



**WE MAKE
METERING SMART**



How ESMIG is enabling a Smarter Energy World in Europe

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Sierra Wireless Developer / Ecosystem Day
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Contents

- ESMIG organisation
- Market developments
- Challenges ESMIG is working on



About ESMIG

ESMIG – the European Smart Metering Industry Group

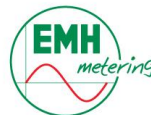
- **knowledge** and **expertise** on Smart Metering and related communications at a European level
- **assist** in the development of national and European-wide introduction, rollout and management of Smart Metering and related energy management solutions
- **regulatory awareness**
- **European** and **international** standardisation
- Electricity, Gas, Water, Heat and Energy Management markets



Our members



CHAMELEON™





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- ESMIG organisation
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 - European Market outlook
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The meter is moving...

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



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

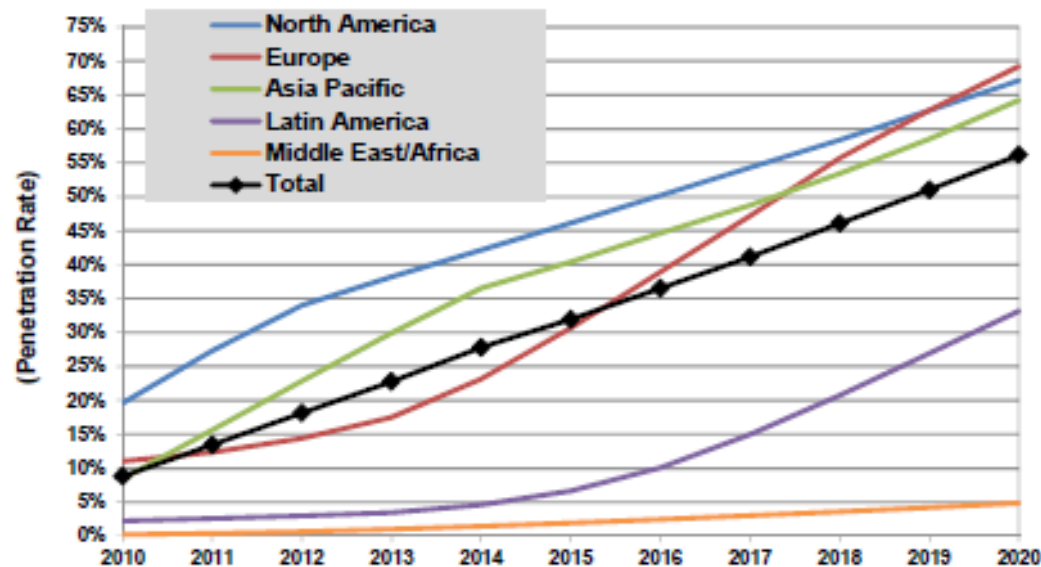
To being an operational component in the smart grid

- 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



The market for Smart Metering

Smart Meter Penetration (of All Electric Meters) by Region, World Markets: 2010-2020

