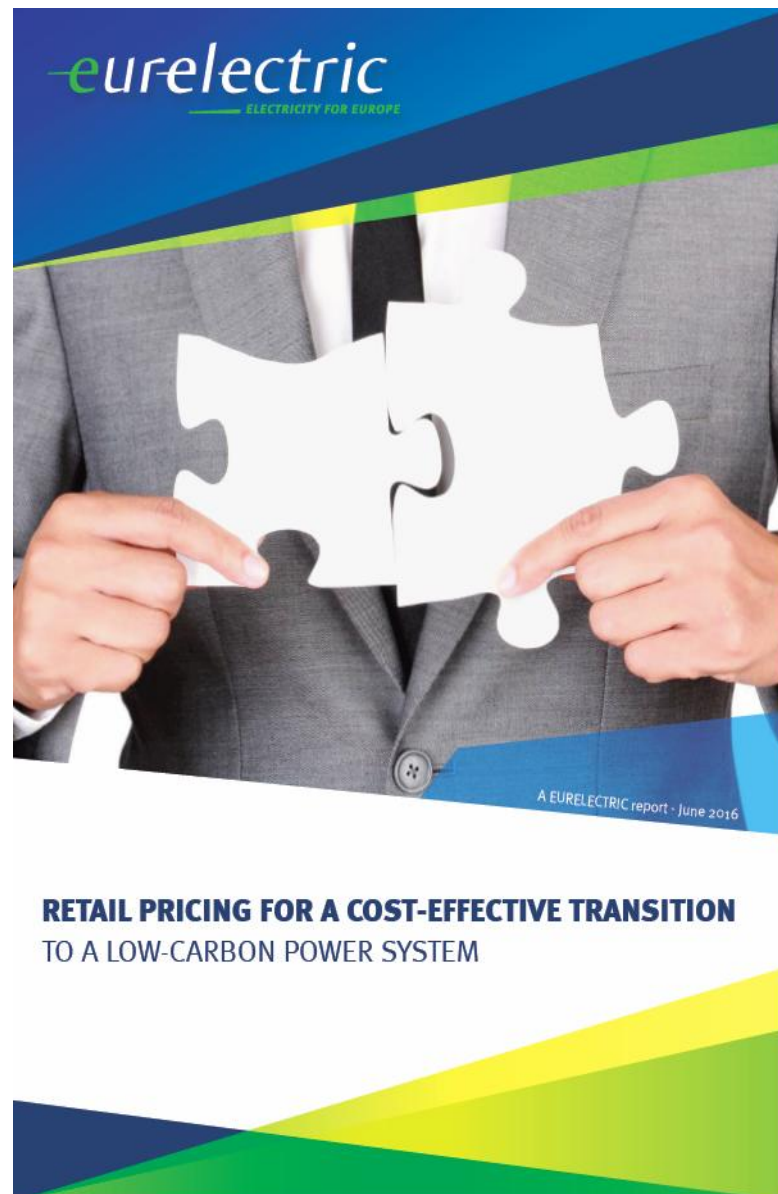


# Empowered consumer in the energy market & the role of innovative retailers

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Manager Generation, Climate &  
Environment, EURELECTRIC

