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# Definition of On-Bill Schemes in the European Context

A snapshot of the main issues

15/10/20 – Social Watt Workshop – Vincenzo Bianco – University of Genoa

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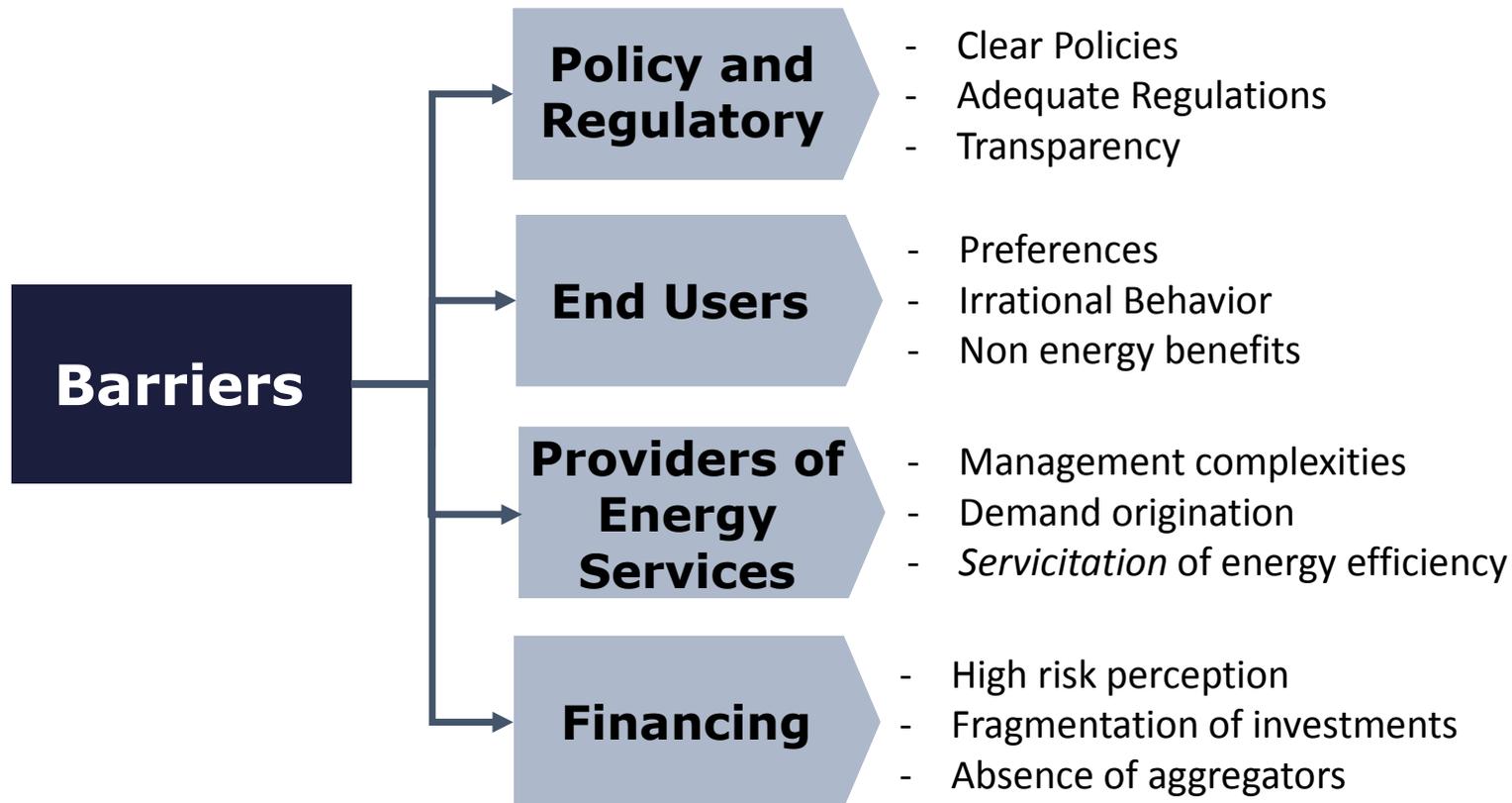
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# INDEX

- 1** **General Barriers to Energy Efficiency**
- 2** Barriers to the implementation of OBS
- 3** Implications for utilities
- 4** Possible Business Models

