

Potential for Further Innovation in Smart Grids

Jon Stretch @Energy Transition: A multifaceted Challenge for Europe

Landis+Gyr – an industry pioneer

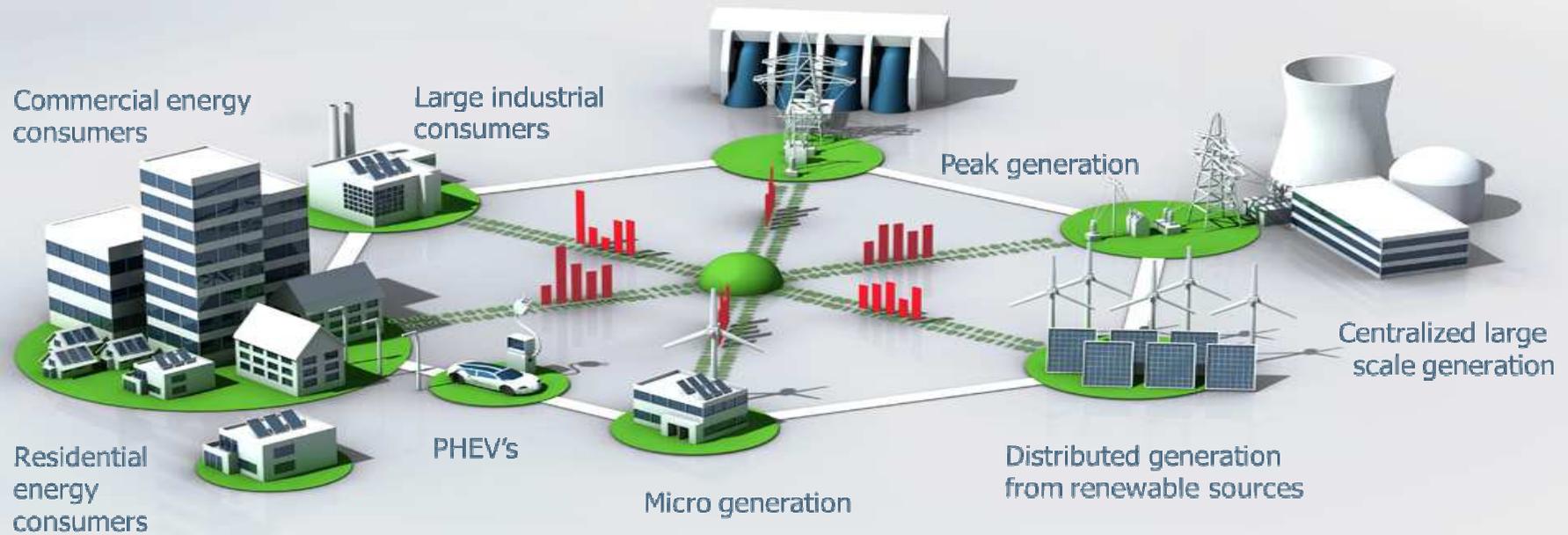


Leader in Smart Metering...

- Compelling industry growth / transformation
- Leading global brand with 100+ year history
- 90% of revenue in electricity metering
- Local presence in over 30 countries
- Over 3,500 utility relationships worldwide
- Largest installed global base (>300mm devices)
- Over 24mm smart grid-enabled endpoints deployed or contracted

The Transition

to a smart system...



...depends on real-time data flows and decisions based on massive amounts of data!