Hong Kong, 23<sup>rd</sup> November 2016



# EURELECTRIC represents the EU electricity industry – all across the electricity value chain

**ENERGY POLICY  
& GENERATION**



**ENVIRONMENT  
& SUSTAINABLE  
DEVELOPMENT**



**MARKETS**



**DISTRIBUTION  
NETWORKS**



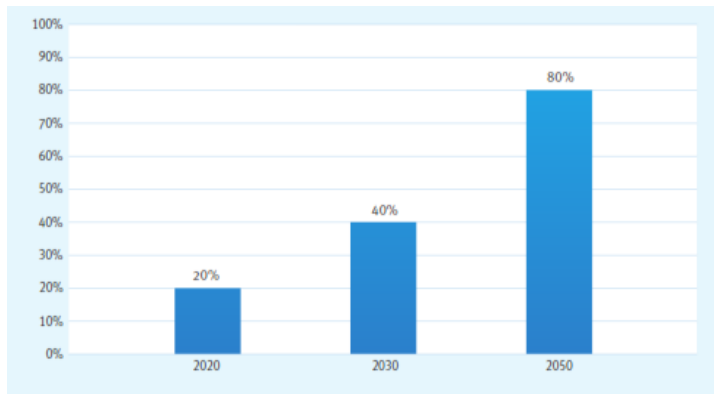
**RETAIL  
CUSTOMERS**



# The European decarbonisation agenda brings a new reality to the European power system...

## Long term EU 2050 Roadmap

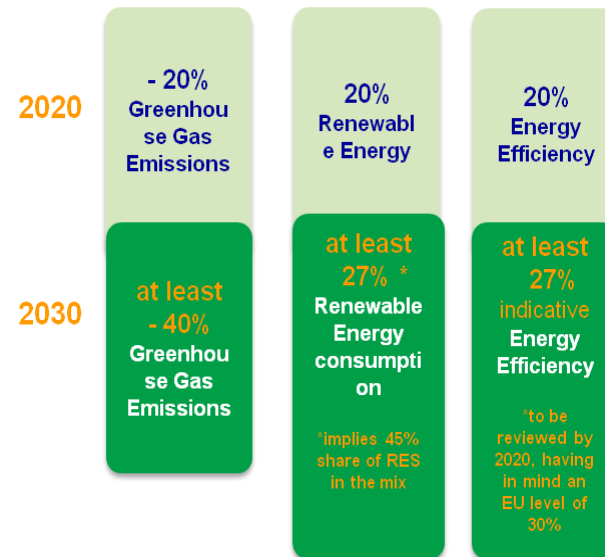
GHG emission reduction objectives of the EU



Source: EURELECTRIC

\* RM refers to COP15 where “world leaders agreed that global average temperature should not rise more than 2°C”

## 2030 Energy & Climate Framework



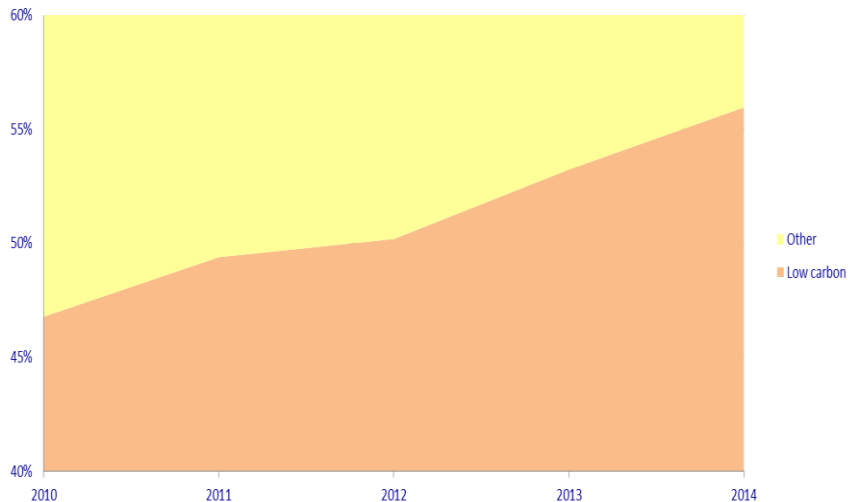
- Impact Assessment mentions “limit global temperature rise to below 2°
- EUCO “will revert to this issue after the Paris Conference”

## ...and the Paris Agreement will probably speed up that process

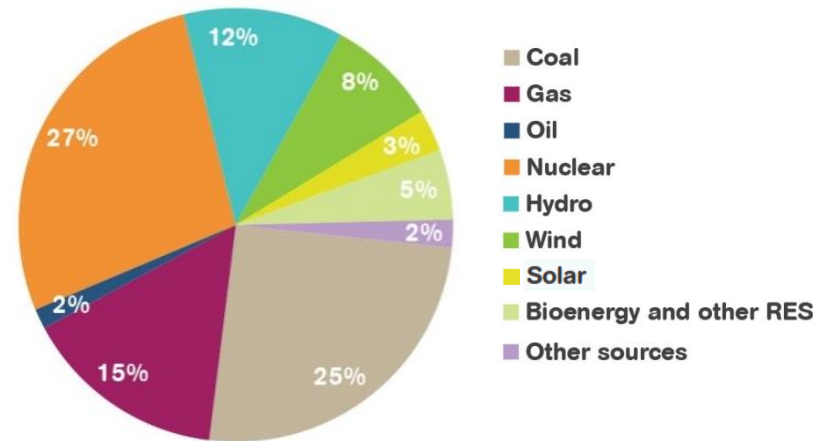
- Art. 2(1a) speaks of “well below 2°C” and “to pursue efforts to limit [the increase] to 1,5°C”
- The Provisions in the Paris Agreement make it probable that the EU’s GHG ambition will be updated before 2030