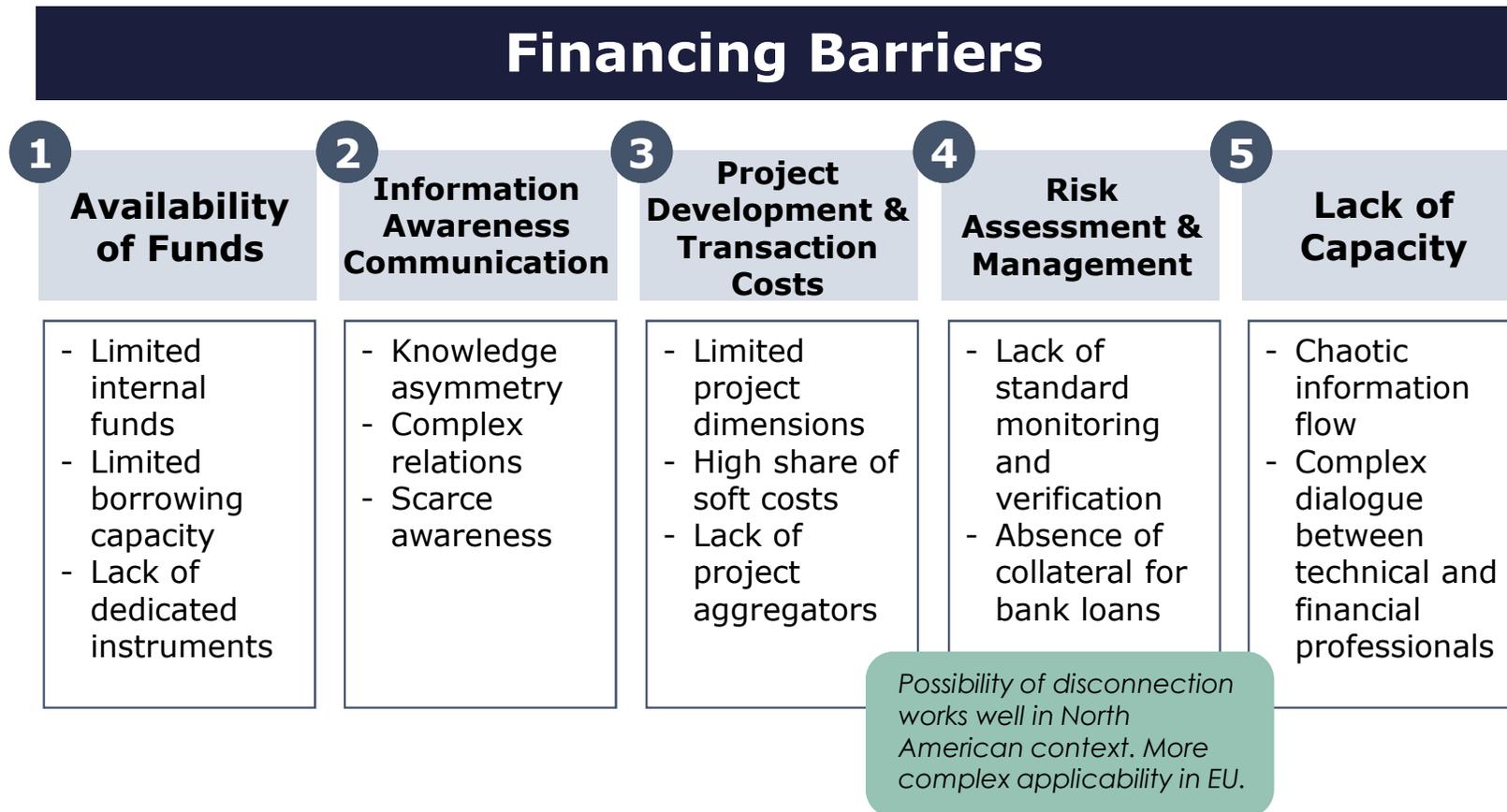
# Barriers to the Implementation of Energy Efficiency Measures in the Residential Sector

A set of barriers is hampering the implementation of energy efficiency measures



# ● A Focus on the Financial Barriers

Addressing financing barriers is fundamental to attract private capital in the process

