agency (ECHA), without prejudice to their independence, shall monitor, assess and report on the progress of the Union and the Member States.

European Green Deal, UN's 2030 Agenda and its Sustainable Development Goals. Building on the European Green Deal, the action programme aims to speed up the transition to a climate-neutral, resource-efficient economy, recognising that human wellbeing and prosperity depend on healthy ecosystems.

It forms the EU's basis for achieving the United Nation's 2030 Agenda and its Sustainable Development Goals. Reinforces the greenhouse gas emission reduction target for 2030 set out in the European Climate Law.



#### **REPowerEU**

COM (2022) 230 final approved: 18 May 2022 implementation: 2030\* | 2050

Type: plan

Sector: energy

Target areas (s): green transition; energy efficiency; renewable energy This plan recognizes the potential negative impact of volatile energy prices.

It aims to reduce the EU's dependency on Russian fossil fuels by fast forwarding the clean transition and joining forces to achieve a more resilient energy system.

It builds upon the Fit for 55 package of proposals by introducing further measures to accelerate the energy transition and putting forward an additional set of actions to:

- save energy;
- diversify supplies;
- quickly substitute fossil fuels by accelerating Europe's clean energy transition;
- smartly combine investments and reforms.

Member States are obligated to implement the recommendations, transpose directives into national law, streamline permitting processes, and ensure compliance with the set targets and goals. It invites Member States to add to their existing NRRPs a dedicated chapter with new actions to deliver on the objectives of diversifying energy supplies and reducing dependence on fossil fuels. It proposes to increase to 13% the binding target It invites the Parliament and Council to enable additional savings and energy efficiency gains in through It calls on the Member States to speed up the transposition of the ED to effectively allow consumers to participate in energy markets (individually or via energy communities or collective self-consumption schemes) to produce, self-consume, sell or share renewable energy. EC will provide oversight, guidance, and support to Member States, and amend its proposal on the RED to support an acceleration of permitting procedures for renewable energy projects and related infrastructure.

It builds on the full implementation of the Fit for 55 proposals; it complements and accelerates the European Green Deal's objectives; it leverages funding from the RRF to finance energy projects that support economic recovery and green transition; it integrates and builds upon existing EU directives (ED, EED, RED, and EPBD) by setting higher targets and facilitating faster implementation; it gives indications for the NRRPs.



Regulation on Trans-	The Trans-European Networks for	Improve connectivity of European energy networks.	n/a	Direct relation to the EU Green Deal.
<b>European Networks for</b>	Energy (TEN-E) is a policy that is			
Energy (TEN-E)	focused on linking the energy			
(EU) 2022/869	infrastructure of EU countries. As part of			
approved: 30 May 2022	the policy, eleven priority corridors and			
	three priority thematic areas have been			
Type: regulation	identified. The EU helps countries in			
	these priority corridors and thematic			
Sector: energy	areas to work together to develop better			
	connected energy networks and			
Target areas (s): energy	provides funding for new energy			
infrastructure	infrastructure projects.			



Council

Recommendation (CR)
on ensuring a fair
transition towards
climate neutrality
2022/C 243/04

approved: 16 June 2022

Type: Council
Recommendation

Sector: energy; social

Target areas (s): just transition; energy poverty

It focuses on ensuring that the transition towards a climate-neutral and environmentally sustainable economy by 2050 is fair and inclusive, leaving no one behind.

1. Ensure fairness: promote a fair transition that addresses employment and social aspects.
2. Comprehensive policy packages: encourage Member States to adopt and implement policies that promote a fair transition across all sectors, notably climate, energy, and environmental policies.
3. Active support for employment: provide active support for quality employment to help those most affected by the green transition, including people in vulnerable situations, facilitating their transition towards economic activities that contribute to climate and environmental objectives.

Member States are invited 1. adopt and implement, in close cooperation with social partners as relevant, comprehensive and coherent policy packages, addressing the employment and social aspects to promote a fair transition across all policies, notably climate, energy and environmental policies, as well as to make optimal use of public and private funding; 2. ensure access to and preservation of quality employment through tailored job search assistance, learning courses, and employment programs targeting green and digital skills; 2.1. integrate the employment and social aspects of the green transition, including potential labour shortages, in the development and implementation of the relevant national strategies addressing skills challenges, for example under the European Skills Agenda, and support setting up and coordinate stakeholder partnerships, including under the Pact for Skills, ensuring notably that skills are at the heart of co-created transition pathways for relevant industrial ecosystems contributing to climate and environmental objectives; 3. implement targeted hiring and transition incentives, such as wage and recruitment subsidies, to support labour market transitions sectors across and regions; 4. foster entrepreneurship, especially in regions facing transition challenges, by providing financial and non-financial support tailored to each business lifecvcle phase: facilitate access to finance and markets for small and medium-sized enterprises (SMEs) contributing to climate and environmental objectives, promoting competitiveness, and quality employment; innovation, 6. strengthen the evidence base on fair transition policies by, inter alia, advancing, where relevant, the gradual harmonisation and consistency of definitions, concepts and methodologies, including on the basis of Recommendation (EU) 2020/1563 and follow-up actions in the Energy Poverty and Vulnerable Consumers Coordination Group.

Part of the 'Fit for 55' package. In line with the principles of the European Green Deal and the European Pillar of Social Rights. Connection with the EU ETS. Direct relation to the European Skills Agenda and the Commission Recommendation on Energy Poverty (2020).



Effort Sharing Regulation (ESR) (EU) 2023/857 approved: 19 April 2023 implementation: 2030  Type: regulation  Sector: environment & climate change  Target areas (s): climate neutrality	It establishes for each Member State a national target for the reduction of greenhouse gas emission by 2030 in the following sectors: domestic transport (excluding aviation), buildings, agriculture, small industry and waste. In total, the emissions covered by the Effort Sharing Regulation account for almost 60% of total domestic EU emissions. It aims at a fair distribution of efforts between Member States, to ensure solidarity and burden sharing between Member States and regions.	With their new national targets Member States will collectively contribute to an emission reduction at EU level, in the Effort Sharing sectors, of 40% compared to 2005 levels.	It establishes for each Member State a national target for the reduction of greenhouse gas emission by 2030 in the following sectors: domestic transport (excluding aviation), buildings, agriculture, small industry and waste.	The revision was adopted as part of a package of proposals aimed at reducing the EU's emissions by 55% by 2030 (compared to 1990 levels) and deliver the European Green Deal (Fit for 55). It contributes to achieving the objectives of the European Climate Law and the Paris Agreement.  The Governance Regulation establishes procedures to help tracking progress of compliance with the obligations on the levels of GHG emissions and removals established in this regulation.
New Emissions Trading System Directive (ETS2) (EU) 2023/959 approved: 10 May 2023 implementation: 2030  Type: directive Sector: energy; social Target areas (s): buildings; transport	As part of the 2023 revisions to the ETS Directive, a new emissions trading system named ETS2 was created. This system, separate from the existing EU ETS, covers CO <sub>2</sub> emissions from fuel combustion in buildings, road transport, and additional sectors, particularly small industries not previously covered by the existing EU ETS. The ETS2 aims to complement other European Green Deal policies and will be fully operational by 2027.	Reduction of Emissions in New Sectors: cover emissions from buildings, road transport, and additional small industries; achieve a 42% reduction in emissions by 2030 compared to 2005 levels.  Economic Incentives: provide market incentives for investments in building renovations and low-emissions mobility through the carbon price set by the ETS2.  Support for Vulnerable Groups: use a share of revenues from ETS2 to support vulnerable households and micro-enterprises through a dedicated SCF; ensure Member States use remaining revenues for climate action and social measures.	The EC manages the market stability reserve to address insufficient or excessive supply of allowances.  Each Member State is responsible for setting up the necessary infrastructure for monitoring, reporting, and verification. Member States must use auction revenues for climate action, social measures, and supporting vulnerable groups through the SCF (reporting on how these funds are spent). Member States issue GGE permits to regulated entities and approve monitoring plans.  Regulated Entities (Fuel Suppliers) are responsible for monitoring and reporting their emissions. They must submit an emissions report by 30 April each year, starting from 2026, and have their data verified by an accredited verifier. They must purchase allowances at auctions and surrender the equivalent number of allowances to cover their emissions by 31 May each year, starting from 2028.  Accredited Verifiers are responsible for verifying the emissions data submitted by regulated entities to ensure accuracy and compliance with the regulations.  SCF Administrators are responsible for managing	Part of the 'Fit for 55' package and therefore of the European Green Deal; aligned with the European Climate Law goals; connected with the Renovation Wave and the Council Recommendation on ensuring a fair transition towards climate neutrality; it establishes the Social Climate Fund (SCF).



	the funds and ensuring that they are directed towards supporting vulnerable households and micro-enterprises.	



Energy Efficiency Directive (EED) (EU) 2023/1791 approved: 13 September 2023 implementation: 2030  Type: directive  Sector: energy  Target areas (s): energy efficiency; energy poverty	Refers explicitly to the central role of energy efficiency in any strategy to tackle EP and it includes a cross-cutting approach that integrates, for example, the impacts of economic and health crises into the understanding of EP. The directive defines EP as "a household's lack of access to essential energy services, where such services provide basic levels and decent standards of living and health, including adequate heating, hot water, cooling, lighting, and energy to power appliances, in the relevant national context, existing national social policy and other relevant national policies, caused by a combination of factors, including at least non- affordability, insufficient disposable income, high energy expenditure and poor energy efficiency of homes (article 1(52))".	Directive establishes a common framework of measures to promote energy efficiency within the Union in order to ensure that the Union's 2020 headline targets on energy efficiency of 20 % and its 2030 headline targets on energy efficiency of at least 32,5 % are met and paves the way for further energy efficiency improvements beyond those dates.	The need for Member States to include social aims in energy-saving measures, energy efficiency obligation schemes, and alternative policy measures.	Part of the "Clean energy for all Europeans" package and of the 'Fit for 55' package, and therefore connected with the Paris Agreement, the European Climate Law, the EU Green Deal. It supports the REPowerEU Plan.  Connection with the Renovation Wave, the Governance Regulation, and the Energy Performance of Buildings Directive.
Renewable Energy Directive (RED) (EU) 2023/2413 approved: 18 October 2023 implementation: 2030  Type: directive  Sector: energy  Target areas (s): renewable energy	Points to the potential role of renewable energy communities in addressing EP through reduced consumption and lower supply tariffs and promoting the participation of "vulnerable consumers" in self-consumption and energy communities. From a social perspective, some of the suggested measures give special consideration to structurally disadvantaged consumers, but they do not clearly define or characterize this category.	Member States shall collectively ensure that the share of energy from renewable sources in the Union's gross final consumption of energy in 2030 is at least 32%, developing transmission and distribution grid infrastructure, intelligent networks, storage facilities and interconnections, with the objective of arriving at a 15 % electricity interconnection target by 2030.	It stipulates that based on the national context, Member States should include an outline of relevant national actions to alleviate EP in their long-term renovation strategies.	Part of the "Clean energy for all Europeans" package and of the 'Fit for 55' package, and therefore connected with the Paris Agreement, the European Climate Law, the EU Green Deal. It supports the REPowerEU Plan. Connection with the Renovation Wave and the Governance Regulation.



Commission
Recommendation on
Energy Poverty (2023)
(EU) 2023/2407
approved: 20 October

2023

Type: EC Recommendation

Sector: energy; social

Target areas (s): energy

poverty

It aims to assist EU Member States in addressing energy poverty through a comprehensive framework that includes defining and distinguishing energy poverty from vulnerability, integrating policies, ensuring targeted measures, and promoting public participation and governance.

Define and Distinguish Energy Poverty: transpose and implement a clear definition of energy poverty distinct customers. from vulnerable Holistic Policy Approach: ensure policies reflect the differences and complementarities between energy poverty and vulnerable customers. Effective Use of National Energy and Climate Plans (NECPs): update and address energy poverty in NECPs Social Climate and Quality Data and Transparency: use and provide transparent data on energy poverty indicators.

It mandates EU Member States to define and distinguish energy poverty from vulnerability, integrate these distinctions into national policies, and utilize NECPs and Social Climate Plans to address the issue. States must employ reliable indicators, prioritize structural measures like energy efficiency and building renovation, prevent disconnections, ensure policy coherence, and promote cross-departmental collaboration. Establishing national energy observatories, fostering targeted communication and trust-building efforts, accelerating renovations, ensuring access to renewables, training relevant personnel, and leveraging EU funding for tailored support schemes are also required actions.

Directive.

Connection with the Renovation Wave.

Connected with the Nacional Social Climate
Plans and the NECPs.

One of the initiatives that the Commission has
put forward to implement the pillar of "Access
to essential services", the 20th principle of the
European Pillar of Social Rights.

Direct relation to the Energy Efficiency



# Energy Performance of Buildings Directive (EPBD)

(EU) 2024/1275 approved: 24 April 2024 implementation: 2030\* | 2040\*\* | 2050

Type: directive

Sector: energy

Target areas (s): buildings

States that the measures aimed at achieving a highly efficient and decarbonized building stock should consider affordability and provide financial mechanisms for consumers experiencing EP and living in poorly performing buildings.

Promotes the improvement of the energy performance of buildings within the Union, considering outdoor climatic and local conditions, as well as indoor climate requirements and cost-effectiveness.

Member States must develop national plans for renovating buildings to increase the number of nearly zero-energy buildings. These plans should include defining energy poverty, measuring energy poverty and related indicators, providing quantified targets for reducing energy poverty through these measures, and outlining a comprehensive roadmap with targets for the years 2030, 2040, and 2050.

Part of the "Clean energy for all Europeans" package and of the 'Fit for 55' package, and therefore connected with the Paris Agreement, the European Climate Law, the EU Green Deal. Directly aligned with the objectives of the Renovation Wave; it supports the REPowerEU Plan.



Electricity Market

Design Directive (EMDD)

(EU) 2024/1711

approved: 13 June 2024

Type: directive

Sector: energy

Target areas (s): internal market for electricity; energy poverty; renewable energy The integrated EU energy market aims to provide secure, sustainable, and affordable energy to EU citizens by establishing common market rules and cross-border infrastructure. This integration allows energy produced in one EU country to be delivered to consumers in another, fostering competition and keeping prices in check.

Ensure secure energy supplies: achieve a stable energy supply through cross-border infrastructure and market integration. Sustainability: increase the share of renewable energy sources in the EU's electricity consumption. Affordability: maintain competitive energy prices through market competition and consumer choice. Market adaptation: integrate renewable energies and foster investment in fossil-free flexible technologies. Consumer protection: protect consumers, especially vulnerable ones, from energy crises and market abuses.

Protection of vulnerable consumers: Member States must ensure that vulnerable households and those affected by energy poverty are protected from electricity disconnections through measures including prohibition of disconnections equivalent Prohibition of disconnections: suppliers are prohibited from terminating contracts or disconnecting customers who have submitted a complaint or are involved in an out-of-court dispute settlement mechanism. Compliance by 2025: Member States must implement the necessary laws, regulations, and administrative provisions to comply with this Directive by 17 January Strengthen the role of the Agency for the Cooperation of Energy Regulators (ACER) to ensure efficient market functioning.

Part of the "Clean energy for all Europeans" package; it amends the Electricity Directive (EU) 2019/944; it supports the REPowerEU Plan

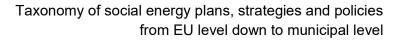


**Table A.2 -** Portuguese strategies, plans, action plans, action programmes, strategic programmes, roadmaps, and laws. Each entry includes its identification, brief description, goals, mandatory actions to be taken, interactions with other policies, direct/Indirect impacts on the population, and stakeholders' involvement in its development and implementation (who and how). Regarding implementation, important intermediate objectives are marked with an \*.

Name, dates, type, sector, target area(s)	Brief Description	Goals	Mandatory actions to be taken	Interaction with other policies	Direct/Indirect impacts on the population	Stakeholders' involvement in its development (who and how)	Stakeholders' involvement in its implementation (who and how)
	g						
Lei de Bases do Clima   Basic Climate Law approved: 31 December 2021	Defines the foundations of climate policy: consolidates objectives, principles and obligations for the	a) Promote a rapid and socially balanced transition to a sustainable economy and a greenhouse gas-neutral society;     b) To guarantee climate justice, ensuring the protection of communities most	It plans to draw up Regional Climate Action Plans - Planos Regionais de Ação Climática (PRAC),	Interaction with all current and future public climate policies. In particular, directly related to the	Citizens have the right to participate in the processes of drafting and revising climate policy instruments.	Central Government	The subjects of climate action are:  a) The State; b) Public institutes; c) Public companies;
Type: law Sector:	different levels of governance for climate action through public policies;	vulnerable to the climate crisis, respect for human rights, equality and collective rights over common goods; c) Ensure a sustainable and irreversible	Municipal Climate Action Plans - Planos Municipais de Ação Climática and Sectoral	Municipal Climate Action Plans, the revision of the PNEC and the ELPPE, and	In addition to public consultations, clarification and debate sessions must be		d) Autonomous regions; e) Local authorities and their public associations; f) The CAC (collaborates
environment & climate change	establishes new provisions in terms of climate policy.	path towards reducing greenhouse gas emissions; d) Promote the utilisation of renewable	Climate Change Mitigation and Adaptation Plans by	having a specific article related to the ENAAC 2020.	organised between citizens and climate policy decision-		with the Assembly of the Republic and the Government in drawing up
Target area(s): climate	Stipulates rights and duties in climate matters, reinforcing the right of citizens to participate.  Defines the governance framework for climate policy, creating new structures and requirements, including the Climate Action Council - Conselho para a Ação	energy sources and their integration into the national energy system; e) Promote the circular economy, improving energy and resource efficiency; g) Strengthening national resilience and capacity to adapt to climate change; i) Stimulate education, innovation, research, knowledge and development and adopt and disseminate technologies that contribute to these ends; j) Combating energy poverty, namely by improving housing conditions and fair access to energy use for citizens; k) Fostering prosperity, green growth and	February 2024, ensuring that they are developed in line with the objectives and targets defined in the RNC 2050 and the PNEC 2030. The government is studying bringing forward the climate neutrality target to 2025, with a view to committing to climate neutrality by 2045 at the latest. The government	Its targets correspond to what the Paris Agreement refers to as Nationally Determined Contributions. The targets set by the Portuguese Parliament every 5 years can only be equal to or greater than those that have been made as	makers, either at the initiative of the Administration or at the request of at least 30 citizens.  To this end, information is made available in a clear, systematised and easily accessible form to all citizens who wish to have access to it.		studies, assessments and opinions on climate action and related legislation); g) Independent administrative bodies with a role in regulating economic activity; h) NGOs, research centres and think tanks, and other non-governmental organisations, associations or civil society entities; i) Citizens, private companies and other



tata at			: 4 4 : I	T	T. Control of the con	
municipal and	generating more wealth and jobs;	sectoral climate change	international			
regional climate	m) Stimulating sustainable financing and	mitigation plans every 5	commitments.			
action plans, and	promoting information on climate risks for	years, in dialogue with				
carbon budgets -	economic and financial agents;	the representative				
which, in line with the	n) Ensure committed, ambitious and	structures of each				
other existing	leading participation in international	sector.				
instruments, establish	negotiations and international cooperation;	The government draws				
the need for national	o) Establish a rigorous and ambitious basis	up and presents the				
targets for shorter	for defining and fulfilling climate objectives,	green industrial strategy.				
sub-periods, in this	targets and policies.					
case every 5 years.						
Creates new						
requirements and						
establishes						
timetables for climate						
policy planning and						
evaluation						
instruments, including						
the development of						
five-year sectoral						
plans for mitigation						
and adaptation, and a						
green industrial						
strategy aimed at						
supporting the						
industrial sector in the						
climate transition						
process.						
It defines new						
principles and						
standards for						
economic and						
financial instruments,						
with a particular focus						
on the government's						
budgetary process,						
green taxation and						
sustainable financing,						
promoting a just						
transition to a carbon-						
neutral economy.						
Defines principles and						
standards for sectoral						
climate policy						
instruments.						
	l .	1	l	1	1	



of



Roteiro para a Neutralidade Carbónica 2050 (RNC2050)

#### **Carbon Neutrality** Roadmap

submitted: 20 September 2019 implementation: 2050

Type: roadmap

#### Sector: environment & climate change

Target area(s): decarbonisation: climate change adaptation; just transition; mobility;

cohesion

explores feasibility of trajectories for Portugal to achieve carbon neutrality by 2050, i.e. to make the balance between emissions and removals of carbon dioxide and other areenhouse gases (GHG) from the atmosphere zero. It identifies the main vectors for decarbonisation and estimates reduction potential of the various sectors of the national economy, such as energy and industry, mobility and transport, agriculture, forests and other land uses, and waste and wastewater.

Achieving the goal of carbon neutrality by 2050 is based on a strategic vision that aims to promote the decarbonisation of the economy and the energy transition towards carbon neutrality by 2050, as an opportunity for the country, based on a democratic and fair model of territorial cohesion that boosts wealth generation and the efficient use of resources. The realisation of this strategic vision is based on eight fundamental premises. described in greater detail in the following sections:

- i) Promote the transition to a competitive, circular, resilient and carbon-neutral generating economy. more wealth. employment and well-being; ii) Identify decarbonisation vectors and lines of action underlying trajectories towards carbon neutrality in 2050; iii) Contribute to national resilience and capacity to adapt to the vulnerabilities and impacts of climate change: iv) Stimulate research, innovation and knowledge production in key areas for achieving the goal of carbon neutrality; v) To guarantee financing conditions and increase investment levels: vi) Ensure a fair and cohesive transition that contributes to the valorisation of the territory;
- vii) Guarantee effective conditions for monitoring progress towards the carbon neutrality objective (governance) and ensure the integration of carbon neutrality objectives into sectoral viii) Involve society in the challenges of climate change, focusing on education, information and awareness-raising, helping to increase individual collective action.

vision necessarily have to be translated into various sectoral policy strategies instruments in energy, transport. trade. services, industry, waste, agriculture and forestry, considering the decarbonisation vectors identified and to be pursued by the country in the 30 years following the publication of RNC

Its antecedent is the There will be sectors National Low Carbon that could potentially be Roadmap 2020 affected by the energy Roteiro Nacional de transition, and it will be Baixo Carbono necessary to design (RNBC 2020). policies that create It supports the alternative government's opportunities for the commitment (2016)workers and/or to achieve carbon territories affected. neutrality by 2050. Net creation contributing to the marginal jobs. more ambitious goals The carbon neutrality under the Paris objective is expected to Agreement. bring co-benefits in It constitutes the terms of improving air long-term quality, with positive development strategy effects on human low GHG health, particularly with emissions to be regard to respiratory submitted to the diseases (a particularly United significant effect in Nations Framework cities). Convention on Change Climate

in

in

of

with

(EU)

Nacional

with

Decision

(UNFCCC),

accordance

1/CP.21, and to the

15

UNFCCC

European

Commission.

accordance

Regulation

2018/1999 of

European Parliament

and of the Council of

11 December 2018.

It was developed in conjunction with the

preparatory work for the National Energy and Climate Plan -

Energia e Clima

Article

Plano

Cycle of sectoral technical workshops focused stakeholders' perceptions of the configuration of the sectors' value chains and the evolution of some of the main assumptions trends. Cycle of thematic events on decarbonisation of society, focusing on Mobility; Forestry; Energy Transition; Just Transition: Sustainable Financing. Public consultation on the preliminary results for 3 months, which began in Lisbon with a public presentation of these results, with around 80 contributions. The Strategic Environmental Assessment of the RNC 2050 was carried out, with consultation of the Entities with Specific

Environmental

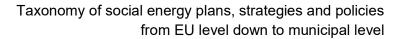
Responsibilities and a

public consultation.

The APA is responsible for coordinating. developina and operationalising the RNC2050. The progress towards the goal of carbon neutrality is monitored by the CAC. The feasibility of a cohesive transition, with the active participation of entities at different levels of territorial organisation. regional players and those closest to the citizen, could be better ensured by deepening the RNC 2050 at sectoral, regional and/or inter-municipal level.



	(PNEC) and with the principles established in other relevant circular economy strategies, in particular pursuing the guidelines set out in the Action Plan for the Circular Economy - Plano Ação para a Economia Circular, and land use planning, in particular the proposed National Land Use Planning Policy Programme - Programa Nacional de Políticas de Ordenamento do	
	the proposed National Land Use Planning Policy Programme - Programa Nacional de Políticas de	
	HOHZOIIS.	



general

during



Estratégia Nacional de Adaptação às **Alterações** Climáticas 2020 (ENAAC 2020) I

National Strategy for Adaptation to **Climate Change** approved: 30 July 2015 implementation: 2025

Type: strategy

Sector: environment & climate change

Target area(s): climate change adaptation

establishes objectives and a model for implementing solutions for adapting different sectors to the effects of climate change: agriculture, biodiversity, the economy, energy and security, energy forests, human health, the safety of people and goods, transport, communications and coastal zones. includes six thematic areas that cut across all sectors: research and innovation, financing and implementation, international cooperation, communication and dissemination. adaptation in land use planning adaptation in water management.

a) Improve the level of knowledge about climate b) Promote the integration of adaptation to climate change into sectoral policies and planning instruments. c) To help central, regional and local administrations and political decisionmakers find the means and tools to implement adaptation solutions based on technical-scientific knowledge and good

practices.

the Launch National Adaptation Platform. Publish reports that should contain: a) progress on each of **ENAAC** 2020 obiectives. with detailed description by thematic area priority sector: b) recommendations to remedy difficulties or gaps, and proposals for improvements, given the general state of implementation of **ENAAC** 2020. Each area must present biannual implementation plan which duly identifies a realistic set of objectives and activities to be carried out during the implementation of the Strategy.

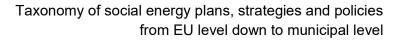
Aligned with application of the EU support framework for the 2020 period (Portugal 2020), which is the favoured financial instrument for supporting the implementation adaptation measures. Framed within the Strategic Framework for Climate Policy -Quadro Estratégico а Política para Climática (QEPiC). With the approval of the National Energy and Climate Plan 2030 Plano Nacional Energia e Clima 2030 (PNEC 2030), ENAAC2020 was extended until 31 December 2025.

charge.

The adaptation efforts APA as of each sector should coordinator. It was the allow society in general subject of a public to better adapt to consultation, climate change. which 60 contributions Through the National were received from a Adaptation Platform. wide varietv quarters. make the necessary climate information and decision-support tools on adaptation available to the public and private sectors free of

Implementation is carried through sectoral working groups (WGs) and by thematic coordinated by the relevant central administration bodies and involving the various sectoral players a) Scientific panel advising the Coordination Group. b) Coordination Group: APA general coordination; Thematic Coordinators: Sectoral WG Coordinators: Autonomous National Regions: Association of Portuguese Municipalities.

The work of the thematic areas will also involve other entities or personalities that are identified as relevant during the implementation of the Strategy.





Plano Nacional de Energia e Clima 2021-2030 (PNEC 2030) | National **Energy and** Climate Plan approved: 10 July 2020 revision: 30 June 2023 | July 2024 implementation: 2025\* | 2030

Type: plan

Sector: environment & climate change

Target area(s): decarbonisation; just transition; mobility; energy efficiency

The PNEC 2030 is the main enerav and climate policy instrument for the decade 2021-2030. towards a carbonneutral future, and is part of the obligations established by the Regulation on the Governance of the Energy Union and Climate Action, which requires all member states to draw up and submit integrated energy and climate plans to the European Commission.

The PNEC includes a characterisation of the existing situation in Portugal in terms of energy and climate, five covering dimensions set out in the Regulation on the Governance of the Energy Union and Climate Action: decarbonisation. energy efficiency, security of supply, the internal energy market and research. innovation competitiveness, as well as the main lines of action planned to the different commitments.

2030 PNEC sets ambitious

For the 2030 horizon, eight national strategic objectives have been defined with a view to integrating energy and climate. The pursuit of the following strategic objectives, which are interlinked, will contribute to carbon neutrality. 1. DECARBONISE THE NATIONAL ECONOMY - Ensure a trajectory for reducing national GHG emissions in all sectors of activity, namely energy and industry, mobility and transport, agriculture and forestry and waste and wastewater, and promote the integration of mitigation objectives into sectoral (mainstreaming)

2. GIVING PRIORITY TO ENERGY EFFICIENCY - Reducing primary energy consumption in the various sectors in a context of sustainability and costeffectiveness. investing in energy efficiency and the efficient use resources, prioritising the rehabilitation and renovation of buildings, and promoting zero-emission buildings. 3. STRENGTHEN SUPPORT FOR RENEWABLE ENERGY AND REDUCE THE COUNTRY'S **ENERGY** DEPENDENCE \_ Strengthen diversification of energy sources through increased and sustainable use of endogenous resources, promote increased electrification of the economy and encourage R&I in clean technologies. 4. GUARANTEE SECURITY OF SUPPLY Ensure the maintenance of a resilient and flexible system, with diversification of energy sources and origins, reinforcing, modernising and optimising energy infrastructures. developing interconnections and promoting the integration. reconfiguration digitalisation of the energy market, maximising flexibility. 5. PROMOTE SUSTAINABLE MOBILITY -Decarbonise the transport sector by Some of the lines of action: 1.3. Reduce the carbon

Regulation

Climate

draft update of the

national energy and

climate plan to the

Commission. It is

also in line with the

Deal, the European

Climate Law, the "Fit-

for-55" package, the

REPowerEU Plan.

the Energy Efficiency

Directive (EED), the

**Energy Performance** 

of Buildings Directive

(EPBD) and the

Long-Term Strategy

for Building Renewal.