# Low-carbon technologies represent 56% of EU electricity generation

SHARE OF LOW-CARBON TECHNOLOGIES IN THE EU POWER GENERATION MIX

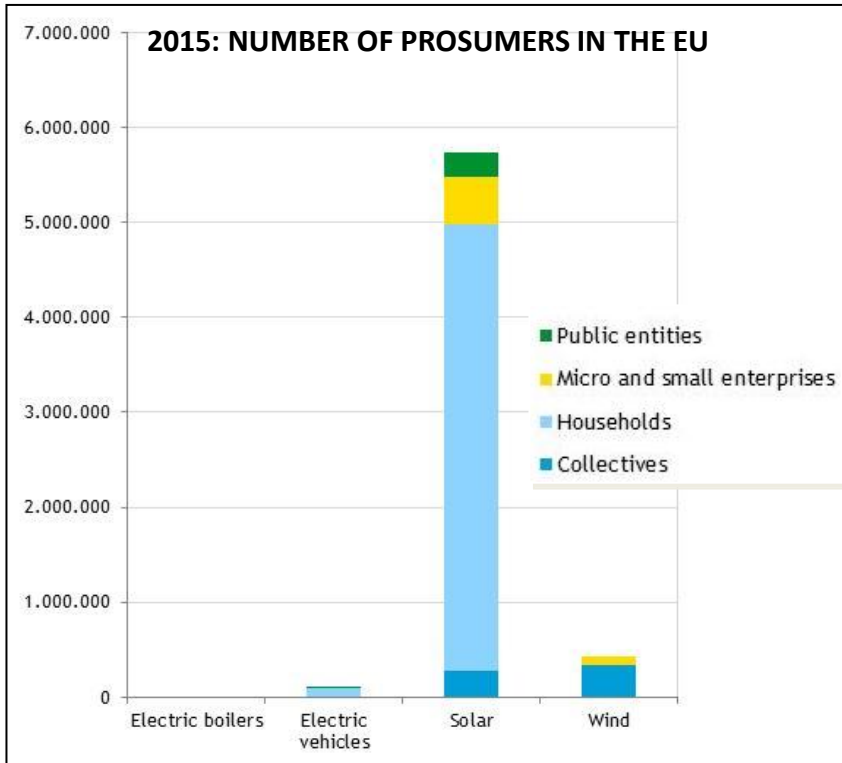


EU GENERATION MIX IN 2014

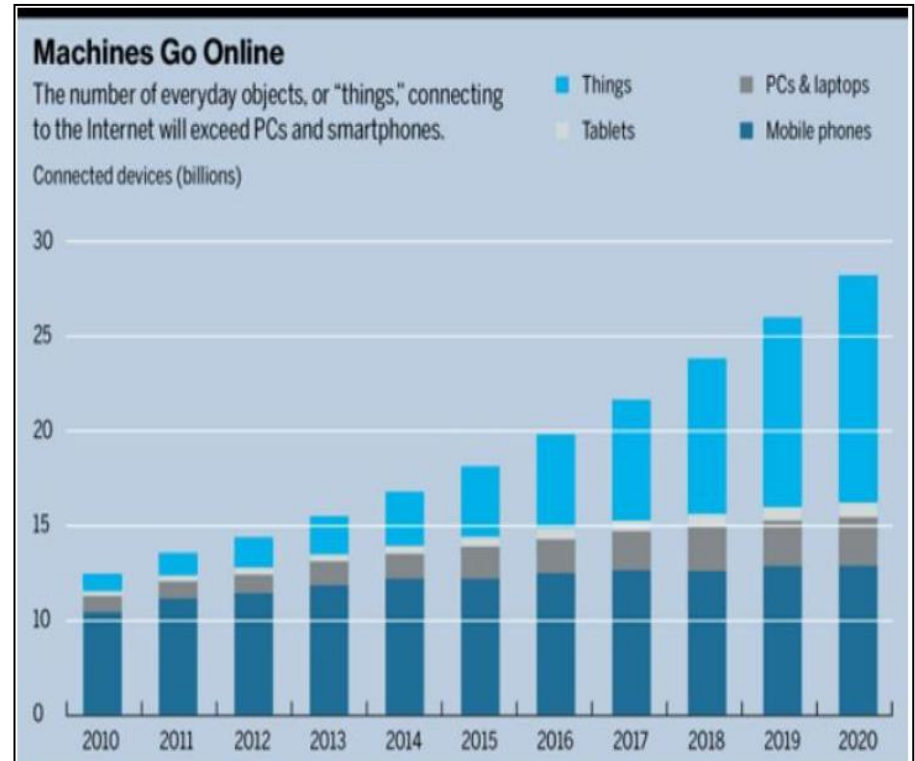


- Low-carbon technologies contribute to more than 50% of EU power generation since 2012.