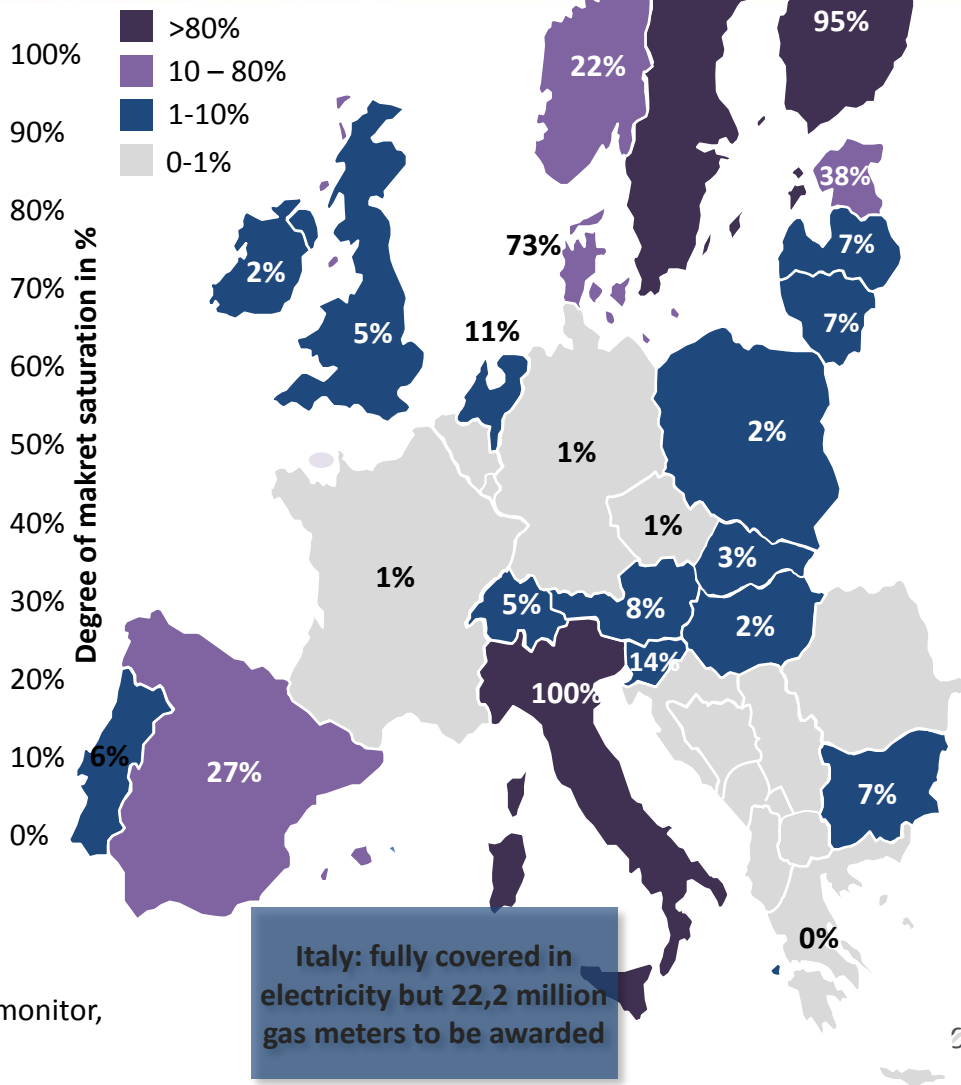


Overall, the global smart meter market is expected to grow at a compound annual growth rate (CAGR) of just under 5% between 2010 and 2020.

Source: Pike Research



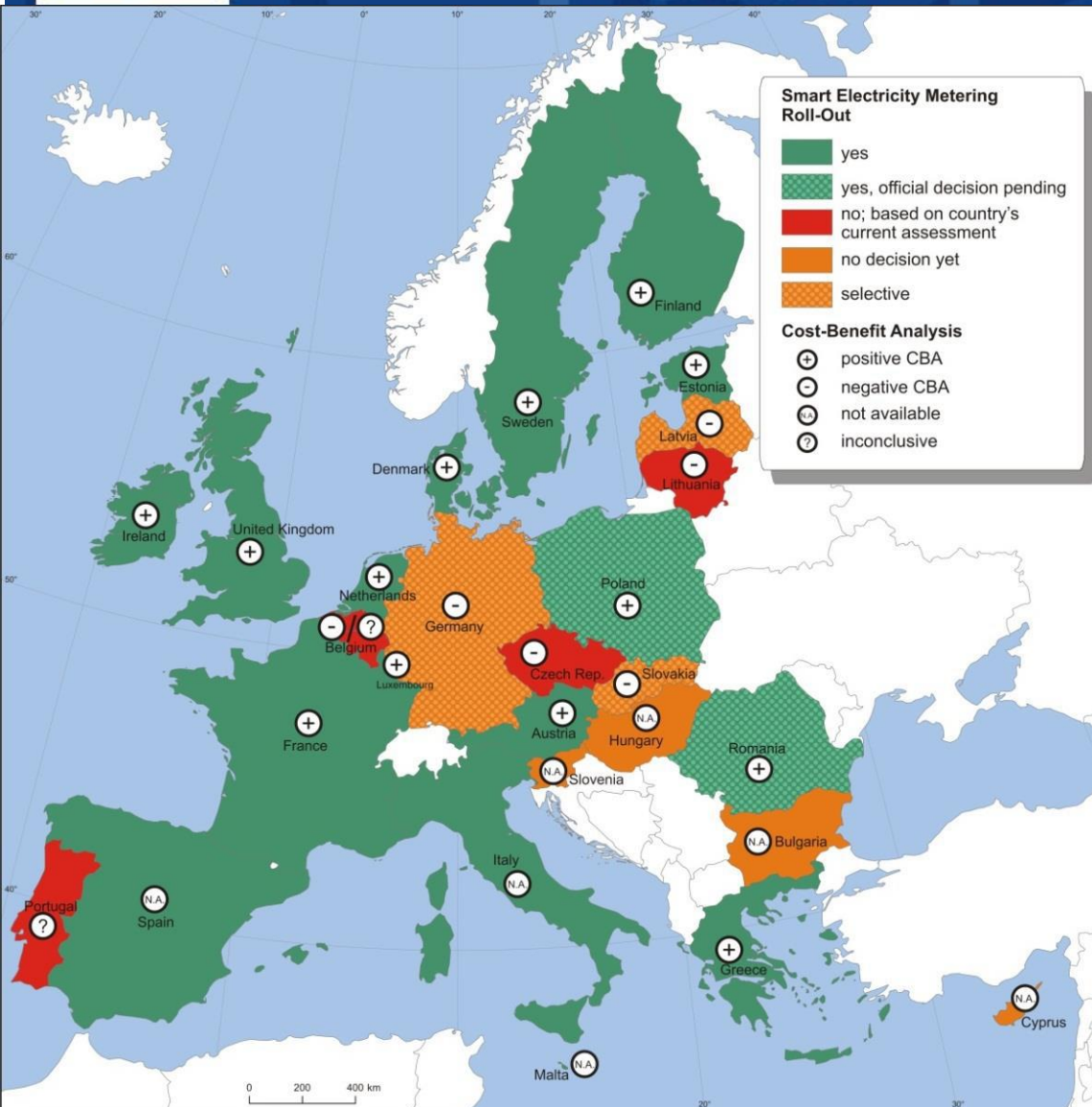
AMI Penetration (end of year 2013)
EU (28+2) saturation is 22%



