

## Which countries have an enabling environment for investment in energy access?

### QUICK FACTS

- Of the world's 20 countries with the largest number of people without electricity, only five - Bangladesh, India, Kenya, Tanzania and Uganda - provide comprehensive policy support for energy access according to the Regulatory Indicators for Sustainable Energy (RISE).
- Sub-Saharan Africa—the least electrified region with over 600 million people without electricity in 2014—has one of the least developed policy environments to support energy access. This includes, for example, Ethiopia, Nigeria and Sudan, three countries with a consumed unserved population of 116 million in 2014.
- Kenya received a high score for energy access in RISE and showed one of the most notable improvements in performance on Doing Business indicators in 2015/16. Kenya streamlined the process of getting electricity by introducing a geographic information system that allows the utility to provide price quotes to customers without conducting a site visit. This reduced the time and interactions needed to obtain an electricity connection as well as its cost. Attractive investment incentives and mini-grid standards have also encouraged private sector engagement.
- In India in 2015/16 the utility in Delhi streamlined the connection process for new commercial electricity connections: the time needed to connect commercial consumers to electricity was reduced from 138 days in 2013/14, to 45 days in 2015/16. Connection costs were also reduced from 846 percent of income per capita in 2013/14 to 187 percent in 2015/16.

### CONTEXT

- RISE offers policy makers and investors detailed country-level insights on the policy and regulatory environment for sustainable energy across 111 countries globally.
- To enable private sector businesses to start, operate and expand their activities, and eventually deliver clean, affordable and reliable energy, an enabling business environment is required. Doing Business ranks economies from 1-190. A high ease of doing business ranking means the regulatory environment is more conducive to the starting and operation of a local firm.
- By looking at how countries perform on RISE and Doing Business, it is possible to get a sense of where progress is needed on the enabling environments to support energy access and energy market development.
- Those high-impact countries that score in the upper range on RISE tend to also rank higher on Doing Business, however progress is still needed on the regulatory environment for businesses.

### ADDITIONAL RESOURCES

[Global Tracking Framework 2017](#)

[Regulatory Indicators for Sustainable Energy 2017](#)

[Doing Business 2017](#)

[State of Electricity Access Report](#)

[SEforALL Africa Hub](#)

[SEforALL Asia-Pacific Hub](#)

[SEforALL Latin America and the Caribbean Hub](#)

[Clean Energy Mini-Grids HIO](#)

[International Energy Agency](#)

[The OPEC Fund for International Development](#)

[Regional Economic Commissions](#)

[GOGLA](#)

[ARE](#)