- decreasing share of fossil fuels in the power mix and a decrease in demand are contributing to a decline in the CO<sub>2</sub> emissions in the power sector

# The DECARBONISATION challenge comes in combination with further DECENTRALISATION and DIGITALISATION as key drivers for new business models

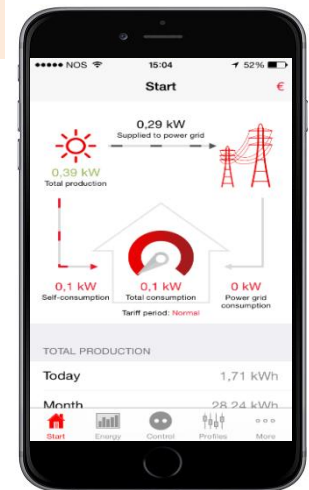
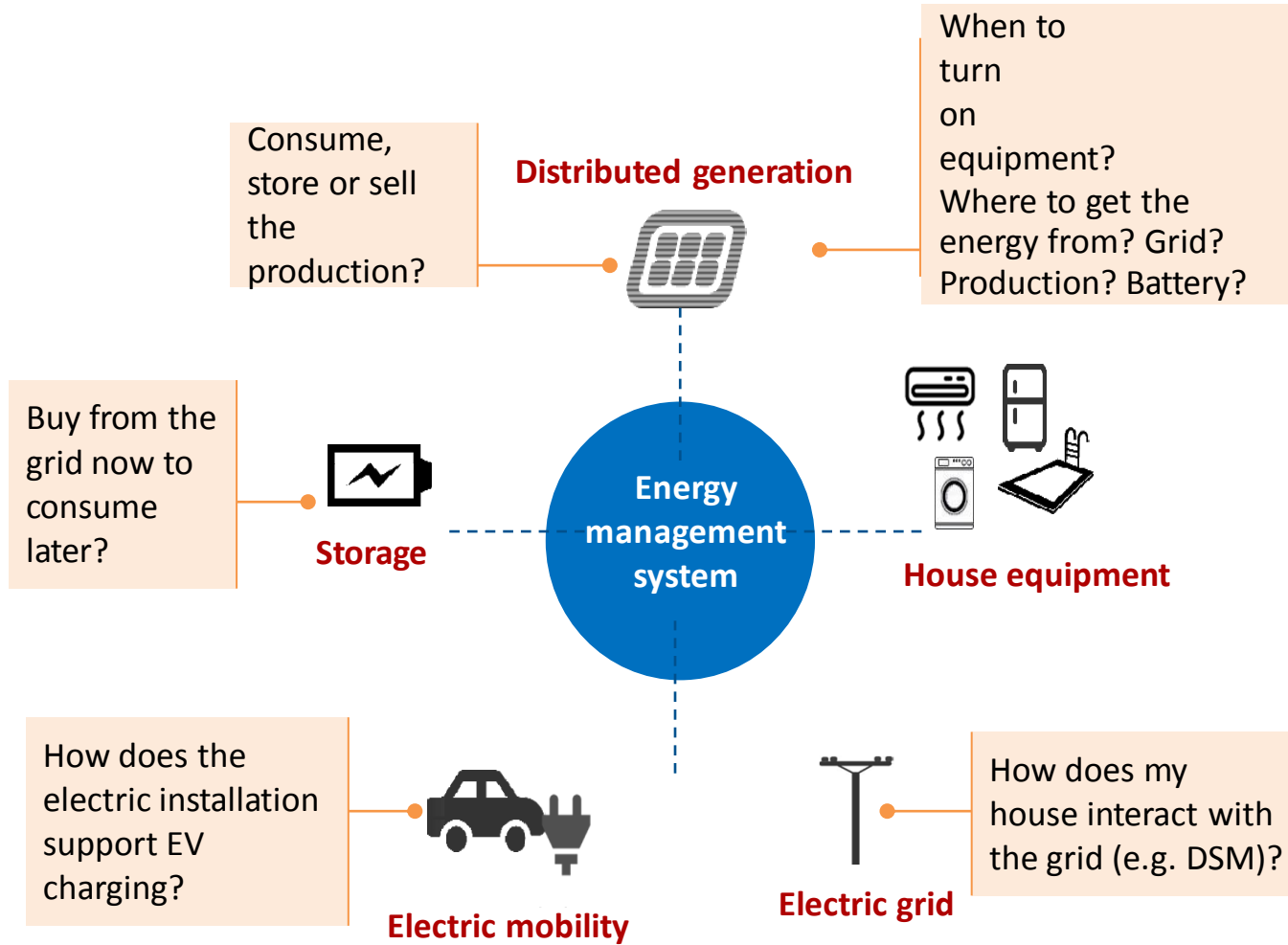