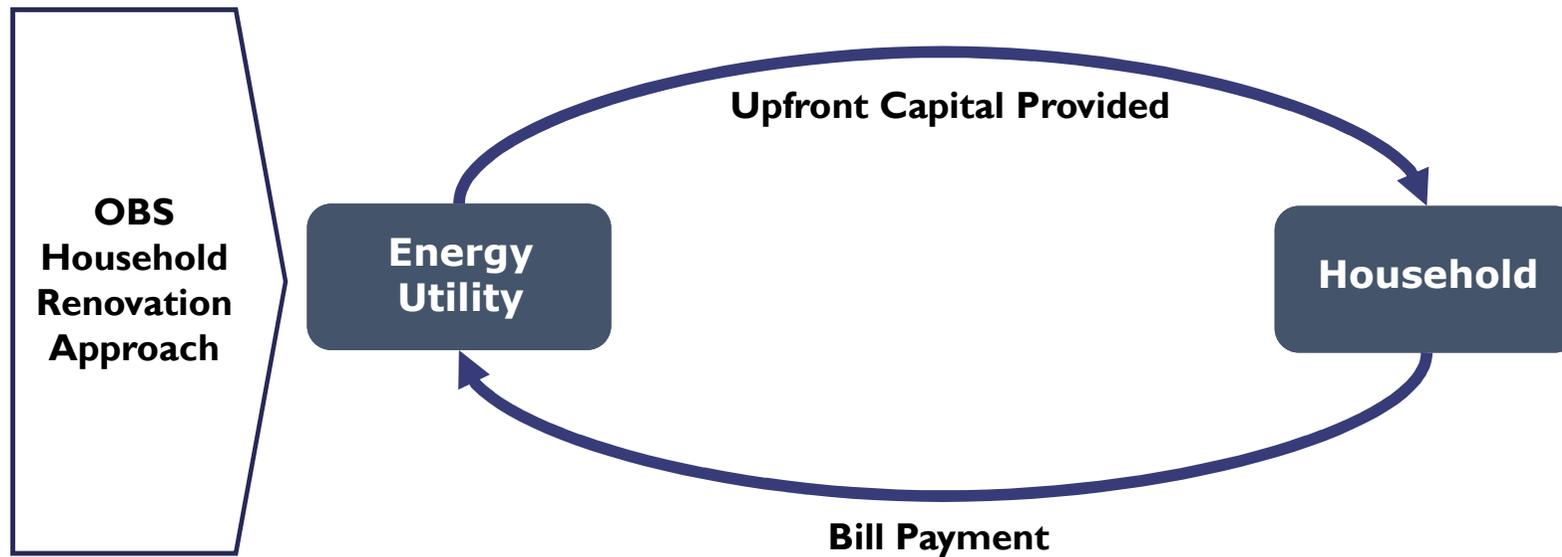


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# ● Basic Framework of an on-bill scheme

