

# Smart Metering in Europe

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

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- **Full coverage** of the European market with in-depth market profiles of all countries in EU28+2.
- **Case studies** of smart electricity and gas metering projects by the leading energy groups in Europe.
- **360-degree overview** of next generation standards for PLC and RF smart grid communication.
- **Updated profiles** of the key players in the metering industry.
- **New detailed forecasts** for smart electricity and gas meters in 30 countries until 2023.
- **Summary** of the latest developments in the European energy industry.

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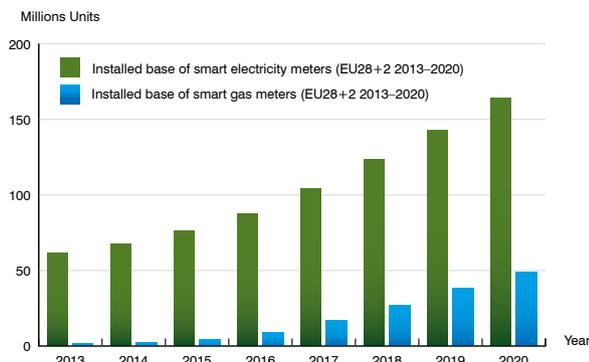
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## Half of the energy meters in Europe will be smart by 2020

EU28+2 has 281 million metered electricity customers and the annual demand for electricity meters for new installations and replacements is in the range of 12–16 million units. Penetration for smart meters, providing more comprehensive functionality than basic meter data collections, was 24 percent at the end of 2014. By 2020, Berg Insight projects that the penetration rate will increase to 58 percent, driven by large rollouts in Spain, France and the UK, in combination with nationwide rollouts in several smaller countries. The installed base of smart electricity meters is forecasted to grow at a compound annual growth rate of 15.8 percent between 2014 and 2020 to reach 163.8 million units at the end of the period. The rate of installations is expected to accelerate towards the end of the decade as nationwide rollouts in France and eventually also the UK get underway. Berg Insight also anticipates that deployments of a new generation of smart meters will start in Italy by circa 2020 as the first intelligent metering devices installed in the country reach the end of their technical lifespan. Moreover an uptake in adoption in Germany is likely, although full-scale installations cannot be expected to begin before the mid-2020s.

Europe's national governments play a key role for the adoption of smart metering. The EU's highly publicised 20/20/20 targets merely include a recommendation for the member states to evaluate the technology and introduce it – if there is a positive business case. Over the past years, almost all European countries have performed cost benefit analyses of smart metering and the majority of the cases have resulted in a recommendation to go ahead with a rollout. Italy and Sweden were the first countries in Europe to complete smart meter rollouts in the late 2000s, followed by Finland at the end of 2013. A second wave of deployments is now prepared or underway in France, the Netherlands, Spain, the UK and several other countries in Western Europe. Estonia is doing the first nationwide rollout in Eastern Europe, where other markets with a high level of activity also include Poland and Latvia. At the end of 2014, a total of seventeen European countries had developed regulatory roadmaps for the full-scale introduction of smart meters and at least two more were planning for partial rollouts. Among the largest countries, only Germany remains indecisive about smart meters. The official position of Germany's federal government is that the country should design the roll-out of smart metering systems in a targeted fashion which meets the needs of its energy reforms.►



► A proposed plan for a partial rollout to around 30 percent of the households is currently being evaluated. If approved, Berg Insight believes that it could result in a gradual ramp-up of smart meter deployments in the late 2010s and full-scale replacements beyond 2020.

The year 2014 was mixed with both positive and negative events affecting the smart metering industry. On the positive side, the major French utilities ERDF and GrDF finally announced that they were going ahead with their smart meter rollouts, signing large contracts with equipment vendors. There were also several new projects announced in Eastern European countries such as Poland and Latvia. On the negative side, the UK's DCC announced that it will be unable to launch the national smart metering solution on time and proposed a one year delay until the end of 2016, which probably postpones the start of the mass-rollout until 2017. In the area of smart meter communications, the most significant event was the tie-up between Alliander and Enexis to deploy a joint CDMA450 network for smart grid applications in the Netherlands.

Smart gas metering is starting to take off in Europe as a number of countries have identified a positive business case for the technology. Seven countries – Austria, France, Ireland, Italy, Luxembourg, the Netherlands and the UK – have made positive assessments in their national cost benefits analyses and plan full-scale rollouts. The Netherlands made the installation of smart gas meters mandatory for new connections and replacements in 2012 and the UK has also started with replacements on a small scale. During 2015, large-scale installations are planned to begin in France and Italy as well. At the end of 2014, there were 2.5 million smart gas meters in operation, corresponding to a penetration rate of around 2 percent. By 2020, Berg Insight projects that the rate will increase to 40 percent, mainly driven by nationwide rollouts in the UK, Italy and France. The installed base of smart gas meters is forecasted to grow at a compound annual growth rate of 63.8 percent between 2014 and 2020 to reach 49.0 million units at the end of the period.

### This report answers the following questions:

- What are the current time plans for smart meter rollouts in Europe?
- Who are the leading adopters of smart metering in Central and Eastern Europe?
- How are smart meter deployments proceeding in France, Spain and the UK?
- What are the plans for smart gas meter rollouts until 2020?
- Why are CDMA-450, long-range RF and BPL emerging as alternative communication technologies for smart meters?
- Which are the leading suppliers of smart metering solutions for the European market?
- How are ICT providers positioning themselves in the value chain?

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## About the Author



**Tobias Ryberg** is co-founder and principal analyst responsible for the M2M research series. He is an experienced analyst and author of numerous articles and reports about telecom and IT for leading Swedish and international publishers. The European Smart Metering market has been his major research area for the past 12 years.

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