SOURCE: CE Delft Energy Citizens in the European Union Sept 2016



SOURCE: MIT technology review

# Self-consumption models will drive innovation



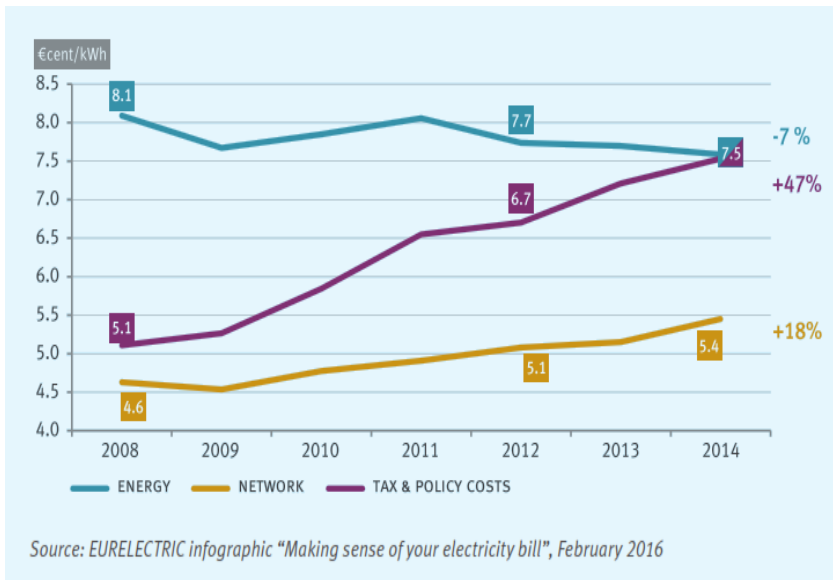


# Retailers are bringing to customers the technologies that will be part of the new power system



# Retail pricing needs to be modernized for a sustainable power system transition

## The “WEDGE”



## The “MISMATCH”

Volumetric

Fixed

TRANSPORT

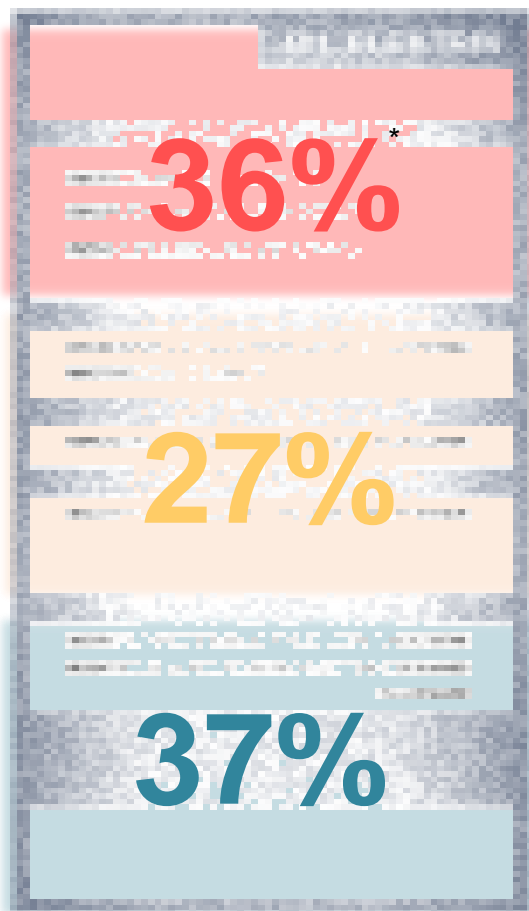
POLICY COSTS

≠








€ 5.4 cents /KWh



## 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
	 €/kWh	 ≠ fiscal nature
<b>GRID</b>	 €/kWh	 ≠ kW
<b>ENERGY</b>	 €/kWh	 kWh