OBS can support the renovation of existing buildings



# —● Main Barriers in the European Context

European context presents its specificity with respect to North America

## Barriers for OBF Schemes

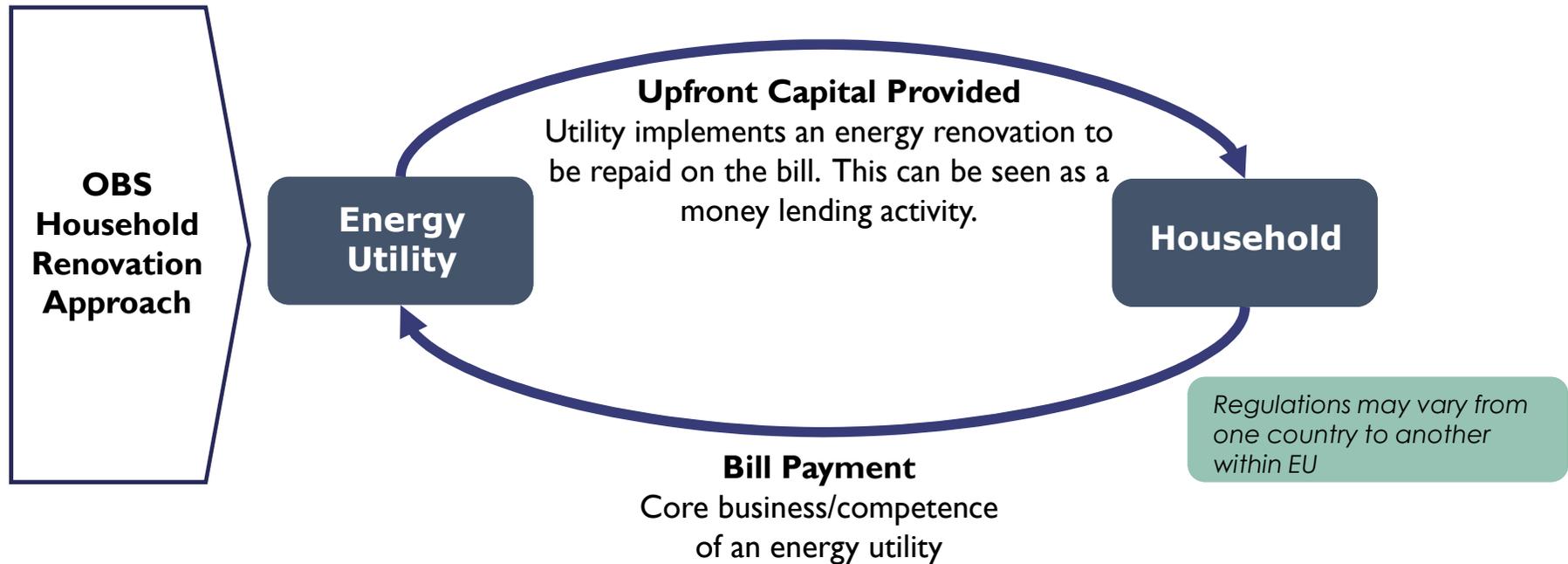
- 1 Regulatory Barriers**  
Financial sector is one of the most regulated activity
- 2 Customer Related Barriers**  
Divergent interests between owners and tenants
- 3 Utilities Related Barriers**  
Relevant program management and strategic issues

# Possible Issues with Financial Regulation



OBS may conflict with the financial regulation

**On-bill schemes comprise the collection of payments from the utilities, which is one of the business core competences, but they also include the “lending” of money which is a core competence of financial institutions.**



## ● Divergent interests between owners and tenants

Split incentives are an open issue and have a relevant role in hampering energy renovations

### Split Incentives

#### Energy Related Split Incentives

- Tenant in charge of paying bills
- Tenant unable to implement EE interventions
- Owner not interested in EE

#### Usage Related Split Incentives

- Tenant not in charge of paying energy bills
- Tenant not interested in reducing energy consumption
- EE investments by the owner discouraged

#### Multi Tenants/Owners Split Incentives

- Situation typical for multifamily buildings
- Collective decisions based on qualified majority
- High level of conflict

