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The changing role of Utilities in the near future

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European Commission
Horizon 2020
European Union funding
for Research & Innovation

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 657672

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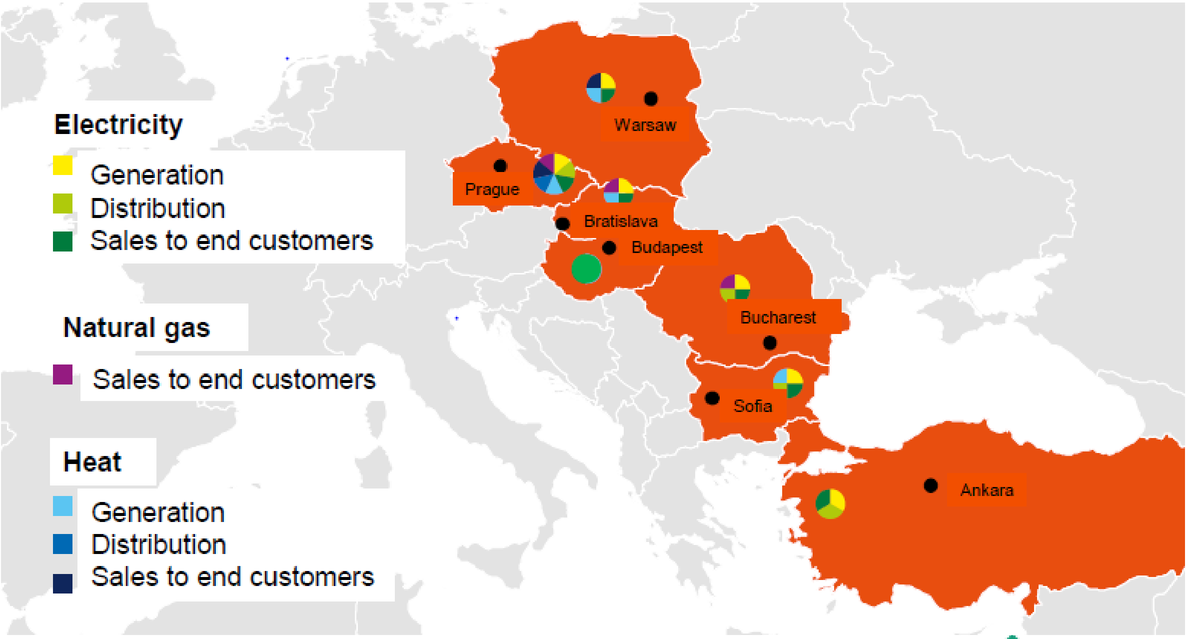
My perspective

- **Working** for CEZ / CEZ Hungary
- **Doing** Electricity Sales / Trading / Risk Management on liberalized B2B market
- **Living** in Hungary

→ My background defines (and limits) my opinion/imagination about our role



The changing role of the sales company

The main task of an electricity sales company is to manage the following equation:

