Smart Metering in Western Europe is the sixth consecutive report from Berg Insight analysing the latest developments for smart metering in Europe.

This strategic research report from Berg Insight provides you with over 160 pages of unique business intelligence, including 5-year industry forecasts, expert commentary and real-life case studies on which to base your business decisions.

**Highlights from the sixth edition of the report:**

- **Case** studies of smart metering projects by the leading energy groups in Europe.
- **In-depth** market profiles of fourteen countries in Western Europe.
- **Status** updates on the development of smart grid and communication technology.
- **Updated** profiles of the key players in the metering industry.
- **Revised** market forecasts lasting until 2014.
- **Summary** of the latest developments in the European energy industry.

**Berg Insight’s M2M Research Series**

What are the key business opportunities in the emerging European wireless M2M market? Berg Insight’s M2M Research Series is a unique series of market reports published on a quarterly basis. Each title offers detailed analysis of a specific vertical application area such as intelligent metering, fleet management or vehicle telematics. Once per year we also publish summaries of our research with detailed forecasts for the Global and European wireless M2M markets, respectively.

[www.berginsight.com](http://www.berginsight.com)
Smart meters to transform the European energy market

Metering is a fundamental enabler for the utilities industry. At the beginning of 2009, there were approximately 253 million electricity meters; 109 million gas meters and 3 million district heating meters in EU23+2. Electricity reaches virtually every household and business in the whole of Europe, while gas is most widely used in the Netherlands, the UK, Italy, Germany, France and Poland. District heating is a significant energy source in the Nordic countries and Central Eastern Europe. The residential sector is the second largest final user of energy, accounting for about 30 percent of consumption.

As part of the efforts to build a sustainable energy system, the traditional mechanical utility meter must be replaced by a smart device. These so-called smart meters are a core element in the vision for smart grids – intelligent energy networks that contribute to improved efficiency and reliability in energy distribution and better optimisation in allocation of resources and utilisation of assets. Smart metering solutions may incorporate a wide range of applications in the fields of remote meter reading, customer relationship management, demand-side management and value added services. Remote meter reading is the core application, providing the data recorded by the meter to the metering system operator, which could be the DSO or an independent party. Smart metering solutions can also be used to support customer relationship management and demand-side management (DSM), as well as enable various value added services in for instance home automation.

The adoption of smart metering in Europe is to a large extent driven by regulations. A majority of the countries in Western Europe have adopted a policy of regulation-driven introduction of smart meters. Sweden was first, followed by the Netherlands, Ireland, Norway, France, Italy and Spain. The UK and Finland were the latest countries to announce regulated rollouts in October 2008 and February 2009 respectively and Denmark seems likely to move in the same direction. Furthermore, nationwide projects led by publicly owned energy companies are underway in Portugal and Malta. Except for Italy where the rollout is already almost complete, the larger countries have long timeframes. France and Spain have deadlines at the end of the 2010s, while the UK has set the target date to 2020. The common energy policies of the EU, based on the 20-20-20 targets, plays an important role in this development. The 3rd Energy Package, approved by the European Parliament in April 2009, proposes that – subject to an economic assessment – 80 percent of all electricity customers should have smart meters by 2020. Furthermore it defines guidelines for supplier-changes, energy consumption information and service quality level monitoring which are very difficult to meet without smart meters.

Italy was the first European country where smart meters were deployed at a massive scale in the first half of the 2000s. By 2011 all Italian electricity customers will be covered by the technology. Sweden however became the first country to achieve 100 percent penetration in July 2009 following a regulation driven rollout. The other Nordic countries are following with Finland and Norway looking to introduce smart metering legislation by 2013, while Denmark has seen strong uptake of the technology without any regulatory requirements. Spain and Ireland are expected to display high volumes from 2011, with France and most likely Portugal following in 2012. By 2013 these countries alone will account for more than 70 percent of total shipments. Elsewhere in Europe the market prospects are more uncertain. The UK is likely to see the start of large-scale deployments of smart meters within the next five years given that no unexpected events cause delays. The Netherlands appeared to be on track for a nationwide rollout starting already in 2010 but with the recent political setbacks the implementation of smart meters is now delayed until 2013 by the earliest. Germany is not likely to see any major market developments in the short term but it appears likely that some of the large DSOs will go ahead with large-scale installations by the mid-2010s, regardless of the regulatory situation. The market prospects in Central Europe are uncertain but there are good reasons to believe that the pilots and early deployments seen today will evolve into major projects by the mid-2010s.

