



In search of viable IoT enabled Business Models

SHAR-Q project www.sharqproject.eu





EU Vice-President Maros Šefčovič

"Renewables, decentralized energy, digitalization and smart grids will be the backbone of the new modern economy in Europe."

Energy Union is "Deepest Transformation Energy Systems Since Industrial Revolution"

IoT **Business models** in Energy **Smart Grids**



The 5 Ds of the Energy Transition

DECENTRALISATION DECARBONISATION DEMOCRATISATION DEREGULATION DIGITALISATION





Energy System in Transition

- 1 Decentralised and smarter system
- 2 Low carbon energy generation
- 3 New modes and levels of interaction and management
- 4 New transmission, generation and balancing technologies and services





DILO PROSUMER perspective



DILO GRID OPERATOR perspective

CONTACT: ATOS Spain S.A. / Juan Rico (Project Coordinator Tel.: 0034–946 662 027 / Email: juan.rico@atos.net This Project has received funding from the European Union's Horizon 2020 research and innovation Programme under grant agreement No 636427 LCE-01-2016/731285/SHAR-Q

Aligning BUSINESS MODELS and the policy objectives

EU objectives 2030:

- a binding EU target of at least a 40% reduction in greenhouse gas emissions by 2030, compared to 1990
- ✤ a binding target of at least 27% of renewable energy in the EU
- an energy efficiency increase of at least 27%, to be reviewed by
 2020 with the potential to raise the target to 30% by 2030
- the completion of the internal energy market by reaching an electricity interconnection target of 15% between EU countries by 2030, and pushing forward important infrastructure projects.





P2P, Social Energy, Energy Efficiency, Decarbonisation, Smart Building Indicators, Self Consumption

Consumer Positioning Progression



Organic needs Public and Private sector gaps

- Facilitate: Public sector smart contract to enable municipal solar or other RES DER, while providing energy poverty matching with producers and other donors;
- IoT services: Verification and enabling P2P transactions; data valorisation;
- Regional Resiliency. The internal energy market where market makers (network operators) will have to manage an increasing number of interactions with market players while ensuring adequacy and security
- Unlock: Energy Efficiency ESCO models savings and systems performance verification for Municipal level systems;
- Unlock: Location based grid charging / within local grid/neighbourhood grid or microgrid;
- Partnerships and collaborations. Scale!

WEB 3.0 or FOMO







Four types of IoT Business models:

1. Anything as a Services 2. Multi Sided Market

3. Partnerships / Barter /Reciprocity

4. Freemium

PUBLIC and PRIVATE sectors delta

PUBLIC

PRIVATE

-Challenges procurement
-Innovation solutions risk
-DEMO scaling up
-Legacy systems locked in
platforms

-Short paybacks-Scale ups vs Customisation-Hybrid: Complexity of PPP



Session: "Novel Business Models for Smart Cities", June 5^{th} , 2018

References

 IoT Business Models
 Framework
 deliverable

EUROPEAN INTERNET OF THINGS INNOVATION ECOSYSTEM

Drive new collaborative IoT business models and market developments to foster the European IoT digital economy in a global perspective, through the creation of an interoperable and secure ecosystem of established and emerging IoT solutions and approaches.

2. IoT-EPI.eu

Cross-Cutting Business Models for IoT study, 2017
 AIOTI white papers from WGs
 European-iot-pilots.eu

UNIFY - IoT





Thank you!



Enercoutim

www.enercoutim.eu Natalie Samovich n.samovich@enercoutim.eu