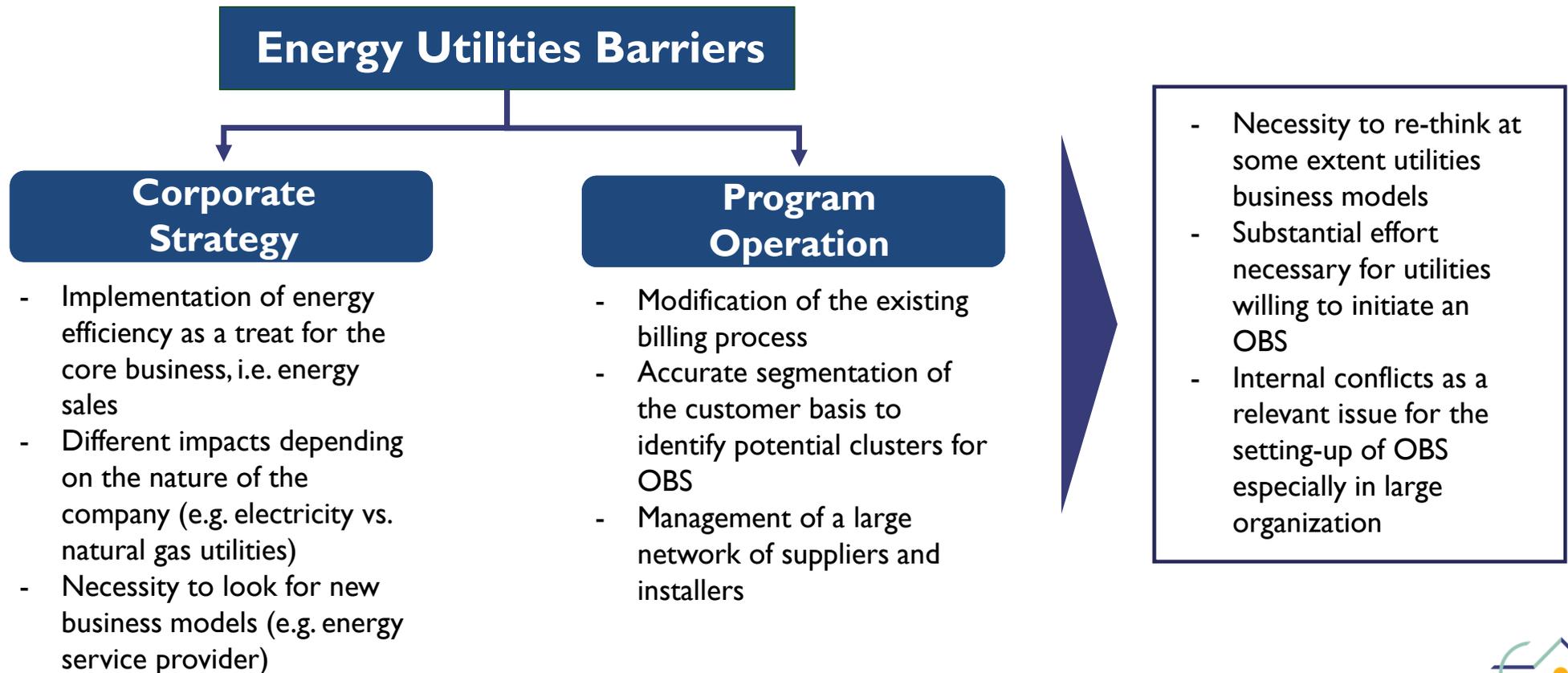
#### Temporal Split Incentives

- Long pay-back period in relevant EE investments
- Probability of property change in the long period
- Impact of property uncertainty on EE implementation

- Split incentives represent one of the main issue in the implementation of EE measures in the residential sector
- It is necessary to set-up a mechanism which provide incentives to both client and tenants
- Behavioral changes and increased awareness of sustainability issues can soften this issue

# Strategic and Operational Issues Related to Energy Utilities

Different barriers hampering the scaling-up of OBS are related to energy utilities



# INDEX

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- 4 Possible Business Models

# ● Implications for utilities

Different kind of utilities are affected in a different way from the identified barriers

## Utility Categories

### Power Utilities

- Possibility to accelerate electrification of consumption
- Integration with other service
- Increase of client loyalty

### Natural Gas Utilities

- Negative impact on energy sales
- Opportunity to review the business model
- Possibility to leverage on the existing customer basis

### District Heating Utilities

- Opportunity to improve the operation (e.g. avoid the revamping of the plant)
- Optimization of the offered services
- Connection of more users

### Retailers

- Possibility to sell EE services
- Leveraging on the existing customer basis
- Specialization on particular market niches

### DSOs

- Possibility to act as facilitators, e.g. in collecting bill payments
- Possible active role in reaching final users, depending on country regulations



