



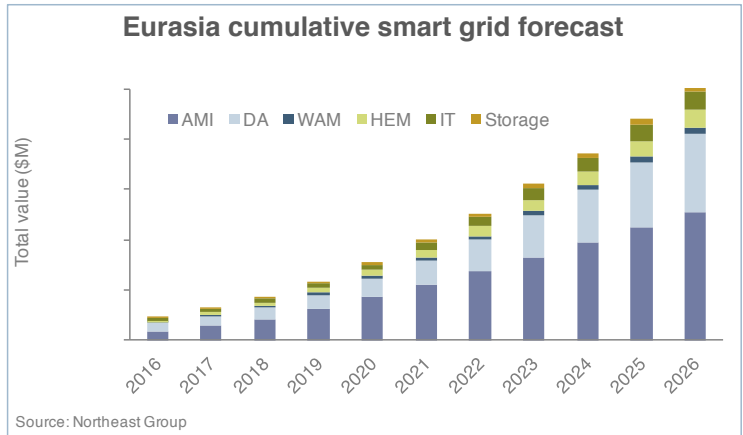
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Eurasia Smart Grid: Market Forecast (2016 – 2026)

Volume II
December 2016 | www.northeast-group.com

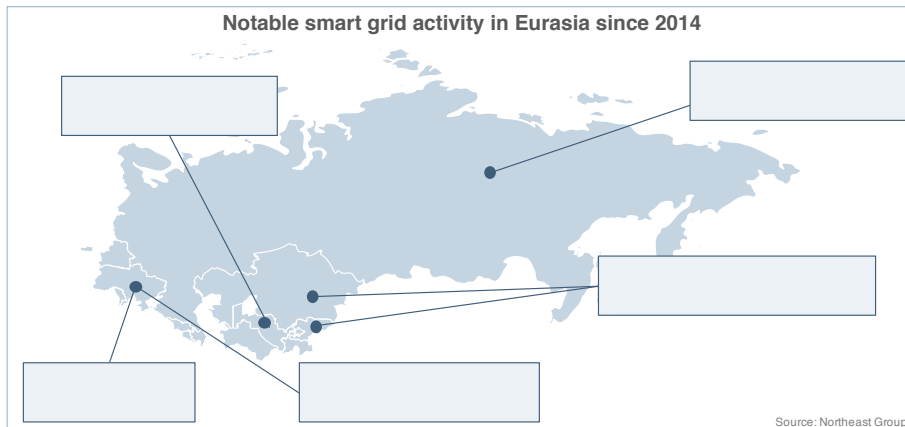
Eurasia Smart Grid: Market Forecast (2016-2026)

The Eurasia region has several drivers for smart grid investment, including an initial base of smart meters already present in the region. Driven by high non-technical losses and aided by affordable local vendors, utilities—particularly in Russia and Ukraine—have been ambitious in deploying smart meters, despite a lack of strong regulatory incentives. This bodes well for future deployments, as investment should continue even without strong regulatory drivers. This includes investment in advanced metering infrastructure (AMI), distribution automation (DA), wide area measurement (WAM), home energy management (HEM), information technology (IT), and battery storage.



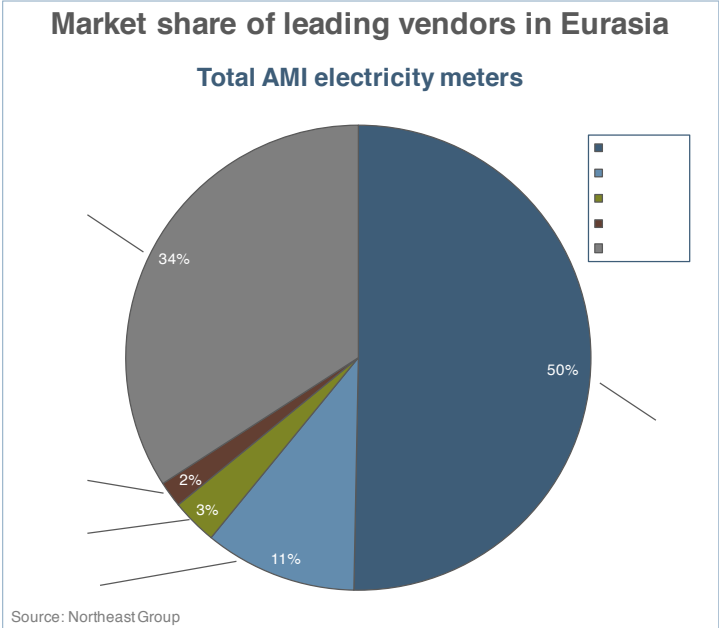
This in-depth study covers all twelve former Soviet countries not currently in the EU, which share several key characteristics. Until 1991, they were all part of the Soviet Union. As a result, they share not only an interconnected power grid but also a legacy of inefficient power usage across the residential, commercial, and especially industrial segments. On average, Eurasian countries have the highest energy intensity of any emerging market region in the world. Until recently, this had been ignored by governments eager to streamline economic growth, but in the past decade all major countries have passed some form of energy efficiency law. Smart grid infrastructure will play an important role in improving the energy efficiency of Eurasian economies—both through direct incentives such as revised tariffs and by making consumers more aware of their energy consumption.

Electricity transmission and distribution (T&D) losses are elevated across Eurasia—almost all rating higher than the emerging market average, in some cases exceeding 20%. Smart meters are the most effective tool at reducing loss rates. They have already succeeded in bringing rates in Russia and Ukraine close to



the emerging market average and multilateral financing programs are in place to reduce losses in other countries. In many cases, reducing losses can provide enough savings to cover the costs of smart metering investments, even without a strong regulatory framework.

Such a clear-cut business case is necessary for at least the next few years, as the political and regulatory environment in Eurasian countries is challenging. No Eurasian countries have meaningful smart grid regulations, and energy efficiency and renewable energy regulations are still in their early stages. Meanwhile, corruption remains extremely high, with almost all Eurasian countries falling in the bottom quartile of Transparency International’s Corruption Perceptions Index. Political risk has only worsened since 2014 due to the conflict between Russia and Ukraine. This creates considerable risk throughout the region, all of which Russia considers under its sphere of influence. In some cases, economic sanctions present significant obstacles to smart grid activity for Western vendors in the near term.



But ultimately, the conditions for smart grid development in Eurasia are strong enough to drive investment in all but the most challenging regulatory environments. Meanwhile, even in countries with poor economic and political climates, multilateral funding may be available to ensure secure financing, implement necessary technical standards, and overcome political risk hurdles—as is the current case in Uzbekistan and Kyrgyzstan. With poor energy efficiency, high non-technical losses, and knowledgeable local firms eager to partner with international smart grid vendors, the medium-term outlook for smart grid infrastructure in Eurasia is favorable. By

2026, the smart grid market in Eurasia will be comparable to that of Central & Eastern Europe, and trail only China, India, and Latin America among emerging market regions in total market size.

Key questions answered in this study:

- Where are the newest smart grid announcements and deployments in Eurasia?
- How large will the smart grid market be across 12 Eurasian countries?
- How will political risk prove to be an obstacle in the Eurasia smart grid market?
- How will smart grid projects be financed in the near to medium-term in Eurasia?
- Who are the most active local and international vendors in the Eurasia market?

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