This report answers the following questions:

- How are EU energy policies driving the adoption of smart metering?
- Which are the latest countries to announce mandatory requirements for smart meters?
- What is the UK government's plan for a nationwide rollout?
- What are the true implications of Germany's new metering regulation?
- What are the latest market developments in the Nordic countries?
- Who are the leading suppliers of smart metering solutions for the European market?
- Which are the main providers of PLC and wireless communication technology for smart meters?
4.1 Meter vendors
4.1.1 Landis+Gyr
4.1.2 Itron
4.1.3 Elster
4.1.4 ABB
4.1.5 Enel
4.1.6 Diehl Metering
4.1.7 Group
4.1.8 Itron
4.1.9 Kankrop
4.1.10 Sagem Communications
4.1.11 ZIW
4.1.12 ZIW
4.1.13 Asian vendors
4.2 Smart metering solution providers
4.2.1 ABB Group
4.2.2 Echelon
4.2.3 Enel
4.2.4ESCO Technologies
4.2.5 Fortum
4.2.6 ISA
4.2.7 Metrime
4.2.8 NURI Telecom
4.2.9 Polcom
4.2.10 Siemens Power Distribution
4.2.11 Telenor Circius
4.2.12 Xanex
4.3 MDMs and middleware vendors
4.3.1 EnergyICT
4.3.2 eMeter
4.3.3 Ericsson
4.3.4 GEMS
4.3.5 NetRemote
4.3.6 Oracle
4.3.7 Powel
4.3.8 SAP
4.4 System integrators
5 Market forecasts and trends
5.1 Market drivers and barriers
5.1.1 Macroeconomic factors
5.1.2 Regulatory environment
5.1.3 Competitive environment
5.1.4 Technology development
5.2 Smart metering market forecast
5.2.1 Capital expenditure forecast
5.2.2 Geographical markets
5.3 Impacts of smart metering on the European wireless M2M market
5.3.1 GPRS technology market
5.3.2 Wireless Mesh technology market
5.3.3 The future role of wireless communication providers in metering
6 Market profiles: Northern Europe
6.1 Sweden
6.1.1 Electricity distribution industry structure
6.1.2 Metering regulatory environment
6.1.3 Smart metering market developments
6.1.4 The outcome of a regulation driven rollout
6.2 Denmark
6.2.1 Electricity distribution industry structure
6.2.2 Metering regulatory environment and smart metering market developments
6.3 Finland
6.3.1 Electricity distribution industry structure
6.3.2 Metering regulatory environment
6.3.3 Smart metering market developments
6.4 Norway
6.4.1 Electricity distribution industry structure
6.4.2 Metering regulatory environment
6.4.3 Smart metering market developments
7 Market profiles: Western Europe
7.1 Austria
7.1.1 Electricity and gas distribution industry structure
7.1.2 Metering regulatory environment and smart metering market developments
7.2 France
7.2.1 Electricity and gas distribution industry structure
7.2.2 Metering regulatory environment and smart metering market developments
7.3 Germany
7.3.1 Electricity and gas distribution industry structure
7.3.2 Metering regulatory environment
7.3.3 Early pilot activities
7.4 Ireland
7.4.1 Electricity and gas distribution industry structure
7.4.2 National program for deployment of smart meters by 2013
7.5 The Netherlands
7.5.1 Electricity and gas distribution industry structure
7.5.2 Metering regulatory environment
7.5.3 Smart metering market developments
7.6 United Kingdom
7.6.1 Electricity and gas distribution industry structure
7.6.2 Metering regulatory environment
7.6.3 The UK government’s proposed rollout model
8 Market profiles: Southern Europe
8.1 Italy
8.1.1 Electricity and gas distribution industry structure
8.1.2 Metering regulatory environment
8.1.3 Smart metering market developments
8.2 Spain
8.2.1 Electricity and gas distribution industry structure
8.2.2 Metering regulatory environment
8.2.3 Smart metering market developments
8.3 Portugal
8.3.1 Electricity and gas distribution industry structure
8.3.2 Metering regulatory environment and smart metering market developments
8.4 Malta
8.4.1 Utility industry structure
8.4.2 National smart grid project
9 Case studies: Energy group strategies for smart metering
9.1 Enel
9.1.1 The Telegestore Project
9.1.2 Marketing to external customers
9.2 ERDF
9.2.1 The ERDF smart metering project
9.2.2 Atos Origin selected as information architect and lead manager for pilot
9.3 EON
9.3.1 Experiences from the Nordic market
9.3.2 Projects in Western and Central Europe
9.4 RWE
9.4.1 Regional DSO operations in Germany
9.4.2 The Müllheim Zählt project
9.5 Iberdrola
9.5.1 The PRIME project
9.5.2 Smart metering rollout plans for Spain and other markets
9.6 Vattenfall
9.6.1 Group smart metering initiatives
9.6.2 Smart metering projects in Sweden and Finland
9.7 Three regional Nordic DSOs
9.7.1 Göteborg Energi – Sweden
9.7.2 Helsingin Energia – Finland
9.7.3 SEAS-NVE – Denmark

