

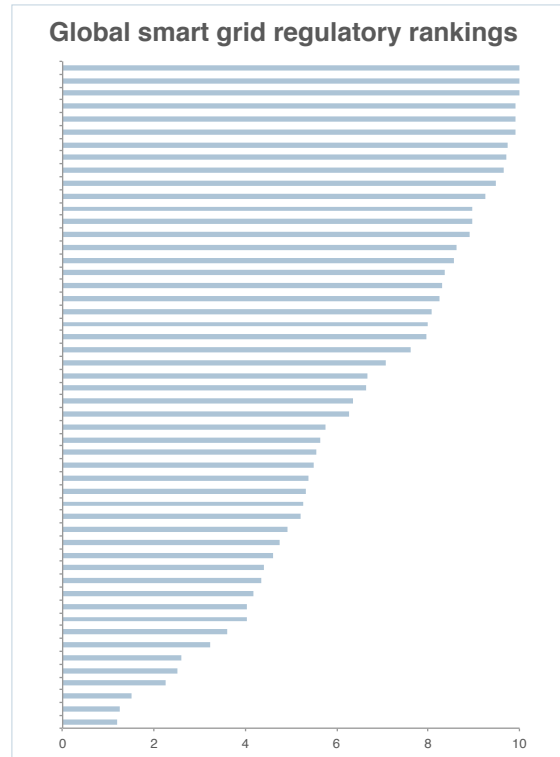
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Global Smart Grid Regulatory Index

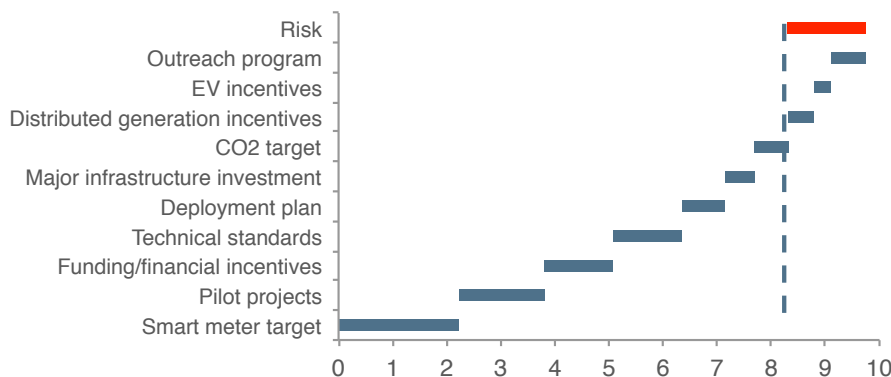
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Global Smart Grid Regulatory Index

Throughout the world, regulatory frameworks have been the driving force for smart grid infrastructure investment. Electric utilities are in many cases state-owned and in all cases are regulated entities, meaning the policies regulators put in place will often be the dominant driver of the market. Smart grid infrastructure is a classic example of an investment with wide ranging benefits – from smoother demand profiles to increased use of renewable energy and lower T&D loss rates – that are sometimes difficult to capture in a simple business case without clear government regulations. As a result, government activity such as the US Smart Grid Investment Grant (SGIG) program and the EU goal of 80% smart meters by 2020 have driven the largest deployments globally. Northeast Group’s Global Smart Grid Regulatory Index describes in detail 10 key policy indicators across 52 countries to show which countries offer the most attractive smart grid regulatory frameworks.



In some countries and for some utilities, the business case for smart grid is convincing even without strong regulations. Typically, this is the case if electricity consumption is high and most customers are wealthy, if non-technical loss rates are high, or if electricity prices are high – or typically, a combination of all of these factors. Most of the leading countries score well in both regulatory development and benefit potential. Others, like Nigeria, have poor regulatory frameworks but strong enough benefits to enable future large-scale smart grid deployments. Less commonly, some countries such as China have a strong government push for smart grid



despite more limited benefit potential. This study ranks each country by both factors – regulatory development and benefit potential – to determine the strength of smart grid drivers and

barriers and likelihood of near-term investments.

Northeast Group has been scoring the regulatory frameworks of emerging market countries since 2011. As smart grid markets mature in many developed countries, emerging markets will provide large growth opportunities. But in the near term, many of the largest opportunities remain in developed countries. The Global Smart Grid Regulatory Index widens Northeast Group's analysis to include all OECD countries as well as the leading emerging market countries. Combined, these 52 countries will invest \$470 billion in smart grid infrastructure from 2016 to 2026.

Key questions answered in this study:

- Which countries have the most developed smart grid regulatory frameworks?
- Which countries have the most smart grid benefit potential?
- What are the key smart grid indicators for 52 leading countries?
- What risk factors could delay deployments in all leading countries?

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In addition, each country summary contains one table and one chart, for an additional 104 tables and charts

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