The Meter moves

From being simply a “cash register” for the energy company,



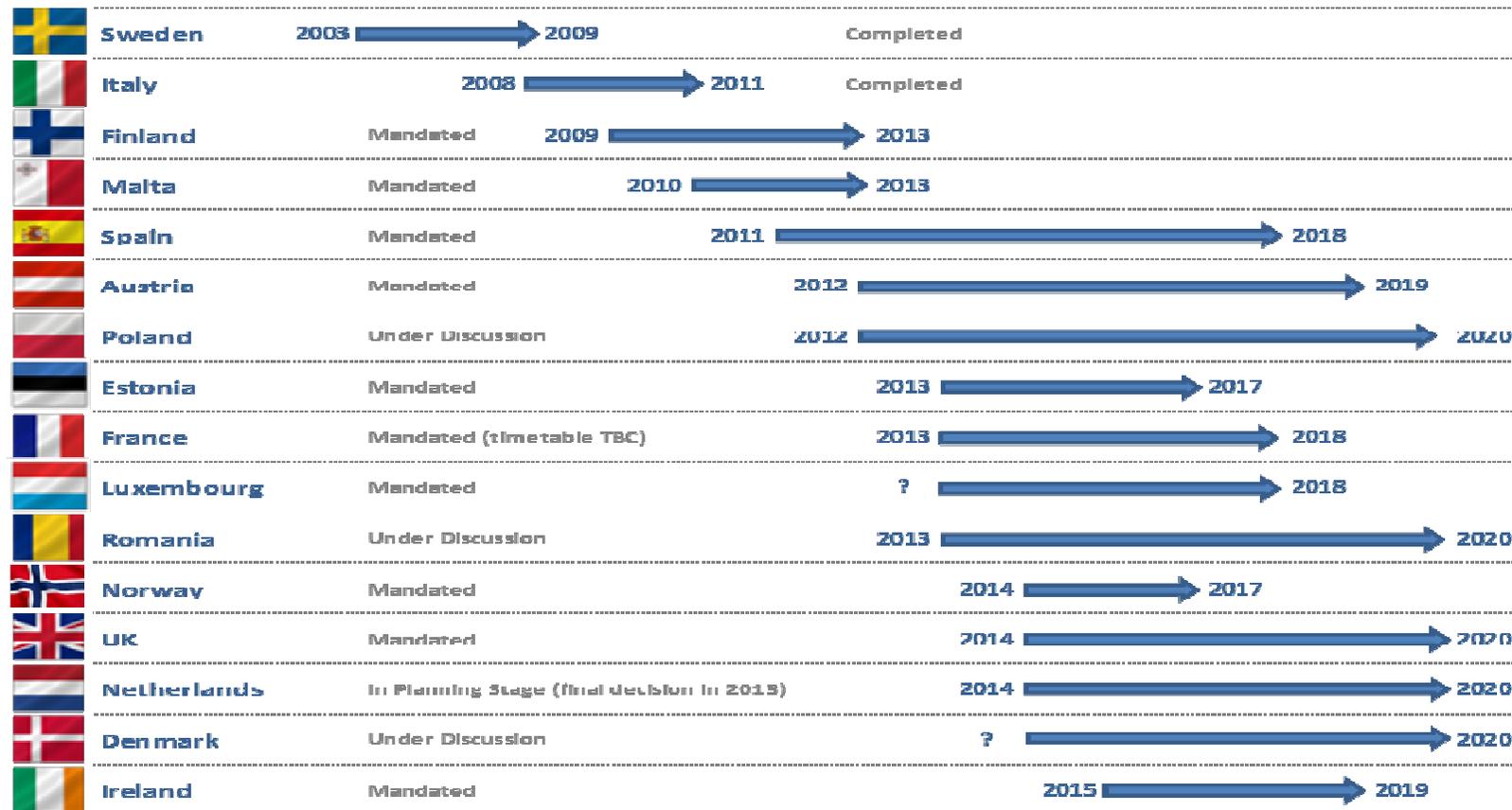
- Low voltage network is blind
- Only records electricity consumed (kWh)
- Manual readings

To being an operational component in the smart grid

- Real time information to supplier, network operator and consumer
- Monitoring of the network
- Enablement of Demand Response
- Monitoring and control of DER Feed-in
- Network investment decisions