\*2014 data, source: EURELECTRIC












# What is the impact on consumer choices and overall system costs?



electricity

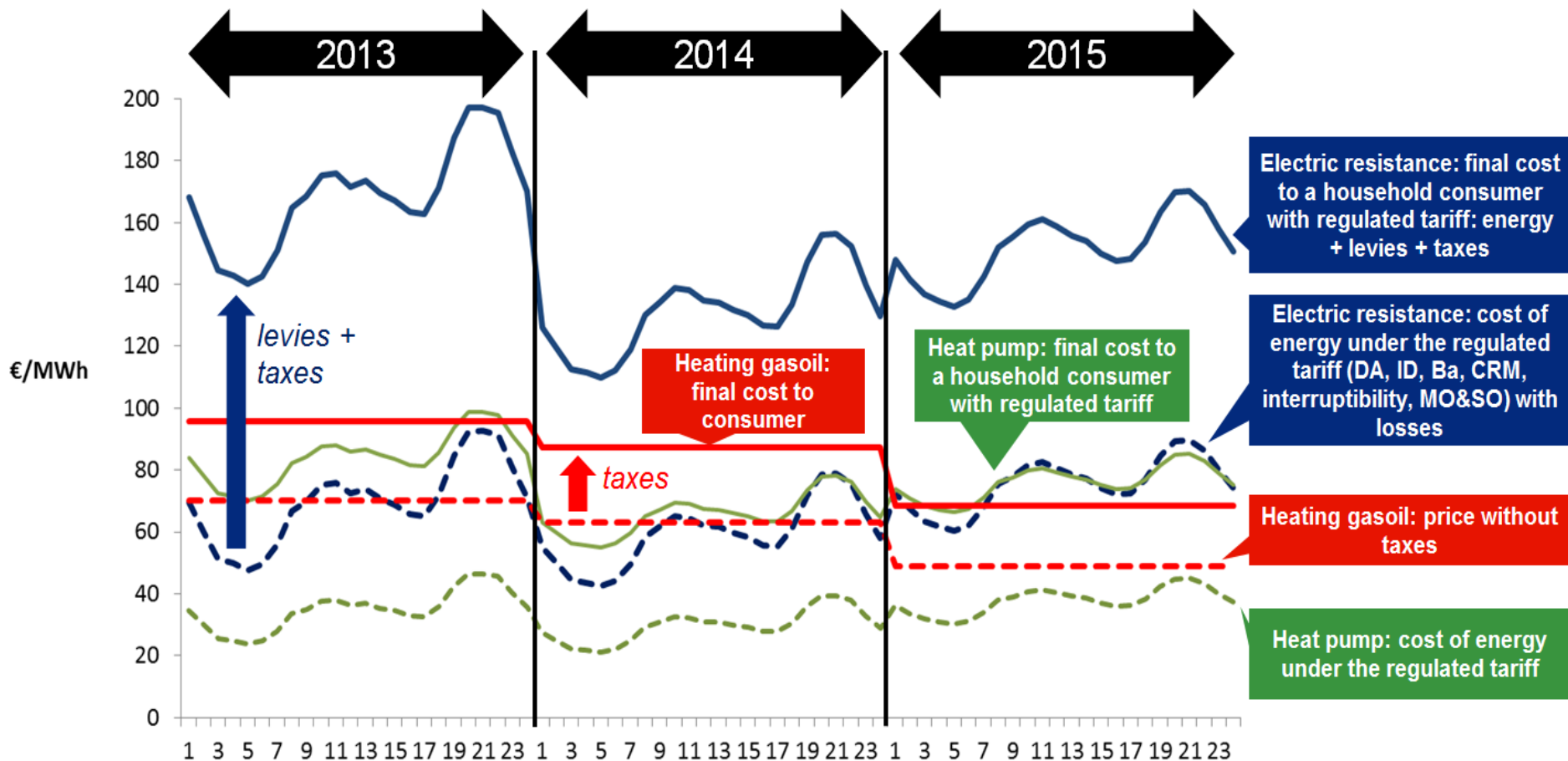


fossil fuels

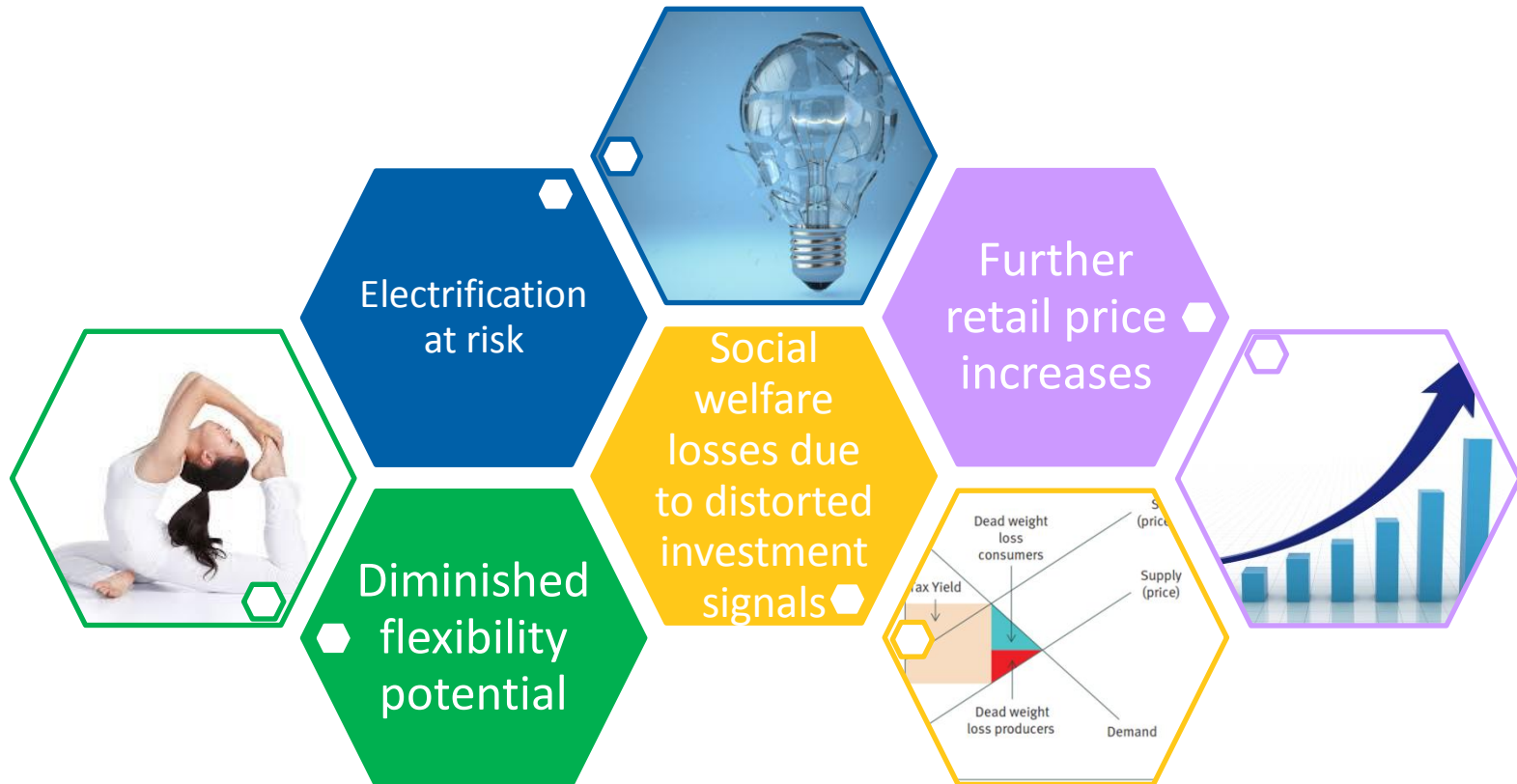


# The WEDGE: Reduce taxes & levies in consumers' bills to increase the competitiveness of electricity vs fossil fuels

## Example of Spain



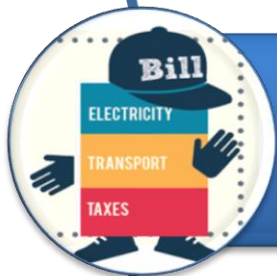
## The mispricing created by 'WEDGE' and the 'MISMATCH' is generating system inefficiencies



## 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

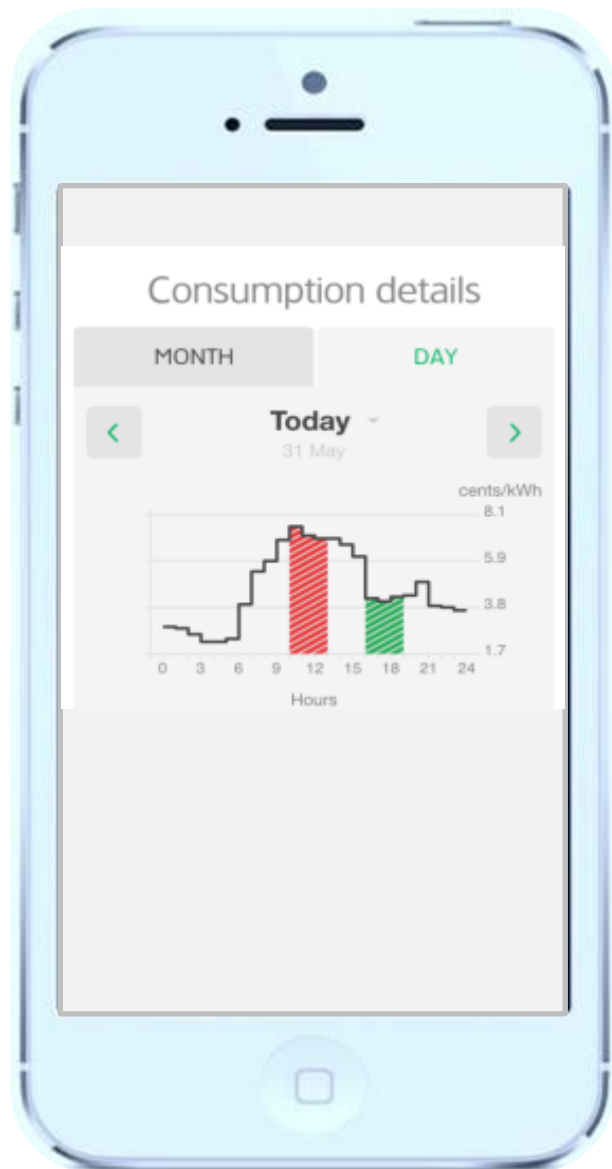
## Telco trend in the energy sector?

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

Illustrative example:

Tier 1: Fast	Tier 2: Faster	Tier 3: Fastest
Good for fast online gaming, large file transfers	Good for downloading HD video, large files	Good for multiple users
▼ Download up to      ▲ Upload up to 5 Mbps	▼ Download up to      ▲ Upload up to 25 Mbps	▼ Download up to      ▲ Upload up to 20 Mbps
<b>15</b> Mbps \$49.99/month	<b>25</b> Mbps \$64.99/month	<b>50</b> Mbps \$139.95/month
<input checked="" type="radio"/> with Home Phone <input type="radio"/> without Home Phone	<input checked="" type="radio"/> with Home Phone <input type="radio"/> without Home Phone	<input checked="" type="radio"/> with Home Phone <input type="radio"/> without Home Phone
<a href="#">&gt; Check Availability</a> <a href="#">+ Details</a>	<a href="#">&gt; Check Availability</a> <a href="#">- Details</a>	<a href="#">&gt; Check Availability</a> <a href="#">+ Details</a>





**Thank you for your  
attention!**