# ELECTRIFICATION



## HIGH-IMPACT COUNTRIES

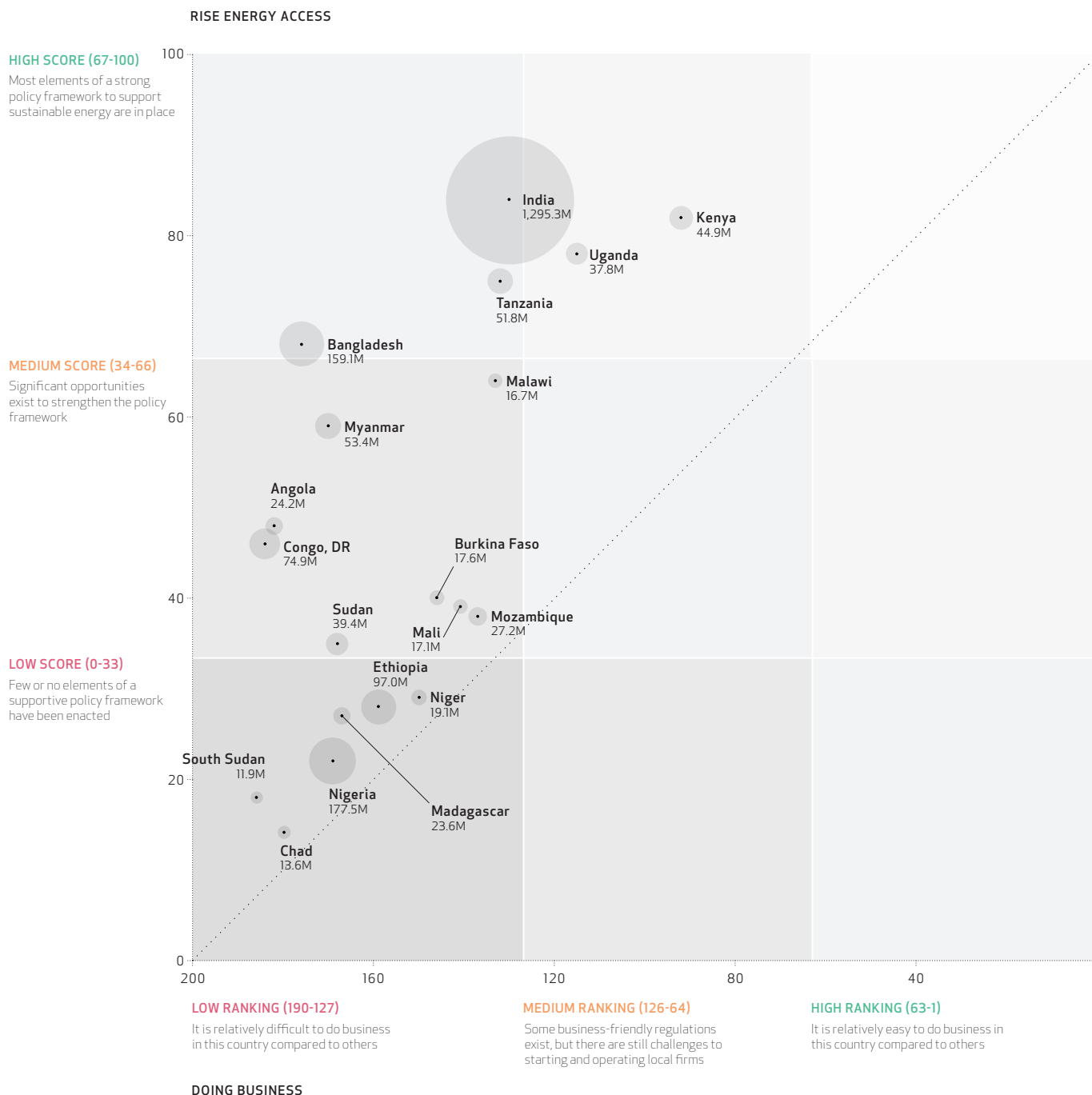
Countries whose efforts are critical to the achievement of SEforALL objectives globally

Which countries have an enabling environment for investment in energy access?

### REGULATORY INDICATORS FOR SUSTAINABLE ENERGY AND DOING BUSINESS RANKING

#### KEY

Population, 2014 values (relative to countries shown)



Notes: 1. No data available for Korea, DPR. 2. Regulatory Indicators for Sustainable Energy (RISE) is a suite of indicators that assesses the legal and regulatory environment for investment in sustainable energy. 3. Doing Business is a relative ranking of 190 economies based on the regulatory environment. It does this by sorting the aggregate scores of 11 topics, each consisting of several indicators, giving equal weight to each topic. Sources: Regulatory Indicators for Sustainable Energy (RISE), World Bank Group, 2017. "Doing Business 2017: Equal Opportunity for All", <http://www.doingbusiness.org/rankings>, 2017. Data extracted from <http://rise.esmap.org/> on 06/23/2017. World Development Indicators, World Bank Group, 2014. Data extracted from [http://data.worldbank.org/indicator/SP.POP.TOTL?end=2014&name\\_desc=false&view=chart](http://data.worldbank.org/indicator/SP.POP.TOTL?end=2014&name_desc=false&view=chart) on 06/20/2017.

## Which countries have an enabling environment for investment in energy efficiency?

### QUICK FACTS

- Some of the most energy intensive economies, including Canada, China, the Russian Federation, South Africa or the United States, are now harnessing energy efficiency measures with enabling regulatory environments and favorable business environments.
- Doing Business rankings suggest that Europe and Central Asia have consistently been the regions with the highest average number of reforms per economy; the region is now close to having the same good practices in place as the OECD high-income economies.
- Despite significant progress realized for business development in Indonesia in recent years, notably due to the introduction of regulatory initiatives to improve overall power reliability, the regulatory environment still lacks energy efficiency standards, building codes or mandates for the public sector and utilities.

