Empowered consumer in the energy market & the role of innovative retailers

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EURELECTRIC represents the EU electricity industry – all across the electricity value chain
...and the Paris Agreement will probably speed up that process

- Art. 2(1a) speaks of “well below 2°C” and “to pursue efforts to limit [the increase] to 1.5°C”
- The Provisions in the Paris Agreement make it probable that the EU’s GHG ambition will be updated before 2030
Low-carbon technologies represent 56% of EU electricity generation.

- Low-carbon technologies contribute to more than 50% of EU power generation since 2012.
- Decreasing share of fossil fuels in the power mix and a decrease in demand are contributing to a decline in the CO₂ emissions in the power sector.

Source: EURELECTRIC
The DECARBONISATION challenge comes in combination with further DECENTRALISATION and DIGITALISATION as key drivers for new business models.
Self-consumption models will drive innovation

- Distributed generation
  - When to turn on equipment? Where to get the energy from? Grid? Production? Battery?
- Energy management system
  - Buy from the grid now to consume later?
  - Storage
- House equipment
  - How does my house interact with the grid (e.g. DSM)?
- Electric grid
  - How does the electric installation support EV charging?
- Electric mobility
- Consume, store or sell the production?
Retailers are bringing to customers the technologies that will be part of the new power system
Retail pricing needs to be modernized for a sustainable power system transition

The “WEDGE”

The “MISMATCH”

Volumetric vs. Fixed

Source: EURELECTRIC infographic “Making sense of your electricity bill”, February 2016
POLICY SUPPORT COSTS WEIGHT ON THE BILL

MISMATCH BETWEEN THE NATURE OF REGULATED COSTS & THE WAY THEY ARE CHARGED

(MOSTLY) PAID IN

ACTUAL COSTS IN

*T2014 data, source: EURELECTRIC
What is the impact on consumer choices and overall system costs?
The WEDGE: Reduce taxes & levies in consumers’ bills to increase the competitiveness of electricity vs fossil fuels

Example of Spain

Source: Endesa, 2016
The mispricing created by ‘WEDGE’ and the ‘MISMATCH’ is generating system inefficiencies

- Diminished flexibility potential
- Social welfare losses due to distorted investment signals
- Electrification at risk
- Further retail price increases
- Diminishing flexibility potential

Dead weight loss consumers
Dead weight loss producers
Supply (price)
Demand
So how do we get there?

Clean up the bill: Bring down policy support costs in the electricity bill and finance decarbonisation in a less distortive way

Improve retail price structures: Ensure that ‘regulated charges’ better reflect the underlying costs

Value electricity injected to the grid by prosumers at its real value on a level playing field
Telco trend in the energy sector?

On the longer term, will electricity follow the telco/ICT trend in price structures?

Illustrative example:

<table>
<thead>
<tr>
<th>Tier 1: Fast</th>
<th>Tier 2: Faster</th>
<th>Tier 3: Fastest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Good for fast online gaming, large file transfers</td>
<td>Good for downloading HD video, large files</td>
<td>Good for multiple users</td>
</tr>
<tr>
<td>▼ Download up to 15 Mbps</td>
<td>▼ Download up to 25 Mbps</td>
<td>▼ Download up to 50 Mbps</td>
</tr>
<tr>
<td>▲ Upload up to 5 Mbps</td>
<td>▲ Upload up to 25 Mbps</td>
<td>▲ Upload up to 20 Mbps</td>
</tr>
<tr>
<td>15 Mbps</td>
<td>25 Mbps</td>
<td>50 Mbps</td>
</tr>
<tr>
<td>$49.99/month</td>
<td>$64.99/month</td>
<td>$139.95/month</td>
</tr>
</tbody>
</table>

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Thank you for your attention!