



# STORY

**ENERGY SERVICES INNOVATION AT THE EDGES OF  
DISTRIBUTION GRIDS – A BUSINESS MODEL PERSPECTIVE**

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# OUTLINE

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- Context and problem statement
- Method and analytical framework
- Results
- Conclusions

# CONTEXT & PROBLEM STATEMENT

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- Future energy system brings new opportunities to **create value**
  - Decentralized, active demand, advanced metering, micro-grid, off-grid...
- ...how can businesses contribute to value creation and also **capture that value?**
  - Mapping of emerging business model innovation

## ■ Data collection

- Cross-section of European researchers and entrepreneurs reported on emerging business innovation that they are aware of; reporting template based on adapted Business model Canvas of Osterwalder & Pigneur (2010)
- Conversion of raw data into ontological business model descriptions

## ■ Data analysis

- Dimension 1: value chain integration
- Dimension 2: customer segments

# METHOD – REPORTING TEMPLATE

- Business passport
- Business model canvas
- Market and regulatory context

<b>Opportunity</b>  <b>What internal or external events triggered our model?</b>	<b>TARGET</b> <b>Who is the customer?</b>		
	<b>VALUE MODEL</b>  What value proposition do we offer?	<b>VALUE CHAIN</b>  Configuration of assets, processes, activities and competencies to deliver the customer value. Position in the value network.	<b>PROFIT MODEL</b>  Revenue source(s). Cost structure and target margins.

# METHOD – DATA COLLECTED

## ■ Home Energy Management Systems



## ■ Aggregators/RES coop



## ■ Self-generation



## ■ Batteries



## ■ Market facilitation



## ■ Others



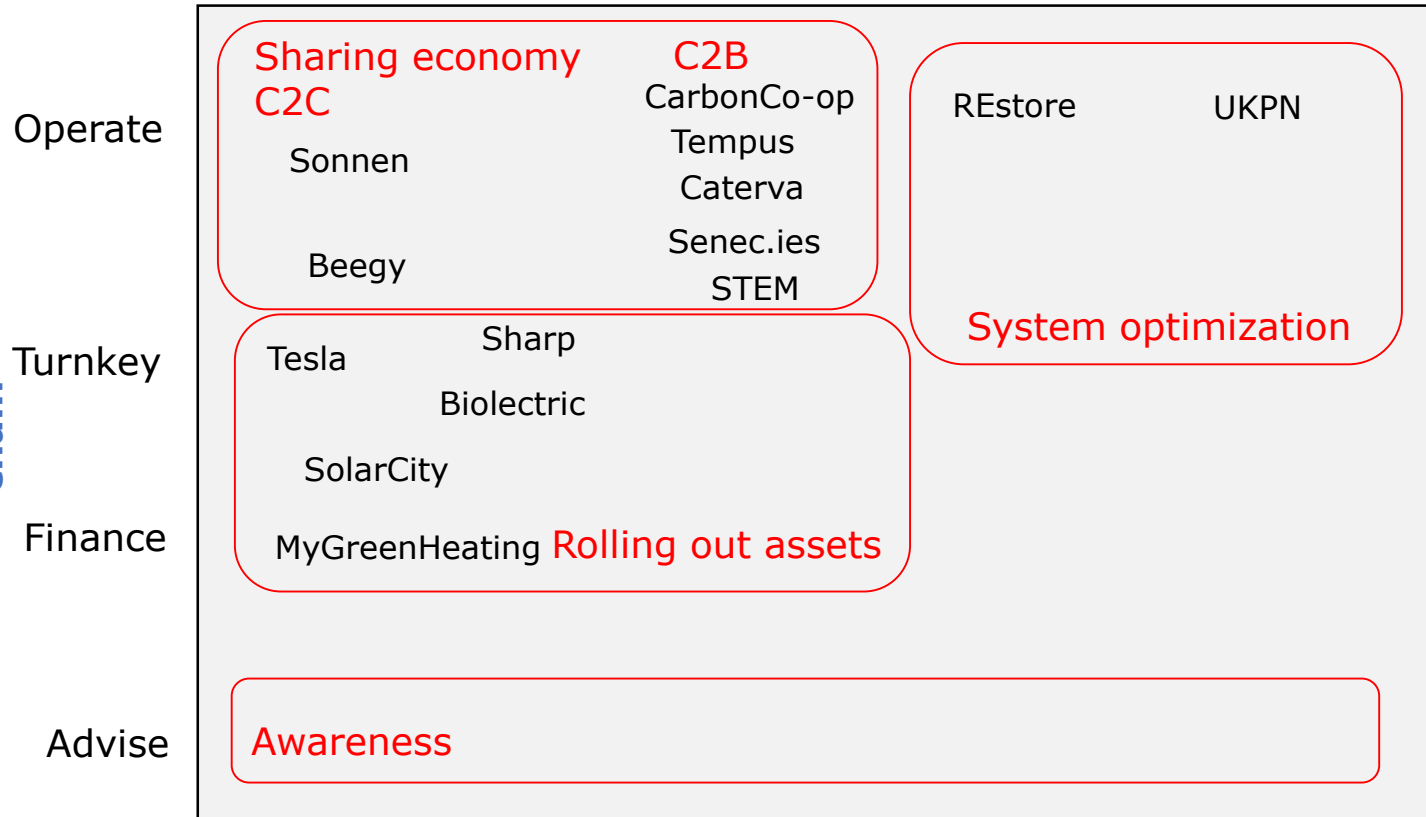
# METHOD – ANALYTICAL FRAME

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- Dimension 1: Value chain integration
  - Advise
  - Finance
  - Turnkey
  - Operate
- Dimension 2: Customer segments serviced
  - Business to consumer
  - Business to business
  - Mixed

# RESULTS - MAPPING

## Archetype 1: Integration of value chain



B2C for end customer services

B2C & B2B

B2B for commercial services & for regulated services

## Archetype 2: customer segments serviced



## RESULTS – OBSERVATIONS\*

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- There is a potential gap for energy service companies advising customers about the value of e.g. storage systems.
- The majority of businesses focus on deploying assets through selling turnkey solutions and/or by financing the assets to remove the barrier of the significant upfront cost. The deployment is strongly focused to the B2C segment.
- Several business models embrace the sharing economy concept allowing consumer to offer services to other consumers (C2C) or to market players (C2B).
- There are few companies that are oriented towards the B2B segment for optimizing the energy system.

\*More elaborate analysis on an expanded dataset is necessary to confirm these observations.

# CONCLUSIONS

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- Business model innovation in downstream energy services is emerging and can offer inspiration for further innovation; policy makers may wish to take note of and spread the best practices
- Not all is bright and shiny, further research is necessary to confirm or counter the current preliminary conclusions and to understand for instance why business are absent in some areas of the mapping in this work



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