# INDEX

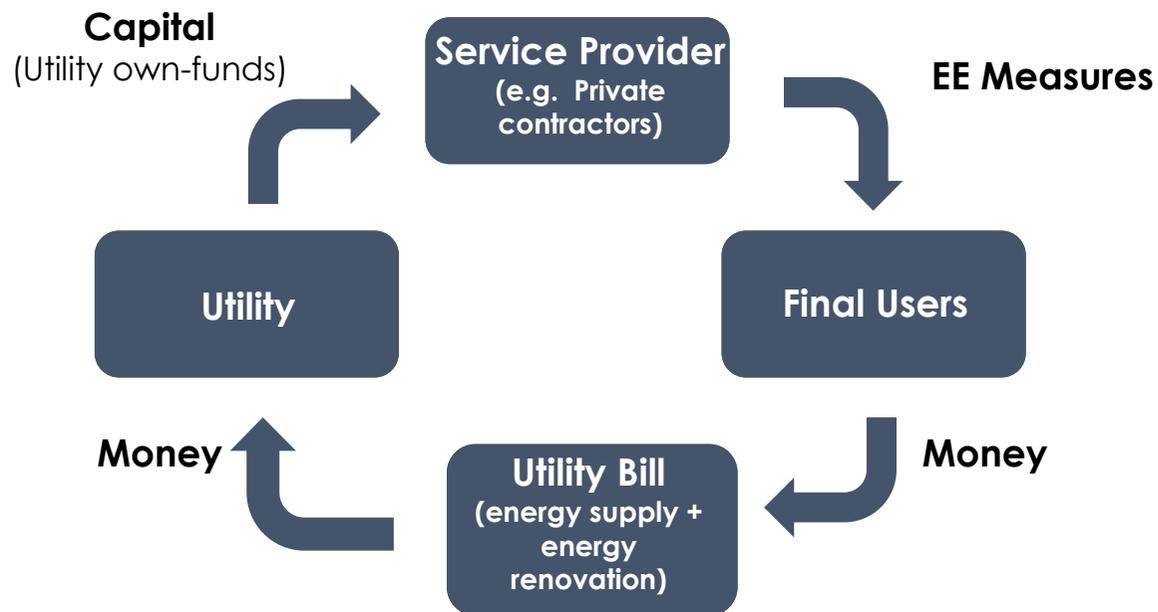
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## ● Conceptual Business Models developed in ROB

Acronym	Short Description
<b>OBF</b>	Standard on-bill financing model
<b>OBFEP</b>	On-bill financing model targeting vulnerable energy consumers
<b>OBR</b>	Standard on-bill repayment with two variants: <ul style="list-style-type: none"> <li>● Deposit on a utility's escrow account</li> <li>● Works paid directly by the financial institutions Involved</li> </ul>
<b>OBRSPV</b>	On-bill repayment scheme operated through a SPV
<b>OBRM</b>	On-bill repayment scheme operated by a master-servicer
<b>OBRMS</b>	On-bill repayment scheme operated by a master-servicer under/with the control of a state agency
<b>OBSI</b>	On-bill scheme, i.e. both OBF and/or OBR, for supporting Valued Added Energy Services (VAES)
<b>DSOF</b>	On-bill scheme, i.e. both OBF and/or OBR, with DSO adding as a facilitator
<b>DSOA</b>	On-bill scheme, i.e. both OBF and/or OBR, with DSO actively engaged in supporting EE measures.

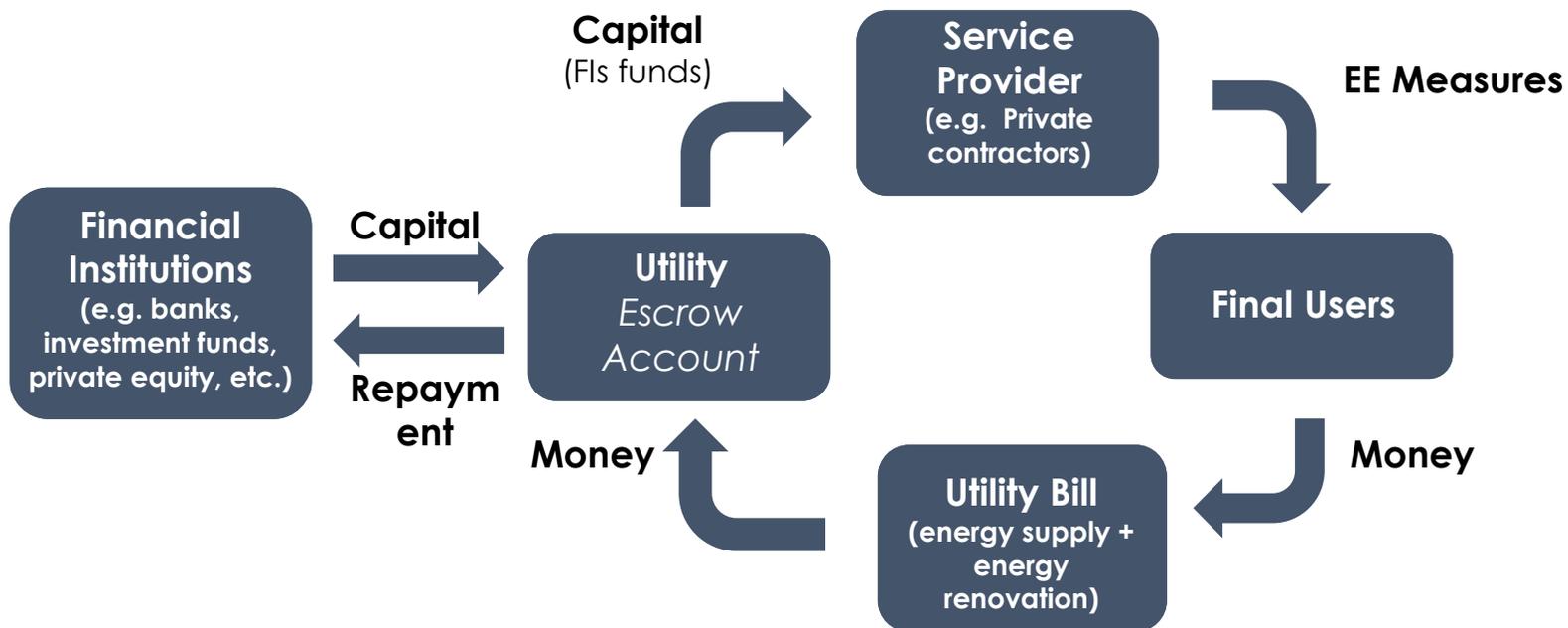
# Standard on-bill financing (OBF)