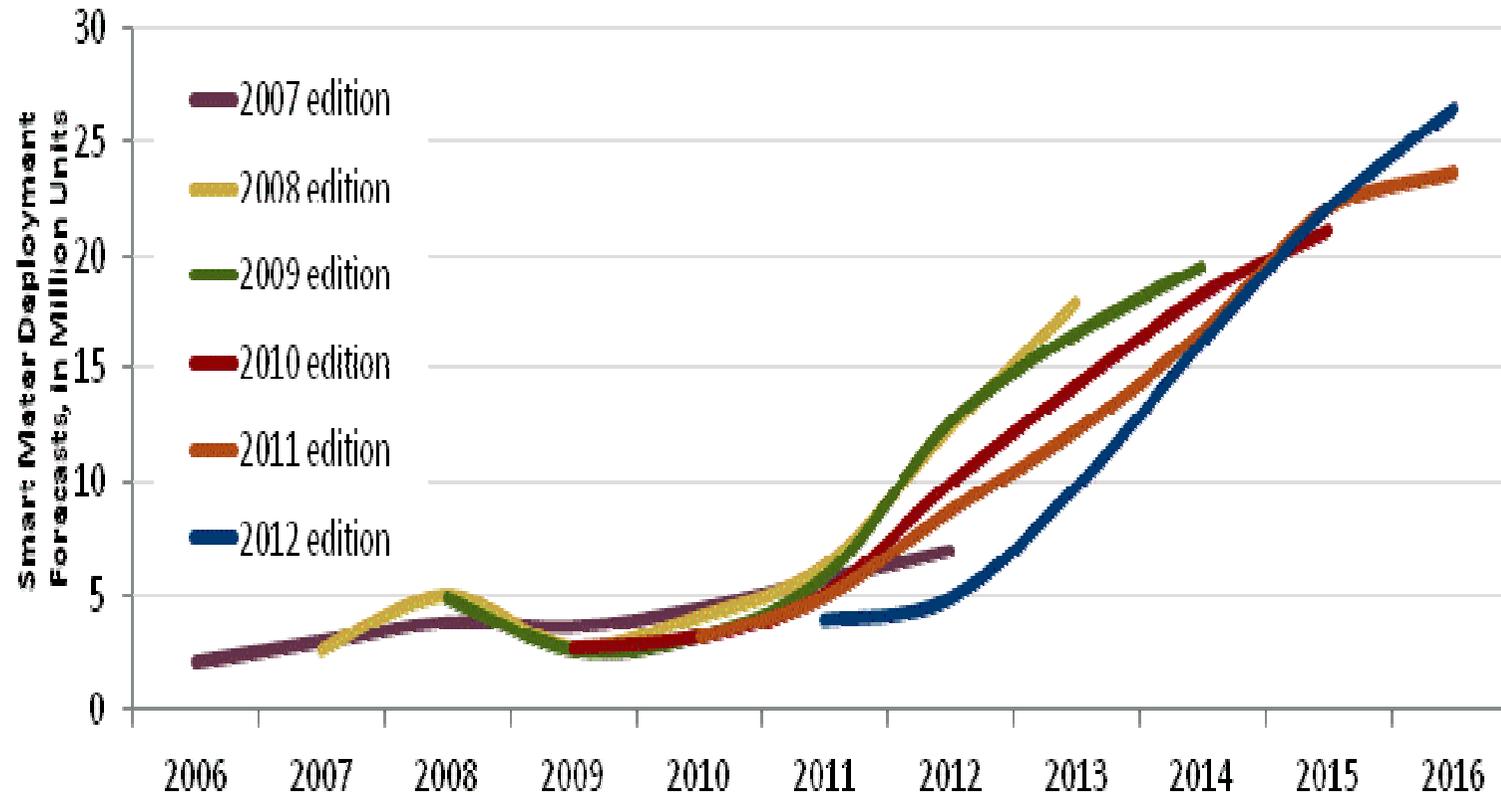


But Europe is moving too slowly



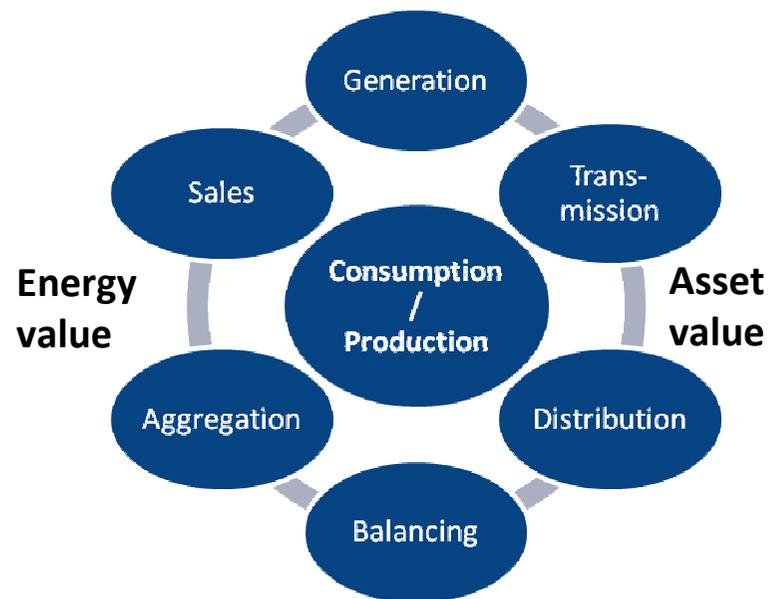
But Europe is moving too slowly

Berg Insight market view through the years



Smart Grid and Market - Transformation of energy utilities

Traditional energy utility roles split up into new parties due to deregulation and open markets. Market parties will be interconnected and dependent upon each other with focus on energy or asset value. This will empower the consumer to become an active participant in the market.