### CONTEXT

- Regulatory Indicators for Sustainable Energy (RISE) offers policy makers and investors detailed country-level insights on the policy and regulatory environment for sustainable energy across 111 countries globally while Doing Business measures aspects of regulation that enable or prevent private sector businesses from starting, operating and expanding.
- Dedicated entities are the necessary building blocks for governments to develop and implement energy efficiency measures, and encourage the private sector engagement. Minimum energy performance standards, appliance labels and building codes are prime candidates for near-term action. Other policy elements are also important but remain often neglected: sectoral-targeted policies for large consumers, the public sector and utilities as well as the development of financing mechanisms.
- The top twenty high-impact countries for energy efficiency show a strong correlation between a high overall RISE Energy Efficiency score and a high ranking on the Ease of Doing Business. Nigeria received its lowest RISE score in Energy Efficiency at 11, with low scores in 11 out of 12 efficiency indicators. Nigeria was ranked 169 out of 190 countries in Doing Business, making improvements in 2015/16 in starting a business and getting credit.

### ADDITIONAL RESOURCES

[Global Tracking Framework 2017](#)

[Regulatory Indicators for Sustainable Energy 2017](#)

[Doing Business 2017](#)

[Copenhagen Centre on Energy Efficiency](#)

[SEforALL Africa Hub](#)

[SEforALL Asia-Pacific Hub](#)

[SEforALL Latin America and the Caribbean Hub](#)

[Appliances and Equipment Accelerator](#)

[Building Efficiency Accelerator](#)

[District Energy Accelerator](#)

[Lighting Accelerator](#)

[Transport and Motor Vehicle Fuel Efficiency Accelerator](#)

[Industrial Energy Efficiency Accelerator](#)

[International Energy Agency](#)

[Energy Efficiency Facilitating Hub \(ECCJ\)](#)

[Regional Economic Commissions](#)

# ENERGY EFFICIENCY



## HIGH-IMPACT COUNTRIES

Countries whose efforts are critical to the achievement of SEforALL objectives globally

Which high-impact countries have an enabling environment for investment in energy efficiency?

### REGULATORY INDICATORS FOR SUSTAINABLE ENERGY (RISE) AND DOING BUSINESS RANKING

**KEY**

● Population, 2014 values (relative to countries shown)



Notes: 1. Regulatory Indicators for Sustainable Energy (RISE) is a suite of indicators that assesses the legal and regulatory environment for investment in sustainable energy. 2. Doing Business is a relative ranking of 190 economies based on the regulatory environment. It does this by sorting the aggregate scores of 11 topics, each consisting of several indicators, giving equal weight to each topic. Sources: Regulatory Indicators for Sustainable Energy (RISE), World Bank Group, 2017. "Doing Business 2017: Equal Opportunity for All", <http://www.doingbusiness.org/rankings>, 2017. Data extracted from <http://rise.esmap.org/> on 06/23/2017. World Development Indicators, World Bank Group, 2014. Data extracted from [http://data.worldbank.org/indicator/SP.POP.TOTL?end=2014&name\\_desc=false&view=chart](http://data.worldbank.org/indicator/SP.POP.TOTL?end=2014&name_desc=false&view=chart) on 06/20/2017.

## Which countries have an enabling environment for investment in renewable energy?

### QUICK FACTS

- The six top-performing high-impact countries for renewable energy in Regulatory Indicators for Sustainable Energy (RISE) – including Germany, the United Kingdom, France, Spain, Japan and South Korea - also score highly for reliable power supplies and transparent electricity tariffs.
- Doing Business' Getting Electricity indicator highlights the Republic of Korea for the fast process – 3 procedures and 18 days - to get access to a quality electricity services.
- With strong policies and regulatory incentives, as well as a plentiful and skilled labor force across the full supply chain, China has invested more in renewable energy than any other country in the world, according to RISE. Over 2010–15, investment renewable energy investment - for solar, wind, geothermal, small hydropower, and biomass - reached \$377 billion, more than the next two countries combined, the United States and Germany.