Exemplary scheme of the business model for a standard OBF



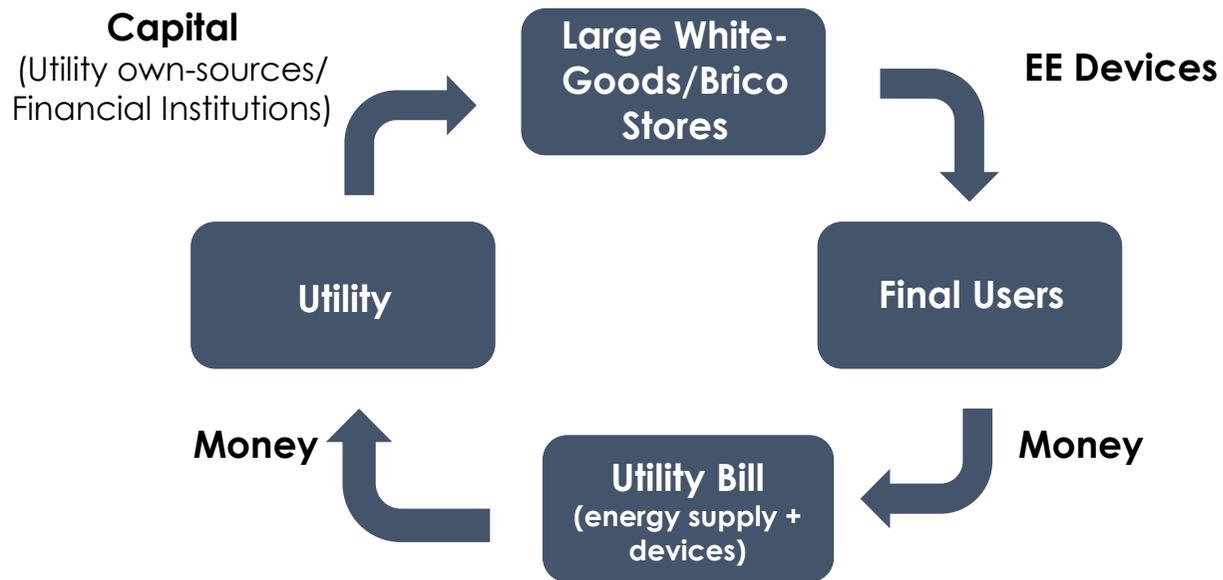
# Standard on-bill repayment model (OBR)

Exemplary scheme of the business model for a standard OBR with escrow account



# ● OBF/OBR Targeting Energy Poor Customers

Exemplary scheme of the business model for a OBF targeting energy poor customers



# Partners



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