Italy: fully covered in electricity but 22,2 million gas meters to be awarded

2020 Market Objectives

EC inventory 2013



Roll out of ELECTRICITY smart metering by 2020

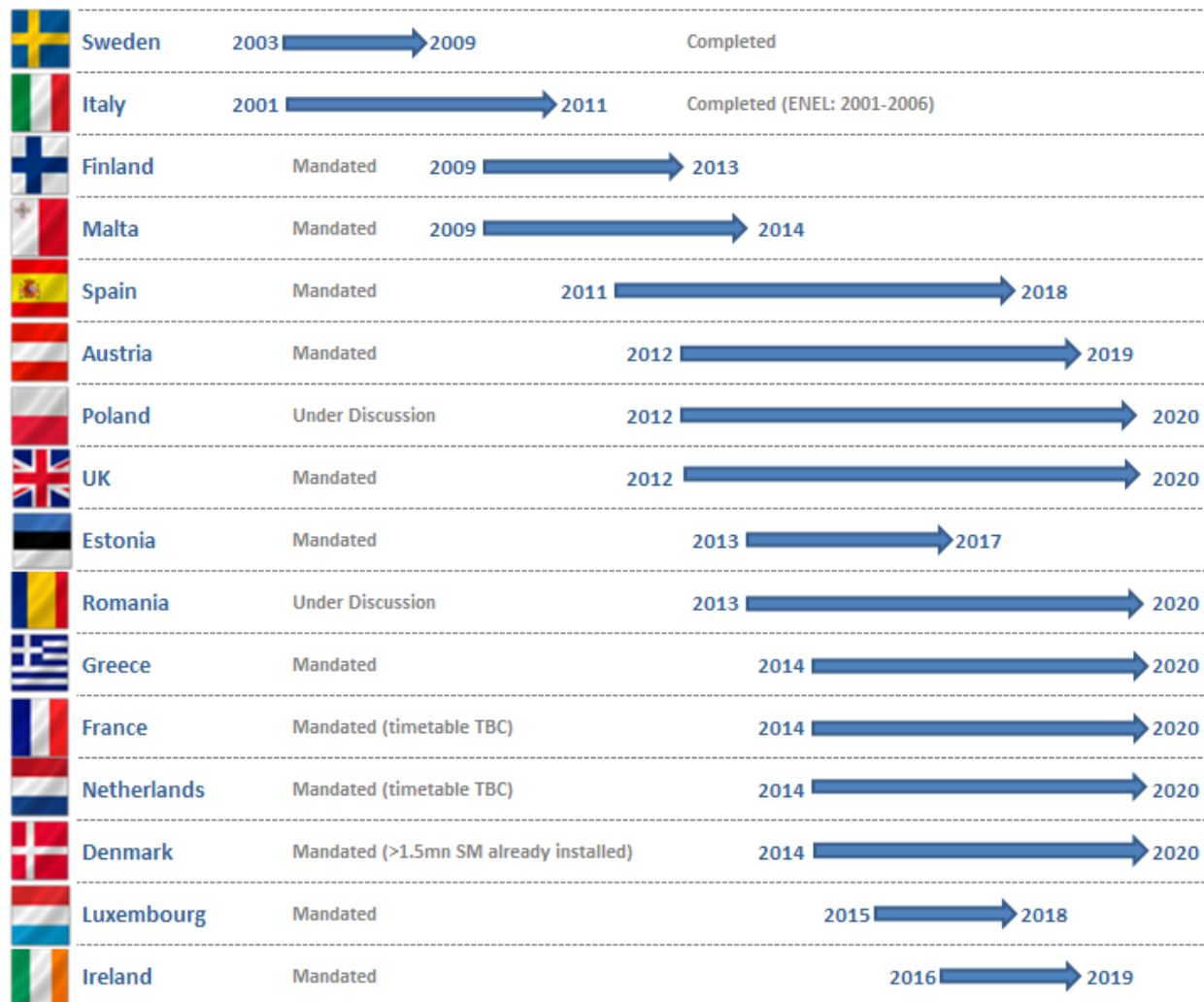
- 20 (21) CBAs, 16 MS: wide roll-out
- ~ 72% EU consumers
- 195 million meters
- € 35 billion