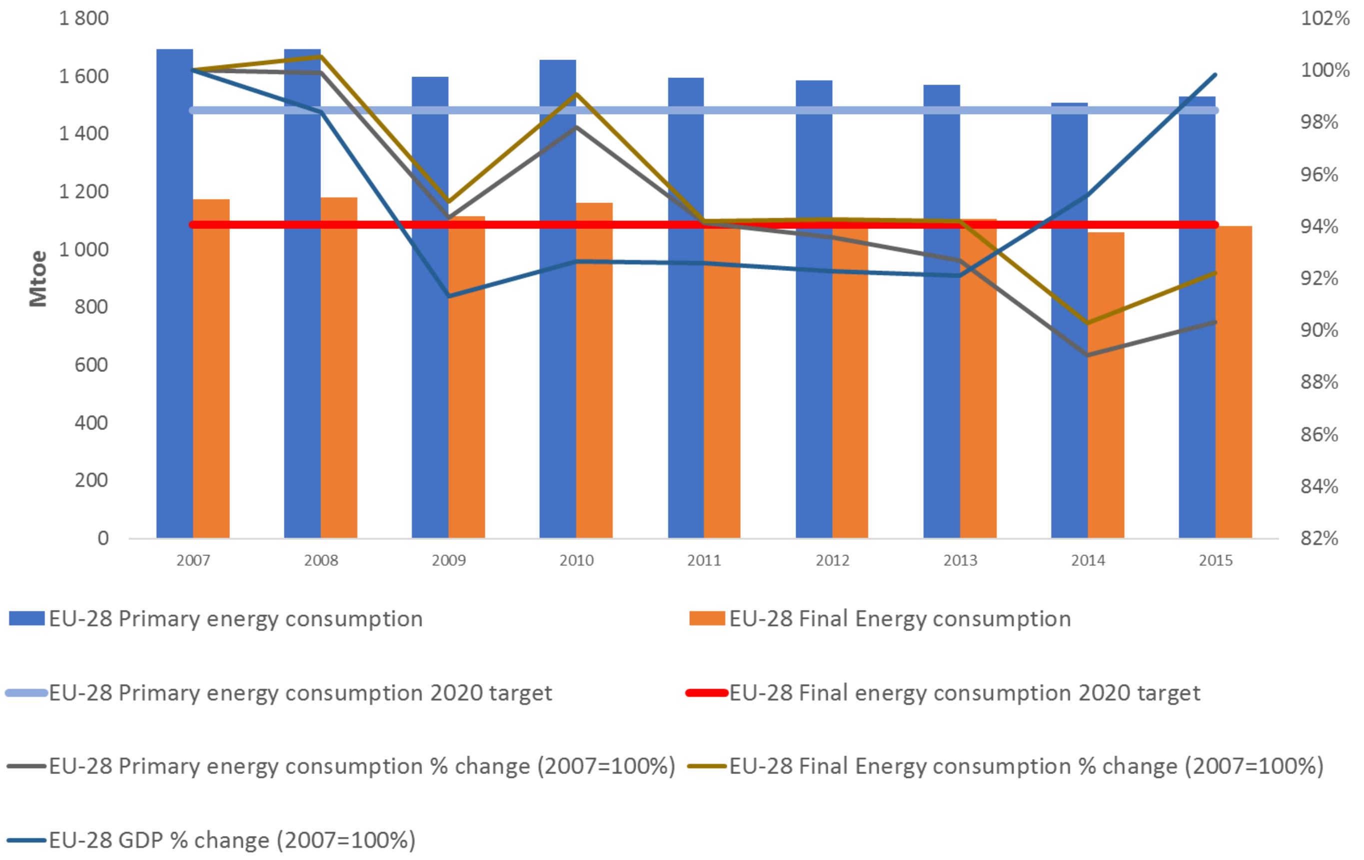
kWh x unit price = electricity cost

	Past	Present	Future
B2B	unit price (fix)	unit price / risk management (structured products)	risk management and consumption / load shaping
B2C	unit price (fix)	unit price (fix)	unit price (fix) & *consumption*

- Utilities basically never considered to be a credible partner in managing consumption (opposing interest)
- When will the change in the B2B market be adapted in the B2C segment?