In conjunction with

the objectives of the

RNC2050, ambitious

targets have been set

for 2030, which are

achievable

European

European

integrated

Green

intensity of the building stock: 1.6. Decarbonise and make companies. and territories resilient; 1.10. more Promote instruments to strenathen climate action; 2.6. Encourage r&i in the field of energy efficiency; 3.2. Promote the spread of distributed production and consumption of energy energy communities: Promote the efficiency integration renewable energies in heating and cooling systems; 3.5. Promote the proper planning of transmission distribution networks to strenathen integration of new renewable capacity; 5.2. Stimulate the energy transition of transport sector: 8.1. Ensure a just transition; 8.2. Combat energy poverty and improve instruments to protect vulnerable customers: 8.3. Deepen knowledge climate change mitigation. disseminate good practices encourage low-carbon behaviour in society: 8.4. Promote information consumers

policies

The definition of this Co-benefits plan stems from the improving air quality. obligations defined in with positive effects on (EU) human health, 2018/1999 of the particularly with regard European Parliament to respiratory diseases and of the Council of (particularly relevant in December cities); greater thermal (Regulation on the comfort in buildings; Governance of the research. innovation Energy Union and development with all Action). associated In accordance with areas of the provisions of the decarbonisation and Regulation on the transition; energy Governance of the generation of greater Energy Union and economic dynamics Climate Action, by 30 and promoting the June 2023, member creation of new jobs. states must submit a

1) Involvement of the national parliament the final version of the PNEC 2030 had a public consultation. the opinion of the Council for Climate Action (CAC) and will be approved Parliament. 2. Involvement of local and regional authorities consultation process that includes meetings and prior consultation events with participating entities of the National System of **Policies** and Measures - Sistema Nacional de Políticas e Medidas (SPeM), as well as Coordination Group of the National Strategy Adaptation Climate Change Grupo Coordenação da Estratégia Nacional de Adaptação às Alterações Climáticas (GC ENAAC). As part of the NECPlatform project, it was also possible to take part in the first of six multilevel dialogues organised by ZERO -Associação Sistema Terreste Sustentável (Sustainable Earth System Association). Meetings were also

Political coordination Climate Action Commission (CAC) - As a promotional and decision-making structure at political level, it responsible promoting, supervising and the PNEC. monitoring Technical coordination Coordination Group (APA and DGEG) - Aims to coordinate and promote the drafting and revision of the PNEC. guarantee articulation of the national contribution for purposes of fulfilling the commitments established under the Regulation on the Governance of the Energy Union and Climate Action. facilitate and implementation of the policy guidelines contained in the PNEC. Monitoring and projection system - National Policy and Measures System (SPeM) -Aims to involve strengthen the accountability of sectors in integrating the climate dimension into sectoral policies: ensure the

monitoring, follow-up and

implementation of policies

and measures and their

effects; ensure the reporting

of

of projections of

emissions and

pollutants;

fulfilment

obligations,

sectoral

of

assess

GHG

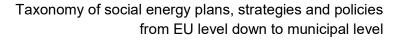
other air

national

including

targets.

reporting





achievable national targets for 2030 in terms of reducing greenhouse gas emissions, incorporating renewable energies, energy efficiency and interconnections, and concretises the policies measures to achieve them.

encouraging modal shift and better functioning of public transport networks, promoting electric and active mobility and the use of clean alternative fuels. **PROMOTE** SUSTAINABLE AGRICULTURE AND FORESTRY AND **ENHANCE CARBON SEQUESTRATION -**Reduce the carbon intensity of agricultural practices and promote effective agroforestry management, helping to increase natural sink capacity. 7. DEVELOP AN INNOVATIVE AND COMPETITIVE INDUSTRY - Promote industrial modernisation by focusing on innovation, decarbonisation, digitalisation (industry 4.0) and circularity, helping to increase the competitiveness of the economy.

8. ENSURE A FAIR. EQUITABLE. DEMOCRATIC AND COHESE TRANSITION - Strengthen the role of citizens as active agents decarbonisation and the energy transition, create a level playing field for all, combat energy poverty, create instruments to protect vulnerable citizens and promote the active involvement of citizens and territorial development.

companies, contributing to better energy literacy simplifying interaction with the market; 8.5. Promote dialogue platforms for sustainable development

leverage intervention capacity at national, regional and local level.

Ação

mentioned for their cross-cutting nature,

as they embody the

three main axes of

the Environment and

Climate Action policy.

In addition, there are

many other sectoral

policy instruments at

national level that are

currently in force or in

the final stages of

being implemented

and that contribute to

the fulfilment of the

energy and climate

goals and objectives

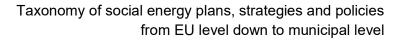
of the PNEC 2030.

set out in the PNEC held with the five 2030. The objectives. Regional Coordination principles and Development obligations set out in Commissions the LBC. (CCDR). which revises the GHG 3. Strategic emission reduction environmental

targets set out in the assessment, RNC2050 even more consultations with ambitiously, stakeholders. reflected in including social revision of the PNEC partners, and 2030. In addition to civil involvement of these, the PNPOT society and the and the Action Plan public. general the Circular 4. Consultations with other Member States. Economy - Plano de para 5. Iterative process а Economia Circular with the European (PAEC) should be Commission.

> process revising the plan was co-ordinated by the Portuguese **Environment Agency** (APA) and Directorate-General for Energy Geology (DGEG), and included the collaboration of the Faculty of Science and Technology of Universidade Nova de Lisboa (NOVA FCT), the National Energy and Geology (LNEG) Laboratory and the Energy Agency (ADENE).

The Climate Action Council. created in the LBC. is responsible for issuing an opinion on the PNEC2030. It is supported by a technical support structure, which includes the services of the Assembly of the Republic.





Programa de Ação para a Adaptação às Alterações Climáticas (P-3AC)

I Programme of Action for Adaptation to Climate Change approved: 2 August 2019 implementation: 2020\* | 2030

Type: action programme

Sector: environment & climate change

Target area(s): climate change adaptation

It aims to fulfil the second objective of ENAAC 2020 implementing adaptation measures

essentially bv identifying physical interventions with a direct impact on the territory. It is a auideline for integrating adaptation to climate change into sectoral plans and the design of funding

programmes, supporting enhancement of the territory and the construction of a society more adapted to climate change. To this end, it sets out the lines of action and priority adaptation measures, identifying organisations involved. the monitoring indicators and the potential sources of funding.

It chooses eight specific lines of action for direct intervention in the territory and in infrastructures. complemented by a transversal line of action, which aim to respond to the main impacts vulnerabilities identified for Portugal.

By 2020, mobilise existing funding instruments. By 2030, support exercises to define cross-cutting and sectoral policies, policy instruments and/or future funding, in order to guide the implementation of more structural actions that contribute to reducing the vulnerability of the territory and the economy to the impacts of climate change. minimising these impacts.

Implement the following adaptation measures:

- 1. Prevention of rural fires structural interventions in agricultural and forestry
- 2. Implementation of techniques to conserve and improve soil fertility 3. Implementing good water management practices in agriculture, industry and the urban sector to prevent the impacts of drought and scarcity phenomena. 4. Increasing the resilience of ecosystems, species and habitats to the effects of change 5. Reducing the vulnerability of urban areas to heat waves and rising maximum temperatures
- 6. Preventing the establishment and spread of invasive alien species, vectorborne diseases and agricultural and forestry diseases and pests 7. Reducing or minimising the risks associated with flooding phenomena 8. Increasing resilience and coastal protection in areas at high risk of erosion, overtopping and flooding 9. Development of decision support tools, training and awareness-raising actions

Draw up an annual P-3AC monitoring report, in conjunction with the **ENAAC 2020 Monitoring** Reports.

The entities responsible the financial instruments that provide fundina for measures identified in the P-3AC, namely the authorities national managing the financial instruments, must provide the APA with information on their implementation, on an annual basis and in accordance with appropriate indicators. during the first months of the following their implementation.

It complements and systematises the work carried out in context of ENAAC 2020, with a view to its second objective, that of implementing adaptation measures. It also connects with the Paris Agreement and the National Spatial Planning Policy Programme Programa Nacional Política de Ordenamento do Território (PNPOT).

and

private

agents

adaptive management.

Ensuring the safety of The drafting of the Ppeople and property in 3AC was the result of fire-risk zones. wide-ranging minimising the process involving negative effects of stakeholders intense heat on the different sectors and health of populations in different levels of general and risk groups territorial organisation, in particular; monitoring both public private. The P-3AC vectors that potentially transmit diseases with subjected to an impact on public public consultation, health in order to circulated among the implement contingency ENAAC 2020 sectors plans: and subject to the raising awareness. mobilising opinion of the sensitising Scientific Panel, thus citizens, communities, quaranteeing a broad political decisionreflection in makers, administration drafting of this officials (central, reference instrument. regional and local); training key public and

APA and ENAAC 2020 Coordination Group promote the integration of the lines of action and measures for adapting to climate change set out in the P-3AC into sectoral planning; policies and contribute to establishing a favourable framework for pursuing the lines of action and measures set out in the P-3AC; promote the use of European and national funding instruments: prepare/contribute monitoring reports proposals for revisina actions. indicators targets and collaborate in the annual monitoring of the P-3AC).

Implementing/beneficiary

organisations of action lines and/or Local government bodies and their associations (5 . Central and Regional Administration bodies (5 and 9) Entities in the state business sector (5) . Companies (trade services sectors, including tourism) Social Solidarity Institutions (5). Transport infrastructure management bodies (5 and

. Public transport service

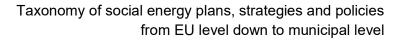
Scientific and academic

and

operators (5



			institutions (5 and 9) . NGOS (9) . Civil protection volunteer organisations (9)



the

public

spaces.

areas.

and



**Programa Nacional** da Política de Ordenamento do Território (PNPOT)

| National Spatial **Planning Policy** Programme approved: 4 September 2007 revision: 5 September 2019 implementation: 2030

Type: strategic programme

Sector: economy & territorial cohesion

Target area(s): territorial management; landuse; climate change

It is the top instrument the territorial management system, defining objectives and strategic options for territorial development and establishing model for organising the national territory. It is the reference framework for other territorial programmes and plans and a guiding instrument for strategies with а territorial impact. It recognises the fundamental role of spatial planning in minimising exposure risk and in developing a territorial matrix that quarantees greater resilience to phenomena resulting from climate change. As such, it identifies climate change as a critical change, and it essential to prospect changes and their impacts and to anticipate mitigate foreseeable effects.

Since spatial planning should help to increase adaptive capacity, the PNPOT Strategic Programme identifies as measures the promotion of knowledge about the territorial incidence of natural and man-made risks and risk management considering adaptation to climate change. According to the Strategic Diagnosis, 18 Spatial Planning Problems and 15 territorially based strategic options for resolving them are identified. We highlight the territorially-based strategic options for resolving the problems of risks and climate change and energy inefficiency: a) Promote the efficiency of regional and

metabolism b) Increasing socio-ecological resilience c) Strengthening inter-urban and ruralurban co-operation as a factor of internal cohesion

d) Promoting urban quality e) Optimising environmental infrastructures and ecological connectivity f) Strengthening and integrating accessibility and mobility networks g) **Boosting** digital networks h) Promoting territorial governance i) Strengthening the decentralisation of competences and intersectoral and multilevel cooperation Promoting territorially-based

k) Increasing Territorial Culture

networks

The entities that make the Intersectoral Forum have a duty to report information that makes it possible to identify implementation of the **PNPOT** Action Programme and the relevant policies associated with it. on the one hand, and to report information for system of result indicators that form the basis for drawing up the State of Spatial Planning Reports (REOT), on the

It is linked to the Reducing risk National Investment increasing Plan - Plano Nacional resilience Investimentos communities, (PNI), the Inland increasing the supply of Development accessible Programme spaces, increasing the bioclimatic comfort of Programa de Valorização do urban Interior (PVI) and the improving the quality of Maritime Spatial life and access to Planning Plan - Plano facilities and services in de Ordenamento do low-density Espaco Marítimo creating jobs (POEM) but is developing functionally and business fabric in rural structurally areas, enhancing local, independent. It is the natural and cultural guiding territorial resources. reference for defining the Portugal 2030 Strategy, as well as for drawing up the 2030 National Investment Programme, under which the structuring projects that underpin the strategic options and territorial model of the PNPOT will be

implemented and the

programming of the

made will be detailed

investments to

operational

In 2014, the PNPOT was the subject of an evaluation exercise carried out by the Directorate-General for Territory, with the collaboration of the network of focal points that accompanied the drafting of Programme and using consultations interviews with around 70 public bodies from various sectors and administrative levels. The work to amend the PNPOT took place 20 months. accompanied by a system of Focal Points and a Consultative Committee, and the proposal submitted for public discussion, encouraging

programme is responsibility of Government. bodies. entities and measures and commitments quidelines therein. ensure the assessment implementation was the participation and involvement of all the relevant players. collating geographical relating National

the the autonomous regions' own intermunicipal local authorities, namely through the implementation of policy and contained b - The government shall take the necessary steps to follow-up. monitoring and ongoing of PNPOT, as well as setting the corresponding system of indicators and drawing up a report on the state of spatial planning. c - The Directorate-General for Territorial Planning is responsible for setting up the Territorial Planning and Urbanism Observatory and all information territorial management instruments in Territorial Information System Sistema Nacional de Informação Territorial (SNIT). d - The entities that make up the Intersectoral Forum have a duty to report information that makes it possible to identify implementation of

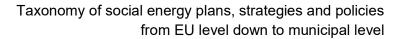
a - The development and

implementation of the action

collaborative



			PNPOT Action Programme
			and the relevant policies
			associated with it.
			e - The participation of civil
			society organisations is ensured by the PNPOT
			Monitoring Committee.
			Wiennierung Genminitee.





Estratégia Nacional de Longo Prazo para o Combate à **Pobreza** Energética 2022-2050 (ELPPE) I National Long-

Term Strategy to **Combat Energy** Poverty approved: 8 January 2024

implementation: 2050

Type: strategy

Sector: energy

Target area(s): energy poverty

The main goal is to eradicate energy poverty in Portugal by 2050. protecting vulnerable consumers and actively integrating them into the energy and climate transition, which is intended to be fair. democratic and cohesive. To this **ELPPE** structured around four strategic lines of action: i) promoting energy and environmental sustainability housing; ii) promoting universal access to essential services: promoting integrated territorial action and iv) knowledge informed action.

i) Increasing the energy efficiency of housing; decarbonizing consumption.

- ii) Reducing the number of households having difficulty paying for essential energy services; ensuring the protection of vulnerable consumers in situations of energy poverty.
- iii) Strengthen the action of local structures in the fight against energy poverty; strengthen the supply of public housing high energy performance;
- iv) Increase the capacity to identify households in a situation of energy poverty; increase energy literacy; stimulate research and innovation; stimulate the training of professionals.

Developing ten-year Action Plans to Combat Energy Poverty – Planos de Ação para o Combate à Pobreza Energética (PACPE), revised every three years, which detail and specify the measures, lines of action and instruments contained in the ELPPE.

the

cohesive transition;

action measure the

approval of a long-

LBC - establishes

targets for reducing

(Estratégia Nacional

strategy

energy

establishes as

term

combat

poverty.

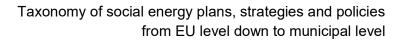
RNC 2050 - roadmap Increase active and the deep passive thermal decarbonization of comfort; reduce the Portuguese problem of infiltration, humidity and rotting economy, with a commitment to elements: increase carbon neutrality by possibilities for selfthe end of 2050. consumption and renewable PNEC 2030 - aims to sharing electricity. quarantee a fair. democratic and

The National Association of Portuguese Municipalities, the National Association of Parishes. Energy Services Regulatory Authority and the Association of Energy Environment Agencies were heard. The National Council Consumer was heard. The public consultation of this resolution was held twice.

ONPE-PT: management unit: DGEG; - technical and operational support: ADENE.



	da Oanshata à	
	de Combate à	
	Pobreza 2021-2030).	
	"Clean Energy for All	
	Europeans" package	
	- highlights the issue	
	of combating energy	
	poverty, including	
	references in the	
	various legislative	
	initiatives to the need	
	for Member States to	
	adopt measures in	
	this direction.	
	European Green	
	Deal - identifies the	
	need to combat the	
	"risk of energy	
	poverty must be	
	addressed for	
	households that	
	cannot afford key	
	energy services to	
	ensure a basic	
	standard of living".	
	REPowerEU Plan -	
	establishes that	
	member states must	
	ensure the	
	implementation of	
	measures aimed at	
	mitigating the social	
	and distributional	
	impacts of armed	
	conflict, focusing in	
	particular on	
	vulnerable	
	households that have	
	difficulty paying their	
	energy bills.	



Government-

Commission

appointed



Estratégia
Nacional de
Combate à
Pobreza 2021-2030
(ENCP) | National
Strategy to
Combat Poverty
approved: 29
December 2021
implementation:
2030

Type: strategy

Sector: social

Target area(s): poverty reduction; social inclusion This strategy, launched as part of the European Pillar of Social Rights, is a central element of the goal of eradicating poverty, as part of the strategic challenge of reducing inequalities.

young people and their families; b) Promote the full integration of young adults into society and the systemic reduction of their risk of poverty; c) To boost employment and qualifications as factors in eliminating poverty; d) Strengthening public policies for social inclusion, promoting and improving societal integration and social protection for the most disadvantaged people and groups;

a) Reduce poverty among children and

- e) Ensure territorial cohesion and local development;
- f) Making the fight against poverty a national goal.

In the realm of housing and energy: Mobilising local authorities to support the promotion of housing solutions for people living in undignified housing conditions who do not have the financial capacity to bear the cost of access to adequate housing; Ensuring access to essential energy services through programmes to support the payment of energy bills for economically vulnerable families.

The High-Level Interministerial Commission (CIAN) is responsible analysing, monitoring and evaluating implementation of the ENCP, and is made up of the members of the government responsible for the areas of the of Presidency Council of Ministers, Labour, Solidarity and Social Security, Education. Local Authorities, Health and Infrastructure and Housing. without prejudice to the fact that the members of the CIAN may invite members of government responsible for other areas of government to take part in their meetings when justified. The CIAN meets quarterly.

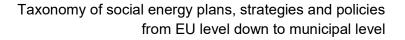
The strategy is based а global, multidimensional and transversal approach to articulating public policies and actors, in close articulation with the European Pillar of Social Rights and its Action Plan and with Sustainable Development Goals of the 2030 Agenda. Connected with the National Long-Term Strategy to Combat Energy Poverty durina the implementation of these strategies. In addition, the ENCP enabling an condition of Portugal 2030 and one of the reforms included in the Recovery and Resilience Plan.

Reduce poverty among children and young people and their families; integration of young adults society and the systemic reduction of their risk of poverty; boost employment and qualifications as factors in eliminating poverty: improve societal integration and social protection for the most disadvantaged people and groups.

The High-Level Interministerial Commission (CIAN) is made up of the members of the government responsible for the areas of the Presidency of the of Ministers. Council Solidarity Labour, Social Security, Education, Local Authorities. Health and Infrastructure Housing, without prejudice to the fact that the members of the CIAN may invite members of the government responsible for other areas of government to take part in their meetings when iustified.

The strategy's Technical Monitoring Committee is made up of: a) The national coordinator, appointed by the CIAN, who chairs it; b) A representative from each of the government areas referred to in paragraph 6;

- c) A representative from each of the services and organisations involved in implementing the measures that implement the ENCP, referred to in the Action Plans:
- d) Three personalities of recognised academic, scientific or professional merit in the areas covered by the ENCP, to be appointed by the CIAN.





Estratégia de Longo Prazo para a Renovação dos Edifícios de Portugal (ELPRE) National Longterm Strategy for the Renovation of Portugal's **Buildings** approved: 3 February 2021 implementation: 2030\* | 2050

Type: strategy

Sector: energy

Target area(s): buildings

Prioritising efficiency from a broader perspective and promoting renewable energy sources is particularly important and priority. ELPRE aims to ensure an effective response to this objective, with the rationale of transforming the country's existing building stock into Nearly Zero Energy (NZEB), Buildings without neglecting other priority and relevant challenges. ELPRE analyses the energy needs and thermal comfort of the national building stock, as well as its potential impact in terms of co-benefits and the economy. To this end, a bottom-up model of the national of stock existina buildinas was developed, based on information from 240.650 energy certificates issued under the Building **Energy Certification** System - Sistema de Certificação Energética dos Edifícios (SCE).

Intervention in the building envelope, the replacement of existing systems with more efficient Promotion of energy from renewable sources, the adoption of technical solutions when appropriate to the practical achievement of the objective of energy renovation of the buildings covered, duly articulated with the identification and analysis of mechanisms to respond to market failures as potential obstacles to this effect, though, among other measures, the creation and/or development of financing programmes for renovation and the mobilisation of public and private investment, as well as the strengthening of incentive policies and market monitoring.

Coordination Group to monitor, supervise and coordinate ELPRE, coordinated by Directorate-General for Energy and Geology (DGEG) with the technical and operational support of Energy **ADENE** Agency, the National Engineering Laboratory - Laboratório Nacional de Engenharia Civil (LNEG) and the Institute for Housing and Urban Rehabilitation -Instituto da Habitação e da Reabilitação Urbana (IHRU). ELPRE is reviewed no more than every five years from the date of its

the

**ELPRE** 

new

energy

renewal

housing

amended

directive

buildings

transformed

Article 2a

should be near zero

(nZEB) - Article 9 of

An ELPRE is drawn

up to promote the

2018/844 - so that all

nZEB buildings by

It is connected with

the European Green

Deal, the European

Recovery Plan, the

Clean Energy for All

Europeans Package,

the RNC 2050, the

ENAAC 2020, and

The renovation of the

national stock of

existing buildings is a

national energy and

climate objectives set

out in the PNEC 2030

and the RNC 2050.

The importance given

Economic and Social

buildinas is

reflected

renovating

in the

also

fundamental

measure

fulfilment

the P-3AC.

for

of

PNEC 2030,

Regulation, Renovation

Governance

Wave,

the

the

year

of

stock

of the

**EPBD** 

(EU)

into

2050.

buildings

buildings

EPBD:

Create

approval.

Energy saving: increased thermal comfort (which can increase health and labour productivity); property valuation

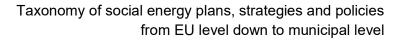
was subject to a process participation and liaison with the various stakeholders, through the public participation of various public bodies and civil society, followed by the respective public consultation.

The drafting of ELPRE

Coordination: **DGEG** Technical and operational support: ADENE, LNEG. and IHRU



	Stabil	ilisation Plan,	
		oved by Council	
	of	Ministers	
		olution 41/2020	
		3 June, which	
	estah	blished the	
	Supp	port Programme	
		More Efficient	
		lings - Programa	
	de Ai	Apoio a Edifícios	
	Mais	Eficientes, and	
		the proposed	
	Reco	overy and	
	Pacili	lience Plan -	
	Plano		
		uperação e	
		liência, which	
		ides for the	
	Enors	gy Efficiency in	
		lings initiative -	
	inicial	ativa Eficiência	
	Edifíc	gética em	
	ELPR	RE analyses the	
	energ	gy needs and	
		mal comfort of	
		national building	
		k, based on the	
		mation issued	
		er the Building	
	Energ	gy Certification	
	Syste	em (SCE).	





Programa Nacional de Habitação 2022-2026 (PNH)

National Housing Programme approved: 5 January 2024 implementation:

**Type:** action programme

2026

Sector: social

Target area(s): housing

The PNH establishes the objectives, priorities,

programmes and of the measures national housing policy over a multiannual period, with reference to the legislative and budgetary framework. Strengthening the role of the state in directly promoting housing responses is fundamental to reversing a paradigm of public response that is fundamentally centred on the private market and which has unable to been ensure the provision of and access to housing for all. Just as it is essential to quarantee a robust commitment to urban regeneration.

As the aim of increasing the supply of housing, essentially by reinforcing the public housing stock. cannot be divorced from the aim of ensuring the quality and sustainability of the housing response, it is important to maintain and reinforce programmes that counteract the current rates of energy poverty, either

Overcome the most pressing situations of housing shortage in an extensive manner, namely situations of unworthy housing. Strengthen the supply of affordable housing, particularly for middle-income households, namely by encouraging the recovery and relocation of vacant properties on the housing market, through cost-benefit assessment. Ensuring the existence of a network of responses, with national coverage, to emergency and transitional situations, targeting very diverse audiences in particularly vulnerable situations: Revitalise and strengthen the rental market, at prices compatible with family incomes, improving investment and access conditions and thus rebalancing the relative weight of renting as a form of occupation.

Adopt measures that contribute, along with strengthening direct public housing development, to a more active role for the private market in adapting the housing response to families' needs, within the framework of more robust market regulation that is consistent with the necessary response to existing speculative practices, recognising and assuming the social function housing. Promoting integrated housing and urban planning policy measures that counteract socio-spatial segregation, gentrification, depopulation of urban centres and housing peripheralisation. At the same time, and in a logic of transversal intervention, ensuring the proper social monitoring of the reception and inclusion processes.

Some goals by 2026: Rehabilitate dwellings in poor condition in the IHRU's public housing stock, including plots with mixed ownership: Implement. in conjunction with authorities. actions to rehabilitate the built environment (habitat) with the integration and participation of the

residents' associations

and organisations on the

population,

resident

ground; - Approve the financial instrument Financial Instrument for Urban Rehabilitation and Revitalisation Instrumento Financeiro para a Reabilitação e Revitalização Urbanas (IFRRU) 2030, promote urban rehabilitation and revitalisation, particular the rehabilitation buildings, and guarantee eneray efficiency: Continue to promote regular coordination with the National Association Portuguese

Municipalities

(ANMP) and

Associação Nacional de Municípios Portugueses

Portuguese Municipal

Associação Portuguesa

da Habitação Municipal

Housing Association

Following the approval of the New Generation of Housing Policies - Nova Geração de Políticas de Habitação (NGPH).

Increasing the supply of affordable and rehabilitated housing.

Central Government The government is responsible for monitoring and implementing the lines of intervention included in

the IHRU.
Promoting entities are:
a) Central administration
bodies with competence in

the PNH, namely through

- housing matters; b) Central government bodies with responsibility for
- property management;
  c) Local authorities and intermunicipal entities;
- d) Social, co-operative and collaborative sector entities;
- e) Private sector organisations.

  IHRU. Public Construction.

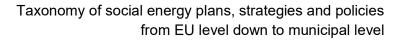
Other Central
Administration entities,
Local authorities and
intermunicipal entities,
Fundiestamo, SGOIC, Third
sector entities, Private
(rental) development,
Private entities



L	(ADLIAN): 1 P			
by rehabilitating	(APHM) in implementing			
existing housing stock	housing policies,			
(public and private) or	defining supra-municipal			
by creating new				
environmentally	disseminating			
sustainable	information, knowledge			
responses.	and access to			
·	programmes and			
	instruments to support			
	housing and			
	rehabilitation, and			
	tailoring the response to			
	local specificities,			
	oncuring an integrated			
	ensuring an integrated			
	response to the			
	population.			
	I I	I I	1	



Nova Geração de	The New Generation	1 - To respond to families living in a	a) Increase the weight of	Direct relationship	a) Respond to families	The National	Central and	Local
Políticas de	of Housing Policies	situation of serious housing shortage,	publicly supported	with the National	living in a situation of	Association of	Governments.	
Habitação (NGPH)	adopts a broad	ensuring that the management of the	housing in the overall	Housing Programme,	serious housing	Portuguese		
New Generation	approach to housing,	public housing stock contributes to the	housing stock from 2 %	with the Strategic	shortage;	Municipalities was		
of Housing	perceiving it as part of	existence of a dynamic housing stock	to 5 %, which represents	Urban Development		consulted.		
Policies	the urban system in	capable of responding to the most serious	an increase of around	Plans/Urban	b) Guarantee access to			
approved: 2 May	which it is inserted	and urgent needs in a swift, effective and	170,000 dwellings;	Rehabilitation Action	housing for those who	This resolution and		
2018	and as a means	fair manner;		Plans, and the Local	can't find a solution via	the annex that forms		
implementation:	towards the general		b) Lowering the rate of	Housing Strategies.	the market;	an integral part of it		
2050	goal of improving	2 - Ensuring access to housing for those	housing costs in the			were subject to		
	people's living	who are unable to find a solution via the	rental system from 35 %		c) Making rehabilitation	legislative public		
Type: resolution	conditions. Mission:	market, encouraging a wider supply of	to 27 %.		the main form of	consultation between		
	1) Guaranteeing	affordable rental housing and improving			intervention in terms of	17 October and 16		
Sector: social	access for all to	opportunities for choice and conditions for			buildings and urban	December 2017.		
	adequate housing,	mobility within and between the various			development;			
Target area(s):	understood in the	housing schemes and forms of occupation						
housing	broad sense of habitat	and throughout the life cycle of families;			d) Promote social and			
	and orientated				territorial inclusion and			
	towards people, by	3 - Create the conditions for rehabilitation			housing choice			
	significantly widening	to be the main form of intervention in terms			opportunities.			
	the scope of	of buildings and urban development,						
	beneficiaries and the	turning rehabilitation from the exception to						
	size of the publicly	the rule, assuming the generalisation of its						
	supported housing	territorial expression and promoting						
	stock;	integrated interventions;						
	O) Crastina the	4 Drawata assist and towitarial inclusion						
	2) Creating the	4 - Promote social and territorial inclusion						
	conditions for both	and housing choice opportunities, focusing on integrated and participatory approaches						
	building rehabilitation and urban	in public rental neighbourhoods and on						
	regeneration to go	strengthening information, referral and						
	from being the	proximity monitoring.						
	exception to the rule	proximity monitoring.						
	and become the							
	predominant forms of							
	intervention, both in							
	terms of buildings and							
	urban areas.							
			I	<u> </u>		<u> </u>	I .	



Central Government



Sistema de Certificação Energética dos Edifícios (SCE) Building Energy

Building Energy Certification System approved: 20

August 2013

Type: law

Sector: energy

Target area(s): buildings

The SCE Certificate is a document issued by a qualified expert within the scope of the SCE and describes the actual energy performance of a property, including the calculation of expected annual energy consumption and qualifies the indoor air quality of a building or autonomous fraction, classifying the property according to energy performance on a scale of 8 classes (from A+ to

Any building, new or existing, must have a valid certificate, which must be presented when the respective purchase, rental or contract signed. Any advert published with a view to selling, renting or leasing a building must indicate the energy rating contained in the respective precertificate or SCE certificate.

