



0268 – InSmart: Towards the New DSO Potential Roles in Low Carbon Future and Integrated Frameworks for Smart Cities

Vera Nunes
EDP Distribuição
Portugal
Vera.nunes@edp.pt

João Pedro Gouveia
CENSE, FCT – Nova
Portugal
jplg@fct.unl.pt

Ana M. Rodrigues
EDP Distribuição –
Portugal
Anamargarida.rodrigues@edp.pt

Tiago Simão
EDP Distribuição -
Portugal
Tiagofilipe.simao@edp.pt

Introduction

- **Integrated framework** of the **DSO** with the smart cities of the future
- Cities represent **75% of EU energy consumption** and CO2 emissions
- Identification of measures to meet smart city **sustainability targets**

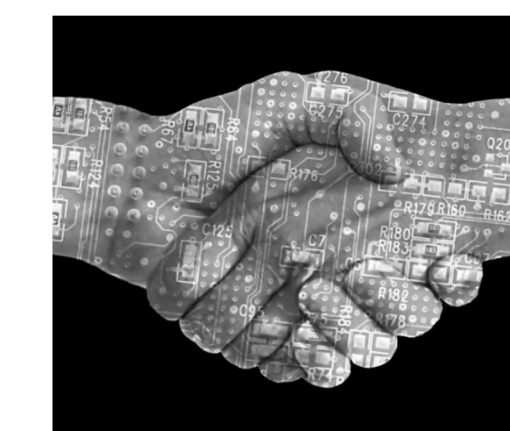
Methodological process



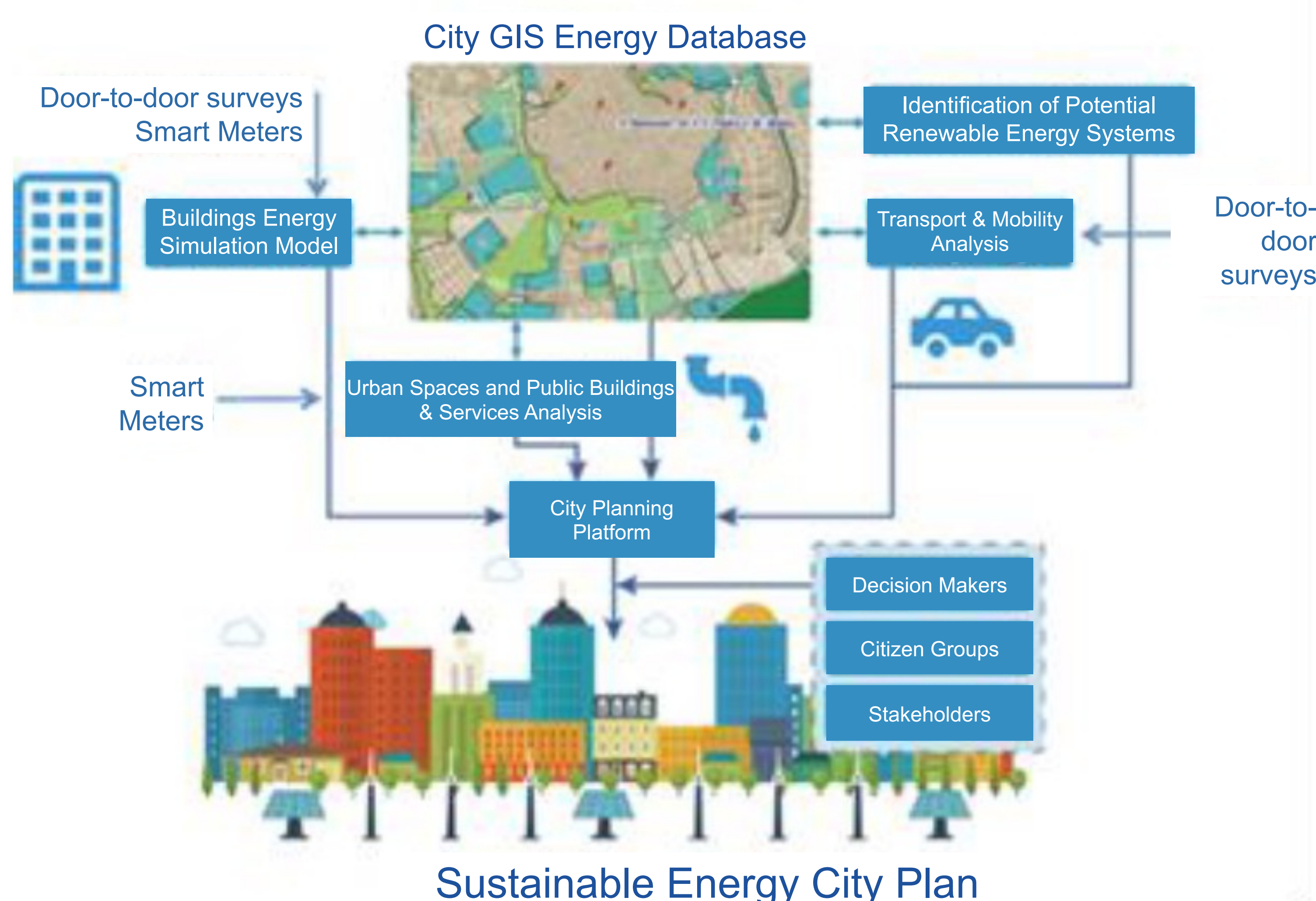
From solar energy potential to DSO grid integration



From consumer segmentation to demand management



Customer relationship manager



Mid-term implementation plan



Public Lighting: 100 % LED technology



Credit schemes for building renovation (micro-generation) reviewed by city council



- Bike lanes infrastructure expansion
- Restriction of traffic (speed, circulation)
- Decarbonisation of bus fleet

Conclusion

- **InSmart** project results provided key **inputs** for the **2030 Implementation plans**
- **DSO** as data manager and market facilitator **enabler of smarter cities** of the future
- **Low carbon** future smart cities will rely on **DSOs'** capacity to **orchestrate diverse energy resources**