Total cost of electricity = kWh x unit price + DSR revenue

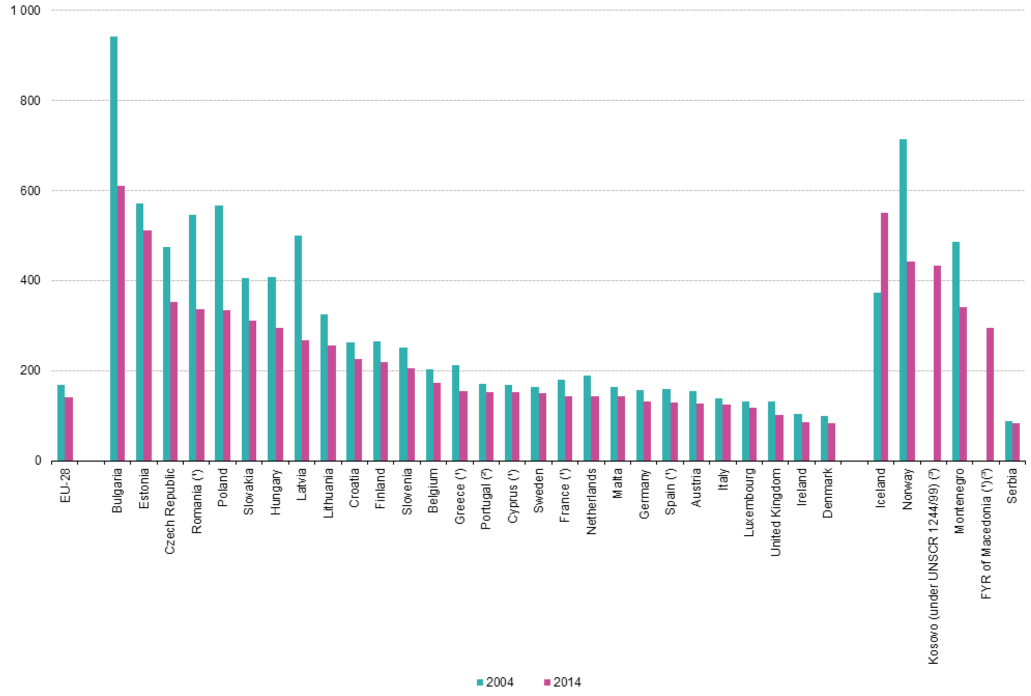
2020 – Where are we?



- With GDP (real) being a key driver of energy consumption, EU 2020 consumption targets are basically met due to he economic crisis
- Now, with GDP back on track we will face a challenging finish
- Energy policy should ensure that wealth is converted in energy efficiency (replacement by more efficient technologies) instead of additional new devices

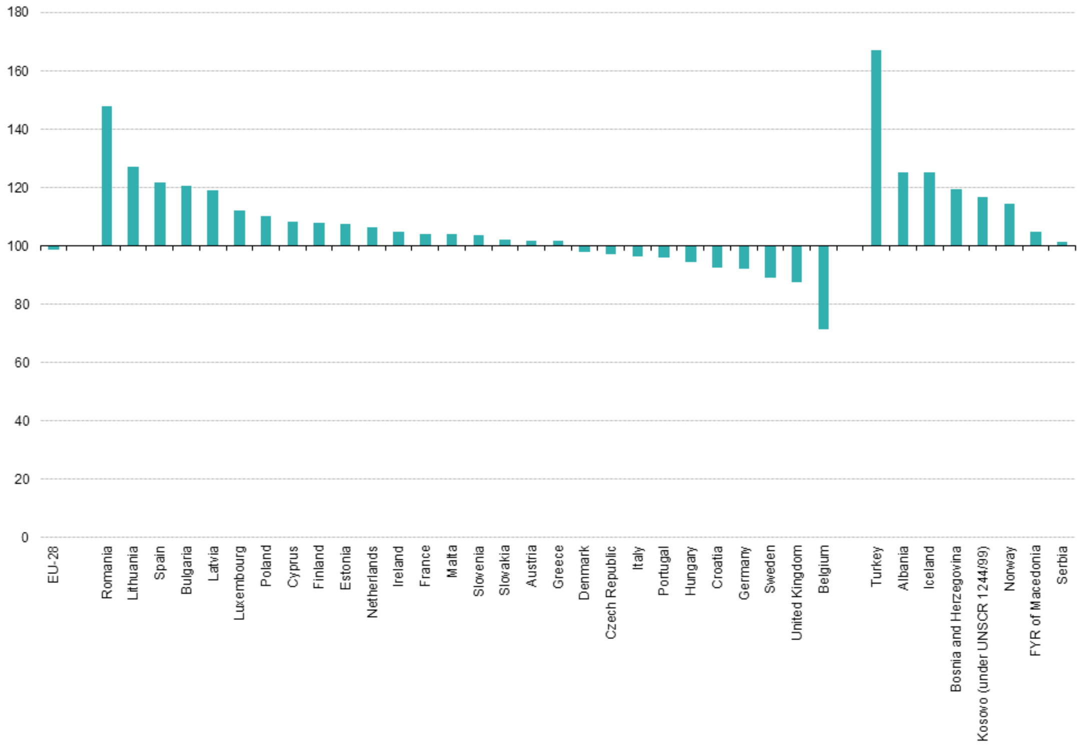
A closer look

Energy intensity in Europe (kgoe / 1000 EUR of GDP)