A property that fulfils the minimum requirements demanded by the new Its aims, among others, are to: ensure regulatory application with regard to energy efficiency conditions and the use of renewable energy systems in accordance with the requirements and provisions contained in the REH and RECS; certify energy performance in buildings; identify corrective or improvement measures for energy performance applicable to buildings and the main types of technical building systems, thus making air conditioning, domestic hot water preparation, lighting, renewable energy utilisation and energy management systems also subject to minimum energy efficiency standards.

certificate but rather a Pre-Certificate (PCE) certifying that the project complies with requirements imposed by the regulations. In practice, it corresponds to a "project certificate", since it has an identical format and the same type of information as a certificate. Providing the PQ, at his request, with necessary elements for certifying the building, whenever available.

During the licensing or

authorisation procedure

for the construction of a

building, the expert does

not issue an energy

Related to Regulation on the **Energy Performance** Residential Buildinas Regulamento de Desempenho Energético dos Edifícios de Habitação (REH) and the Regulation on the **Energy Performance** of Commercial and Services Buildings -Regulamento de Desempenho Energético dos Edifícios de Comércio e Serviços (RECS). Connection with the ELPRE analyses.

Improving the thermal behaviour of buildings, the efficiency of their technical systems and minimising the risk of surface condensation on the elements of the envelope.

It can lead to greater

It can lead to greater energy savings and increased thermal comfort (which can increase health, labour productivity and property value).

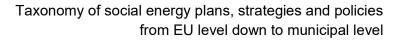
Stakeholders and competences of the SCE: Supervising/Supervising the SCE: DGEG Management: ADENE Monitoring of indoor air quality: DGS and APA, within the scope of their competences in terms of indoor air quality.

SCE technicians:
Qualified Expert (QE):
Individually responsible for
conducting the building
certification process, and is
the agent who ensures that
the SCE is operational in the
field. A pool of QEs is
available on the SCE Portal.

Installation and Maintenance Technician Técnico de Instalação e Manutenção (TIM): Holder professional qualification with competence to coordinate or carry out planning. verification, utilisation management installation maintenance activities relating to buildings and technical systems. A pool of TIMs is available on the SCE portal.



regulations will have a			
B - rating.			
D-Taurig.			





Regulamento relativo ao desempenho energético dos edifícios residenciais (REH)

| Energy performance in residential buildings regulation approved: 20 August 2013

Type: law

Sector: energy

Target area(s): buildings

It establishes requirements for residential buildings, whether new or subject to interventions, as well as the parameters and methodologies for characterising the energy performance, under nominal of all conditions, residential buildings and their technical systems, in order to the promote improvement of their thermal behaviour, the efficiency of their technical systems and the minimisation of the risk of surface condensation on the elements of the envelope.

improving

preventing

energy

The buildings covered must be assessed and subject to requirements with a view to their thermal behaviour, improving pathologies, environmental comfort and reducing needs, focusing characteristics of the opaque and glazed envelope, ventilation and nominal annual energy needs for heating and cooling.

The use of passive systems that improve the building's energy performance should be promoted in major interventions to carried out, and their contribution should be taken into account when calculating the building's energy needs, based on European standards or rules defined for this purpose by the DGEG.

Ensured transposition of Directive 2010/31/EU into national law, as well as the revision of national legislation on the SCE.

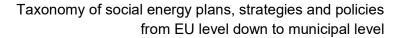
Improving the thermal envelope.

increased productivity property value).

Central Government n/a behaviour of buildings, the efficiency of their technical systems and minimising the risk of surface condensation on the elements of the It can lead to greater energy savings and thermal comfort (which can increase health, labour



<u>Estratégia</u>	A strategy with a	It is complemented	This	strategy	National	Council for
Nacional de	flexibility that allows it	by various public and	represents	the	Intelligent	Specialisation,
Especialização	to keep pace with	private sources of	culmination	of	Executive	Committee,
Inteligente 2030	innovation and not be	funding, such as the	preparatory	work	National	Thematic
(ENEI 2030)	an impediment to	state budget,	carried out of	over two	Platforms,	Technical
National Strategy	development. As a	European funds (in	years by	National	Committee	and Territorial
for Intelligent	result, this document	particular the	Innovation	Agency	Committee	
Specialisation	is structured into 6	Cohesion Policy	(ANI), acco	mpanied		
2030	major areas: Digital	Funds, the Recovery	by players f	rom the		
approved: October	Transition; Materials,	and Resilience Plan	entire	national		
2021	Systems and	and the Horizon	innovation	system,		
revision: 14 June	Production	Europe Programme)	without ex	xception.		
2022	Technologies,	and private	This preparat	ory work		
	Green Transition,	investment.	took the forr	n of 43		
Type: strategy	Society, Creativity	Direct relationship	seminars	and		
	and Heritage; Health,	with the Regional	workshops, v	with the		
Sector: economy &	Biotechnology and	Strategies for	participation	of		
territorial cohesion	Food; Major Natural	Intelligent	companies,	research		
	Assets: Forest, Sea	Specialisation.	centres,	interface		
Target area(s):	and Space.		centres,	partner		
innovation	It aims to be a		institutions,	regional		
	facilitator of		regional	players,		
	innovation, in line with		business			
	the needs and		associations,	experts,		
	challenges of the		in a wide	0 0		
	national territory,		consultation	process		
	without forgetting the		which, in the c	ontext of		
	specificities of each		the pandem	1		
	region of Portugal.		mainly expre			
			digital forma			
			managed to			
			more than	2,000		
			people.			





**Roteiro Nacional** para a Adaptação 2100 (RNA 2100)

**National Roadmap** for Adaptation published: October 2023 implementation: 2100

Type: roadmap

Sector: environment & climate change

Target area(s): climate change adaptation

RNA 2100 supports and responds to public policy exercises adaptation to climate change at the various levels of territorial intervention. It is also supported by various initiatives disseminate the results, including to the public, with the ambition of becoming an important enabler education awareness-raising on subject of adaptation to climate change.

The roadmap aims to define narratives of the evolution of vulnerabilities and impacts of climate change, as well as assessing investment needs for adaptation and the socio-economic costs of inaction. The priority is to promote adaptation to the dangers of drought, water scarcity, rural fires, coastal erosion and coastal overtopping and flooding.

The following actions will 1. the activities of the

National Strategy for Adaptation to Climate Change (ENAAC 2020), the implementation and monitoring of the Action Programme Adaptation to Climate Change (P-3AC), as well other strategic instruments and plans for adaptation to climate change at sub-national and/or sectoral level, namely supporting the implementation of the National Spatial Planning Policy Programme (PNPOT), identifying and mapping territories vulnerable to climate change, with particular emphasis on extreme events, on a national and regional scale, with a view to ensuring the socioecological resilience of territories at the different levels of planning and management in the context of the territorial challenge: 2. the progressive

supported:

integration of adaptation to climate change into the design of direct and indirect intervention projects in the territory; determining the financial needs that should be taken into

Directly supports the implementation of the National Spatial Planning Policy Programme (PNPOT).

Through the exercise to draw up the Action Programme Adaptation to Climate Change (P-3AC), it was possible identify the main impacts and vulnerabilities of the territory.

Connected with the National Strategy for Adaptation to Climate Change (ENAAC 2020). It has a practical

quide which is aimed

primarily at decision-

technicians involved

in the preparation of

Plans (PDM)

and

Master

makers

Municipal

support them integrating climate adaptation into these territorial planning instruments, particularly concerning the hazards that are the subject of Roadmap such as drought. water scarcity, rural fires, coastal erosion and

Promoting education and awareness of the issue of adaptation to climate change.

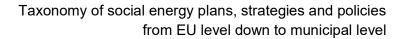
The Roadmap has brought together expertise from variety of institutions to ensure that all relevant areas are taken into account. namely Portuguese Environment Agency, I.P. (APA) as project promoter, the Bank of Portugal (BP); the Directorate-General for Territory (DGT); Faculty the of Sciences of the University of Lisbon (FCUL); Portuguese Institute for the Sea and Atmosphere (IPMA) and the Norwegian Directorate for Civil Protection (DSB). Workshops to disseminate, to the interested parties, the work carried out within the scope of the National Roadmap for Adaptation project, and to gather information about climate change adaptation measures that the stakeholders deemed most suitable to address climate projections until the end of the 21st century in Portugal. The goal was also for these contributions to be relevant to



	account in future financial programming exercises.	coastal overtopping and flooding.	process of constructing sector- based and NUTS II- based storylines for mainland Portugal.	

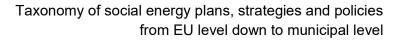


Regional level - Alentejo	Regional level - Alentejo							
<u>Estratégia</u>	The three structural objectives, considered	Direct relation to the						
Regional de	the basis of the entire strategy, seek to:	National Strategy for						
<u>Especialização</u>	. increase sustainability and territorial	Intelligent						
Inteligente 2030	cohesion, where decarbonisation, the	Specialisation 2030						
(EREI 2030)	transition to a more circular economy and	and the Alentejo						
Regional Strategy	the sustainable use of resources/assets	Regional Spatial						
for Intelligent	are the basis of the regional response to	Planning Plan.						
Specialisation	the major environmental challenge;	Aligned with the						
approved: 13 July	. strengthen the value of regional	Alentejo Regional						
2023	production chains, where 'covering' the	Strategy, the						
implementation:	'chain gaps' associated with regional	Territorial						
2030	resources, promoting the spillover effect	Sustainability,						
	and anchor effect of the region's structuring	Natural Heritage and						
Type: strategy	projects align with other responses to the	Climate Action Plan.						
	major challenge of the digitalisation of the	Connected with the						
Sector: economy &	economy; and increasing the qualification	Alto Alentejo						
territorial cohesion	of regional human resources (talents),	Sustainable Urban						
	responding to the demographic challenge	Mobility Action Plan						
Target area(s):	facing the region;	and the Alto Alentejo						
innovation;	. reinforcing the offer of advanced training	Territorial						
decarbonisation;	and the creation and/or attraction of talents	Development						
training	based on the promotion/creation of	Strategy.						
	innovation ecosystems at regional level.							





Plano Regional de	The approval of the	To affirm the Alentejo as a sustainable		Direct relation to the		
Ordenamento do	Alentejo Regional	territory with a strong regional identity,		National Spatial		
Território do	Spatial Planning Plan	supported by a polycentric urban system,		Planning Policy		
Alentejo (PROTA)	(PROTA) is part of a	guaranteeing adequate levels of territorial		Programme and the		
Alentejo Regional	wider context of	cohesion and reinforced integration with		Regional Strategy for		
Spatial Planning	territorial planning	other national and international areas,		Intelligent		
Plan	initiatives, which	enhancing its geostrategic position.		Specialisation.		
approved: 2 August	involved the approval			Aligned with the		
2010	of the National Spatial			Alentejo Regional		
revision: due to	Planning Policy			Strategy and		
2024	Programme			connected with the		
	(PNPOT). PROTA, as			Alto Alentejo		
Type: plan	a territorial			Territorial		
	development			Development		
Sector: economy &	instrument, affirms			Strategy.		
territorial cohesion	the Alentejo as a					
	sustainable territory					
Target area(s):	with a strong regional					
spatial planning	identity, supported by					
	a polycentric urban					
	system, guaranteeing					
	adequate levels of					
	territorial cohesion					
	and reinforced					
	integration with other					
	national and					
	international areas,					
	enhancing its					
	geostrategic position.					
	I		1			I and the second



n/a



Plano de Ação
Sustentabilidade
Territorial,
Património Natural
e Ação Climática
(PA 2030)

Territorial
Sustainability,
Natural Heritage
and Climate Action
Plan

approved: July 2022 implementation: 2030

Type: plan

Sector: environment & climate change

Target area(s): nature conservation and biodiversity; waste management; energy efficiency; renewable energy; climate change; risk prevention.

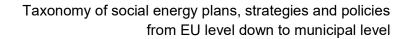
The Action Plan takes account the Cohesion Policy Objectives and aims promote an innovative and intelligent economic transformation in line with the founding objectives of the European Green Deal for a green and inclusive transition to climate-neutral Europe by 2050. The Action Plan identifies operations that fall under the Investment Priorities relating to: nature conservation and biodiversity; waste management; coastal protection; environmental liabilities; promoting energy efficiency and renewable energies; mitigating adapting to climate risk change; and prevention.

1- Strategy for Agricultural and Agro-Industrial Sustainability. 2- Montado Regeneration Programme, based on the definition of a multifund thematic ITI (system - services - landscape - climate - biodiversity relationship). 3- Heritageisation of the cork oak forest as an agro-sylvo-pastoral system - application for recognition by SIPAM (Important World Agricultural Heritage Systems). 4- Valuing the hydraulic infrastructure components (Algueva, Caia and Pisão, in 5- Promoting heritage and nature tourism. 6- Environmental recovery of guarries and revitalisation of ecosystems and urban settlements. 7- Promoting resource efficiency in the transition to a circular economy - industrial symbioses.

8- Energy efficiency and decarbonisation of economic activity and energy systems.9 Improved management of the conservation of Natural Heritage - consolidation of ecological corridors.

Directly related to the European Green Deal and the Estratégia Regional 2030. Connection with PNEC 2030. RNC 2050, ENAAC. At a regional level, the Transversal and Specialisation Domains of EREI Alentejo 2030 are taken into account, as well as Intermunicipal Climate Change Adaptation Plans (such as PIAAC-AA) and the territorial development strategies (such as the Alto Alenteio 2030 Territorial Development Strategy). Designed in 'active coexistence' with the PRR and PNI2030, as a result of the umbilical relationship with the priorities of resilience and the climate and energy transitions.

.Proposal to create a Regional Food Council (Agriculture/Environment/F interface). . Proposal to create a Territorial Sustainability Centre/College in Intersectoral Coordination Council (CCI). . Proposal to monitor the OADR at the interface with Water-Climate Observatory and other Observatories identified (Climate Change Observatory -CIMAC: Observatory to Combat Desertification - CIMBAL). .Water and Climate Intelligence Centre - A technical rationality unit as an Operations Centre that generates knowledge and mobilises skills.



better



Estratégia Regional de Adaptação às **Alterações** Climáticas do Alentejo (ERAACA) I

Alentejo Regional **Climate Change** Adaptation Strategy approved: July 2023

Type: strategy

Sector: environment & climate change

Target area(s): climate change adaptation

This strategy aims to create the conditions for the territory and its agents to be better prepared for the effects of climate change.

methodology The followed was based the **ADAM** methodology, and ten structuring and priority themes were defined for the Alentejo Region in its process of adapting to climate change: biodiversity, resource management, ecosystem services, energy and energy security, coastal zones and the sea. urban design, infrastructure and equipment, transport and communications, health and systems. 50 adaptation

measures

for the

Region.

identified as priorities

were

Alenteio

.Improve Alentejo's knowledge of climate change by defining an information and monitoring system for the structuring elements of adaptation to climate change in the region's strategic sectors: Provide the Alenteio with a detailed diagnosis of climate impacts in key spheres of the natural, social economic environments, articulated with existina strategies in the territory: .Identify regional climate change adaptation measures and mechanisms for monitoring the vulnerabilities, impacts and measures identified. identified:

Provide the Alentejo region with the strategies and institutional capacities to promote adaptation to climate change based on the articulation of transversal. sectoral and territorial measures: .Informing and training socio-economic agents to equip them with the skills to develop autonomous climate change adaptation strategies in different territories and sectors of activity.

Energy energy security measures: Promoting the use of renewable energy sources Increasing the passive resilience of electricity generation and transport infrastructures

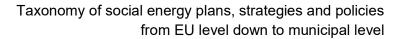
Promoting the dynamic sharing of selfconsumption production and energy exchanges Promoting distributed electricity production Implementation of virtual power stations in local public administration Promoting energy sustainability buildings and public

Related to Territory National Strategy for prepared for the effects of climate change. Adaptation to Climate Change and the National Roadmap for Adaptation 2100. Connection with the PNPOT and

PROTA.

Prepared by Alenteio Regional Coordination and Development Commission (CCRDR), it analyses the territory's current and future climate vulnerabilities. consulted the Intermunicipal Communities of the Alentejo Region, the municipalities of the Alentejo Region and a number of relevant national and regional stakeholders, as well as analysing 37 case studies that inspiring examples in process adapting to climate change.

In relation to the energy and energy security measures: Comissão de Coordenação Desenvolvimento do Regional Alentejo (CCDR Alentejo). Comunidades Intermunicipais da Região do Alentejo e Municípios da Região do Alentejo, Direção Geral do Território (DGT). Direção-Geral de Energia e Geologia (DGEG). Associação Portuguesa de Energias Renováveis (APREN), Empresas e do Associações Setor Energético, Laboratório Nacional de Energia e Geologia (LNEG), Agência para a Energia (ADENE). Fórum de Energia e Clima, EDP Distribuição S.A., AREANATejo, Entidade Reguladora dos Serviços Energéticos (ERSE). Cooperativas de Energias Renováveis.





**Estratégia** Regional 2030 Alentejo Regional Strategy

approved: September 2020 implementation: 2030

Type: strategy

Sector: economy & territorial cohesion

Target area(s): investmentemployment; energy transition; circular economy; climate change

The Alentejo 2030 Regional Strategy will enable the region to develop a new level of response to the renewed problems that arise, from the most structural ones, related to people, the economy and the territory, to those resulting from the necessary responses to the impacts of climate change and the consequences of the pandemic crisis, in terms of environmental. economic and social emergency.

The strategic objectives and their breakdown into a set of specific objectives, related to demography, the economic base, the urban system and governance, also correspond to an approach to programming, framed in the regional strategic stakes, namely through the future Action Plans.

family in

Mitigate the effects of demographic constraints through an integrated investment-employment strategy and through the excellence of reception and support Promote resource allocation investment models to boost the energy transition, the circular economy, climate change mitigation and adaptation strategies and the efficient use of water. Lay the foundations for a new production paradigm for the region by combining the consolidation of the Regional Innovation System with skills training capacity. Mobilise strategic resources and assets from across the territory in an intense, integrated and wide-ranging manner in order to assert Alentejo's competitiveness global economy. Promote the sustainable inimitability of the region's urban system, a factor of competitiveness and territorial cohesion. SO6. Strengthen the conditions for governance and collective action.

coherence between sectoral policies and land-use planning guidelines (PNPOT revised and PROTA beginning the revision process). Directly related to the Strategy National Portugal 2030, the Regional Strategy for Intelligent Specialisation (EREI 2030) and the Territorial Sustainability, Natural Heritage and Climate Action Plan. Connected with the PNEC, the ENAAC, and the RNC.

The aim is to improve

Alentejo Regional Coordination and Development Commission (CCRDR)



### Regional level - Alto Alentejo

Estratégia de Desenvolvimento Territorial para o Alto Alentejo 2030 | Alto Alentejo

Territoral Development Strategy approved: 2024 implementation: 2030

Type: strategy

**Sector**: economy & territorial cohesion

Target area(s): depopulation; climate change The Alto Alentejo 2030 Territorial Development Strategy aims to establish the framework for strategic intervention and investment programming in its territorial area of intervention, in preparation for and guidance of the new cycle of European Structural and Investment Funds programming that will extend over the next decade of the 21st century. With this revision.

focused on the 2030 horizon, the aim is to strengthen the thematic focus on existing needs where the conditions for competitiveness and attractiveness of the territory are present, as well as the most significant constraints and problems, such as demographic decline and depopulation, climate change, the lack of critical mass. investment and investors.

\*Strengthening the attractiveness and competitiveness of the region and the subregional economy \*Strengthening and qualifying local public services, promoting appropriate responses to the socio-demographic challenges of the and sub-region local needs. \*Promoting the active inclusion of the most vulnerable groups \*Promoting business dynamism and employment

historical-cultural heritage with a view to affirming identity and sub-regional specificities strengthening and attraction tourist \*Promoting energy efficiency \*Promoting the use of **ICT** in local administration \*Increasing the subregion's capacity to respond to accidents or disasters \*Promote the collective infrastructure of agricultural land \*Upgrading the school estate \*Diversify and qualify social and health responses \*Empowering vulnerable groups \*Promote educational development and success in primary and secondary education \*Supporting entrepreneurship and job creation \*Supporting the

qualification

business fabric

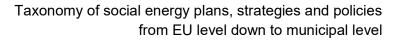
of

the

\*Enhancing the natural

In addition to its alignment with the Portuguese Recovery and Resilience Plan (PRR) the and European funds, it is also in line with the territorial options of the PNPOT, the Regional Strategy for Intelligent Specialisation 2030 (EREI 2030) and the Territorial Model of the Regional Spatial Planning Plan (PROT), the Portugal 2030 National Strategy and the 2030 Alentejo Regional Strategy

Alto Alentejo municipalities and organisations represented on the Strategic Council for Intermunicipal Development



SPI

(APA)

Alenteio

Tourism

Institute

**Forests** 

Alentejo

Agriculture

**Fisheries** 

Alentejo)

(NEEA)

(ULSNA.

Alentejo,

Portalegre

Alenteio

Alentejo

(ADRAL)

Alenteio

Commission

Development Agency

Municipalities of Alto

Regional

Águas

(ERT)



**Plano** Intermunicipal de Adaptação às **Alterações** Climáticas do Alto Alenteio (PIAAC-

AA) | Alto Alentejo Intermunicipal **Climate Change Adaptation Plan** approved: September 2022 implementation: 2030

Type: plan

Sector: environment & climate change

Target area(s): climate change adaptation

Alentejo Alto Intermunicipal Climate Change Plan Adaptation (PIAAC-AA) aims to create conditions so that the territory and its agents are better prepared for effects of climate change, and a few objectives methodologies have been defined for this project.

\*Characterise and scenario the climate of Alto Alenteio, which will serve as a basis for identifying vulnerabilities and actions in the context of climate change; \*Identify the climate vulnerabilities to which the sub-region/municipalities are exposed. including the impact caused and details of consequences; \*Identify the main future climate impacts and risks that require a response: \*Identify and characterise a set of adaptation options that can respond to the main current and future climate vulnerabilities identified: \*Streamline the integration of adaptation to climate change into the planning and decision-making processes of intermunicipal, municipal and sectoral agents; \*Promote the involvement of the population, municipal technicians and local

\*Contribute to the objectives and goals of ENAAC 2020 and the P-3AC, with regard to improving the level of knowledge about climate change, implementing adaptation measures, which includes the P-3AC (Action Programme for Adaptation to Climate Change), and promoting the integration of adaptation measures into policies, safeguarding sectoral the necessarv coordination complementarity with these instruments: \*Create the basis for drawing up municipal and inter-municipal strategies for adapting to climate change in all the municipalities of Alto Alentejo, with the aim of creating a culture of cooperation between the various sectors and players, thereby strengthening territory's resilience. \*Streamline the integration of adaptation to climate change into the planning and decision-making processes of intermunicipal, municipal and sectoral agents: \*To concretise and detail concrete actions

Urban Renaturalisation and the Introduction of Nature-Based Solutions Cleaning Renaturalising Water Lines Identifyina Climate Refuges for Biodiversity Retention Displacement Promoting agro-sylvopastoral systems Promoting Water Use

Efficiency in Agriculture Enhancing the Rural Economy through the Diversification Regional **Products** Adoptina Sustainable Drainage Measures Rationalisation and Management of the Water Supply System Use of Efficient Irrigation

Harnessing Rainwater

Wastewater Bioclimatic Design of Buildings and Improving the Energy Efficiency of Buildinas Creation of a Support Line for the Elderly Monitorina Prevention of Risks to Human Health from Climate Change Creation of Zero **Emission Zones** (ZZE) and Reduced Emission Zones (ZER)

Carrying out Awareness

Campaigns to Promote

Climate

Education

Change

Systems

The main objective of PIAAC-AA is to comply with the recommendations of the National Strategy for Adaptation to Climate Change, thus contributing to its implementation on an inter-municipal scale and making possible to meet the targets set for the territory in terms of adaptation to climate change. Connection with the Territorial

Sustainability. Natural Heritage and lives of the population. Climate Action Plan.

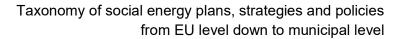
CIMAA has been promotina the development of actions to achieve greater and energy environmental sustainability. The need to act towards climate change in the sense of local and regional adaptation is fundamental, and is seen as a priority matter, due to the inevitability of its impacts on the territory, which will continue to have on the territory, influencing the daily

Intermunicipal Intermunicipal Community Community of Alto of Alto Alentejo - CIMAA Environment Alenteio -CIMAA Portuguese Portuguese Agency (APA) Innovation Society Alentejo Regional Tourism Authority (ERT) University of Aveiro Institute for Nature Conservation and Forests Portuguese (ICNF) **Environment Agency** Alenteio Regional Regional Directorate for Agriculture Authority **Fisheries** (DRAP and Alentejo) for Nature Business Centre of the Conservation and Alentejo Region (NEEA) Local Health Unit of Norte (ICNF) Alentejano, EPE (ULSNA Regional Directorate for EPE) and Águas do Alto Alentejo, (DRAP EIM. Portalegre Region Business Business Centre of Association (NERPOR-AE) the Alenteio Region Alenteio Regional Coordination **Development Commission** Local Health Unit of Norte Alentejano, EPE Alentejo Regional Development EPE) Agency do Alto (ADRAL) EIM, SA Municipalities Region Alentejo **Business Association** (NERPOR-AE) Regional Coordination and Development

Alto



and measures to adapt to the most relevant climate impacts.	Adaptation and Mitigation		
cimate impacts.	Willigation		





Plano de Ação de Mobilidade Urbana Sustentável do Alto Alentejo (PAMUSAA) | Alto Alenteio Sustainable Urban **Mobility Action** Plan approved: 2016

revision: 31 August

Type: plan

2023

Sector: transport

Target area(s): mobility

The Alto Alentejo \*Improving the efficiency and effectiveness Sustainable Urban Mobility Action Plan (PAMUSAA), anchored in a lowcarbon strategy, and includes the promotion of sustainable multimodal urban mobility and contains measures that promote the reduction of greenhouse emissions and reduction of energy intensity, while simultaneously

an

of the transport of people and goods \*Promoting a smooth shift to cleaner and more efficient modes of transport \*Ensuring a more inclusive accessibility transport system \*Reducing the negative impact of the transport system on health \*Reducing the negative impact of the transport system on the safety of citizens (particularly the most vulnerable) \*Reducing air pollution, noise, greenhouse gas emissions and energy consumption.

Structuring Integrated Public Transport Network Encouraging the Use of Soft Modes - cycling Encouraging the Use of Soft Modes - pedestrian mode Promotina Public Transport Intermodality Traffic and Parking Management for Sustainable Mobility Encouraging the reduction of emissions associated individual transport.

The PAMUSAA took The implementation of into account the this Sustainable Urban articulation and Mobility Action Plan for coherence with: Alto Alentejo will have - Strategic Urban implications for the Development Plans population, since the (PEDU) promoted by aim is to modernise the municipalities that change make up the urban accessibility and the road system in Alto centres, particularly with regard to the Alenteio. other investment priorities considered in these plans, and investment priorities

considered in these

- the intentions and

make up the group of

Programme and thus

in connection with the

Regional Strategy for

Alentejo

strategies of

municipalities

complementary

the

Operational

Intelligent

Specialisation.

centres:

plans;

Municipalities of Alto Alenteio and Alentejo Coordination Development Commission Alto Intermunicipal Community Intermunicipal Baixa Intermunicipal

Municipalities Alto Alenteio Institute of Mobility Transport Regional Alenteio Community of Beira Community of Médio Tejo Intermunicipal Community of Lezíria do Tejo Intermunicipal Community of Central Alentejo Infraestruturas de Portugal Rede Nacional de Expressos, Lda Rodoviária do Alentejo Municipalised Water and Transport Service CMPortalegre Trains of Portugal National Association of Heavy Passenger Road Hauliers National Association of Road Hauliers in Light Motor Vehicles National Association Public of Road Hauliers Among other local. regional and national organisations.

promotina

increase in the share



#### Local level - Gavião

Estratégia Local de Habitação de Gavião | Gavião Local Housing Strategy

approved: 2022 implementation: 2028

Type: strategy

Sector: social

Target area(s): buildings; housing; energy efficiency; thermal comfort

The Local Housing Strategy (LHS) is an instrument that defines the intervention strategy for housing policy. It is conceived as a local strategic tool that allows the instruments defined in the New Generation of Housing Policies (NGHP) to be adapted to the territorial reality and implemented in an integrated way, with the aim of promoting housing solutions that focus on the most vulnerable communities. ln effect.

it presupposes а diagnosis of the existing shortcomings in access to housing, in accordance with the resources and dvnamics of transformation of the territory, which allows for the definition of a desired future to be achieved throughout its implementation. It must specify the housing solutions to be developed, their prioritisation, and the articulate

\*Improving the housing conditions of the population and the quality of life of the local community, encouraging thermal comfort and energy efficiency in buildings; \*Promoting the rehabilitation of vacant and derelict dwellings, favouring dwellings located in the ARU; \*Stimulating the rental market in the municipality;

\*Qualifying urban areas and, at the same time, promoting intra-council mobility; \*Promoting affordable housing for sale or rent;

\*Consolidate urban agglomerations with different functions, promoting a more coherent and attractive urban image. Rehabilitation buildings by owners Rehabilitate social housina Build municipal housing for reduced rents Promote and publicise housing support programmes Mobilise private investment in the area Survey the number of vacant buildings in the area with rehabilitation potential Mobilise owners to rehabilitate their homes Recover and landscape degraded areas with a focus on Urban Rehabilitation Areas Mobilise landlords to rehabilitate housing and practice affordable rentina Building municipal to promote housing reduced or

rents Acauirina rehabilitating vacant and derelict dwellings to promote rentals Design and publicise housing programmes with benefits for landlords Improving accessibility and the transport

Promote conditions for

network

The Local Housing Strategy of the Municipality of Gavião is aligned with New the Generation of **Policies** Housing (NGPH), established by the Council of Ministers Resolution nr. 50-A/2018. This aims to ensure that everyone has access to proper housing and to create the conditions for both building rehabilitation urban rehabilitation to go being the from exception to the rule. In this sense, it is aligned with the following objectives: 1) To provide a response to families living in situations of serious housing deprivation: 2) To guarantee access to housing for all those who have no response via the

market:

conditions

3) To create the

rehabilitation to be

the main form of

intervention in terms

urban development;

buildings and

for

objectives

environmental

sustainability

of

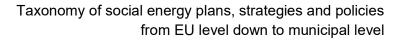
and

The qualification and rehabilitation of the Municipality is commitment of Gavião Town Hall, in order to better serve its citizens, promoting a series of investments with an impact on the quality of life of the resident population. According to diagnosis carried out as part of the LHS, it is necessary to develop a dianified housing response for families, corresponding to 170 people. In addition to solving the housing needs of the most vulnerable families, the aim is to promote economic investment and the settlement of population in the area. The actions carried out will be guided by the idea of enhancing the urban agglomeration's connection with natural surroundings spaces that and support economic activity outside the urban perimeter. always with underlying

Municipality of Gavião Municipality Gavião Tertiary sector Tertiary sector Investors Investors Owners Owners



objectives and a	actions	the use of alternative	4) To promote social	energy efficiency. At	
to be develope		means of transport		the same time, it is	
other sectoral p		Recover and requalify	inclusion and housing	extremely important to	
	social,	degraded areas	choice opportunities.	promote the housing	
employment,	555.a.,	Modernising	andres opportunities.	market in the	
	health,	infrastructure		municipality, through	
	among	Building new housing at		the construction of	
others).	a	controlled costs with a		affordable housing with	
		view to integrating rural		rents suitable/	
		areas		subsidized for families,	
		Promote the supply of		aimed at attracting the	
		affordable housing		population, especially	
		Contain dispersed		young people. The	
		building		housing needs and	
		Attract private		difficulties in accessing	
		investment		affordable housing in	
		Acquire and rehabilitate		the municipality of	
		dilapidated buildings		Gavião have been	
		Requalify public spaces		identified by degree of	
		Develop and publicise		urgency, primarily due	
		mechanisms to support		to precariousness. This	
		rehabilitation and the		is explained above all	
		establishment of new		by the fact that some of	
		services in the		the families identified	
		municipality.		are in situations of	
				financial difficulties that	
				prevent them from	
				accessing housing,	
				pushing them to give	
				up their homes. There	
				are also households in	
				a situation of	
				insolvency, unable to	
				pay their rents.	
				, ,	





Plano Municipal de Ação Climática de Gavião | Gavião Municipal Climate Action Plan approved: June 2024 implementation: 2050

Type: plan

**Sector:** environment & climate change

Target area(s): climate action

It aims to characterise the municipality (including an emissions inventory and the main vulnerabilities) and define specific mitigation adaptation measures, contributing to climate neutrality adaptation to climate change.