### CONTEXT

- RISE offers policymakers and investors detailed country-level insight on the policy and regulatory environment for sustainable energy across 111 countries globally.
- Doing Business measures aspects of regulation that enable or prevent private sector businesses from starting, operating and expanding. It ranks economies from 1-190 based on the regulatory environment by sorting aggregate scores on 10 topics and giving equal weight to each topic.
- Doing Business' Getting Electricity indicator highlights the importance of a reliable power supply and transparent tariffs structures to support effective business activity and the deployment of renewable energy at scale.
- The high renewable energy penetration rates observed in high-impact countries such as Germany, the United Kingdom, Spain or Australia, generally result from a combination of favorable policy, regulatory and business environments.
- Doing Business's Getting Electricity indicators shows that India, Indonesia and Kenya improved the administrative processes needed to get a connection to an electricity network while also reducing the cost of connection. Further effort is needed to mitigate the risks of payment delays or defaults, reduce delays for obtaining construction permits, and meet domestic renewable targets in a timely manner.

### ADDITIONAL RESOURCES

[Regulatory Indicators for Sustainable Energy 2017](#)

[Global Tracking Framework 2017](#)

[Doing Business 2017](#)

[SEforALL Africa Hub](#)

[SEforALL Asia-Pacific Hub](#)

[SEforALL Latin America and the Caribbean Hub](#)

[International Renewable Energy Agency](#)

[International Energy Agency](#)

[REN21](#)

[Bloomberg New Energy Finance](#)

# RENEWABLE ENERGY



## HIGH-IMPACT COUNTRIES

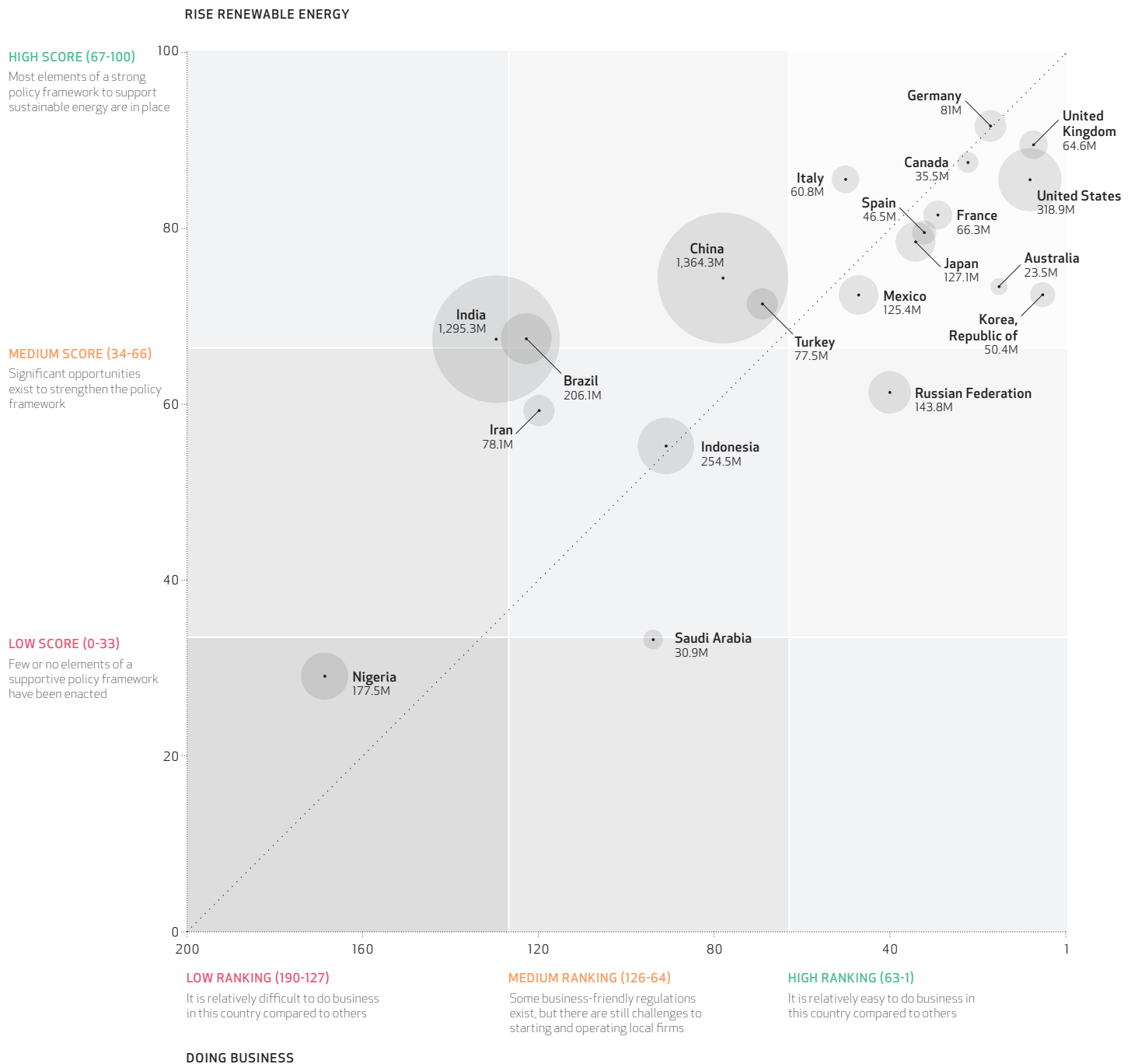
Countries whose efforts are critical to the achievement of SEforALL objectives globally