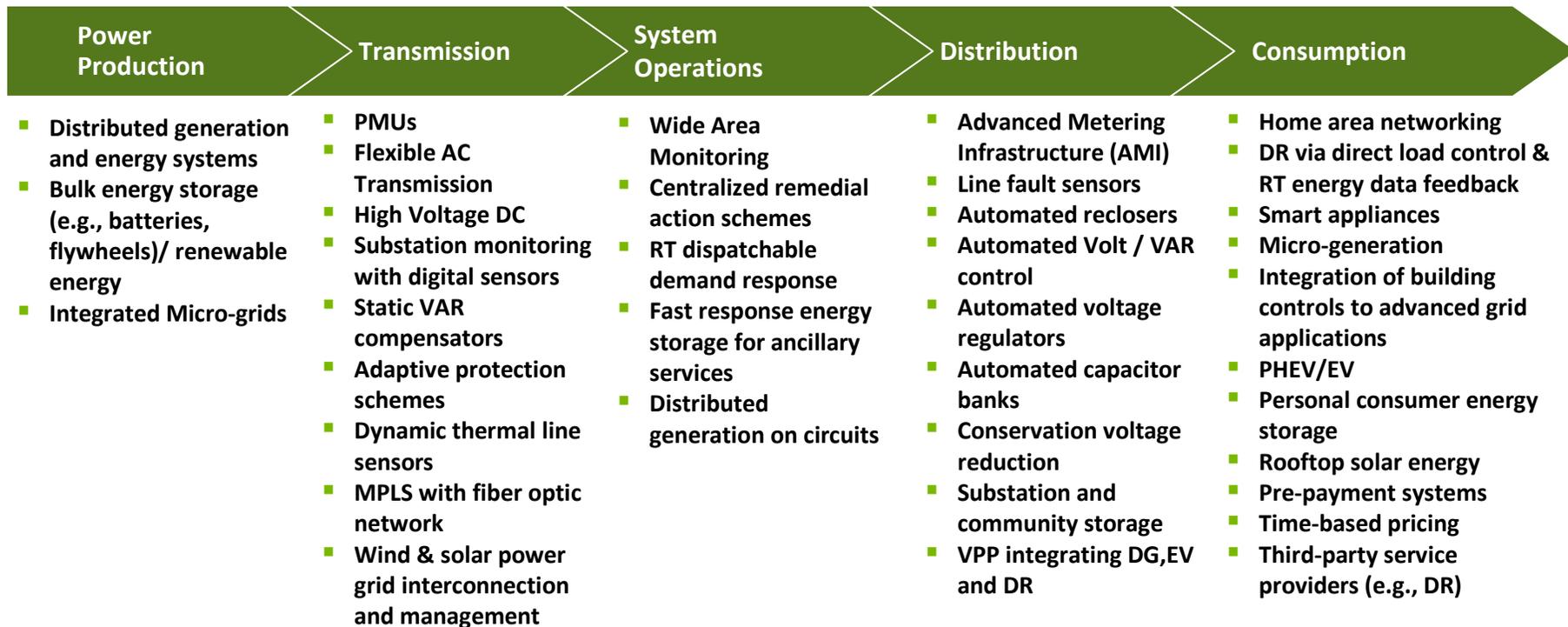


New actors/drivers will stress these relationships

- End-customer acquisition and retention
- Closer relationship between price and cost (TOU)
- Demand response/Direct load control
- Renewables proliferation
- Electric vehicles
- etc

Information will be the key for each party 's business model, transformation and operation

What is the potential for further innovation in RES, smart grids and energy efficiency technologies? Technology OK, what about the Solution?



Smart grid technologies, while complex, can bring significant value to the entire utility value chain. These are “typical” technologies and applications we have found in most smart grid designs.

What is the potential for further innovation in RES, smart grids and energy efficiency technologies? Technology OK, what about the Solution?



- ✓ Innovation will evolve from interconnectivity and information towards analytical processing and advanced applications for real time knowledge and decision making
 - Smart metering will need to be broadly in place
- ✓ Investment in standard/scaled solutions will emerge as business models in Smart Markets/Grids begin to stabilise
 - Different regulatory, technology and customer boundaries will drive adoption of different solutions

Uniform regulation drives scale, scale drives investment, Investment drives innovation

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Landis
|Gyr+
|manage energy better



Jon Stretch | | Brussels, October 8, 2013