Promoting the decarbonisation of the municipality and increasing the production of renewable energy, boosting the role of the community as an active part of the energy system and minimising the impacts of the strong attractiveness of the territory in terms of the implementation of photovoltaic energy projects. Promote the decarbonisation and energy transition of the public transport sector, the municipal fleet and the private sector. fostering sustainable mobility, reinforcing universal accessibility and the adoption of efficient behaviour. Supporting the energy transition of the municipality's industrial fabric, promoting innovation, competitiveness and the reformulation of production processes Increasing thermal comfort, passive resilience and energy and water efficiency by favouring the use of more efficient equipment, optimising the public lighting system and increasing the resilience of public spaces to the risks posed by climate change.

Strengthening the resilience of ecosystems to current and future climate risks; enhancing the value of natural spaces in a sustainable way, combining economic productivity with the protection of biodiversity and increased carbon sequestration capacity. Encouraging efficiency in public infrastructures and resource management, preventing waste and boosting the territory's resilience. Integrating climate action into the daily lives of citizens and institutions (public and private) with a view to improving quality of life and achieving a low-carbon society, in which all citizens and institutions endeavour to contribute to carbon neutrality and the protection of biodiversity.

The Action Plan was drawn up with a view to Gavião's contribution to achieving the targets set out in the Basic Climate Law.

Municipal plan obligatory under the Basic Climate Law and connection with the PNEC 2030, the ENAAC 2020, the RNC 2050, and the PIAAC-AA.

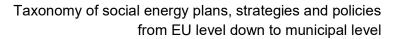
1. Supporting citizens and companies in identifying sources of funding that ensure a just transition in all its different aspects, economic, social and environmental.

2. Implementing inclusive actions to combat energy poverty and increase efficient energy consumption among the most socioeconomically disadvantaged and info-excluded population.

Supporting reduction of energy costs for domestic consumers, helping to ensure that the price of energy is not a factor in excluding access to these services, regardless of the economic or social situation of consumers, and ensuring universal access to quality services at affordable prices.

The plan is the result of three collaborative involving moments various stakeholders (Gavião municipality, other municipalities in Alto Alenteio, CIMAA. AREANATejo) who recognised the urgency of consolidating а strategic approach to combating challenges of climate change and promoting the decarbonisation of the territory. The Ponte de Sor GCAP will be put out for public consultation. during which contributions from civil society will received.

The plan provides for the creation of the Municipal Climate Action Council and at inter-municipal the Alto Alenteio Climate Action Working Group, both of which bring together strategic public and private entities and will facilitators of act as consultation and institutional coordination, always focussing on the implementation of measures and respective actions within the planned timeframe.





Plano de Desenvolvimento Social do Município de Gavião 2019-2021 I

Gavião Social **Development Plan** approved: May 2019 implementation: 2021

Type: plan

Sector: social

Target area(s): education; employment; vocational training; housing; culture and leisure

The Social Development Plan serves as an instrument for jointly definina and negotiating priority objectives for promoting local social development.

It aims not only to produce corrective effects in terms of reducing poverty, unemployment and social exclusion, but also preventive effects generated through actions to animate communities and induce processes of change, with a view to improving people's living conditions. The Social Development Plan therefore paints a picture of a desirable but realistic social situation.

Promote initiatives for interaction between parents and carers, the School Group and Kindergarten Rehabilitation or extension of the School Group's main buildina Promoting the appreciation of the school career by students and their families Promote/disseminate support incentives for attending higher education Promote entrepreneurship and encourage businesses to settle (Business Dynamism) Promote and increase employability levels Promote the qualification and requalification of the unemployed and the actively employed Promote tourism in the municipality Requalification and valorisation of the built heritage

Increase or extend the number of cooperation agreements Increasing responses in terms of support facilities for the more dependent elderly population

Promote neighbourhood care in all the borough's parishes Promoting access to decent housing Make the population aware to the importance of the associative movement

The Social Development Plan includes objectives and strategies capable of responding to priority individual and collective needs and problems. The axes of intervention identified represent all the main needs felt in the municipality. namely: Axis 1 - Education Axis 2 - Employment, Vocational Training and Economic Development Axis 3 - Health, Social Action and Housing (Actions to be taken: i) increasing responses in of support facilities for the most dependent elderly population; ii) breaking down situations of social isolation and facilitating access to services in parish and municipality headquarters; ensuring that all families can live in a way that meets their basic survival needs: iv) promoting access to decent housing; contributing to attracting and settling families in the municipality through "Gavião Program; vi) promoting elimination architectural barriers)

Axis 4 - Associations

Culture and Leisure

The Social Diagnosis Social of the Municipality of Development Plan for the Municipality Gavião made it possible to Gavião was conceived characterize the from the point of view of participatory, municipality's social reality by identifying integrated and needs and detecting comprehensive priority problems and intervention planning. their causes, as well It is a continuous and as local resources flexible document. and potential, which which is constantly constitute real being revised. opportunities for monitored development. It was evaluated. In this way, on the basis of the it is hoped to achieve a Social Diagnosis that coherent intervention Social with links between all Development Plan the planning stages was drawn up, in carried out and/or to be which the objectives carried out, in order to strategies to and contribute capable of desirable future responding to priority scenario and individual and contribute to lower collective needs and rates of poverty and problems were social exclusion, i.e., to defined.The Social a better quality of life. Diagnosis and the Social Development

Plan are components

of the same process

each other.

complement

Gavião Town Council Parish Union of Gavião and Atalaia Portalegre District Social Security Centre Gavião Holy House of Mercv Gavião Health Centre Gavião School Group Association of Parents and Guardians of the Municipality of Gavião Gavião National Guard Republican Parish of Gavião Gavião Municipal Youth Band Os Gavionenses" Club Belver Parish Council Comenda Parish Council Margem Parish Council Estrela da Planície" Orpheon Belverense Social Centre Margem Social Centre Ponte de Sôr Institute for Employment and Vocational Training Youth Gavionense Cultural and Artistic Association Commission for the Protection of Children and Young People in Gavião Profiforma Belverense Recreational and

а

to

Sports

Equality

Local Councillor for

Centre

Gavião Town Council Parish Union of Gavião and Atalaia Portalegre District Social Security Centre Gavião Holy House of Mercv Gavião Health Centre Gavião School Group Association of Parents and School Guardians of the Municipality of Gavião Gavião National Republican Guard Parish of Gavião Gavião Municipal Youth Band Os Gavionenses" Club Council Belver Parish Comenda Parish Council Margem Parish Council da Planície' Estrela Orpheon Belverense Social Centre Margem Social Ponte de Sôr Institute for **Employment and Vocational** Training Gavionense Youth Cultural and Artistic Association Commission for Protection of Children and Young People in Gavião Profiforma Belverense Recreational and Sports Centre Local Councillor for Equality



#### Local level - Ponte de Sor

Plano Municipal de Ação Climática de Ponte de Sor

Ponte de Sor Municipal Climate Action Plan approved: June 2024 implementation: 2050

Type: plan

**Sector:** environment & climate change

Target area(s): climate action

It aims to characterise the municipality (including emissions inventory and the main vulnerabilities) and define specific mitigation and adaptation measures, contributing to climate neutrality and adaptation to climate change.

Promoting the decarbonisation of the municipality and increasing the production of renewable energy, boosting the role of the community as an active part of the system. Promote the decarbonisation and energy transition of the public transport sector, the municipal fleet and the private sector. encouraging sustainable mobility, reinforcing universal accessibility and the adoption of efficient behaviours. Supporting the energy transition of the municipality's industrial fabric, focusing on innovation and co-responsibility in climate matters а local Increasing thermal comfort, passive resilience and energy and water efficiency by favouring the use of more efficient equipment, optimising the public lighting system and increasing the resilience of

Strengthening the resilience of ecosystems to current and future climate risks; enhancing the value of natural spaces in a sustainable way, combining economic productivity the protection of with biodiversity increased carbon and sequestration capacity. Encouraging efficiency in public infrastructures and resource management, preventing waste and boosting the territory's resilience Integrating climate action into the daily lives of citizens and institutions (public and private) with a view to improving quality of life and achieving a low-carbon society, in which all citizens and institutions seek to contribute to carbon neutrality and the protection of biodiversity.

public spaces to the risks posed by climate

change.

The Action Plan was drawn up with a view to Ponte de Sor's contribution to achieving the targets set out in the Basic Climate Law.

Municipal plan obligatory under the Basic Climate Law and connection with the PNEC 2030, the ENAAC 2020, the RNC 2050, and the PIAAC-AA.

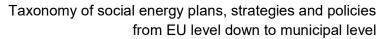
1. Supporting citizens and companies in identifying sources of funding that ensure a just transition in all its different aspects, economic, social and environmental.

2. Implementing inclusive actions to combat energy poverty and increase efficient energy consumption among the most socioeconomically disadvantaged and info-excluded population.

Supporting the reduction of energy costs for domestic consumers, helping to ensure that the price of energy is not a factor in excluding access to these services, regardless of the economic or social situation of consumers. and ensuring universal access to quality services at affordable prices.

The plan is the result of three collaborative moments involvina various stakeholders (Ponte de Sor municipality, other municipalities in Alto Alentejo, CIMAA. AREANATejo) who recognised the urgency of consolidating а strategic approach to combating the challenges of climate change and promoting the decarbonisation of the territory. The Ponte de Sor GCAP will be put out for consultation. public during which contributions from civil society will received.

The plan provides for the creation of the Municipal Climate Action Council and also. at inter-municipal the Alto Alentejo level, Climate Action Working Group, both of which bring together strategic public and private entities and will act as facilitators of consultation and institutional coordination. always focussing on the of implementation measures and respective actions within the planned timeframe.





Plano Local de Ação Integrada: Rede Circular para a Construção Sustentável |

Ponte de Sor Local Plan: Circular Network for Sustainable Construction approved: June 2023 implementation: 2030

Type: action plan

**Sector:** economy & territorial cohesion

Target area(s): circular economy; urban planning; buildings

The Local Integrated Action Plan (LIAP) was produced on the basis of а participatory and collaborative action planning process aimed at improving the design of sustainable urban strategies and action plans for the territory of Ponte de Sor. It is part of the National Circular Cities Initiative and the R2CS Network Circular network for Sustainable Construction. The internal discussion began with the identification of the main problems and challenges facing public and private organisations in terms

of the circular economy, sustainability and public policies. Experiences, points of view and hesitations were shared. summarised and worked on, leading to three thematic action lines that were defined as the basis for the Actions to be developed in the Plan: Theme Valorisation and

reuse of materials Theme 2 - Transport The main objective of R2CS Network is to define support guidelines for everyone involved in the construction process of cities, in the search for a sustainable and natural (re)use of resources, promoting the transition to a circular and low-carbon economy with a focus on durability, adaptability and resource reduction in buildings and public space. The project also focuses on raising awareness and raising awareness, taking as its motto the initiatives of local public entities as inspiration and encouragement for experimentation.

The Local Integrated Action Plan of the Municipality of Ponte de Sor presents its strategic objectives within the scope of the circular economy in the areas of construction and urbanism, defining quidelines for support and help all the involved in the process, with a commitment to involve, raise awareness and enable for the global commitment to the sustainable development of the territory. In a first diagnosis, the Municipality identified the following as priority areas: \*Involvement and participatory culture for the development of local policies; \*Integration of the circular economy in new construction;

\*Improvement of CDW management (construction and demolition waste); \*Promoting the circularity of the economy through public procurement.

The analysis of the issues worked on by the Planning and Local Action Group led to the definition of three thematic working areas:

1) Transport and Reuse of CDW, 2) Recovery and Reuse of Materials and 3) Environmental and Architectural Education.

Within the theme of

Transport and Reuse of

CDW, the Incentive for transport and deposit of CDW stands Regarding theme Recovery and Reuse of Materials, the following measures/actions were defined: creation of a Municipal Materials Valorization Center; Creation of incentives for the reuse recovery materials; and Creation of a practical quide of reusable materials Finally, within the theme Environmental Architectural Education. it is worth mentioning Architectural Awareness to the community and Training of Technicians the reuse buildings, materials and eneray efficiency

Ponte de Sor LIAP is focused on achieving the following SDGs: SDG 7 (Clean and affordable energy), SDG8 (Decent work and economic SDG9 growth), (Industry, innovation and infrastructure), SDG11 (Sustainable cities and communities), SDG12 (Responsible consumption and production) and SDG13 (Action against global climate change). It is also in line with the compliance with European rules for sustainable construction

In its commitment to the promoting of a transition to a circular economy, the Municipality of Ponte de Sor is challenging its governance model in order to involve, raise awareness and empower its population to make a global commitment to sustainable development of its territory. Taking this into account. the Municipality has foreseen sessions to raise awareness and present the LIAP to schools and community, together with Parish Councils and the Municipality. Depending on that actions are developed and the implementation of the plan, communication strategy will be adopted in order to involve a greater number of the population and agents from the various activity sectors in achieving the objectives set for the actions developed.

Municipality of Ponte Sor Union of Parishes of Ponte de Sor, Tramaga and Vale de Acor Galveias Parish Council Montargil Parish Council CCDRA - Alenteio Regional Coordination Development and Commission SEPNA - Nature and Environment Service Protection Architectural Technical Offices **AREANATeio** Regional Energy and **Environment Agency** of Alto Alentejo region **PRAGOSA** S.A. VALNOR - Recovery and Treatment S.A. Solid Waste. UNIVERSITY ÉVORA (areas of architecture, engineering and management) ACIPS - Commercial and Industrial Association of Ponte de Sor

Municipal Recovery of Materials: contractors: construction owners Tax incentive for the reuse and recovery of materials: contractors: construction owners Creation of a practical guide to reusable materials architectural construction offices material companies Encouragement for transportation and deposit construction demolition waste: local companies and individuals: CIMAA - Alto Alentejo Intermunicipal Community:

Architectural awareness to the community: parish councils; contractors; community; companies in the sector (manufacturers)

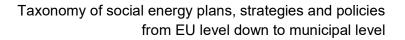
councils

parish

Training Agents Technicians on the reuse of buildings, materials and energy efficiency: technical; contractors: construction owners: Municipality of Ponte de Sor; parish councils; external entities architectural offices: academy



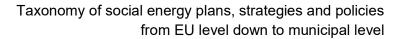
and reuse of Construction and Demolition Waste Theme 3 - Environmental and architectural education By defining these three thematic areas, the LIAP is intended to be an instrument that supports the transition to a circular economy in the urban planning and construction sector in a structured, efficient and conscious manner.		ı	1	I	
Demolition Waste Theme 3 - Environmental and architectural education By defining these three thematic areas, the LIAP is intended to be an instrument that supports the transition to a circular economy in the urban planning and construction sector in a structured, efficient and conscious					
Theme 3 - Environmental and architectural education By defining these three thematic areas, the LIAP is intended to be an instrument that supports the transition to a circular economy in the urban planning and construction sector in a structured, efficient and conscious					
Environmental and architectural education By defining these three thematic areas, the LIAP is intended to be an instrument that supports the transition to a circular economy in the urban planning and construction sector in a structured, efficient and conscious					
architectural education  By defining these three thematic areas, the LIAP is intended to be an instrument that supports the transition to a circular economy in the urban planning and construction sector in a structured, efficient and conscious	Theme 3 -				
education By defining these three thematic areas, the LIAP is intended to be an instrument that supports the transition to a circular economy in the urban planning and construction sector in a structured, efficient and conscious					
By defining these three thematic areas, the LIAP is intended to be an instrument that supports the transition to a circular economy in the urban planning and construction sector in a structured, efficient and conscious					
three thematic areas, the LIAP is intended to be an instrument that supports the transition to a circular economy in the urban planning and construction sector in a structured, efficient and conscious					
three thematic areas, the LIAP is intended to be an instrument that supports the transition to a circular economy in the urban planning and construction sector in a structured, efficient and conscious	By defining these				
to be an instrument that supports the transition to a circular economy in the urban planning and construction sector in a structured, efficient and conscious	three thematic areas,				
that supports the transition to a circular economy in the urban planning and construction sector in a structured, efficient and conscious	the LIAP is intended				
transition to a circular economy in the urban planning and construction sector in a structured, efficient and conscious	to be an instrument				
transition to a circular economy in the urban planning and construction sector in a structured, efficient and conscious	that supports the				
economy in the urban planning and construction sector in a structured, efficient and conscious	transition to a circular				
planning and construction sector in a structured, efficient and conscious	economy in the urban				
construction sector in a structured, efficient and conscious	planning and				
a structured, efficient and conscious	construction sector in				
and conscious	a structured, efficient				
manner.	and conscious				
	manner.				



fundamental pillars for the municipality.



Estratégia Local The Local Housing to housing, Diversification of supply Ponte de Sor LHS The Local Housing Municipality of Ponte Municipality of Ponte de Sor de Habitação de consolidation and the response to "new vision was designed Strategy (LHS) aims demand to Strategy for the de Sor in alignment with the Ponte de Sor contribute to "unblock" markets and Municipality of Ponte Comfortable housing that promotes well-Ponte de Sor Local strengthening Ponte stop price rises. local challenges de Sor was developed **Housing Strategy** de Sor's sense of beina Universalisation of identified for the as a result of the approved: development through Diverse, well-served and "irresistible" "decent, healthy and housing sector, as Municipality's Social November 2020 intelligent integration neiahbourhood experiences environmentally well as with more Dianosis. which of its socio-territorial Coherence and attractiveness extended to responsible housing for challenges highlighted the need to global Type: strategy diversity (town and the whole territory (city and parishes) all" and housing quality (i.e. UN-SDG), with improve adapted to various parishes) and to the potential lines of mechanisms needs and ways of living Sector: social affirm its strategic development for the monitoring families in position in the region. Municipality and with social housing living. Target area(s): socio-territorial the principles and revealed the lack of a An integrated approach buildings; housing; diversity (town and "habitat" objectives of the to local housing strategy. energy efficiency; parishes), and to "dwelling" through NGHP New Taking thermal comfort affirm its strategic residential and urban Generation of consideration the Housing Policies. economic difficulties position in the region. quality. This Strategy was Promoting a dynamic faced by many families drawn up using a overall image and an on a daily basis, which collaborative and extended "local are very difficult to predominantly aesthetic" to reinforce manage, as comprehensive municipality's incomes make approach, involving identity and territorial impossible for them to the participation of cohesion. pay the high rents diverse and relevant available on local actors. market, Municipality made it a priority to provide the municipality's socially vulnerable families with better living conditions, investina in rehabilitation of the municipality's housing stock, with most of the rehabilitated housing being channelled into social housing. A better quality of life and the comfort population





Plano de
Desenvolvimento
Social do
Município de
Ponte de Sor 20192021 | Ponte de
Sor Social
Development Plan
approved: May 2019
implementation:
2021

Type: plan

Sector: social

Target area(s): vulnerable groups; health; social facilities; housing; education; training; employability; entrepreneurship

The Social Development Plan aims to fulfil quidelines set out in the Social Diagnosis, which provided an understanding of the municipality's social reality through the identification of needs, the indication of priority problems and their causalities, well as local resources and potential that could constitute windows of opportunity for social development. This

structuring document presents a common project for change, which includes the objectives and activities leading to the implementation of responses to challenges facing the Ponte de Sor Social Network, aiming to: i) promote social development: ii) prevent the risks of poverty and exclusion. which mainly affect the most disadvantaged social groups, and iii) act on the most pressing situations of poverty and social exclusion.

\*To provide the elderly population with conditions for a better quality of life, favouring the right to active and dignified ageing;

\*Supporting families in fulfilling their roles; \*Ensuring citizens have access to quality health care;

\*Providing access to support facilities for citizens and families and the right to decent housing;

\*Promoting the development of innovative, quality education/training/qualification systems geared towards boosting employability and entrepreneurship; \*Promoting and strengthening responses that avoid or mitigate situations of risk and vulnerability;

\*Contributing to the promotion of socioterritorial cohesion and sustainable development. Favouring the creation of new services for the elderly Improve the quality of existina responses Promotina parental and/or family skills Improving support for informal carers Ensure that the municipality has adequate human resources, facilities and equipment Implement measures to

help strengthen prevention and improve information and awareness among the population.

Favour conditions that

citizens enable and families to access support facilities. Create answers so that each household has access to housing that is habitable and adjusted to the number of members. Promoting education/training.

qualifications. employability and entrepreneurship among the population Contributing to promotion of a school management system aimed at increasing the quality of educational and training responses Promoting the quality of life of the population's

most vulnerable groups

At supranational level, this document is aligned with the Sustainable Development Goals nr 1, 2, 3, 4, 5 and 8, as well as with Strategy 2020, which includes targets set for Employment,

Education

Programs,

emphasis

Exclusion.
This instrument is also articulated with the strategic references at national level, namely Portugal 2020 Program, composed of Operational

Poverty and Social

and

with

on the

Social Inclusion and Employment
Program, which includes the following axes: Axis I Promoting the sustainability and quality of

employment; Axis II -

Youth Employment

Initiative; Axis III Promoting social
inclusion and fighting
poverty and
discrimination. At
local level, Ponte de
Sor Local
Development Plan
must be coordinated

other

and

with

development

intervention

Social School Development Plan for the Municipality of Ponte de Sor consisted of drawing up an Ponte instrument for jointly definina and negotiating priority Age objectives, aiming not only the production of corrective effects in and

reducing terms of poverty, unemployment and social exclusion, but also preventive effects generated through actions to foster communities and induce processes of change, aiming to improve people's living

conditions.

School Group
Commercial and
Industrial Association
of the Municipality of
Ponte de Sor
Forensic Association
of Friends of the 3rd
Age
Portuguese
Association of Parents

Age
Portuguese
Association of Parents
and Friends of
Mentally Handicapped
Citizens
Portalegre District
Centre of the Social
Security Institute
Ponte de Sor Local
Council for Social
Action

Ponte de Sor Local

for

Social

Council

Guard

Institute

Medium-sized

**Enterprises** 

Innovation

Vocational

**Employment** 

Action - Executive Centre Municipal Youth Council Commission for the Protection of Children and Young People Integrated Response Centre Ponte de Sor Children's Recovery Centre Alenteio Regional Directorate Education National Republican

for

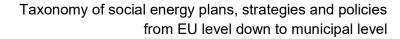
and

and

Training

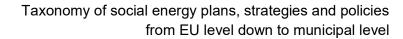
Support of Small and

Municipality of Ponte de Sor





		I =				
		Promote initiatives that			Institute - Vocational	
		help prevent situations			Training Centre	
		of risk and vulnerability	such as "Ponte de		University of Évora	
		To help build the	Sor Municipal Master			
		capacity of non-profit	Plan".			
		institutions and the				
		Network, and to value				
		and boost networking				
		and partnership work				
		that promotes social				
		inclusion and territorial				
		cohesion.				
		Supporting measures				
		that contribute to				
		economic sustainability				
		Co-operating with				
		initiatives aimed at				
		preserving the				
		environmental aspect of				
		sustainable				
		development				
		Co-operate with				
		initiatives aimed at				
		contributing to				
		demographic				
		sustainability.				
		sustamability.				
 ·	I .		I.	1		





Estratégia Energética do Município de Ponte de Sor | Ponte de Sor **Energy Strategy** approved: November 2019 implementation: 2020

Type: strategy

Sector: energy

Target area(s): energy efficiency, renewable energy

The Municipality of Ponte de Sor developed an Energy Strategy that aims to contribute to the EU's energy policy objectives in terms of greater energy efficiency and encouraging the use and production of energy renewable and in terms of reducing CO<sub>2</sub>emissions, while at the same time helping reduce municipality's energy costs.

The Energy Strategy of the Municipality of Ponte de Sor is essentially focused on the following sectors: Public Lighting and Buildings (services, sports and schools).

\*Implementation of measures to improve energy efficiency in (public) infrastructures and buildings (public and private); \*Installation of renewable energy systems and technologies for decentralised energy production (in terms of reducing external energy dependence) in all sectors with a view to a transition to a low-carbon economy;

\*Installation of ICT-based management systems: energy efficiency and improving the energy performance of public administration (buildings infrastructures), resource management (water and forests) and control and emissions; monitoring of carbon \*Encouraging sustainable forest management and proper resource management (water and waste): \*Creating new businesses around the renewable energy value chain (particularly solar energy and bioenergy).

\*Installation of more efficient **luminaires** in (LED) parishes \*Installation of more efficient **luminaires** (LED) in municipal gardens or in facilities for which the Municipality is responsible

\*Replacement of lighting svstems buildings/service facilities \*Replacement of lighting

systems in sports buildings \*Replacement of lighting systems in schools \*Installation of solar thermal systems DHW production \*Installation of solar photovoltaic systems to produce electricity (selfconsumption) in school

\*Installation of biomass

in

sports

buildings

boilers

buildings

PNAEE - National Action Plan for Efficiency Energy (replaced by the National Integrated Energy and Climate Plan) PNAER - National

Plan for Action Renewable Energies (replaced by the National Integrated Energy and Climate Plan) Covenant of Mayors

Strategy Municipality of Ponte de Sor do not have a direct impact on the population, one of the most effective ways to fight energy poverty is to improve the energy efficiency of buildings (public and private). This can be done through improvements in construction and insulation (among others), so we can consider that these

life.

energy-efficient

choices.

Although the measures **AREANATejo** Municipality of Ponte de Sor set out in the Energy Municipality of Ponte of the de Sor measures have indirect impact on the population's quality of It is important that people understand how they can reduce their energy consumption and how to make more



**Table A.3 -** Spanish strategies, plans, laws, agendas, and policies. Each entry includes its identification, brief description, goals, mandatory actions to be taken, interactions with other policies, direct/Indirect impacts on the population, and stakeholders' involvement in its development and implementation (who and how). Regarding implementation, important intermediate objectives are marked with an \*.

Name, dates, type, sector, target area(s)	Brief Description	Goals	Mandatory actions to be taken	Interaction with other policies	Direct/Indirect impacts on the population	Stakeholders' involvement in its development (who and how)	Stakeholders' involvement in its implementation (who and how)
National level - S	pain						
Real Decreto-ley 15/2018, de 5 de octubre, de medidas urgentes para la transición energética y la protección de los consumidores Law on urgent measures for energy transition and consumer protection approved: 6 October 2018  Type: law  Sector: energy  Target area(s): Energy poverty	Title I contains consumer protection measures, grouped into two chapters: a first chapter dedicated to vulnerable consumers and the fight against energy poverty; and a second chapter, which contains measures aimed at increasing information, protection and rationalisation of contracting mechanisms, increasing the protection of electricity consumers as a whole. Title II includes the content of the Proposed Law on self-consumption presented by the majority of the political groups in Congress, as a reflection of the broad consensus on the matter. In essence, it introduces three fundamental principles that will govern this activity: i) it recognises the right to self-consume electricity free of	The transition must be fair, and it is therefore necessary to provide vulnerable consumers with specific protection mechanisms for those with the least economic capacity to deal with this scenario of high prices.  This Royal Decree-Law responds to the situation described, and aims to provide an immediate response to it, containing a series of urgent measures that allow the aforementioned objectives to be achieved, grouped into three titles and a final part that includes the additional, final and transitory provisions necessary to complete the regulation.	To elaborate the National Strategy Against Energy Poverty; Modification of different decree laws to favour vulnerable consumers.	National Against Poverty Energy	Protection measures for vulnerable consumers	Government of Spain; Ministry for ecological transition and demographic challenge (MITECO)	Government of Spain; Ministry for ecological transition; MITECO

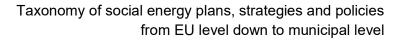


1 11 11 11	l l		I	I	
charge; ii) it recognises the right to shared self-					
consumption by one or several consumers to take	aspects and contribute to the achievement of the ten main				
advantage of economies of	objectives. All of them are also				
scale; and iii) it introduces the principle of	accompanied by lines of action that provide possible alternatives for				
administrative and technical simplification, especially for	influencing each of the proposed objectives, while at the same time				
small power installations.	making practical aspects available				
Title III introduces a series of regulatory actions aimed at	to the Agenda's ultimate stakeholders to achieve their				
accelerating the transition to	implementation.				
a decarbonised economy, so as to immediately remove					
the regulatory barriers that prevent agents from taking					
the necessary decisions for					
the transition to be carried out as quickly as possible.					
catac quieta, as possible.					