Glossary
### Who should buy this report?

**Smart Metering in Western Europe** in its sixth edition is the foremost source of information about the ongoing transformation of the metering sector. Whether you are a vendor, utility, telecom operator, investor, consultant, or government agency, you will gain valuable insights from our in-depth research.

### Related products
- Fleet Management and Wireless M2M
- The European Wireless M2M Market
- Car Telematics and Wireless M2M
- The Global Wireless M2M Market

---

### Order form — TO RECEIVE YOUR COPY OF SMART METERING IN WESTERN EUROPE

You can place your order in the following alternative ways:

1. Place your order online in our web shop at www.berginsight.com
2. Fax this order sheet to us at fax number: +46 31 711 30 96
3. Mail this order sheet to us at: Berg Insight AB, Viktoriagatan 3, 411 25 Gothenburg, Sweden
4. Email your order to: info@berginsight.com
5. Phone us at +46 31 711 30 91

<table>
<thead>
<tr>
<th>Family/Surname</th>
<th>Forename</th>
<th>Position</th>
<th>Company</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Address</th>
<th>FAX</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**VAT** is chargeable on all orders from Sweden. Orders from all other countries in the European Union must include the buyer’s VAT Registration number below in order to avoid the addition of VAT.

<table>
<thead>
<tr>
<th>Your PO number</th>
<th>Your VAT/TVA/IVA/BTW/MWST number</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please charge my credit card

- [ ] VISA
- [ ] Mastercard

<table>
<thead>
<tr>
<th>Card number</th>
<th>Expiry date (MM/YY)</th>
<th>CV code</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Cardholder’s name  
Signature  

Billing address  
Postcode  
Country  

- [ ] We enclose our cheque payable to Berg Insight AB  
- [ ] Please invoice me

Signature  
Date

Reports will be dispatched once full payment has been received. For any enquiries regarding this, please contact us. Payment may be made by credit card, cheque made payable to Berg Insight AB, Viktoriagatan 3, 411 25 Gothenburg, Sweden or by direct bank transfer to Skandinaviska Enskilda Banken, 106 40 Stockholm, Sweden.

Account Holder: Berg Insight AB  
Account number: 5011 10 402 80  
BIC/SWIFT: ESSESESS  
IBAN: SE92 5000 0000 0501 1104 0280

---

**Smart Metering in Western Europe** in its sixth edition is the foremost source of information about the ongoing transformation of the metering sector. Whether you are a vendor, utility, telecom operator, investor, consultant, or government agency, you will gain valuable insights from our in-depth research.

**Berg Insight** offers premier business intelligence to the telecom industry. We produce concise reports providing key facts and strategic insights about pivotal developments in our focus areas. From time to time we also perform custom research assignments. Our vision is to be the most valuable source of intelligence for our customers.