(1) 2014: provisional.
(2) 2014: estimate.
(3) 2004: not available.
Source: Eurostat (online data code: tsdec360)

Household electricity consumption 2014 vs. 2004 (2004 = 100%)



Source: Eurostat (online data code: tsdpc310)

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The winter package

Main target: Clean energy for all Europeans

→ **Enabling the integration of more weather dependent renewables**

- Smart World
- Small businesses and households participating in DSR also via „aggregators”
- Dynamic pricing
- Local energy communities
- Storage
- EV

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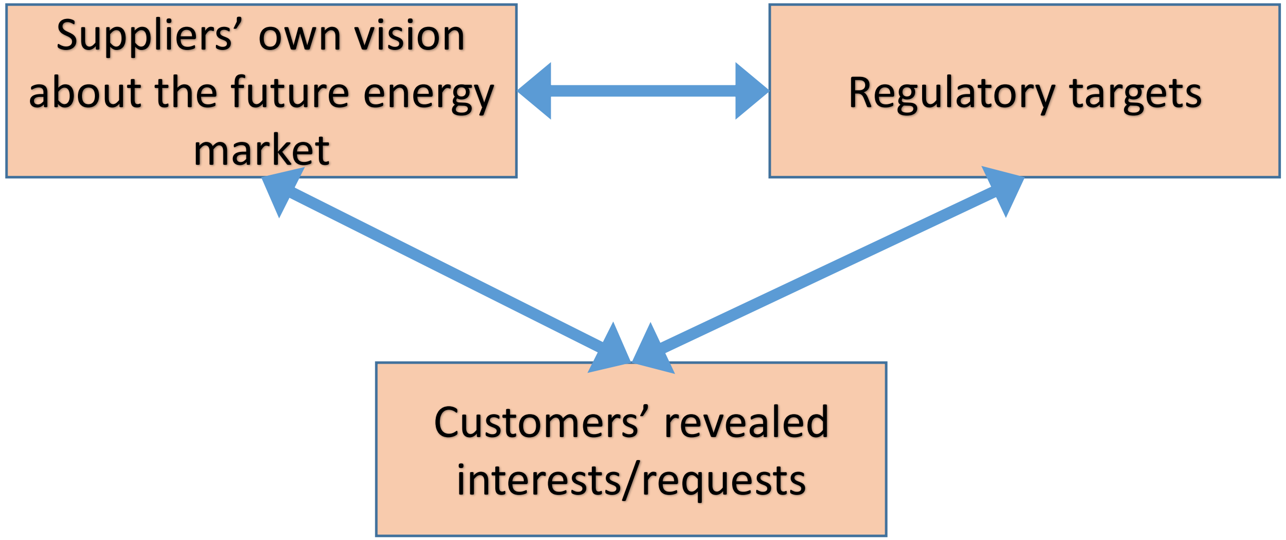
How do we shape the future?



- The difference in views in not that much about the building blocks/content, but rather about timing and level of penetration

- Customers (especially households) have limited information about technology, regulation, etc.

Suppliers shape their strategy considering all these factors

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Summary

The future utility will (have to)

- Manage a lot of data which can be shared/used as information/input for different services (e.g. security/failure alerts; comparisons (!!!GDPR!!!); demand response)
- Face customers with an EV (demand response customer), PV and own storage
- Key question: timing and penetration → Do we have a business case? (← regulation!)

→Utilities' role will not change significantly in the **NEAR** future (looking at the mass), but they need to become capable of servicing the niche market (as this could be **the** market in the (not so) **FAR** future)

Some open questions

- Is it OK to consume more if locally offset by renewable generation?
- How do we manage situations of negative prices when we should request customers to consume more?
- Are we doing the maths – Is it possible at all? : lifetime cost of producing and operating a smart meter vs. savings enabled by the technology
- …

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Thank you

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Data sources:

- *Eurostat publications*

Thank you

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Project reference: 657672 (H2020)

Type of action: CSA

Topic: The human factor in the energy system (LCE-20-2014)

Duration: May 2015- April 2017 (24 months)