Agenda Urbana Española (AUE)   Spanish Urban Agenda approved: 22 February 2019 implementation: 2030  Type: agenda Sector: economy & territorial cohesion  Target area(s): various related to urban development	The Spanish Urban Agenda (AUE) is a strategic document, without normative character, and therefore of voluntary adhesion, which, in accordance with the criteria established by the 2030 Agenda, the New Urban Agenda of the United Nations and the Urban Agenda for the European Union, pursues the achievement of sustainability in urban development policies. It also constitutes a working method and a process for all public and private actors involved in cities that seek equitable, fair and sustainable development in their different fields of action.	The characteristic principles and values that constitute the commitment of the Spanish Urban Agenda, its strategic framework can be structured by identifying a Decalogue of first-level objectives, which in turn deploys a total of 30 specific objectives, which are based on more specific	n/a	Sustainable Development Strategy 2030; Integrated National Energy and Climate Plan 2021-2030: Strategy for Energy Rehabilitation in the Spanish Building Sector.	improvement of the quality of life	Spanish Government; Ministry of housing and urban agenda	Multi actor approach (Autonomous Communities, Local Administration, Cities, Local entities, society, companies,)
--	--	--	-----	--	------------------------------------	--	--







Estrategia de Transición Justa | Just Transition Strategy approved: 1st January 2020 implementation:

Type: strategy

2024

**Sector:** social; energy

Target area(s): •
Just Transition •
Economic Sectors •
Industrial Sectors •
Consumers • Green
Employment and
Social Protection

The Just Transition Strategy drives the desian of industrial, research and development. economic activity promotion, employment and vocational training policies to ensure that the transition to a new productive scenario is fair and socially beneficial for all. It focuses on maximising the employment opportunities of the transition to a low-carbon development model, following the guidelines of the International Labour Organization (OIT in Spanish) and the recommendations of the Paris Agreement.

	<ul> <li>Enab</li> </ul>	le ti	ne e	exploita	ation	of		
	employment opportunities and							
	improve competitiveness and							
	social a	and	territo	rial	cohes	sion		
	generated by the ecological							
transition of the economy.								

n/a

- Ensure equal distribution of opportunities, on the one hand, through gender equality measures that reduce labour inequalities for women in the ecological transition and, on the other hand, through measures for groups with special difficulties.
- Provide public administrations and Spanish society with a dynamic and forward-looking observation capacity on the situation and trends of the labour market regarding the transformations that are taking place in it due to the effect of the ecological transition.
- Make the ecological transition a vector for slowing down depopulation, by developing a model that takes into account the specific characteristics of rural areas and bets on their dynamism, in a sustainable and integrating framework.
- Promote sectoral participation forums for a better understanding among economic and social actors of the possibilities of ecological transformation.
- Identify, by implementing sectoral plans in the main economic sectors, the challenges, opportunities, threats and measures necessary to carry out their transformation, anticipating the possible negative effects of some transformations related to greening, both at a sectoral level and concentrated on specific territories, in order to accompany them.
- Evaluate the current instruments of the National Government and its business support bodies for R&D&I activities, such as financing, loans, guarantees, training, advice, etc.,

Climate	Change					
and	Energy					
Transition	Law;					
Integrated	National					
Energy and Climate						
Plans	(INECP);					
2050						
Decarbonisation						
a	A1 (* 1					

Plans (INECP); 2050 Decarbonisation Strategy; National Strategy Against Energy Poverty. Savings of approximately 67 billion Euros by 2030 due to the reduction of fossil fuel imports, which will also improve energy security.

- Positive effect on employment, since between 253,000 and 348,000 jobs will be generated in the next decade, mainly in manufacturing and construction.
- Economic revitalization depopulated areas, as a result of the creation of green jobs in these territories, thus contributing to meet the demographic challenge Reduction of about 27% in the number of premature deaths caused by air pollution.

Government of Spain; Ministry for ecological transition and demographic challenge (MITECO); Just Transition Institute, O.A.



	and propose their adaptation or
	improvement to ensure that they
	support the ecological transition.
	Propose industrial, research,
	development, innovation,
	digitalisation, economic activity
	promotion, investment promotion
	and required funding, active
	employment and vocational training
	policies for coordinated work of the
	General State Administration, the
	Autonomous Communities, the
	Local Entities and the social agents
	with the aim of taking advantage of
	the transition to achieve the best
	employment results and the
	improvement of competitiveness.
	Minimize the negative impacts on
	vulnerable areas through Just
	Transition Agreements, technically
	and financially supporting their
	implementation and with the
	participation of the different
	administrations, agents and social
	organizations of the territory.
	Promote the elaboration of Just
	Transition Agreements for strategic
	sectors and affected groups and to
	support their implementation.
	Propose an Urgent Just Transition
	Action Plan for coal regions and
	territories and groups affected by
	the closure of power plants.



competitiveness	Plan Nacional Integrado de Energía y Clima 2021-2030   Integrated National Energy and Climate Plan approved: 20 January 2020 implementation: 2030  Type: plan  Sector: environment & climate change  Target area(s): • Decarbonisation • Energy efficiency • Energy security • Internal energy market • Research, innovation and competitiveness	The PNIEC 2021-2030 presented in this document aims to reflect the commitment and Spain's contribution to the international and European effort. Spain's PNIEC identifies challenges and opportunities across the five dimensions of the Energy Union: decarbonisation, including renewables; energy efficiency; energy security; the internal energy market; and research, innovation and competitiveness.	23% reduction in (GHG) emissions compared to 1990.     42% of renewables over final energy use.     39.5% improvement in energy efficiency.     74% of renewable energy in electricity generation.	n/a	Climate Change and Energy Transition Law; Just Transition Strategy; 2050 Decarbonisation Strategy; National Strategy Against Energy Poverty.	The PNIEC will also generate a net increase in employment of between 253,000 to 348,000 people. The measures will favour lower income households and especially vulnerable groups. and especially vulnerable groups. Health benefits from improvements resulting from the reduction of air pollutants.	The process of elaborating the PNIEC has been favoured by the integration of the energy, climate change and environment areas of competence in a Ministry for ecological transition and demographic challenge (MITECO).	The private sector, mainly associated with the deployment of renewables, distribution and transmission networks, and a large part of the savings and efficiency measures.
-----------------	--	---	--	-----	--	--	---	---



Estrategia para la Rehabilitación Energética en el Sector de la Edificación en España 2020 (ERESEE2020)   Strategy for Energy Rehabilitation in the Spanish Building Sector approved: 18 June 2020 implementation: 2030  Type: strategy  Sector: energy  Target area(s): • Energy efficiency • Energy renovation dwellings	The "Long-term strategy for energy rehabilitation in the building sector in Spain. ERESEE 2020" complies with Article 2a of Directive 2010/31/EU of 19 May 2010 on the energy performance of buildings, as amended by Directive 2018/844/EU of 30 May 2018. The strategy also responds to the fulfilment of Strategic Objectives 2, 3, 4 and 8 of the Spanish Urban Agenda, and is one of the planning actions foreseen in its own Action Plan.	The long-term strategy for energy rehabilitation in the building sector in Spain, ERESEE, aims to establish a roadmap with intervention scenarios, measures and progress indicators for the energy rehabilitation of the building stock, residential and non-residential, public and private, with the objective of transforming it into a highly energy efficient and decarbonised building stock by 2050.	n/a	Spanish Urban Agenda; Recovery, Transformation and Resilience Plan; Integrated National Energy and Climate Plan 2021-2030.	Energy savings, improved thermal comfort, improved health.	Ministry of transport, mobility and urban agenda	Interministerial Technical Working Group, the Technical Working Group with the Autonomous Communities, the Technical Working Group with Local Entities and the Working Group with Sector Agents.
--	---	---	-----	--	--	--	--



	an Nacional de	The National Plan for	The overall objective of the PNACC	n/a	Climate Change	Health	Government of Spain;	Spanish Office for Climate
	daptación al	Adaptation to Climate	2021-2030 (chapter 4) is to		and Energy	improvement;	Ministry for ecological	Change (OECC); Impacts
	ambio Climático	Change 2021 - 2030, aims to	promote coordinated and coherent		Transition Law;	Access to essential	transition and	and Adaptation Working
	21-2030	respond to the growing	action to address the effects of		Integrated National	resources;	demographic challenge	Group (GTIA); Impacts,
<u>(P</u>	NACC)	needs for adaptation to	climate change in Spain in order to		Energy and Climate	Protection of natural	(MITECO); Ideas and	Risks and Adaptation
Na	ational Climate	climate change in Spain, as	avoid or reduce present and future		Plans (INECP);	environments	suggestions from experts	Committee (CIRA); The
Cr	nange	well as to our international	damage from climate change and		2050		and key actors in the field	Autonomous Communities
	daptation Plan	commitments in this field,	to build a more resilient economy		Decarbonisation		of adaptation have been	and Local Administration
ар	proved: 22	laying the foundations to	and society. To achieve this goal, 9		Strategy; Just		collected using a variety of	
	eptember 2020	promote a more resilient	specific objectives are defined that		Transition Strategy;		formats: deliberative	
	plementation:	development to climate	contribute in a complementary way		Spanish Urban		workshops, online forms	
20	30	change over the next decade	to the general objective.		Agenda; National		and bilateral consultations	
		to build a safer and more			Strategy Against		with key public	
Ту	<b>/pe:</b> plan	inclusive country.			Energy Poverty.		administrations	
							responsible for	
	ector:						implementing adaptation	
	vironment &						policies and measures.	
clir	mate change							
_								
	rget area(s):							
Ad	laptation							
						I .		



Government of Spain;

and

Estrategia de	The
descarbonización	Strate
a largo plazo (ELP	cohe
2050) Long term	respo
decarbonisation	crisis
strategy	oppo
approved: 3	mode
November 2020	comp
implementation:	econ
2050	and i
	for m

Type: strategy

Sector: environment & climate change

Target area(s): • Mitigation • Natural Carbon sink • Adaptation • Decarbonisation

aim of this Long-Term tegy is to articulate a erent and integrated onse to the climate which seizes ortunities for the ernisation petitiveness of our nomy and is socially just inclusive. It is a roadmap noving towards climate neutrality by 2050, with intermediate milestones in 2030 and 2040.

- To achieve the commitments of the Paris Agreement.
- Anticipate and plan the transition to a climate-neutral economy. taking into account the challenges and the social, business and political debate on its implications and needs. This transformation needs to be addressed in a holistic manner, as it affects many crosscutting elements of the economy and society.
- Provide a clear long-term objective, which will help to anticipate the necessary courses of action and thus maximise and exploit the opportunities arising from the energy transition while reducing the risks.

Climate Change and Energy Law; Transition Integrated National **Energy and Climate** Plans (INECP).

• The energy model will evolve towards a more secure model. The system will be based on renewable energies, thus reducing its dependence external fossil fuels, increasing diversification energy sources and decentralisation of generation, thereby improving degree of selfsufficiency through renewables. of selfsufficiency through renewables. Another relevant

area will be energy

refurbishment, as it

reduction of energy costs for families, which could be used for other purposes. · Thirdly, the ELP makes an analysis of the expected economic impact on employment and health will be

decarbonisation, employment generation throughout

for

the

and

combines opportunities

territory

positive.

Ministry for ecological transition demographic challenge (MITECO); IDAE

Within the framework of this governance system, the coordination, collaboration and involvement of the autonomous communities, as well as local entities, will be essential to achieve the objectives. A large part of the necessary competences to carry it out belong to these entities.



Ley de cambio climático y transición energética |

Climate Change and Energy Transition Law approved: 22 May 2021 implementation: 2030

Type: law

**Sector:** environment & climate change

Target area(s): •
Renewable energy
and energy
efficiency • Energy
transition and fuels
• Emission-free
mobility and
transport •
Adaptation • Fair
energy transition

This law responds to the commitment assumed by Spain at international and European level and presents an opportunity from an economic and modernisation point of view for our country, as well as from a social point of view, facilitating the equitable distribution of wealth in the decarbonisation process. To channel all opportunities, the law must ensure the achievement of greenhouse gas emission neutrality in Spain by 2050 and an efficient and renewable energy system, facilitate a just transition, and ensure consistency with the objectives in the public and private spheres of action.

This law aims to ensure Spain's compliance with the objectives of the Paris Agreement, adopted on 12 December 2015, signed by Spain on 22 April 2016 and published in the "Boletín Oficial del Estado" on 2 February 2017; to facilitate the decarbonisation of the Spanish economy, its transition to a circular model, so as to ensure the rational and supportive use of resources; and to promote adaptation to the impacts of climate change and the implementation of a sustainable development model that generates decent employment and contributes to the reduction of inequalities.

Integrated National Energy and Climate Plans (INECP) and the 2050 Decarbonisation Strategy; both are the tools to ensure compliance with the law.

Integrated National Energy and Climate Plans (INECP) and the 2050 Decarbonisation Strategy; both are the tools to ensure compliance with the law.

Related to the PNACC and to the Paris Agreement.

Connection with the National Strategy Against Energy Poverty and the Just Transition Strategy, through the Strategic Framework for Energy and Climate to the Council of Ministers.

Reduction of Spanish Parliament energy

dependence;
• Employment growth.

Administration, the Autonomous Communities and the Local Entities, within the scope of their respective competences, shall comply with the purpose of this law, and shall cooperate and collaborate to achieve it.

• Expert Persons Committee

General

State

The

 Expert Persons Committee on Climate Change and Energy Transition as the body responsible for assessing and making recommendations on energy and climate change policies and measures, including regulatory measures.



Estrategia de Desarrollo Sostenible 2030 |

Sustainable Development Strategy 2030 approved: 5 June 2021 implementation: 2030

Type: strategy

**Sector:** sustainable development

Target area(s): various related to sustainability

The 2030 Agenda addresses the profound relationship that exists between the economic. social and environmental spheres and between local, national and global realities, and calls on public administrations and the different levels of government, in close collaboration with the other actors involved, to promote coherent, integrated and interrelated actions that take into account the ecodependent relationships of human beings and societies with respect to nature, and the links between people and institutions, all in the interests of quaranteeing life and its sustainability. At the same time, it is undeniably committed to a concept of sustainability that intrinsically linked to the social sphere, in such a way that it understands that the future of our world will only be sustainable if it also quarantees a dignified life for all people, leaving no one behind.

· End poverty and inequality.

• Addressing the climate and environmental emergency.

n/a

- Closing the gender inequality gap and ending discrimination.
- Overcoming the inefficiencies of and overconcentrated and overdependent economic system.
- · Ending job insecurity.
- Reversing the crisis in public services.
- To end global injustice and threats to human rights, democratic principles and the sustainability of the planet.
- Revitalising our rural areas and tackling the demographic challenge.

Health improvement;
Access to essential resources;
Protection of natural environments
Agrococpar ela

UN Agenda 2030

Government of Spain; Ministry for social rights and Agenda 2030; The Government's delegated commission for the Agenda 2030 (Promoting, coordinating and participating in the design, elaboration, implementation and evaluation of plans and strategies)

The Government's delegated commission for Agenda the (Promoting, coordinating and participating in the design. elaboration, implementation and evaluation of plans and strategies; Submitting the Sustainable Development Strategy to the Council of Ministers; Agreeing on policy levers and transformational measures; agree on and promote mechanisms for impact analysis; Proceeding to the study of matters relating to the major challenges and needs of the 2030 Agenda in its implementation.)

- Sectorial Conference for the Agenda 2030 (Development of coordinated action in matters related to the fulfilment of the 2030 Agenda and the achievement of the SDGs)
- Sustainable Development Council (Advise the Secretary of State for the 2030 Agenda on the development of plans and strategies.

  Generate documents and analysis; Contribute to the dissemination and communication of the 2030 Agenda, foster dialogue and coordination.)
- Multi actor approach (Autonomous Communities, Local Administration, Cities, Local entities, society, companies...)



Estrategia de Movilidad, Segura, Sostenible y Conectada 2030 | Safe Sustainable

Safe, Sustainable and Connected Mobility Strategy 2030

approved: 10 December 2021 implementation: 2030

Type: strategy

Sector: transport

Target area(s): • Mobility

At Ministry of Transport, Mobility and Urban Agenda (MITMA) we want to respond to the mobility and transport challenges of the 21st century. These challenges are marked by changes in the global context, such as the need to decarbonise the economy and respond to climate change, the irruption - often disruptive - of new technologies and the challenges produced by the increasing concentration of population in large cities. But also because of the need to adapt our activity to the reality of our country: we are no longer the country of the 1980s, marked by a strong infrastructure deficit, but a leading country in terms of infrastructure provision. This situation requires that now, from MITMA, we prioritise those investments that optimise their use and provide greater social benefit, such as, for example, proper maintenance and conservation, daily mobility solutions, digitalisation, intermodality or safety.

Mobility for all;

New investment policies;

· Mobility safe;

Low-emission mobility:

· Smart mobility;

 Chains Logistics Intermodal Smart;

• Connecting Europe and Connected to the World;

· Social and employment aspects.

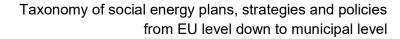
Sustainable Mobility Law

Social and Labor Aspects of the strategy: The mobility paradigm shift has several scopes yet to be known and understood. It addresses the mitigation of the negative impacts that these changes may have on society and the economy. The aim is to achieve a just transition in all productive sectors and move towards a more egalitarian environment and labor market by deepening the labor and social aspects of the sector, including the role of women in the transport sector, improving the training professionals, with necessary regulatory development and

the awareness of all

agents.

Ministerio de Transportes, Movilidad y Agenda Urbana (MITMA) Companies and public entities linked to MITMA, which, as infrastructure managers, infrastructure providers, service providers and operators, will play an essential role in meeting the objectives of the Strategy.





La Política
Agrícola Común
(PAC) 2023-2027 y
el Plan Estratégico
| The Common

Agricultural Policy and the Strategic Plan

approved: 1st January 2023 implementation: 2027

Type: policy

**Sector:** economy & territorial cohesion

Target area(s): Rural areas

One of the main novelties of the PAC 2023-2027 is that all Member States must have a PAC Strategic Plan indicating the interventions or measures that are intended to achieve the objectives of the PAC and the ambition of the European Green Pact. The design of interventions is based on a thorough analysis of the needs of the agricultural sector and the rural environment as a whole. The aim is to make the PAC more responsive to current and future challenges, such as climate change generational change, while supporting farmers achieve a sustainable and competitive agricultural sector. The aim is to make the PAC more responsive to and future current challenges, such as climate change or generational change, while supporting farmers to achieve a sustainable and competitive agricultural sector. The aim is to make the PAC more responsive to current and future challenges, such as climate change generational change, while supporting farmers achieve a sustainable and competitive agricultural sector. The aim is to make the PAC more responsive to current and future challenges, such as climate change or generational change, while supporting farmers to achieve a sustainable and competitive

agricultural sector.

Promote a smart, competitive, resilient and diversified agricultural sector that ensures long-term food security; Support and strengthen environmental protection, including biodiversity, and climate action and contribute to achieving the Union's environmental and climate objectives, including commitments under the Paris Agreement; Strengthen the socio-economic fabric of rural areas.

National Climate Change Adaptation Plan 2021-2030; Integrated National Energy and Climate Plan 2021-2030

Modernisation of the agricultural sector through knowledge, innovation and digitalisation in rural areas.

The PAC Strategic Plan has been developed by the Ministry of Agriculture, Fisheries and Food in collaboration with multiple actors: regional and local authorities, environmental and climate authorities, economic and social partners and bodies representing civil society, among others.

The Autonomous Communities are a particularly important part of the Strategic Plan since, in addition to having actively participated in the design of national interventions, they are directly responsible for the implementation of the PAC in their territories and for the specific design of territorial interventions.



Regional level - 0	Catalonia						
Pacte Nacional per a la Transició Energètica de Catalonia   National Pact for the Energy Transition in Catalonia approved: February 2017 implementation: 2050 Type: plan Sector: energy Target area(s): • Energy efficiency • Clean mobility	Energy transition must be continued with the aim to eliminate fossil fuels and achieve a new energy model that can minimize social and environmental costs associated to our current energy model. Also, energy transition will allow Catalonia reduce foreign energy dependence.	Relying 100% on renewable energy sources. Reject nuclear energy. Reduce fossil fuels dependence. Active citizen participation.	n/a	Climate Change and Energy Transition Law / 2050 Decarbonization / Clean Energy for All Europeans / National plan for the implementation of the 2030 Agenda in Catalonia	Better air quality / Improved Health / New Job Opportunities / Stop relying on fossil fuels	n/a	n/a



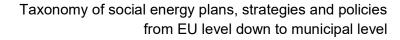
Lev 16/2017, de 1 de agosto, del cambio climático   Law on climate change approved: 23 August 2017 implementation: 2030  Type: law  Sector: environment & climate change  Target area(s): • Mitigation and Adaptation • Energy transition • Climate Neutrality • Reduce vulnerability	The objective of the law is to regulate current national measures on mitigation and adaptation to climate change, to define the public administration governance model regarding climate change, and to implement taxes as a tool to tackle and fight against climate crisis.	Reducing greenhouse gas emissions and vulnerability to climate change;     Clean energy transition;     Climate resilience;     Mitigation and Adaptation;     Citizen Participation;     Keep up with international treaties' objectives.	n/a	Climate Change and Energy Transition Law / National plan for the implementation of the 2030 Agenda in Catalonia / Paris Agreement / Plan Nacional de Adaptación al Cambio Climático (PNACC) 2021-2030	- Health and longevity of species; - New Job Opportunities; - Capacity to face climate change accordingly; - Stop relying on fossil fuels.	Departaments Generalitat	de la	Local administration should enforce the law and make sure every goal is being implemented
---	---	--	-----	---	--	-----------------------------	-------	---



<u>Estratègia</u>	The SOLARCAT strategy will	Implementation of renewable	National Pact for the	Reduce Energy	Catalan Government	ICAEN, Interdepartmental
SOLARCAT	prepare Catalonia for the	energies (and, significantly,	Energy Transition in	Poverty; Improve		Commission for the energy
SOLARCAT	capture, utilization and	photovoltaic solar energy) in the	Catalonia; Law	energy security.		saving and efficiency plan for
Strategy	electrical storage of solar	territory of Catalonia;	16/2017, of 1			the buildings and equipment
approved: 9 July	energy in Catalonia. It must	Facilitating the integration of	August, on climate			of the Generalitat.
2019	guarantee, in particular, the	renewable energies with the	change.			
implementation:	use of electricity through	electric vehicle and energy storage				
2030	photovoltaic solar energy,	within the framework of intelligent				
	while identifying and	energy management;				
Type: strategy	developing the necessary	Development of models and				
	technical, economic, legal	projects for photovoltaic solar parks				
Sector: energy	and socio-cultural	on public land of the Generalitat de				
	instruments.	Catalonia and support for the				
Target area(s):		implementation of photovoltaic self-				
Renewable energy		production solar installations in the				
		buildings and equipment of the				
		Generalitat de Catalonia;				
		Support for the development of				
		photovoltaic solar self-consumption				
		in the domestic and industrial				
		sectors;				
		Improved knowledge of the solar				
		resource.				
				I .		



Pla nacional per a la implementació de l'Agenda 2030 a Catalonia   National plan for the implementation of the 2030 Agenda in Catalonia approved: September 2019 implementation: 2030  Type: agenda  Sector: sustainable development  Target area(s): various related to sustainability	The National Plan for the implementation of the 2030 Agenda in Catalonia, with a transversal vision, has as its main objective to ensure the achievement of the 17 Sustainable Development Goals (ODS) of the 2030 Agenda, through public policies promoted and managed by the Generalitat de Catalonia.  The Plan also plans to contribute to the achievement of the SDGs on a global scale, thereby reinforcing Catalonia's commitment to the international community.	The document has adapted the 17 sustainable development goals to local needs.	n/a	Sustainable Development Strategy 2030; Urban Agenda Catalonia	The document has a section describing the impacts related to the population, mentioning the SDGs of ending poverty, health, gender and education.	The Government established a governance system for the Plan, composed of an interdepartmental commission and a technical commission, currently made up of the 13 departments of the Generalitat de Catalonia.	The Interdepartmental Commission of the National Plan for the implementation of Agenda 2030 in Catalonia, assisted by the Technical Commission and the technical team of the Advisory Council for Sustainable Development (CADS), is the body responsible for the regular updating of the plan and to promote measures to ensure the integration of the SDGs and the commitments included in the policies, plans and programs and regulatory projects promoted by the Generalitat de Catalonia.
Agenda Urbana Catalonia   Urban Agenda Catalonia approved: 1st June 2022 implementation: 2050  Type: agenda  Sector: economy & territorial cohesion  Target area(s): various related to urban development	The Urban Agenda is focused on urban development and planification in order to correctly tackle sustainable development.	Sustainable urban development.	n/a	National plan for the implementation of the 2030 Agenda in Catalonia	Resilient cities	Entities / private and public actors	To be committed with the goals and foster its implementation locally.





Estratègia catalana d'adaptació al canvi climàtic 2021-2030   Catalan strategy for adapting to climate change approved: 17 January 2023 implementation: 2030  Type: strategy  Sector: environment & climate change Target area(s): various related to Adaptation	Following EU and Spanish initiatives, the strategy has the objective to provide targeted adaptation measures to Catalonia to fight climate crisis.	Resilience to climate change;     Energy Transition.	n/a	Estratègia catalana d'adaptació al canvi climàtic 2013-2020 (antecedent) / 2017 Climate Change Law / National plan for the implementation of the 2030 Agenda in Catalonia	Keeping up with EU policies / Adaptating to climate change / Clean Energy	n/a	n/a
Llei de transició energètica de Catalonia   Energy transition law of Catalonia Law in process implementation: 2050  Type: law  Sector: energy  Target area(s): • Energy efficiency • Clean mobility	The aim of this law is for Catalonia to reach climate neutrality and stop relying on fossil fuels, promoting sustainable development according to SDGs and Agenda 2030. Also, it aims to reduce environmental vulnerability and greenhouse gas emissions thanks to a new innovative energy model.	Clean energy transition     Renewable energy     Climate Neutrality	n/a	Climate Change and Energy Transition Law / National plan for the implementation of the 2030 Agenda in Catalonia	Clean air / New Job Opportunities / Keeping up with EU policies / Mitigating climate change	Departament de la indústria i l'energia	Being the channel to foster a clean energy transition

Diputació de Barcelona



### Regional level - Barcelona

Pla estratègic d'implementació de l'Agenda 2030 a la Diputació de Barcelona (2021 – 2030) | Strategic plan for the implementation of Agenda 2030 in Barcelona approved: 2021 implementation: 2030

Type: strategy

**Sector:** sustainable development

Target area(s): SDGs

The adoption of the 2030 Agenda constitutes the frame of reference for the action of the Diputació de Barcelona through the localization of the objectives of sustainable development and also the associated milestones, in order to adapt them to the reality of the governments premises of the province of Barcelona, as well as of the same the corporation and their competencies.

- Define a roadmap for the period 2021-2030 that guides the implementation process of the 2030 Agenda in the Diputació de Barcelona.
- Have an instrument that orders, both on a strategic and operational scale, the main actions and policies that are promoted to respond to the 2030 Agenda.
- Promote tools to monitor the action taken by the corporation as a whole to deploy the 2030 Agenda, as well as mechanisms that facilitate the periodic retention of accounts and the updating and improvement of the policies and actions that are carried out carry out.

National plan for the implementation of the 2030 Agenda in Catalonia | Sustainable Development Strategy 2030 (Spanish level).

The actions are presented classified in the four spheres of the 2030 Agenda which the Provincial Council contributes through local policies promoted by corporate areas, includina people. The area is defined as: Actions aimed at addressing three major challenges that are deeply interrelated: gender equity, the right to sexual and gender diversity, and a life free of sexist violence; egual opportunities and social inclusion, which is located in a community dimension that today is fundamental to design transformative policies that promote cohesion and social integration from the proximity, while promoting cultural participation as a tool to contribute to

the 'empowerment and promote the inclusion of all people.

Local authorities; Municipalities; United Cities and Local Governments; Spanish Federation of Municipalities and Provinces; Advisory Council for the Sustainable Development of Catalonia.



### Regional level - Girona

Pla estratègic per al desenvolupament de les energies renovables   Strategic plan for the development of renewable energies approved: July 2020 implementation: 2030  Type: plan  Sector: energy  Target area(s): Energy efficiency	The Strategic Plan for the Development of Renewable Energies was born with the aim of creating an environment in which public action serves to trigger investment in renewable energies and further enhance the work that is already being carried out in relation to the energy transition and the fight against climate change.	The objective is to involve the private sector and citizens in general in the deployment of the Plan, in order to reach, at least, 32% of renewable energies on the final energy consumption in the demarcation of Girona year 2030.	The plan is structured in 4 principal areas: industrial; residential; municipal and tourist sectors.	Climate Change and Energy Transition Law; Law 16/2017, of 1 August, on climate change; Integrated National Energy and Climate Plan 2021-2030.	The plan has defined a social axis whose main objectives are:  (1) place the consumer at the center of the energy policy; (2) promote the advantages and facilitate the deployment of renewable energies among society; (3) achieving social acceptance of the projects; (4) favor a fair and inclusive energy transition	Diputació de Girona	The Diputació de Girona has worked side by side with the agents involved in the territory to define specific actions. 29 actions have been programmed that will mainly affect four sectors: industrial, tourist, residential and municipal, because they are considered to have the most potential for achieving the goal of penetration of renewables in the next few years in the demarcation.



