



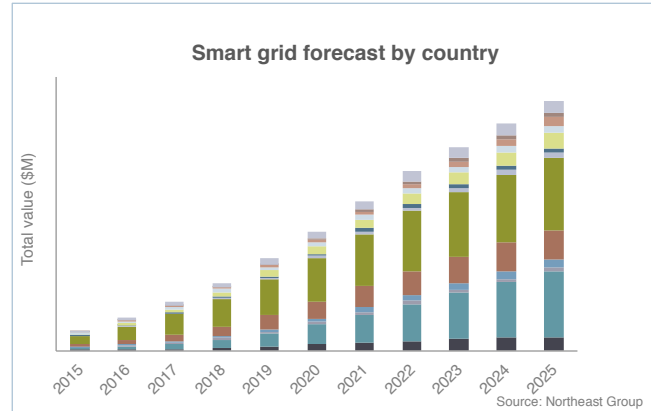
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Central & Eastern Europe and Turkey Smart Grid:  
Market Forecast (2015 – 2025)

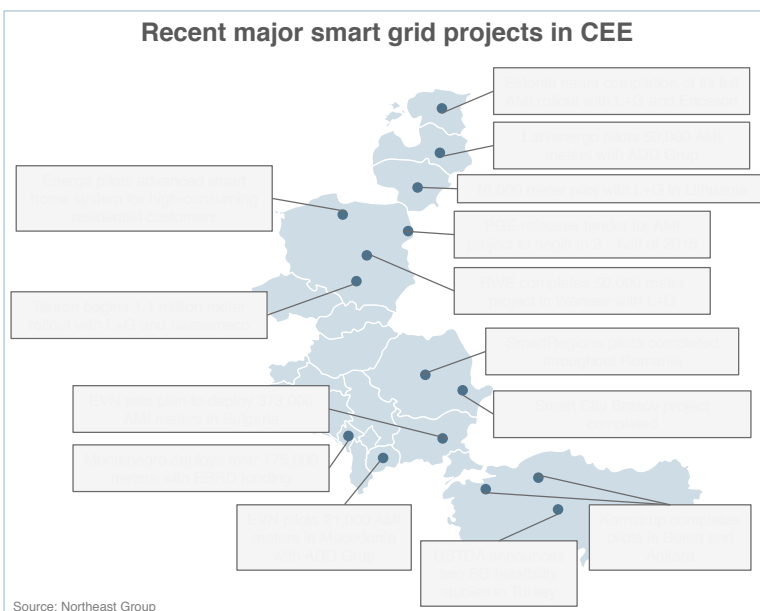
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## Central & Eastern Europe and Turkey Smart Grid: Market Forecast (2015 – 2025)

Countries in the Central & Eastern Europe (CEE) region (including Turkey) are leaders for their smart grid and smart metering potential among emerging market nations. By 2025, eight of the 12 main countries in this study (all except for Croatia, Czech Republic, Lithuania, and Turkey) will have completed smart meter deployments and many will have deployed other advanced smart grid infrastructure such as distribution automation, wide area measurement, distributed renewable sources of generation, and electric vehicle charging infrastructure. Overall, the smart grid market represents \$25.2 billion of investment over the next ten years.



Volume II of this study covers twelve CEE countries in depth, as well as summaries for six additional countries. It includes the eleven countries in Central & Eastern Europe that are now part of the European Union but until the early 1990s were Communist states, as well as Turkey, Albania, and the remaining former Yugoslav countries. These countries have all undergone radical industry restructurings over the past two decades, and in some cases are still in the process of full liberalization. In most countries, the state still plays a role in one or more segments of the electricity industry. Overall power infrastructure is in many cases outdated and not compatible with a fully integrated European power market. The CEE electricity market is therefore undergoing changes, which present utilities with opportunities to invest in smart grid



infrastructure in the process of upgrading their grids.

Most of these countries also must meet EU regulations (while many non-EU countries are looking to follow similar guidelines). More specifically, EU Directive 2009/72/EC requires that all EU states conduct a cost-benefit analysis (CBA) for smart metering and that, when the result is positive, countries deploy smart meters to 80% of households and businesses

by 2020. Almost all Western European countries have found—or are expected to find—net positive benefits from smart metering, and must meet the EU target. The case is less clear in the CEE region, and many countries have yet to say if they will aim for this target. So far, the results of CBAs have been mixed in the CEE region, with three countries finding positive results, four finding negative results, and three yet to announce. The EU is encouraging countries with negative CBAs to re-assess their smart meter potential in the next 2-3 years as costs come down and underlying conditions improve. Therefore, it is still likely that most CEE countries will begin large-scale deployments in the next few years.

Beyond regulations, the CEE region's core market conditions support smart meter deployments. Per-capita consumption is higher than in most other emerging markets. Consumption may be lower than in Western Europe, but is growing faster. Meanwhile, the CEE region is closer and more exposed to Russia, and recent aggressiveness from Russia has increased the importance of energy independence in the region. Finally, transmission and distribution (T&D) losses and power outages are a much larger concern in the CEE region than in Western Europe. In some CEE countries, utilities can justify smart meter deployments through immediate loss-reduction benefits, with other benefits an added bonus.

The CEE region also benefits from knowledge spillovers from Western Europe. Many utilities in CEE are owned by French, German, and Italian utilities that already have experience in deploying smart grid infrastructure. Almost all of the major smart grid vendors already have a presence in CEE countries, giving them a better grasp of regulatory conditions. EU-based vendors in particular face few barriers due to the common market. Additionally, many local vendors are already active across the region, which will help to drive new market segments.

Most CEE countries have not yet transposed EU smart metering regulations into national law or accepted the EU smart meter mandate. Until they do, some uncertainty will remain in the market. The EU's ongoing financial crisis casts some further doubt on new investments. Only five of the countries covered in this report are part of the euro currency, but all are susceptible to further financial market volatility. But overall, CEE countries have conditions that support smart grid, willing stakeholders, and well-developed pilot projects—including large-scale rollouts in some cases. The CEE smart grid market is well positioned for significant near-term growth.

Key questions answered in this study:

- Which CEE countries will follow EU regulations for smart grid deployments?
- How large will the smart grid market be in 18 countries across 14 sub-segments?
- How will smart grid projects be financed in EU and non-EU countries?
- Which local vendors are active and who are they partnering with?

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