However, 50% of Smart Meters will not benefit consumer!

Roll out plans Smart Metering

EC inventory 2012

Electricity Smart Meters Roll-Out Timelines in MS (at least 80% coverage)





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- Benefits of Smart Meters
- Market developments
- **Challenges ESMIG is working on**
 - Standardization
 - Privacy and Security
 - Cost
 - Consumer engagement

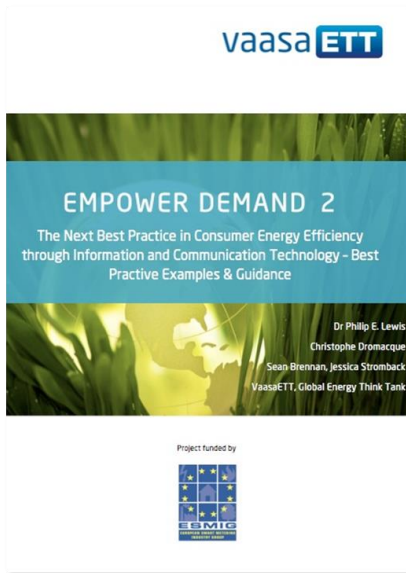
Challenges I

- Standards for Smart Metering are there!
 - M441 – Smart Metering Standards Mandate
 - M490 – Smart Grid Standards Mandate
- Broad European landscape of national and industry security guidelines

Challenges II

- A liberalized, unbundled energy market makes investments in smart metering more complicated
- Consumer → Prosumer
 - Key ingredients: Information, education, communication....trust!

Empower Demand I and II



- Empower Demand: Analysis of 100 Demand Response Programmes
- 460 sample groups
- 450,000+ residential participants
 - Mixed Feedback
 - Appealing Feedback Services
 - Empathy and Trust
 - Motivation and Incentivation
- Consumer Campaign: Mini website to learn more about smart metering and grids in simple and accessible language – **to be launched in September**



ESMIG's contribution to a Smarter Energy World

- Support the **European Standardization mandates** (e.g. M441 & M490).
- Support **open standards** and **interoperability** (ESMIG paper “Interoperability”).
- **Actively lobby** the European Institutions for Smart Regulation (Energy Efficiency, SM functionalities)
- Ensure **standards and privacy by design** are implemented across the EU member states (TF Smart Grids, EG2 recommendations).
- Investing to ensure that **smart metering rollouts** in Europe are **successful**: for our customers and for our customers' customers – the end consumer! (ESMIG use cases & Empower Demand study).
- Create **consumer awareness, education** and **empowerment**



For more information

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