### Regional level - Osona

#### Osonaecotransici ó40%

approved: March 2021 implementation: 2027

Type: plan

Sector: energy

Target area(s): Energy efficiency

The Regional Council of Osona is the promoter of this project, which will have to play a key role in the Energy Transition of Catalonia and in the implementation and consolidation of renewable energies. A moreover, this transition is not strictly confined to the energetic, but will also contribute to the strong development of the local economy, its society and its culture; which will mean, undoubtedly a contribution to the country's recovery after the Covid-19 pandemic.

This is a regional Energy Transition project that aims, in a period of 7 years, to reduce 42% of CO<sub>2</sub> emissions derived from energy consumption. The project consists of planning and executing a wide range of actions in all segments of energy consumption and in all sectors of public and private activity, stimulating the mobilization of local administrations and citizens through local energy communities and with the participation of the private business, institutional and financial sector.

The plan is structured in 3 principal areas: thermal consumption; mobility; electricity consumption.

Climate Change and Energy Transition Law; Law 16/2017, of 1 August, on climate change; Integrated National Energy and Climate Plan 2021-2030. The plan says that "educational" work will be necessary on the benefits of the energy transition, of the use of infrastructures for self-consumption and the use of electric vehicles, as well as energy savings and money they will bring with them. Always taking into account, those most vulnerable groups, and in as far possible, establish necessary means for a just transition

to occur.

Consell Comarcal d'Osona administrations, and Local Energy Agency from Osona local administrations, citizenship and private sector



### Regional level - Ripollès

#### Local level - Gombrèn

l'Energia Sostenible i el Clima - Gombrèn Sustainable **Energy and Climate Action** Plan - Gombrèn (SECAP -Gombrèn) approved: April 2022

Pla d'Acció per

Type: plan

Sector: environment & climate change

Target area(s): • Energy efficiency • Mobility • Buildings Plan to develop actions from the rural local towns in favor of mitigation and adaptation to climate change. 27 local actions and 12 supramunicipal actions.

1) Decarbonisation of the territory. 2) Improve their adaptation to climate change.

3) Facilitate access to safe. sustainable and affordable energy for citizens.

Expected reductions from plan, including municipal supramunicipal measures, are 62% reduction in 2030 of CO2 emissions from 2005, 823 tns of CO2 and 155 Mwh of res production a year.

Elaborate municipality plans about how to act in front of different natural disasters (wind, floods, simological events, snow).

2030 targets; - New Green Deal; - developed under the Covenant of

Mayors initiative; Estratègia espanyola per al canvi climàtic i l'energia neta (Climate change and clean energy strategy in Spain); - Pla Nacional Integrat d'Energia i Clima (Nacional energy and climate

climate

plan); Estraègia Catalana d'Adaptació al Canvi Climàtic (Catalan

strategy for climate change adaptation): - Llei Catalana de canvi climàtic (Climate change catalan law); - Municipis gironins contra el canvi climàtic

(Municipalities of Girona demarcation against the climate change).

- Improvement in the quality of life; - Forest regulation;

 Keeping the landscape; - More security towards natural

disasters: - Creation of spaces acting as climate refuge;

- More involvement to participate in town decisions.

Those are the institutions involved in the PAESC edition:

Girona council; - Pacte dels Alcaldes pel Clima l'Energia; i - Consell d'Iniciatives Locals per al Medi Ambient de les Comarques de Girona;

- Arda Gestió i Estudis Ambientals.

Those are the entities in charge of the implementation of some of the activities describes in the document:

- Ripollès regional council;

- Ripollès energy agency; CEINR:

Girona council;

- Town hall.



#### Local level - Sant Quirze de Besora

Pla de I	<u>ransicio</u>
<b>Energèti</b>	ica de
Sant Qu	irze de
Besora	Sant
Doora	Ourit
	e Besora
Quirze d	
Quirze d	e Besora

Die de Terrestatif

approved: 27 September 2023 implementation: 2030

Type: plan

#### Sector: environment & climate change

Target area(s): • Energy efficiency • Mobility • Buildings

The municipality of Sant Quirze de Besora signed the Covenant of Mayors on 09/05/2013, with an original Plan up to 2020. A new SECAP was set up for the period up to 2030. To respond to the commitments acquired, an inventory of energy consumption and greenhouse gas emissions of the municipality has been made. The scope of the inventories excludes the primary and secondary sectors, and we call it the SECAP scope. The reference year is 2005 and the emission reduction targets are set based on this year.

- 1) Sustainable mobility.
- 2) Renewable energies.
- 3) Energy efficiency.
- 4) Governance.

The Action Plan consists of 86 actions distributed across 5 strategic axes. (the four above and "others"). By 2030, the estimated total reduction is 4,404 tCO<sub>2</sub>, which represents a 58.7% decrease from the total greenhouse gas emissions within the scope of the Covenant of Mayors in 2005. There is expected a energy savings reduction of 7.095 MWh/year, RES generation of 16.527 MWh/year.

- developed under the Covenant of Mayors initiative;

- Pacte de les Alcaldies (Mayors Pact);

OSONAECOTRAN SICIÓ40% (Osona Energy Plan for 2027);

- Lei Catalana de Canvi Climàtic (Climate change catalan law); - Pla Nacional Integrat d'Energia i Clima (National energy and climate plan). - Improve the train communication towards other municipalities.

- Be beneficiary of the installation of clean energies in some municipal equipments and for the population.
- For those who has a shop, reduction of the electric consumption.

Economic bonifications. - Support to those families in energy poverty. - Promotion of the local product. - Concienciation toward the use of natural resources. - An office creation for helping the population in renewable energy

aspects.

Those are the institutions involved in the PAESC edition:

Sant Quirze town hall;Barcelona councilSUNO.

The town hall of Sant Quirze de Besora is the only responsible for them implementation of the actions described in the

document

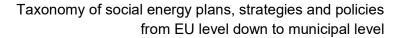


**Table A.4 -** Italian strategies, plans, programmes, laws, and action programmes. Each entry includes its identification, brief description, goals, mandatory actions to be taken, interactions with other policies, direct/Indirect impacts on the population, and stakeholders' involvement in its development and implementation (who and how). Regarding implementation, important intermediate objectives are marked with an \*.

Name, dates, type, sector, target area(s)	Brief Description	Goals	Mandatory actions to be taken	Interaction with other policies	Direct/Indirect impacts on the population	Stakeholders' involvement in its development (who and how)	Stakeholders' involvement in its implementation (who and how)
National level - It	aly						
National plan on charging infrastructure (PNIRE) approved: 2012 revision: 2016 implementation: 2020  Type: plan  Sector: transport  Target area(s): electric mobility	The plan focuses on the realization of infrastructural networks for the recharge of electric vehicles, as well as on interventions of recovery of the building stock finalized to the development of such networks.	1st phase (Definition and Development): - Introduction of a minimum size for electric vehicles; - Introduction of basic infrastructure for public and private charging points; - Coordination and definition of technological standards; - Definition, development, and implementation of policies that promote the development of electric mobility; - Incentives for technological development. 2nd phase (Consolidation): - Issuance of common and shared regulations among Member States; - Widespread adoption of electric vehicles; - Completion and consolidation of the public (and private) charging infrastructure network; - Incentives for technological development.	Achieve the performance levels in terms of car emissions set by Regulation (EC) No. 443/2009 of April 23, 2009, of the European Parliament and Council, and contribute to the European strategy for clean and energy-efficient vehicles, as outlined in Commission Communication COM(2010)186 of April 28, 2010.	The "Europe 2020" Strategy aims to promote "green" vehicles by encouraging research, setting common standards, and developing the necessary infrastructure.  The "Transport 2050" Strategy, a roadmap for a competitive transport sector with ambitious sustainability goals.	Basic infrastructure that ensures travel within the city and commuting between national metropolitan areas.	Bilateral meetings were held with the main stakeholders of electric mobility in the country and collection of material information, as well as acquiring information, opinions and technical/technological views.  ENEL S.p.A. (Energy provider company) A2A S.p.A. (Energy provider company) Federazione Anie (National Federation of Electrotechnical and Electronic Enterprises) AEEG (Electricity and Gas Authority) CEI-Cives (Italian Commission for Electric Road Vehicles with Batteries, Hybrids and Combustion Cells - CEI-Cives) Italian section of AVERE, European Association for Battery, Hybrid and Fuel cell Electric Vehicles promoted by the EEC in 1978) within CEI - Comitato Elettrotecnico Italiano ENEA (National Agency for New Technologies, Energy	The Directorate General for Land Development, Planning and International Projects International Projects, on behalf of the Ministry of Infrastructure and Transport, promotes the signing of programme agreements in order to concentrate interventions aimed at building electric recharging networks in individual territorial contexts according to the actual needs, networks in individual territorial contexts according to actual needs, promoting and enhancing the participation of public and private subjects. Applications may be submitted by municipalities, provinces, regions or aggregations of these,



			and Sustainable Economic	as well as energy
			Development)	distribution
				companies
				energy, companies
				that manage fuel
				distributors, public
				transport companies,
				public companies
				private companies.





Strategia Nazionale adattamento Cambiamenti Climatici | National Climate Change Adaptation Strategy approved: 2015 revision: every 5 years

Type: strategy

**Sector:** environment & climate change

Target area(s): climate change adaptation

The strategy develops a national vision on the common paths to take to deal with climate change, combating and mitigating its impacts.

- Improve knowledge on climate change and its impacts.
- Describe the vulnerability
   of the territory, the
   adaptation options for all
   natural systems and
   relevant socio-economic
   sectors, and any
   associated opportunities.
- Promote participation and increase awareness of stakeholders in the definition of sectoral adaptation strategies and plans.
- Support awareness and information on adaptation through widespread communication activities.
- Specify the tools to be used to identify the best options for adaptation actions, also highlighting the co-benefits.

Water Resource Management:

- implementation of Directive 2000/60/EC concerning water management, including the division of competencies;
- mandatory hydraulic and hydrological invariance regulations;
- development of basin water budgets to verify current and future needs and availability;
- strengthening monitoring and modelling of water resources to support management and projections.

Disaster Risk Management:

- enhancement of flood and drought services (vigilance, monitoring, alerts) by Regional Environmental Protection Agencies, Civil Protection, and Territorial Presidia;
- creation and implementation of emergency water management plans, such as Drought Management Plans and Flood Risk Management Plans.

Ecosystem-based Approaches:

 adoption of soft or light measures, including legal, political, and management approaches, to address climate adaptation.

Economic and Financial Instruments:
optimization of economic tools for integrated water resource management, including the revision of water tariffs, extraction fees, and concessions.

The EU Strategy on Adaptation to Climate Change of 2013 and its pillars guided the national strategy, which was the basis for the National Climate Change Adaptation Plan.

- Protection of public health and safety by reducing the risks associated with extreme weather events (e.g., heatwaves, floods).
- Improved resilience of healthcare infrastructure to withstand climate impacts.
- Reduction of economic losses in sectors like agriculture, tourism, and fisheries due to climate-related disruptions.
- Reduction of costs related to damage from extreme weather events, such as floods, affecting households and businesses directly.
- Enhanced resilience of buildings and infrastructure, especially in areas prone to flooding or landslides.
- Mandatory

   adaptation of
   building codes and

   land use planning
   to mitigate risks.

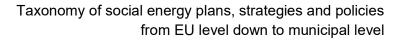
MASE. Centro Euro-Mediterraneo sui Climatici Cambiamenti (CMCC), national experts from Institutional academia, an table made up representatives Ministries and other relevant institutions; among public these the Ministry Agricultural and Forestry Policies, the Ministry of Infrastructure and Transport, the Ministry of Health, the Ministry of Cultural and Environmental Heritage, the of Education, Ministry University and Research, the of Economic Ministry Development, the Ministry for Regional Affairs, Tourism and Sport, Civil Protection, the Regions Committee, ANCI and UPI.

MASE: leading the development and monitoring of the SNAC; coordinating the integration of adaptation measures into national, sectoral, and regional plans.

Regional Governments and Local Authorities: implementation adaptation measures at the local level; managing the development and execution of emergency management plans, particularly for water resources.

Public Agencies (e.g., Regional Environmental Protection Agencies, Civil Protection): conducting monitoring, vigilance, and risk management operations; developing and implementing environmental and disaster management plans.

Economic and Financial Institutions: revising economic tools such as tariffs and fees to support sustainable water management and climate adaptation.





Strategia
Energetica
Nazionale | National
Energy Strategy
approved: 2017

Type: strategy

Sector: energy

Target area(s): energy transition and security

The National Energy Strategy is the tenyear strategy that the Italian Government drew up to anticipate and manage the change of the national energy system: a document looking beyond 2030, and laying the groundwork buildina an advanced innovative energy model.

The objective of the Strategy is to make the national energy system more competitive, more sustainable, and secure.

More competitive means: aligning Italian energy prices with European ones to the benefit of both companies and consumers; opening up new markets to innovative companies; creating new employment opportunities; and fostering research and development.

More sustainable means: contributing to decarbonisation, in line with the long-term targets of the Paris Agreement on Climate Change; improving energy efficiency and encouraging energy conservation to mitigate environmental and climate impacts; promoting environmentally conscious lifestyles, from sustainable mobility to wise energy usage; and confirming Italy's environmental leadership role.

More secure means: improving the security of energy supply, while ensuring its flexibility; and strengthening Italy's energy independence.

Price targets: narrowing the gap between Italian natural-gas costs and north-European ones; this gap amounted to about € 2/MWh in 2016; narrowing the gap between Italian electricity prices and average EU ones; this gap was equal to roughly € 35/MWh in 2015 for an average household, and to about 25% on average for companies.

Energy-Efficiency Targets: curbing yearly energy consumption from 2021 to 2030 (10 Mton) changing sectoral energy mixes to promote the achievement of non-ETS2 CO<sub>2</sub> emission reduction targets, by focusing on the residential and transport sectors; stepping up the decarbonisation of the energy system.

Decarbonisation Targets: accelerating the decommissioning of coal-fired thermal power plants by 2025, based on a detailed plan of infrastructural actions; Increasing public resources allocated for research and development of cleanenergy technologies.

Research and Development Targets: doubling investments in research and development of clean-energy technologies: from € 222 million in 2013 to € 444 million in 2021.

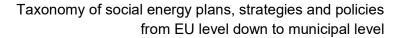
Energy security: integrate a growing amount of RES-E3 (including distributed ones) and new players, by strengthening and fostering the evolution of networks, grids, and markets towards smart, flexible, and resilient configurations; manage the variability of natural-gas flows and demand peaks, and diversifying supply sources, in the complex geopolitical context of the countries from which we import gas and of increasing integration of European markets; improve the cost-

Connected with the The document results from a Paris Agreement. participative process that The PNIEC (INECP) involved the Italian and the Piano Energia Parliament, the Regions, and e Ambiente Regionale over 250 stakeholders, Regione Campania including associations, build on this Strategy. companies, public entities, citizens, and representatives of academia.

The Strategy provides for the setting-up of a Steering special Committee. The members of the Committee, by the coordinated Ministries Economic Development and of the Environment, are representatives from the Ministries of Economy, Transport, and Cultural Heritage. as well as from the Regions; periodical consultations local governments are planned. Additionally, to ensure transparency monitoring the implementation of the Strategy, Government will have to present a yearly report to the Parliament on the status implementation of the Strategy, and on the actions taken achieve its targets, as well as to undertake a participative process of revision of the Strategy every three vears.



	effectiveness of the energy expenditure thanks to technological innovation.		





National Strategy for Sustainable Development approved: 2017 revision: 2022  Type: strategy  Sector: sustainable development	It represents the framework of action oriented towards promoting development that harmonizes economic, social, and environmental aspects, adapting the United Nations	Promoting sustainable economic welfare.     Financing and promoting sustainable research and innovation.     Ensuring quality employment and training.     Affirming sustainable patterns of production and consumption.	n/a	To fully contribute to demonstrating the potential contribution of the National Recovery and Resilience Plan (PNRR) to achieving sustainability goals, SNSvS22 includes an analysis of the	The strategic framework of SNSvS22 is composed of 5 strategic areas that correspond to the 5 pillars of the 2030 Agenda. One of these is "PEOPLE": pertains	n/a	The Ministry of Environment and Energy Security (MASE) is responsible for overseeing the implementation, monitoring, and revision process and, in general, for coordinating the
Target area(s): economic welfare; mobility; decarbonisation; environmental	Sustainable Development Goals to the national context.	Promoting mobility and transport sustainability and security.     Reducing climate-altering emissions and decarbonising the economy.		relationships between each mission of the PNRR and the sustainable development goals.	to the promotion of a social dimension that ensures a dignified life for the entire population, so that all citizens can achieve		Strategy at the national level.  The Ministry of Foreign Affairs and International
protection; sustainable energy		7. Halting the loss of biodiversity. 8. Ensuring sustainable management of natural resources. 9. Creating resilient communities and territories, preserving landscapes and cultural heritage. 10. Eradicating hunger and poverty and ensuring			their potential in a healthy environment.		Cooperation (MAECI) is responsible for coordinating the external dimension of the Strategy through the Triennial Programming Document for Development Cooperation.
		fairness and equality.  11. Environmental protection, management of natural resources and combating climate change.  12. Sustainable energy.					The Ministry of Economy and Finance (MEF) is tasked with ensuring alignment with the economic and financial planning documents.
							The National Forum for Sustainable Development has been included in the implementation process of the National Sustainable Development Strategy (SNSvS) and in the related triennial update processes.



### Bioeconomy strategy

approved: 2017 revision: 2019; 221 implementation: 2030

Type: strategy

**Sector**: economy & territorial cohesion

#### Target area(s):

circular economy; agrifood; bio-based; forestry; marine and maritime sectors

The Implementation Action Plan (IAP) has objective to translate emeraina Bioeconomy Italian Strategy (BIT II) priorities into well identified actions and monitoring related system, in order to ensure an operational rollout of the Italian Bioeconomy potential across Italy in the next 5 years.

This strategy aims at 2030 to achieve a 20% increase in economic activities and jobs related to the Italian bioeconomy.

None - only proposed/recommended actions.

Operational actions under four broad headings have been identified. They are:

- 1) Promoting the development/adoption of policies, standards, labels and emerging market based actions and incentives;
- 2) Launching pilot actions at the local level to support the national circular Bioeconomy in the domains of agrifood, bio-based, forestry, and marine and maritime sectors, in rural, coastal and urban areas;
  3) Enhancing the knowledge, protection and restoration of national biodiversity and ecosystems, and ecosystem services on their resilience/adaptation to climate changes;
- 4) Promoting awareness, skill upgrading, education, attitude, training, and entrepreneurships across the Bioeconomy.

Italian Bioeconomy Strategy is part of the implementation process of the National Smart Specialization Strategy (SNSI). The SNSI aims to identify priorities for investment in research. development and that innovation complement the resources and productive capacity of territories to build comparative advantage and sustainable growth path in the medium and long term. Circular Economy Package. ln December 2015, the EU adopted the Circular Economy Package "Closing the loop - An EU action plan for the Circular Economy" defining ambitious targets and a timeline to reduce the pressure on natural resources and boost the market for secondary materials.

Promote citizens awareness and engagement through campaigns to showcase Bioeconomy products, including food products emblematic of a sustainable valuechain (e.g., carbon neutrality, adoption of circular economy practices, sustainable production practices such as sustainable fishing) in the food mobile sector. exhibition to showcase the Bioeconomy in day to-day life, "open days" in companies active in the Bioeconomy, participation to National Bioeconomy Day launched bv SPRING Cluster and Assobiotec-Federchimica, all other initiatives which aims creating awareness

in the public opinion.

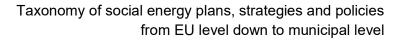
The National Bioeconomy Coordination Board (NBCB) of the Presidency of Council of Ministers (active in the frame of the National Committee Biosafety, Biotechnology and Sciences of same Presidency, involving representatives of five Ministries and of all Regions and Autonomous Provinces, National Agency for Territorial Cohesion, SVIMEZ, and the main relevant National Technology Clusters - public private partnerships -, who developed BIT II), prepared Implementation Action Plan (IAP).

Ministry Economic Development (cocoordinator) Ministry Agriculture, Food and Forestry iii) Ministry Education, University and Research iv) Ministry of the Environment. Land and v) Committee of Italian Regions vi) vi) Agency for cohesion territorial vii) Italian Technology Clusters for Green Chemistry AgriFood

and Bluegrowth



Plan for Sustainable Mobility approved: December 2018  Type: plan	The Plan is intended to renew the bus fleet of local and regional public transport services, and to promote and improve air quality with innovative technologies.	objectives: the renewal of the rubber-tired vehicle fleet through the replacement of those that are more energy- intensive and polluting; the	n/a	The 2030 Climate and Energy Framework, according to the conclusions adopted by the European Council on October 23-24, 2014, envisions a 40% reduction in greenhouse gas emissions compared to 1990. This target translates into a 43% reduction by 2030 compared to 2005 for sectors participating in the Emissions Trading System (ETS) and a 30% reduction, also compared to 2005, for non-ETS sectors, such as transportation.	The emission limits set by the plan aim to achieve air quality levels that do not result in negative impacts or significant risks to human health.	n/a	n/a
---	---	---	-----	---	--	-----	-----





Piano Nazionale Integrato per l'Energia e il Clima (PNIEC) | Integrated National Energy and Climate Plan (NECP)

approved: December 2019

revision: 2023 implementation:

2030

Type: plan

**Sector**: environment & climate change

Target area(s):

decarbonisation;
renewable energy;
energy efficiency;
energy security;
internal energy
market; research,
innovation and
competitiveness

The Integrated National Energy and Climate Plan 2030 is a fundamental tool that marks the beginning of a major change in our country's energy and environmental policy towards decarbonisation through five lines of action.

- Decarbonisation (including renewable sources) for electricity production: the goal entails a significant spread of wind and photovoltaic, with an average annual installed capacity from 2019 to 2030 of approximately 3200 MW and about 3800 MW. respectively, compared to a total average installed capacity in recent years of 700 MW. This diffusion of wind and photovoltaic will require also many infrastructural works and extensive use of distributed and centralized storage systems, both for system security and to avoid having to stop renewable plants during periods of lower consumption production.
- 2) Energy efficiency.
  3) Energy security: improve supply security by increasing renewable sources and energy efficiency on one hand, and diversifying supply sources on the other, for example, by utilizing natural gas, including liquefied natural gas (LNG), and employing infrastructure consistent with the scenario of deep decarbonization by 2050.
- 4) Internal market: greater flexibility of the electrical system is sought, expanding the resources that can provide the necessary services for real-time balance between demand supply. 5) Research, innovation and competitiveness: enhance the research system's capacity to oversee and

1- For security purposes, it will be necessary to coordinate national emergency plans with those of other countries connected to the same physical supply corridors. A new role for gas infrastructure, to be explored, could arise from fuels such as biomethane and integration with the electrical system, such as transforming energy from renewable sources not immediately consumed into gaseous fuels. Regarding petroleum products, which will continue to be necessary for transportation, the evolution towards greener infrastructure will be encouraged, including existing refineries. On the electrical system front, it will be important to promote the development of infrastructure and storage systems necessary to account for the evolution of the production mix, increasingly based on intermittent renewables, a topic connected to the internal market dimension.

- 2- Consumer protection will be crucial, both by promoting an active role in the market and through greater market transparency in all phases, particularly in the sales process.
- 3- Market rules should evolve to promote the integration of the growing share of renewables, for example, by gradually aligning the end of the trading period with the physical delivery of electricity. Appropriate developments in the internal transmission network and connections with third countries, with the coupling of the national electricity market with those of other states, will contribute to aligning Italian electricity prices with European ones.

Market mechanisms will need to be introduced to ensure the adequacy of the system, i.e., the system's ability to meet the expected demand for electricity in the medium and long

Relation to the EU Regulation 2021/1119 (Governance Regulation).

On the national level the PNIEC is linked with/accompanied by other crucial planning tools: National Climate Change Adaptation Plan. National Strategy for Sustainable Development, Strategy for the energy upgrading of the real estate national stock, National Strategy for the Circular Economy, National waste management programme, National **Ecological Transition** Plan, National Recovery and Resilience Plan.

summary: - the average annual additional contribution over the 2023-2030 period to Value Added creation is estimated at more than € 13 bn compared to what would occur in the current policies scenario: average annual temporary employment

estimated at about 191.000, additional to those calculated for the current-policy scenario over the 2023-2030 period; - a central aspect will be the increasingly active role acting consumers, prosumers as (renewable energy producers and consumers), including through renewable energy communities.

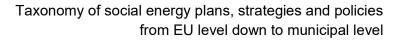
Ministry of Environment and Energy Security (MASE), the Ministry of Economy and Finance (MEF), the Ministry of Infrastructure and Transportation (MIT), the Ministry of Enterprise and Made in Italy (MIMIT), the Ministry of Agriculture, Food Sovereignty and Forestry (MASAF), the Ministry of University and Research (MUR), and the Ministry of Culture (MiC). In addition, the Inter-Ministerial Committee for Ecological Transition (CITE), which was created to provide an initial definition of the governance of the ecological transition, with the task of coordinating national policies on reducing climate-changing gas emissions, sustainable mobility, combating drogeological disruption and land consumption, water resources and related infrastructure, air quality, and circular economy.

Municipalities through SECAPs but also Autorità Regolazione Energia Reti Ambiente (ARERA), Gestore dei Servizi Energetici (GSE), Agenzia nazionale per le nuove tecnologie. l'energia e lo sviluppo economico sostenibile (ENEA), Superiore per Protezione е Ricerca Ambientale (ISPRA).

The monitoring will be done by the "Osservatorio PNIEC" to be set up.



dayalon as	sential product term, while respecting operation	al	
and process	technologies for and quality requiremen		
the energy	transition. The 4- Tools to combat energy pove	tv	
focus is als	o on promoting (families in economic distress) will	ie	
the intr	oduction of refined.		
technologies	s, systems, and		
organization	al and		
managerial	models		
functional	to the energy		
transition	and security.		
The main to	pols will involve		
hotter gove	ernance of the		
recearch	system and		
coordination	between		
	measures on the		
policies and	de for products		
demand sid	legios (induced		
and technol	logies (induced,		
tor example	e, by support s for renewable		
sources	and energy nd the supply of		
these many	reducte and		
these p	roducts and s. This		
technologies			
coordination	is essential so oductive system		
finds it as	ductive system		
linds it ac	dvantageous to		
evolve cons	istently with the		
	e future energy		
system.			





Strategy for the energy upgrading of the real estate national park approved: November

2020 implementation: 2030\* | 2050

Type: strategy

Sector: energy

Target area(s): energy efficiency; buildings

Describes overview of the real estate park and subsequently identifies the rate of energy upgrading rate of the current building stock and the target, also highlighting the opportunity to conduct an energy upgrade with an integrated approach that improves the effectiveness of the cost-benefit ratio.

The document describes a review of the housing stock and, subsequently, identifies the rate of energy redevelopment of the current building stock and the target one, highlighting also the opportunity to conduct an energy redevelopment with an integrated approach that improves the effectiveness of the cost-benefit ratio. Some information from the cost-optimal methodology, which forms the basis for the development of modelling tool used to estimate the m2 to be redeveloped in residential and some subsectors of the nonresidential, is then briefly recalled. After estimating the m2 to be redeveloped in order to reach the savings targets for 2030 and 2050 in line with the PNIEC and the LTS, the existing measures and actions and the envisaged lines development aimed at achieving the estimated rate of redevelopment are framed. In particular, policies and actions related to residential buildings are described, subdividing by the public and private sector, and those aimed at nonresidential buildings, distinguishing between the public and private tertiary sector. Finally, it describes

Drawn up in accordance with the Directive 2010/31/EU on the energy performance of buildings, as amended by Directive 2018/844/EU and also the PNIEC and the Long-Term Strategy set the goals.

benefits in terms of energy savings and the reduction of CO<sub>2</sub> emissions, the benefits for the country in terms of investments. employment and industrial added value have been estimated (see pg. 42 or PNIEC). Energy redevelopment can save on average 15% of the total annual expenditure of households on energy products.

In addition to the

Ministry of Economic Development
Ministry of Environment and Land and Sea
Ministry of Infrastructure and Transport

promote

training a mechanisms.

the most cross-cutting initiatives, namely actions to

technologies, skills and

intelligent

and financial



National Long-Term Strategy approved: January 2021 implementation: 2050  Type: strategy  Sector: environment & climate change  Target area(s): decarbonisation; renewable energy; energy efficiency	Envisioned by Regulation (EU) 2018/1999 on the governance of the Energy Union and Climate Action, the Long-Term Strategy (NLTS) outlines potential pathways to achieve a state of "climate neutrality" by 2050. Starting from a Reference Scenario (projecting virtuous energy-environmental trends from the National Energy and Climate Plan (PNIEC) to 2050, exogenous dynamics of GDP and population from ISTAT data, and priority actions in terms of "adaptation"), and based on the emissions gap identified by the reference scenario, the Strategy develops a consequent decarbonization scenario.  The NLTS is expected to be updated to align it with new European objectives: climate neutrality in the EU by 2050 and a net reduction of at least 55% in greenhouse	emissions are offset by CO <sub>2</sub> removals. These are its key directions:  1) Reduced demand for energy, thanks mainly to declines in private mobility and consumption in the civilian/residential sector; 2) Decisive acceleration of renewables and hydrogen production; 3) Enhancement and improvement of green surfaces, to increase CO <sub>2</sub>	n/a	Adopted in accordance with Art. 15 of the EU Regulation on Governance of the Energy Union and Climate Action (Governance Regulation).  In continuity with the work done on the PNIEC, which sets the intermediate targets by 2030.  Climate change mitigation and decarbonisation pathway described in the Plan are complemented by the PNACC.	Unavailable	Inter-institutional steering committee composed of the Ministries of the Environment and Protection of the Territory and the Sea and the Ministry of Economic Development integrated by the Ministries of Infrastructure and Transport and Agricultural Food and Forestry Policies.	Ministry of Environment and Land and Sea Ministry of Economic Development Ministry of Infrastructure and Transport Ministry of Agriculture, Food and Forestry Policies
	reduction of at least						



National Ecological Transition Plan approved: March 2022 implementation:

Type: plan

2026

**Sector:** environment & climate change

Target area(s): decarbonisation; mobility; circular economy The plan aims to provide a general framework on the strategy for the Italian ecological transition, defining a conceptual framework also for the interventions provided for by the National Recovery and Resilience Plan (PNRR).

The Plan, in coherence with the delineated programmatic lines from the PNRR, previews a complete attainment of the objectives in 2050, so as in good part prefixed in the national Long-Term Strategy. More precisely, the themes outlined and dealt with in the Plan are divided into: Decarbonisation; 1. Sustainable mobility; Combating

3. Improvement of air quality;
4. Combating soil
consumption and
hydrogeological disruption;
5. Improvement of water
resources and related
infrastructure;
6. Restoration and
enhancement of biodiversity;
7. Protection of the sea;
8. Promotion of the circular
economy, bioeconomy and

sustainable agriculture.

- Continue the process of bringing anthropogenic greenhouse gas emissions to net zero by 2050.
- Bring pollution below the alert thresholds indicated by the World Health Organisation, towards a substantial zero.
- Interventions to combat

hydrogeological disruptions in place, and to increase the resilience of natural and man-made systems, and water resources, including the zeroing of soil consumption. - Enhancing the national biodiversity heritage with measures to conservation (increase of protected areas on land and at sea), and implementing nature-based solutions ('nature based solutions'). nature-based solutions ('naturebased solutions'). - Moving from a linear economic

model to a circular model

The Plan, in coherence with the programmatic lines of the PNRR, foresees a complete attainment of the objectives in the national Long-Term Strategy.

Pursuing objective of Combating land consumption and hydrogeological instability the plan will lead to a reduction in the Population exposed to the risk of landslides and exposed to the risk of flooding.

Health benefits to the population through the enhancement of biodiversity in the 14 metropolitan areas via an urban afforestation program.

Ministry of Environment and Energy Security; Ministry of Sustainable Infrastructure and Mobility: Ministry of Economic Development; Ministry of Economy and Finance. The establishment of the Interministerial Committee for Ecological Transition (CITE) has been planned, which is entrusted with the discussion and approval of the Plan, as well as the implementation and review pathways of the National Sustainable **Development Strategy** 

The National Institute of Statistics (ISTAT) the Higher and Institute for Environmental Protection and (ISPRA) Research conduct scenario analyses covering climatic. environmental, energy, social, and economic aspects to ensure a quantitative background identifying the most appropriate policy choices to achieve the goals of the plan. Environmental agencies and research institutions collaborate establish appropriate discussion panels with national and regional stakeholders, aiming to gather relevant data and information



document.

#### National Strategy for the Circular Economy

approved: June 2022 implementation: 2040

Type: strategy

**Sector:** economy & territorial cohesion

#### Target area(s): circular economy; environmental taxation system

This strategy provides for a new digital waste traceability system, tax incentives to recycling support activities and the use of secondary raw materials, the revision of the environmental taxation system, the right to reuse and repair, support for existing regulatory instruments (such as legislation on the cessation of waste status, or End of Waste, and Minimum **Environmental Criteria** in the context of green procurement).

With the new "National Strategy for the Circular Economy", focused on ecodesign and eco-efficiency. the aim is to define new administrative and fiscal instruments to strengthen the market for secondary raw materials, the extended responsibility of the producer and the consumer, the spread of sharing practices and of "product as service", support the achievement of climate neutrality objectives, define a roadmap of measurable actions and targets by 2040.

- a new digital waste traceability system which will have to support the development of the secondary market for raw materials on the one hand and the control authorities in preventing and combating illicit waste management on the other;
- tax incentives to support recycling activities and use of secondary raw materials;
- review of the environmental waste taxation system in order to make recycling more convenient compared to landfilling in the national territory;
- right to reuse and repair: development of reuse centers and identification of regulatory and economic tools to incentivize operators;
- reform of the EPR (Extended Producer Responsibility) system and of the Consortia and creation of a specific supervisory body, under the presidency of the MASE, with the aim of monitoring the functioning and effectiveness of the Consortia;
- support for existing regulatory tools and their development and updating: End of waste (national and regional), Minimum environmental criteria (CAM) in the context of green public procurement.
- support for the industrial symbiosis project through regulatory and financial instruments.

The Strategy was foreseen in the PNRR as one of the reforms to be adopted.

Direct relation to the

Unavailable.

European Circular Economy Action Plan (CEAP) - COM/2020/98, one of the main building blocks of the European Green Deal.

Ministry of the Environment and Energy Security (MASE). A public consultation was held and received more than 100 contributions relating to the five sections of the strategy. These contributions, when considered relevant, were included in the text of the

The establishment at the MASE of an "Observatory on the implementation of the National Circular Economy Strategy" is envisaged, chaired and coordinated by the MASE, with the support of ISPRA and ENEA and composed of representatives of following administrations and organizations: Ministry Development economic, Ministry of Finance, Ministry of agricultural, food and forestry policies, Ministry of sustainable infrastructure mobility, Ministry of Education, Ministry of Health, Regions and Autonomous Provinces, ANCI.



National waste management programme (PNGR) approved: 2022 implementation:

Type: programme

2028

**Sector:** economy & territorial cohesion

Target area(s): waste management; circular economy A national programme waste management aimed at achieving very high levels of preparation for reuse, recycling and recovery, which adapts the network of installations necessarv integrated waste management. It defines the criteria and strategic lines that the Regions and the Autonomous Provinces must follow in the elaboration of Waste Management Plans; offers a national recognition of the installations and addresses the gaps between the Regions; Focuses on increasing the rate of separate collection, indicates the need for regional planning based on the quantification of waste streams and identifies life the cycle assessment methodology to compare management scenarios, taking into account environmental impacts.

- 1. Minimise, as a last resort and as a residual option, final disposal.
- 2. Establish monitoring systems.
- 3. Avoid new infringement procedures against Italy.
  4. Address the low rate of waste collection.
  5. Disincentive landfill and
- ensures complementarity with regional waste programmes, enabling the objectives of EU and national legislation to be met and combating illegal waste discharges and outdoor incineration.
- 6. Reduce the number of irregular landfills and reducing the rate of landfill of municipal waste below 10% in 2035.

- 1. Promotion of the adoption of the flow analysis approach as a basis for the application of Life Cycle Assessment.
- Identify and solve management and plant gaps.
   Verify that the planning of the Regions complies with the guidelines and methods of the PNGR.
   Promoting environmental
- 4. Promoting environmental communication and knowledge on waste and circular economy.
  5. Promote the implementation of the relevant components of the PNRR and other incentive policies.
  6. Minimizing the use of macro-area planning.
- 7. Ensure proper monitoring of the implementation of the PNGR and its impacts.

To be included in the Plans developed by the Regions that must that ensure the achievement of the 2035 target of 10% of Urban Waste landfilled, for each of the following temporal milestones: in 2023, 2024, 2026, 2028.

The Programme was foreseen in the PNRR as one of the reforms to be adopted, it falls under the umbrella of the National Strategy for Circular Economy and accompanies the National Plan for Waste Prevention.

it is strictly related to:

- the investment 1.1.
for the construction
of new waste
management plants
and modernisation of
plants to which 1.5

Unavailable however

and modernisation of plants to which 1.5 billion are destined; - 1.2 for projects "lighthouse" of circular economy for strategic industries supply chains, for which a financing of 600 million euros is foreseen.

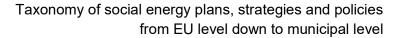
Ministry of Ecological Regions and the Transition, Regions, ISPRA; ANCI, ARERA.

Provinces in the elaboration of their plans of Waste

Management.



Communities Decree approved: December 2023 implementation: 2027  Type: law Sector: energy Target area(s): renewable energy	nergy communities.	households and businesses within a specific geographical area to collectively produce, consume, and manage energy resources.	the attainment of an incentivized power contingent of 5 GW. This target must be achieved within the thirtieth day following the date on which the specified power contingent is reached, but no later than December 31, 2027.  For Title III of the decree, the provisions apply until June 30, 2026, for the development of a total power capacity of at least 2 GW and an indicative production of at least 2,500 GWh/year. These targets must be achieved by the specified date, within the financial resources allocated under the PNRR.	criteria and methods for the granting of contributions provided by Mission 2, Component 2, Investment 1.2 (Promotion of renewables for energy communities and self-consumption) of the National Recovery and Resilience Plan (PNRR).	available on its institutional website documents and informative guides, as well as dedicated support channels, to assist users in setting up Energy Communities (CERs). In coordination with MASE, it will launch an informational campaign to raise consumer awareness of the benefits associated with the new mechanism: the first step is already online and consists of some FAQs to start guiding citizens, small and medium-sized enterprises, organizations, cooperatives, and all other recipients of the measure.	and Energy Security (MASE).	entity for the measure referred to in this Title is the GSE (Gestore dei Servizi Energetici).  The Energy Services Manager (GSE) will issue the operational rules that will govern the methods and timelines for the recognition of incentives. Within 45 days from the approval of these rules, the GSE will also launch the portals through which requests can be submitted.  The GSE will make documents and informational guides available on its official website, along with dedicated support channels, to assist users in establishing Energy Communities (CERs). In coordination with the Ministry of the Environment and Energy Security (MASE), it will also launch an informational
--	--------------------	--	--	--	---	-----------------------------	---





National Climate Change Adaptation Plan (PNACC)

approved: December 2023

Type: plan

**Sector:** environment & climate change

Target area(s): climate change adaptation

The plan establishes a dedicated national governance structure and serves as a guiding document aimed at laying the foundations for both short and long-term planning for climate change adaptation. This is achieved through the definition of specific measures aimed at strengthening adaptation capacity at the national level and developing an optimal organizational framework, for the formulation effective actions at the local level.

The main objective of PNACC is to provide a national policy framework for the implementation of actions aimed at minimizing the risks associated with climate change, improving adaptability socioeconomic and natural svstems. and taking advantage of any opportunities that may arise with the new climatic conditions.

- 1- Establishment of the "National Observatory for Climate Change Adaptation".
- 2- Identification of methods, tools, and competent entities for incorporating principles, measures, and adaptation actions into national, regional, and local Plans and Programs.
- 3- Definition of sectoral and crosssectoral methods and tools for implementing PNACC measures at various levels of government.
- 4- Development of a research program to enhance understanding of the impacts of climate change, vulnerability, and risks in Italy.

Governance Regulation stipulates that every two years since 2021. Member States must communicate to the Commission information on their climate national change adaptation plans and strategies, describing their implemented and planned actions to facilitate adaptation to climate change, in line with the requirements the Paris Agreement. Connection with the EU Adaptation

Green Deal and the Paris Agreement.

The Plan aims at the implementation of the National Climate Change Adaptation Strategy (SNAC) adopted in 2015, and it is also connected to the Long Term Strategy.

Strategy 2021, and

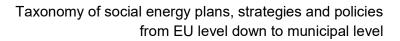
therefore the EU

Strategy.
The Ecological
Transition Plan is an
instrument of
coordination and
update of climate
change mitigation and
adaptation policies.
Connection with the
NECP and the NLTS.

The document does not assess the impact of the Plan but only the impact of climate change and sectoral vulnerabilities.

Ministry of the Environment and Energy Security Institute Higher for Environmental Protection and Research (ISPRA) State-Regions Conference Technical Commission for Environmental Impact Verification General Directorate of Archaeology, Fine Arts and Landscape of the Ministry of Culture

Within three months thev foresee establishment of: а National Observatory composed representatives of the Regions and the Representations local authorities, to identify territorial and sectoral priorities and to monitor effectiveness of adaptation actions; - a permanent Forum for the promotion of information, training and decision-making capacity of citizens and stakeholders.





Energy security decree approved: February 2024  Type: law  Sector: energy  Target area(s): energy security	Urgent provisions for the energy security of the country, the promotion of the use of renewable energy sources, and support for energy-intensive reconstruction enterprises in the areas affected by the exceptional floods which have occurred since 1 May 2023.	Promote the self-production of renewable energy in energy-intensive sectors at risk of relocation by selling renewable energy to energy-intensive end customers at fair prices. Strengthen the security of natural gas supplies and their flexibility. Encourage regions to host renewable energy plants.	The decree issues urgent provisions for the country's energy security, the promotion of the use of renewable energy sources, support for energy-intensive companies, and reconstruction in the areas affected by the exceptional flooding events that occurred starting from May 1, 2023.	The law aims to support the production of biomethane injected into the natural gas network, in line with Mission 2, Component 2, Investment 1.4 of the PNRR.  The decree provides measures for the contribution to the flexibility of the electrical system by non-enabled plants powered by sustainable bio-liquids in order to achieve the objectives of the National Integrated Energy and Climate Plan (PNIEC).	The decree provides urgent provisions for the reconstruction of areas affected by the flooding events that occurred starting from May 1, 2023, access to the national solidarity fund for agricultural enterprises that suffered damage due to the exceptionally severe weather events in October and November 2023, and provisions in favour of the areas of the Tuscany Region affected by the flooding events that occurred starting from November 2, 2023.	The decree has been assigned to the Environment and Productive Activities Committees of the Chamber, which, starting from December 14, 2023, have scheduled hearings aimed at reviewing the text before its conversion into law.	n/a
--	---	---	---	---	--	--	-----



### Regional level - Region of Campania

Piano Energetico
Ambientale
Regionale
Regional
<b>Environmental</b>
Energy Plan
approved: July 2020

Type: strategy

Sector: energy

#### Target area(s): buildings; renewable energy; bioenergy

PEAR The is proposed as а contribution to the energy-environmental planning of the territory, with the final objective of planning the development of RES, making the assets of existing building and production facilities energy efficient, also in the context of urban regeneration programmes, plan the development distribution networks serving the territory, in context valorisation of excellence territorial technologies, design a development model made up of small and medium-sized connected systems to high-capacity "intelligent" networks, in the logic of the widespread smart grid.

- Increase the competitiveness of the regional system by reducing the energy costs borne by users and in particular by industrial ones.
- 2. Achieve the environmental objectives defined by the EU by accelerating the transition towards a decarbonised scenario.
- 3. Improve the security and flexibility of energy systems and infrastructure.

Same of the 82 planned actions: containment of energy consumption and polluting emissions; global energy requalification of multi-family buildings: energy recovery and regualification of public and private structures for the creation of additional social housing; incentive for sustainable mobility policies: renew the existing public transport fleet: dissemination. involvement. information and training interventions for Local Authorities; support for Local Authorities; energyenvironmental planning and programming tools; support actions for Local Authorities for the implementation of SEAP measures and the implementation of Action Plans for Sustainable Energy and Climate (SEAP).

It is consistent with the indications of the 2017 National Energy Strategy and with the PNIEC.

It is directly linked to the National Strategy for sustainable development, and consequently to 2030 Sustainability Agenda, and to the EU Transport 2050

strategy.

Access to instruments to activitie reduce energy consumption, to reduce CO2 efficien emissions, to increase production of renewable energy.

The Coordination of the activities was made by the Unità Operativa Dirigenziale 50.02.03 "Energia, efficientamento e risparmio energetico, Green economy e Bioeconomia".

The Working Group was

selected by the Regional

President Act n. 166 of 21/07/2016 and integrated with Regional Government Act n. DGR 574 of 25/10/2016. The Universities in the Campania Region participated through the project: "Le Università campane e le Azioni previste dal Piano Energetico Ambientale Regionale2017 (PEAR\_C17)". The ACaMIR, regional agency for mobility, and the ARPAC, regional agency environment protection, also contributed to prepare some chapters of the document.

The Unità Operativa Dirigenziale 50.02.03 "Energia, efficientamento e risparmio energetico, Green economy e Bioeconomia", ACaMIR , regional agency for mobility and ARPAC, regional agency for environment protection.



Strategia per le Green City | Green City Strategy approved: June 2021

Type: strategy

Sector: environment & climate change

Target area(s): circular economy; renewable energy; energy efficiency; buildings; sustainable mobility; air quality; water preservation and management

strategy connection with activities for Regional Strategy for Sustainable the Development Campania Region, aims at the activation of a specific focus for sustainable development in the municipalities Campania 50.000 inhab.), following the Green City Approach, which focuses on the three priority aspects of ecological sustainability: environmental quality, the circularity of resources and the contrast of change climate.

The Strategy promotes: the the green of mobility; of (over too; especially for

1. quality of city planning; 2. adequate endowment of infrastructures: 3. improvement of air quality; 4. increase of sustainable 5. urban regeneration and soil protection; 6. expansion of building refurbishment to increase the reuse of existing facilities

7. increment and spread of circular economy practices waste prevention and recycling; 8. strategic management of water; 9. reduction of greenhouse

gas emissions; 10. energy consumption reduction; 11. the uptake

renewables; 12. the uptake of climate change adaption measure.

Adopt Regional law Architectural quality. 2. Monitor regularly the green infrastructure and adopt multi-vears management 3. Map land consumption in cities.

4. Produce Urban Regeneration Plans that facilitate the use for social housing 5. Update regional plan for waste

management. 6. Monitor and renew aging water

networks to eliminate leaks. 7. Monitor municipal energy consumption. 8. Promote energy communities.9.

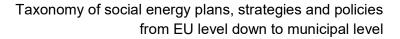
Finalise research on cities

vulnerability to climate change.

Connected with the Regional Strategy for Sustainable Development.

Improve air quality, make mobility more sustainable, improve buildinas stock. increase the circular uptake, economy reduce energy consumption, reduce  $CO_2$ emissions, facilitate uptake of measures to reduce the impact of climate change.

Municipalities through SECAPs but also Gestore dei Servizi Energetici (GSE). Agenzia nazionale per le nuove tecnologie, l'energia e lo sviluppo economico sostenibile (ENEA), Istituto Superiore per la Protezione e la Ricerca Ambientale (ISPRA), Universities. Research centers.





Programma Regionale FESR 2021-2027 Campania | ERDF Regional Programme 2021-2027 Campania approved: November 2022

Type: action programme

Sector: economy & territorial cohesion

Target area(s): ecology; digital transition

The Campania FESR Regional Programme 2021-2027 is defined in close coherence with the framework of the main European and national strategies that identify ecological and digital transition as the two pillars on which to base the economic and social development of the territories, strengthening cohesion. The Region Campania intends to implement impressive programme of public investment around five 'priority challenges' that will strengthen the regional socioeconomic system by making it more resilient, accompanying it in the digital and green transition process and helping to reduce inequalities economic, social, gender, generational and territorial inequalities. Challenge 2 Greener Campania. The strategy is to direct investments in prevention and adaptation to hydrogeological, seismic and volcanic risks, also through a more capillary and systematic monitoring and control of the territory. With regard

to energy transition

Promoting efficiency and reducina greenhouse gas emissions. 2.2 Promote renewable energy in accordance with Directive (EU) 2018/2001, including the sustainability criteria set out therein. 2.4 Promote climate change adaptation, disaster risk prevention and resilience, considering ecosystembased approaches. 2.5 Promote access to water sustainable and its management.

2.6 Promoting the transition to a circular and resourceefficient economy. 2.7 Strengthening the protection and preservation of nature, biodiversity and infrastructure, green including in urban areas, and reducing all forms of pollution.

Ecological upgrading of production processes and improvement of the energy sustainability of enterprises. It is aimed at promoting energy efficiency and energy saving in enterprises, achieving, on average, a reduction of at least 30% of direct and indirect greenhouse gas emissions through the energy regualification of production facilities and structures.

Energy Efficiency of Public Property: interventions are aimed at reducing consumption in public buildings and facilities, achieving, for the share related to the relevant sector of intervention an average reduction of at least 30% of direct and indirect greenhouse gas emissions.

Improvement of the energy performance of school and health care building stock, which aims at the promotion of interventions to improve the energy performance of heritage school and health care buildings, which have particularly high energy consumption levels.

Support for energy production from renewable sources, which must include, as a priority, interventions to promote community thermal and electrical self-consumption energy and businesses by encouraging accumulation and the most energyintensive sectors. Communities will be encouraged energy promoted by municipalities and/or production agglomerations, for the expected environmental, economic and social benefits a local level.

Promote local public transport by strengthening and expanding infrastructures and services. It has as its objective the general improvement of the local public transport sector and its energy rationalisation, as well as the

It is the programming document that defines the strategy and interventions for the use of the resources allocated to the Region by the European Regional Development Fund (ERDF), in the framework of the Cohesion Policy. Region's Programme is defined in close coherence with the main European and national strategies that identify the ecological and digital transition as the two pillars of the economic and social development of the territories. strengthening their cohesion. It also follows a strategic and unified vision of the programming European, national and regional funds, which has taken the Green Deal and Agenda 2030 as its priorities. Connection with the National Recovery

and Resilience Plan

(PNRR), and the

Regional Strategy for

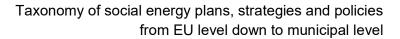
Sustainable

Development.

The regional strategy aims to accompany the ecological transition of companies, to strengthen the sustainability of both public buildings and businesses by acting in an integrated way through redevelopment and energy efficiency, the production of energy from renewable sources for self-consumption, the reduction of consumption seismic adaptation, to support the creation of energy communities, as well as the promotion of biodiversity protection interventions. Support and incentives for the use of renewable energy sources are cornerstone crucial to the development and sustainable of growth the Campania region also in perspective to reduce the phenomenon of energy poverty and accelerate the decarbonisation path to 2050. lt also aims to complete the development of infrastructures necessary to quarantee smooth. sustainable and zero emissions mobility,

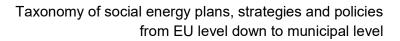
Institutional actors: ANCI Campania. Lega delle Autonomie Locali, Upi, Uncem. Area Metropolitana di Napoli, Ufficio Scolastico Regionale, Comitato Regionale Universitario Unar. Coordinamento dei Distretti Turistici Campania. Considliera Regionale di Parità. Economic and social actors: CGIL, CISL, UIL, UGL, CISAL, CIDA, Confindustria. CONFAPI, Confcommercio, Confesercenti, CNA, CLAAI, CASARTIGIANI, Confartigianato, Coldiretti, CIA, Confagricoltura, Lega AGCI. Coop, Confcooperative, ABI. Confservizi, ACLI, UNCL Unioncamere, Unimpresa, Confprofessioni, ANCE. Consulta Interprofessionale degli Ordini e Collegi Professionali di Napoli e Campania, AdEPP, Aicast Imprese Italia, CIFA. Assinrete. Federterziario. COPAGRI, OTACL, ODAF, Ente Nazionale per Microcredito, AEPI, INU, ACAI, Federsanità ANCI Campania, ConFAEL. NGOs: Forum Terzo Settore, Legambiente. WWF. Federparchi, Federfauna, Forum regionale Gioventù, UNPLI Campania.

n/a





the regional strategy aims to accompany the ecological	promotion of less invasive forms of urban logistics (i.e. open and	including the strengthening of the	
i iic ecolodical i	interoperable digital infrastructures	low carbon/zero	
transition of	and solutions), thus contributing to	emission vehicle	
companies, to	the development of the so-called	fleet. Furthermore,	
strengthen	"Green City".	the interventions will	
sustainability of public	Green only .	be able to guarantee	
buildings and	Development of alternative, gentle	greater use of	
enterprises by acting	and sustainable forms of mobility:	collective transport	
in an integrated	promote the development of	by reducing the gap	
manner through	alternative, gentle and sustainable	between supply and	
energy upgrading and	forms of mobility.	demand and at the	
efficiency energy	ionnis of mobility.	same time improving	
efficiency, the		air quality in urban	
production of energy		environments.	
from renewable		CHVII OHINCHES.	
sources for self-			
consumption and the			
creation of energy			
communities, the			
consumption			
Specific dentity plane.			
reduction and seismic retrofitting as well as the promotion of biodiversity protection measures. As a priority, critical issues related to overcoming infringement procedures (water and waste) will be addressed through specific action plans.			



n/a



Strategia Regionale per lo sviluppo sostenibile |

Regional Strategy for Sustainable Development approved: March 2023

Type: strategy

Sector: sustainable development

Target area(s): just transition; inclusion; biodiversity; regional economy; education; sustainable mobility; digital innovation

The Regional Strategy Sustainable Development of Campania defines the strategic, regulatory perspectives and procedural measures aimed at guiding regional policies in coherence with the principles and objectives of

sustainable development. Strategy The completes and integrates the set of rules, organizational conditions operational mechanisms intended select the interventions aimed at achieving the sustainable development goals. The Strategy therefore represents the reference framework in the activities of institutional cooperation with local and territorial authorities sustainable development and for the active involvement of economic parties and social issues in the co-planning and verification

interventions.

Strategy promotes integrated interventions to adapt employment and inclusion policies to the current transformations and transitions. It defines the set of transformations that affect businesses in all sectors. including agriculture, necessary to support the transition towards a climate neutral and circular, just and socially balanced economy capable of improvement competitiveness, quarantee new quality drive employment, to technological innovation, to rationalize the use of develop resources, to business culture, considering problematic environmental aspects, such as air quality and the loss of biodiversity. It promotes a balanced and harmonious development of cities and territories and is based on cooperation and coordination of the different levels of government (multilevel approach to governance) to balance inclusion, sustainability and competitiveness, through an integrated, participatory and innovative approach to development. It promotes interventions for environment, energy and climate aimed at protecting, conserving and enhancing natural capital, encouraging adaptation to climate change, reduce energy consumption and production from fossil fuels, promote production methods sustainable and conscious and thrifty consumption

seventeen Sustainable Agreement Cohesion quidelines. for Development. To ensure structured involvement Partnership Cohesion Programmes, possibly additional associations stakeholders to be addressed.

The strategic frame of reference for SRSvS is based on the Development Goals (SDGs) of the 2030 Agenda, combined with the key principles of the European Pillar of Social Rights, the objectives of the Paris Climate Change, the initiatives of the European Green Deal and the 2021-2021 Policy It is directly connected with the PNRR and the National Strategy Sustainable а participation activity in its field, an important role is assumed by the Economic and Social Policy related to the ERDF, ESF and EAFRD Regional Community complemented with and in relation to the issues

Fight poverty making material aid available and activating accessible assistance, health protection and social integration, intended for the poor and most disadvantaged people in a state of material deprivation or homelessness and to those affected by forms of new poverty, excluded from ordinary social assistance and in need of immediate Pursuing support. inclusion, social protection and active citizenship will allow the for most disadvantaged, vulnerable and fragile, the access and the permanence in the job market and the participation in social opportunities, with the aim of strengthening relational networks and economic and community participation. Promote the sustainable development of rural territories and internal and peripheral areas of the region by enhancing natural capital, cultural and landscape and improving the capacity for climate adaptation in order to increase the wellbeing of citizens,

ensure structured involvement and participation activity in its field, an important role is assumed by the Economic and Social Partnership Cohesion Policy related to the ERDF. ESF and EAFRD Regional Community Programmes, possibly complemented with additional associations and stakeholders in relation to the issues to be addressed.

styles, reduce environmental



pollution, protect biological	improve the
diversity and safeguard	provision of civic
landscapes and habitats. It	services, strengthen
protects the right to mobility	competitiveness,
and the free and safe	reduce gaps
movement of people and	between
goods by improving the	communities, thus
efficiency of the transport	determining the
system, resorting to the	conditions to combat
widespread use of digital	the phenomena of
technologies, encouraging	depopulation and
the use of public transport or	encourage, with
shared mobility and	particular regard to
renewing the public and	the youngest,
private car fleet with low-	permanence and
emission electric or	return. Promote the
hydrogen vehicles. It	sustainable
promotes the digital	development of cities
transformation of society and	and smaller centres,
the economy to improve	intervening in an
people's quality of life and	integrated and
strengthen the	coordinated way on
competitiveness of	the urban
businesses, guarantee equal	environment, climate
access and connection	change, digital
conditions for all, in order to	transition, growth
contribute to sustainable	and social inclusion
development and climate	and culture,
neutrality, and at the same	mobilizing citizens to
time support employment,	promote civic
improve and modernize the	participation and co-
education and social	planning to make
inclusion system. It	cities more
encourages the adoption of	sustainable,
governance consistent with	cohesive, inclusive,
the objectives of sustainable	productive and
development, adopting the	connected.
principles of simplification,	connected.
integration, coherence,	
transparency and evaluation,	
promoting an inclusive	
approach and broad	
participation along the way	
all phases of public decision,	
together with systematic	
dialogue with	
representatives of local	
authorities and the economic	
and social parties.	

for

and

to

to

and infrastructure to

recharge e-vehicles.



#### Regional level - Naples

Piano Urbano della	
Mobilità Sostenibile	
(PUMS)	

Sustainable Urban **Mobility Plan** approved: June 2023

Type: plan

Sector: transport

Target area(s): mobility

The PUMS of the Metropolitan City of Naples is a strategic planning tool that outlines, over a 10year time horizon, the directions for the development mobility in all its forms and contains 4 specific focuses on the themes of cycling mobility (Biciplan), mobility of the disabled, basin for plan public transport and freight transport and logistics.

1. Improvement of public transport.

2. Rebalancing mobility shift. modal 3. Reduction of traffic congestion.

4. Improving accessibility for people and goods. Improve integration 5. between territorial disposition and development and the mobility system. 6. Improving urban and road space.

7. Reduction of fossil fuel consumption.

8. Improving air quality. 9. Reduction of noise. 10. Reduction of road accidents and related social costs.

11. Reduction of road accidents, especially those that generate injuries or deaths with particular focus weaker users. 12. Improving social inclusion.

13. Improving citizens satisfaction.

14. Reduction of costs due to the need to use a private vehicle.

Creation of a unified Signage (spatial cognition) system for accessibility and pedestrian circulation in multimodal nodes and for daily and tourist mobility.

Creation of a network of cycle stations and charging points for electric bikes at public transport stops and stations of metropolitan rank, Integration of the national level cycling network with elements aimed at guaranteeing the connection between the national network and the hubs metropolitan and regional attractors for study, work, tourism etc.

For municipalities with urban public transport, introduction of on-demand services in rural areas and with weak demand.

Promotion of the spread of electricity supply points on the relevant road network; Resolution of critical road accidents along side streets within inhabited areas with fewer than 10,000 inhabitants.

It integrates hard Increased accessibility measures (e.g. infrastructure) that security already pedestrians were approved and funded cvclists by the interchange stations, National Recovery increased and accessibility Resilience Plan (PNRR) with local citizens policies and soft sustainable mobility measures via on demand public (e.g. education, transport services

campaigns) supporting the of development sustainable and integrated urban planning. It is directly related to the National Strategic Plan for Sustainable Mobility, and to the

Regional Strategy for Sustainable

Development.

information,

Regional and municipalities departments, public transport operators, private transport companies, NGOs, citizens.

n/a

Along the drafting, the participatory process played a fundamental role in all the activities underpinning the SUMP according to its own Participation Communication Plan.



**Table A.5 -** Greek strategies, plans, laws, frameworks, and action programmes. Each entry includes its identification, brief description, goals, mandatory actions to be taken, interactions with other policies, direct/Indirect impacts on the population, stakeholders' involvement in its development and implementation (who and how). Regarding implementation, important intermediate objectives are marked with an \* (first) or an \*\* (second).

Name, dates, type, sector, target area(s)	Brief Description	Goals	Mandatory actions to be taken	Interaction with other policies	Direct/Indirect impacts on the population	Stakeholders' involvement in its development (who and how)	Stakeholders' involvement in its implementation (who and how)
National level - Greece							
Eθνικός Κλιματικός Νόμος 4936/2022   National Climate Law approved: 2022 implementation: 2050  Type: law Sector: environment & climate change Target area(s): energy transition; climate change; greenhouse gas emission reduction; sustainable infrastructure	The National Climate Law 4936/2022 is Greece's legal framework for achieving climate neutrality by 2050. It sets intermediate goals for reducing greenhouse gas emissions and outlines strategic actions for energy transition and climate adaptation, aligned with the European Union's climate policies and the Paris Agreement.	The primary goal of the law is to achieve climate neutrality by 2050, with intermediate targets set for 2030 and 2040. The National Energy and Climate Plan (NECP) is based on the National Climate Law. The law aims to reduce greenhouse gas emissions, transition to renewable energy, and create a climate-resilient economy.	- Phasing out lignite use by 2028. Setting up carbon budgets to regulate emissions in different sectors Promoting renewable energy sources and increasing energy efficiency Creating regional climate adaptation plans to mitigate climate risks Developing sustainable urban mobility plans and expanding electric vehicle infrastructure.	- The National Climate Law aligns with both the Paris Agreement and the European Green Deal, ensuring Greece adheres to international climate goals and the EU's climate neutrality by 2050.	- Energy Transition: transitioning from fossil fuels to renewable energy sources may lead to shifts in employment sectors, particularly affecting regions reliant on lignite production Public Health: reduced air pollution from a cleaner energy mix could improve public health Economic Transportation: emphasis on electric vehicles and sustainable mobility may lead to significant changes in public and private transportation habits.	The Ministry of Environment and Energy is primarily responsible for developing and drafting the law, in coordination with other relevant ministries and stakeholders, including scientific bodies, local governments, and industry representatives.	- Implementation will involve multiple stakeholders: the Ministry of Environment and Energy - overall coordination and monitoring of the implementation Regional and Local Authorities: responsible for executing climate adaptation and mitigation plans at local and regional levels Private Sector: expected to adopt green technologies, especially in energy, transport, and construction.



Εθνικό Σχέδιο για την Ενέργεια και το Κλίμα (ΕΣΕΚ)

#### | National Energy and Climate Plan approved: 2019

implementation: 2027\* | 2028\* | 2030 | 2050\*

Type: plan

**Sector**: environment & climate change

Target area (s): energy efficiency; renewable energy; lignite phase-out; energy poverty; urban planning; mobility

The National Energy and Climate Plan (NECP) outlines Greece's strategy to achieve the EU's Energy Union goals by 2030, focusing on GHG emission reduction, increased RES penetration, energy efficiency, and lignite phase-out. It involves comprehensive measures across various sectors to ensure a climateneutral economy by 2050.

The NECP sets kev targets for Greece by 2030, aiming to reduce greenhouse gas (GHG) emissions by more than 42% compared to 1990 levels. It also seeks to increase the share of renewable energy sources (RES) to over 35% of gross final energy consumption, while improving energy efficiency by 38%. These objectives are crucial for Greece's strategy to align with EU climate goals, promoting a shift toward renewable energy and reducing overall energy consumption to ensure a sustainable and low-carbon future.

- Implement lignite phase-out by 2028 - Renovate public

and private buildings to improve energy efficiency - increased use of RES in heating, cooling, and

transport - Promote sustainable urban mobility and bioclimatic urban planning.

- The NECP is a core component of the National Climate Law, laying out the steps to achieve - Improved air quality and reduced pollution< - Lower energy costs for consumers

Greece's climate
objectives by 2030.
- The NECP is in line
with international
agreements such as

the Paris Agreement,

- The NECP's 2030

with the MS50, which

extends these targets

goals are aligned

to ensure climate

neutrality by 2050.

ensuring Greece

fulfils its global

commitments.

climate

- Social support for vulnerable groups through energy poverty measures. - Hellenic Parliament: Consultations and presentations - Workshops with local/regional authorities, institutional bodies, market players, NGOs - Public consultation through questionnaires and feedback mechanisms.

- Regional and municipal authorities: Implementation of local initiatives - Private sector: Investments and execution of energy projects

NGOs and civil society:
 Monitoring and advocacy



Μακροχρόνια Στρατηγική για το 2050 (ΜΣ50) | National Long-term Strategy

approved: 2020 implementation: 2050

Type: strategy

**Sector:** environment & climate change

**Target area(s):** energy efficiency, mobility; renewable energy

The Greek Long-term Strategy for 2050 (MS50) aims to guide Greece towards becoming a climateneutral economy by 2050, aligning with the European Union's broader goal of climate neutrality as outlined in the EU Green Deal. The strategy spans several sectors, including energy, industry, transport, and buildings, focusing on significantly cutting greenhouse gas emissions and fostering sustainable development. outlines various policy measures, such as increasing the use of renewable energy sources (RES), boosting energy efficiency, and incorporating advanced technologies.

- Strengthening the use of RES. -Improving energy efficiency. - Integration of advanced technologies.

- Electrification in all sectors. - Interventions to improve energy efficiency. -Development of chemical electricity storage. - Coupling sectors through the production and disposal of climate-neutral hydrocarbons. - Implementation of carbon dioxide capture, use and storage.

- The MS50 builds on the NECP by extending the roadmap beyond 2030 to reach climate neutrality by 2050. - The MS50 supports the long-term goals of the National Climate Law, focusing on post-

2030 objectives.

- MS50 is based on the Paris Agreement, aiming for climate neutrality by 2050.

- MS50 aligns with the Energy Union Strategy, reflecting its goals of secure, affordable, and sustainable energy for Europe by 2050, contributing to the EU's climate-neutral economy transition.

- Ensures a cleaner, healthier environment by reducing pollution and greenhouse gases. - Promotes the use of renewable energy,

gases.
- Promotes the use of renewable energy, leading to lower energy costs for citizens.

- Supports job creation in green technologies and sustainable industries.

- Enhances energy security, reducing dependence on imported fossil fuels. Improves living conditions with more energy-efficient buildings and transportation.

Ministry of Environment and Energy

- Government Policymakers: These include various ministries and public agencies responsible for shaping energy and environmental policies. -**Energy Industry: Companies** from the renewable energy sector, fossil fuel industry, and power generation contribute technical expertise and resources. -Non-Governmental Organizations (NGOs): Environmental and civil society groups participate in the consultation process to advocate for sustainability and social justice.

- Private Sector: Industry stakeholders, particularly those involved in energy efficiency, bio-economy, and new technologies, play a role in adapting and applying green technologies



Εθνική Στρατηγική για την Προσαρμογή στη Κλιματική Αλλαγή | National Adaptation Strategy to Climate Change

approved: December 2016 implementation: annually

Type: strategy

**Sector:** environment & climate change

Target area(s): biodiversity and ecosystems; fisheries; aquaculture; water resources; coastal zones; energy infrastructure; transport The National Strategy for Adaptation to Climate Change (NASCC) aims to enhance Greece's resilience against climate change impacts. It establishes general goals, guiding principles, and tools for a modern, effective, and growth-oriented adaptation approach, in line with the United Nations Framework Convention on Climate Change, EU directives, and international experience.

- Systematize and improve adaptation decision-making processes. Integrate adaptation into a sustainable growth model
- through based on new regional/local information. plans. - Use a collaborative - Promote approach with adaptation actions across all sectors, public focusing on the administration, most vulnerable. scientific - Create community, mechanisms for economic monitoring and stakeholders, and

- Develop

adaptation plans

regional

with local

measures.

assess and

civil society.

priorities and

- Continuously

update actions

updating adaptation actions.
- Enhance the adaptive capacity of Greek society

- The NASCC provides the adaptation strategy needed under the Climate Law's broader focus on emissions reduction.
   The NASCC works alongside the NECP, addressing different aspects of climate resilience.
- Connected to the Paris Agreement and European Energy Strategy: NASCC is aligned with global and European frameworks for climate adaptation, ensuring that Greece's adaptation efforts contribute to global resilience.

The strategy aims to reduce the socioeconomic costs of climate change. improve resilience, minimize regional disparities, and ensure a fair distribution of adaptation costs. It seeks to enhance the welfare of all citizens by protecting public goods such as the climate and local goods like health and infrastructure.

The Ministry of Environment and Energy is primarily responsible for coordinating and implementing the strategy.

The development of the strategy was a collaborative effort involving the Ministry of Environment and Energy, the Bank of Greece, and various other partners. It was developed through a public consultation process, with contributions from the Climate Change Impact Study Committee (CCISC) supported by the Bank of Greece and other governmental and scientific bodies.



Efficiency in Industry implement energy/environmental energy efficiency -Implement DirectiveLower energy bills. technical support).	ustrial enterprises olementation of audits measures) and the vate Sector.
---	---



Εθνικό Σχέδιο Δράσης για την Ενεργειακή Απόδοση

**National Energy Efficiency Action Plan** approved: 2007 implementation: annually

Type: action plan

Sector: energy

Target area(s): energy management; energy efficiency; technological upgrades

The National Energy Efficiency Action Plan (EEPEA) outlines measures and actions aimed at reducing energy consumption across all sectors. It focuses on estimating energy savings, determining necessary budgets, and identifying funding sources for these initiatives. Serving as a key national policy and monitoring tool. the EEPEA tracks Greece's progress in energy efficiency and is subject to approval by the European Commission.

- Reducing overall primary energy consumption 20% by 2020. aligned with EU directives.

energy-saving measures across various sectors. such as public and private buildings. industry, transportation. energy efficiency through technological upgrades innovative practices. - Securing funding and budgeting appropriately for the successful execution of these

measures.

- Implementing wide-scale energy efficiency by upgrades in public buildings. - Increasing the

energy efficiency Implementing standards for new and renovated buildinas. - Promoting the adoption of energy-efficient appliances and Enhancing lighting. - Enhancing industrial energy efficiency through and technology improvements and process optimizations. - Encouraging the use of energy-

efficient vehicles

and improving

transportation networks.

public

The National Energy Efficiency Action Plan is an integral part of NECP. the contributing to Greece's energy efficiency goals.

- Reduced energy

increased energy

and businesses.

quality and health

decreased reliance

- Enhanced comfort

in buildings through

better insulation and

modernized heating

- Improved air

benefits from

on fossil fuels.

systems.

sectors.

- Increased

employment

green energy

Access to

incentives for

upgrades and

installations.

energy-efficient

renewable energy

opportunities in

efficiency in homes

bills due to

- The action plan directly contributes to achieving the National Climate Law's emission reduction targets by enhancing energy efficiency

- The Action Plan aligns with the EU Energy Efficiency Directive, ensuring Greece's compliance with EU obligations.

- Directly connected with Energy Communities.

- Ministry of Environment and Energy:

> allocation. - Financial Sector (e.g., banks and investment firms): Financing projects aligned with the national

energy efficiency goals. - Consumers and Homeowners: Engaging in energy-saving practices, upgrading appliances, and retrofitting homes to meet new standards.

- Energy Providers and

efficiency measures and

Utility Companies:

Implementing energy

managing resource



Eθνικό Σχέδιο αύξησης κτιρίων με μηδέν κατανάλωση ενέργειας   National Plan to increase zero-energy buildings approved: 2018 implementation: 2019*   2021  Type: action plan  Sector: energy  Target area(s): energy efficiency; energy infrastructure; residential buildings; public and commercial buildings	This plan focuses on increasing the number of buildings in Greece that have nearly zero energy consumption (NZEB), in line with the EU's energy efficiency directives (EED).	- Ensure that all new buildings from 2021 are nearly zero-energy. Specifically for public sector buildings, the transition to NZEB must be complete by 2019.  - Reduce the energy consumption of existing buildings through renovation and energy upgrades.	- Mandate energy efficiency upgrades for public buildings Provide incentives for private buildings to meet NZEB standards Implement financial programs to assist with building renovations, such as energy-saving programs for homes and businesses Increase the use of renewable energy sources in buildings.	The National Plan to increase zero-energy buildings: - Contributes to the NECP's overall objectives of enhancing energy efficiency, especially in the building sector It is connected to the National Energy Efficiency Action Plan: This plan directly supports the Action Plan's goal by focusing on improving energy performance in buildings The Action Plan aligns with the EU Energy Efficiency Directive, ensuring Greece's compliance with EU obligations.	- Citizens will benefit from reduced energy costs due to more efficient buildings The plan supports public health by improving indoor air quality and reducing energy poverty It creates job opportunities in the construction and energy services sectors.	The plan is developed by the Ministry of Environment and Energy of Greece, following the guidelines set by the European Union and international energy efficiency protocols.	The Ministry of Environment and Energy is responsible for the overall implementation, with support from other governmental bodies and local authorities, especially for public buildings.
--	--	---	--	--	---	--	---



Σχέδιο Δράσης για την Καταπολέμηση της Ενεργειακής Ένδειας   Action Plan to Combat Energy Poverty approved: 2021 implementation: 2030  Type: action programme  Sector: social/energy  Target area(s): energy poverty; energy efficiency	The action plan aims to reduce energy poverty in Greece by at least 50% by 2025 and bring it below the EU average by 2030, providing discounted electricity rates and other support measures for vulnerable consumers.	The goals of the action plan are to reduce energy poverty, improve energy efficiency in vulnerable households.	- Provide discounted electricity rates, - Improve energy efficiency in vulnerable households - Raise awareness of existing programs.	The Action Plan to Combat Energy Poverty is aligned with the Energy Efficiency Directive, aiming to reduce energy consumption and enhance energy efficiency. The plan specifically focuses on vulnerable households, ensuring that those most affected by energy poverty benefit from energy-saving measures.  - The Action Plan is aligned with the NECP to ensure that vulnerable households benefit from energy-saving measures.	Direct financial relief to vulnerable households, improved energy efficiency, and reduced energy bills.	Developed with input from national and regional authorities, energy suppliers, and social policy makers.	Implementation by energy suppliers and local authorities, monitored by the Ministry of Environment and Energy.
---	--	--	--	---	---	--	--



Σχέδιο Βιώσιμης Αστικής Κινητικότητας   Sustainable Urban Mobility Plans approved: 2019 implementation: 2021  Type: plan Sector: transport  Target area(s): mobility; energy efficiency in public transport	Sustainable Urban Mobility Plans improves energy efficiency in transport through infrastructure projects, promotion of public transport, and sustainable mobility initiatives.	- Enhances energy efficiency in transport -Reduce emissions	- Develop infrastructure - Promote electromobility, - Implement eco- driving programs	- The SUMPs support the NECP's goals by reducing carbon emissions in the transportation sector. This is a parallel connection, as SUMPs target sustainable mobility, contributing to broader climate objectives The SUMPs are aligned with EU-wide transport and energy policies, ensuring that national and local mobility efforts are in line with the EU's sustainability goals.	- Improved air quality - Reduced traffic congestion	Ministry of Environment and Energy, local authorities (consultation and planning).	Local authorities, transport companies (implementation).
---	--	---	--	---	---	--	--



Εθνικό Σχέδιο

Ηλεκτροκίνησης | National **Electrification Plan** 

approved: 2022 implementation: 2025\* | 2030\*\* | 2050

Type: plan

Sector: transport

Target area(s): mobility; energy infrastructure; electric vehicles

The Greek National Electrification Plan is designed to accelerate the adoption of electric vehicles (EVs) and the development of associated infrastructure across Greece. It targets the comprehensive electrification of various vehicle types including passenger cars, commercial vehicles, buses, and motorcycles by establishing ambitious goals for the coming decades. The plan also emphasizes the expansion of EV charging facilities, both in urban centers and across the country, including islands, aiming to support the growth of the EV market. This strategic initiative aligns with Greece's broader environmental objectives and the EU's energy policies, focusing on reducing carbon emissions and promoting sustainable transport solutions.

- Increase EV Registrations: Target higher percentages of EVs in new vehicle registrations by 2030. - Expand Charging Infrastructure: Build comprehensive charging networks across Greece, including remote and insular areas. - Broad Electrification: Electrify various types of vehicles, including public transport and commercial fleets. - Policy and

Incentives:

incentives such as

subsidies and tax

breaks to foster

Enhance the EV

ecosystem with

innovation and

EV adoption.

Ecosystem:

technology

stakeholder

collaboration.

- Develop

Introduce

-Infrastructure Setup: Develop and deploy extensive charging infrastructure nationwide. - Legislative Support: Enact policies that provide financial and regulatory support for EV adoption. -Public Awareness: Run campaigns to educate the public on the benefits of EVs and available incentives. - Stakeholder **Engagement:** Foster partnerships between government, industry, and other stakeholders to drive EV initiatives. - Monitor and Adapt: Continuously monitor progress and adapt strategies to ensure goals are met, reflecting technological advancements and market dynamics.

- The national Electrification Plan is connected to the NECP: it supports the NECP by promoting electric vehicles and the necessary infrastructure.

- The plan also aligns with the EU's Green Deal, contributing to the broader objective of climate neutrality by 2050.

- Reduced air - Ministry of Environment and pollution: Improved Energy: Coordinates regulatory and energy policy frameworks air quality due to essential for the adoption and fewer emissions from combustion integration of electric vehicles. Ministry of Infrastructure: engines. Facilitates the development and - Lower Energy Costs: Potential expansion of necessary savings on fuel costs infrastructure, such as EV as electricity can be charging stations, to support cheaper than petrol electromobility.

- Government Agencies: Coordinate policies and regulatory frameworks, ensuring alignment with national and EU directives. - Private Sector Partners: Implement infrastructure projects, manufacture EVs, and develop technologies, supported by government incentives and regulations.

Benefits: - Reduced respiratory and cardiovascular issues from cleaner air. - Enhanced **Transport Options:** More reliable and diverse transportation options with the introduction of electric buses and taxis.

or diesel. Health



Περιφερειακά Χωροταξικά Πλαίσια (ΠΧΠ)   Regional Spatial Frameworks approved: 2020 implementation: not specified  Type: framework  Sector: economy & territorial cohesion  Target area(s): energy infrastructure; renewable energy	The National Regional Spatial Planning Frameworks aim to create a balanced approach to regional development. This includes protecting natural resources, improving infrastructure, and promoting economic growth. In the energy sector, the emphasis is on increasing the share of renewable energy in the regional energy mix and supporting sustainable practices that align with climate change goals.	- Increasing the proportion of renewable energy in the local energy grid Promoting energy efficiency across all sectors Ensuring a sustainable energy supply for the region by reducing greenhouse gas emissions.	- Installation of renewable energy projects such as wind farms, solar parks, and hydropower facilities Promotion of energy-efficient building practices in urban areas Development of energy storage systems and smart grids to manage the variability of renewable energy sources.	- The Greek Regional Spatial Frameworks support the NECP by promoting regional development, renewable energy use, and improvements in energy infrastructure These frameworks support the Climate Law by promoting renewable energy projects, which contribute to the broader goals of reducing emissions and transitioning away from fossil fuels The RES framework indirectly supports the NASCC by integrating sustainable energy sources, which contribute to climate change mitigation and adaptation efforts.	- Lower energy costs for local populations due to increased efficiency Job creation in the renewable energy sector and related industries Improved quality of life through cleaner air and sustainable urban development Long-term benefits in climate resilience and reduced environmental risks	The Greek Ministry of Environment and Energy in collaboration with regional governments and local stakeholders.	Regional authorities, in partnership with public and private investors, particularly in large-scale energy projects, in close collaboration with the Greek Ministry of Environment and Energy.
--	---	---	---	--	---	---	--



Χωροταξίας και Βιώσιμης Ανάπτυξης για Ανανεώσιμες Πηνές Ενέργειας (ΑΠΕ)   Special Spatial Planning and Sustainable Development Framework for Renewable Energy Resources approval: November 2008 implementation: annual (with revisions)  Type: framework Sector: energy Target area(s): renewable energy; sustainability	energy installations into the Greek landscape with respect to environmental and spatial characteristics, promoting sustainable development.	involve: - Efficiently identifying areas suitable for renewable energy projects, - Establishing criteria for site selection that balance energy generation with environmental and aesthetic factors - Aligning with both national and European energy and environmental policies.	actions involve: - Carrying out essential studies - Planning, and delegating tasks to advance renewable energy project - Ensuring compliance with the environmental standards and spatial planning regulations established by the framework.	- The Spatial Planning Framework for RES aligns with the NECP by providing the necessary spatial planning guidelines that enable the deployment of renewable energy infrastructure needed to meet these targets The RES framework indirectly interacts with the Long-Term Strategy 2050 by contributing to long-term greenhouse gas emission reductions through renewable energy infrastructure With the National Adaptation Strategy to Climate Change (NASCC), as the relationship is indirect as the RES framework helps mitigate climate change by integrating sustainable energy sources, which aligns with the NASCC goals of adapting the energy infrastructure to withstand climate impacts.	employment in the renewable energy sector, especially in rural and remote areas.  - Enhanced energy security and reduced energy costs over time due to local energy production.  - Reduced air pollution and carbon emissions, leading to improved public health and environmental benefits.  - Long-term economic benefits from sustainable energy production and potential growth in green technologies.	and Energy.	and Energy - Regulatory Authorities for Energy - Environmental agencies and land use planning authorities
--	---	---	--	--	--	-------------	---



#### Regional level - Eastern Macedonia & Thrace

	A	la sassas sastal	lt	The Deviewed	Discret insured as		0	
Περιφερειακή Στρατηγική για	A comprehensive strategy aimed at	- Increase social	- Implement	The Regional	Direct impact on	Involves local authorities, social	Continued involveme	
την Κοινωνική Ένταξη & την	improving social inclusion and	inclusion	integrated local	Strategy for Social Inclusion and the	reducing poverty and	services, NGOs, and community		social
Καταπολέμηση της Φτώχειας	combating poverty in the region of Eastern Macedonia and Thrace.	- Reduce poverty -Enhance	plans and		improving social inclusion for	groups in both the development	services, NGOs,	and
Regional Strategy for	Eastern Macedonia and Thrace.		initiatives, - Promote	Fight against Poverty has a parallel	inclusion for vulnerable groups.	and implementation phases.	community groups.	
Social Inclusion and the		employment opportunities for	employment	connection to	vuirierable groups.			
Fight against Poverty		vulnerable groups.	among excluded	environmental				
approved: 2015		vuillelable gloups.	groups, and	policies like the				
implementation: annual,			develop social	NECP and NASCC.				
with revisions			economy.	While its primary				
Type: strategy			Coorionity.	focus is on social				
Type. strategy				development and				
Sector: social				poverty reduction,				
ootor: ooolal				these efforts can				
Target area(s): social				indirectly support				
inclusion; poverty reduction				broader sustainability				
, i				and climate goals by				
				promoting inclusion				
				and reducing				
				vulnerability,				
				contributing to the				
				resilience needed for				
				climate adaptation				
				and for the				
				Sustainable				
				Development Goals.				



Σχέδιο Βιώσιμης Αστικής Κινητικότητας Περιφέρειας Ανατολικής Μακεδονίας και Θράκης   Sustainable Urban Mobility Plan Of the Region of Eastern Macedonia and Thrace approved: 2021 implementation: not specified  Type: plan  Sector: transport  Target area(s): mobility; public transport; innovation	The Sustainable Urban Mobility Plan off Region of Eastern Macedonia and Thrace aims to create a sustainable transportation system in urban areas by improving public transportation, promoting non-motorized transport (walking, cycling), and reducing car dependency. It emphasizes accessibility, safety, and environmental sustainability, while incorporating public consultation and collaboration with various stakeholders.	- Promoting public transport Encouraging non-motorized transportation (walking, cycling) Enhancing road safety, particularly for vulnerable groups (disabled, elderly) Reducing private vehicle usage Incorporating new technologies to optimize road network use.	- Developing action plans with specific measures for improving mobility and public transport Implementing awareness and participation campaigns to involve citizens and stakeholders in the decision-making process.	The Greek Sustainable Urban Mobility Plan is a national plan, governed by law N. 4784/2021, which the document explicitly references. This law provides a national framework for the Sustainable Urban Mobility Plan of the Region of Eastern Macedonia and Thrace, ensuring that local and regional mobility plans across the country follow standardized principles. It is directly supporting EU-wide transport and energy policies, particularly the EU Green Deal, by reducing urban transportation emissions and promoting sustainable mobility.	- Improving quality of life through reduced pollution and congestion Enhancing mobility for all, especially for vulnerable groups - Providing safer, cleaner, and more efficient transport options, reducing dependency on private cars Boosting public health by promoting walking and cycling.	- General Directorate of Transport and Communications of the Region of Eastern Macedonia and Thrace.	The responsibility for implementation lies with various stakeholders, including local and regional authorities, such as the General Directorate of Transport and Communications of the Region of Eastern Macedonia and Thrace in coordination with national institutions, especially the Ministry of Infrastructure and Transport.



Προσαρμογής στην Κλιματική Αλλαγή  (Περιφέρεια Ανατολικής Μαγεδονίας και Βράκης) I	al Climate Change Plan (Region of cedonia and Thrace) is co assess climate rand provide strategic or the region to adapt hange.  To reduce the region's vulnerability to climate impacts, enhance resilience, and integrate climate adaptation into all aspects of regional planning.	management, disaster risk reduction, improving energy efficiency, and protecting ecosystems.	Macedonia and Thrace is closely aligned with Greece's National Climate Change Adaptation Strategy (NEPC), the National Adaptation Strategy to Climate	The plan is designed to safeguard the well-being of the population by mitigating the risks associated with climate change, such as extreme temperatures and flooding, which could affect health, livelihoods, and local economies.	The development of the "PeSPKA" involves the Regional Authority of Eastern Macedonia and Thrace in collaboration with the Ministry Ministry of Climate Crisis and Civil Protection of Greece and the Ministry of Environment and Energy.	The Regional Authority of Easter Macedonia and Thrace is responsible for its implementation alongside the Ministry of Climate Crisis and Civil Protection of Greece and the Ministry of Environment and Energy.
--	---	--	---	--	--	---



Περιφέρειακό Χωροταξικό Πλαίσιο Περιφέρειας Ανατολικής Μακεδονίας και Θράκης   Regional Spatial Framework of the Region of Eastern Macedonia and Thrace approved: October 2018 implementation: not specified  Type: framework  Sector: economy & territorial cohesion  Target area(s): energy infrastructure; renewable energy	This framework aims to support the sustainable development of Eastern Macedonia and Thrace through enhanced energy infrastructure, environmental protection, and economic growth. Energy projects are a key component, focusing on the use of the region's rich renewable energy resources and modernizing its energy infrastructure.	- Promote the production and use of renewable energy (RES) across the region Develop geothermal energy potential Expand natural gas networks to improve regional energy security.	- Development of wind and solar farms to increase renewable energy production Geothermal energy exploitation in areas with potential Expansion of natural gas networks to supply more areas with cleaner energy.	The Regional Spatial Framework of the Region of Eastern Macedonia and Thrace is aligned with both Greek and European Union policies on energy and climate change, including:  - The EU's Green Deal.  - The National Energy and Climate Plan (NECP) of Greece  - The Central Regional Spatial Framework, as it is a part of it		The Ministry of Environment and Energy alongside the Region of Eastern Macedonia and Thrace.	The Region of Eastern Macedonia and Thrace, supported by public and private investors.
--	---	---	--	--	--	--	--



#### Local level - Avdira

Ετήσιο Πρόγραμμα Δράσης του Δήμου Αβδήρων   Annual Action Program of the Municipality of Avdira approved: 2022 implementation: 2023 (annual)  Type: action programme  Sector: sustainable development  Target area(s): energy efficiency; renewable energy	The Annual Action Programme of the Municipality of Avdira for 2023 focuses on improving the quality of life through environmental sustainability, enhancing social services, supporting economic growth, and modernizing municipal operations. Key initiatives include energy upgrades for public buildings, waste management improvements, support for vulnerable groups, and infrastructure development.	The plan focuses on sustainable development and aims to: - enhance energy efficiency through building upgrades; - improve waste management to support recycling and reduction of landfill use; - promote the use of electric vehicles within the municipality.	Key actions include: - Energy Upgrades: Retrofitting municipal buildings to improve energy efficiency Electric Mobility: Procuring electric vehicles and installing charging stations as part of the national effort to promote electric mobility Waste Management: Implementation of advanced waste management systems to improve recycling rates and manage	The Annual Action Program of the Municipality of Avdira initiatives for building retrofits and electric vehicle usage are directly in support of NECP's objectives to reduce carbon emissions and promote renewable energy use in Greece.	- Reduce energy costs for public buildings, thus saving municipal funds Decrease pollution and improve air quality through reduced combustion engine use Enhance the quality of life by improving environmental standards and public health.	The development of these actions is led by the Economic Committee of Avdira and supported by various technical departments within the municipality.	The municipality's technical services department will implement the energy and waste management initiatives, while procurement and ongoing maintenance of electric vehicles will be managed by the municipal transport services.
			systems to improve recycling				







Empowering local and regional authorities to design clean energy transition plans

### **Contact us:**

info@entrack-project.eu www.entrack-project.eu

