Which high-impact countries have an enabling environment for investment in renewable energy?

### REGULATORY INDICATORS FOR SUSTAINABLE ENERGY (RISE) AND DOING BUSINESS

**KEY**

● Population, 2014 values (relative to countries shown)



Notes: 1. Regulatory Indicators for Sustainable Energy (RISE) is a suite of indicators that assesses the legal and regulatory environment for investment in sustainable energy. 2. Doing Business is a relative ranking of 190 economies based on the regulatory environment. It does this by sorting the aggregate scores of 11 topics, each consisting of several indicators, giving equal weight to each topic. Sources: Regulatory Indicators for Sustainable Energy (RISE), World Bank Group, 2017. Doing Business, <http://www.doingbusiness.org/rankings>, 2017. Data extracted from <http://rise.esmap.org/> on 06/23/2017. World Development Indicators, World Bank Group, 2014. Data extracted from [http://data.worldbank.org/indicator/SP.POP.TOTL?end=2014&name\\_desc=false&view=chart](http://data.worldbank.org/indicator/SP.POP.TOTL?end=2014&name_desc=false&view=chart) on 06/20/2017.

# ENABLING POLICIES



## HIGH-IMPACT COUNTRIES

Countries whose efforts are critical to the achievement of SEforALL objectives globally

Which high-impact countries have an enabling environment for investment in energy efficiency and renewable energy?

### QUICK FACTS

- More than three-quarters of all countries covered by Regulatory Indicators for Sustainable Energy (RISE) score well on the legal framework for renewable energy, compared to 9 percent that score well on having energy efficiency mandates and incentives for utilities in place.
- High performers on RISE's energy efficiency indicator often have strong regulations in place to support renewable energy deployment. However, the average RISE score for energy efficiency is more than ten percentage points below that for renewable energy.
- Official renewable energy targets have become nearly universal, with some form of public commitment in 93 percent of countries covered by the RISE indicators.
- Most of the world's largest energy consumers score in the top tier of the RISE renewable energy indicator indicating strong policy frameworks are in place.

### CONTEXT

- RISE offers policy makers and investors detailed country-level insights on the policy and regulatory environment for sustainable energy across 111 countries globally.
- RISE shines a light on the need to attach greater political and policy priority to energy efficiency. With the exception of the highest income countries, many countries have few or no policies in place to support the adoption of ambitious energy efficiency measures. In contrast, RISE highlights strong progress and broad uptake in advancing renewables policy across many countries.
- Among the countries where wind and solar power account for at least 5 percent of total electricity generated in 2014, more than 80 percent have completed a grid integration study to understand how to integrate variable renewable energy.
- India and China together represent more than a third of the global population. Driven in part by clean air imperatives and low-carbon development ambitions they both have high scores on RISE for renewable energy and energy efficiency. China's 13th Five-Year Plan sets a 15 percent target of non-fossil energy as a share of total final energy consumption by 2020, and a 15 percent reduction in energy intensity compared to 2015 levels. India has placed energy conservation at the heart of its development strategy through multiple initiatives such as "Unnat Jeevan By Affordable LEDs and Appliances for All", the world's largest zero-subsidy LED bulb program for domestic consumers.

### ADDITIONAL RESOURCES

[Regulatory Indicators for Sustainable Energy 2017](#)

[Global Tracking Framework 2017](#)

[International Renewable Energy Agency](#)

[SEforALL Africa Hub](#)

[SEforALL Asia-Pacific Hub](#)

[SEforALL Latin America and the Caribbean Hub](#)

[International Energy Agency](#)

[REN21](#)

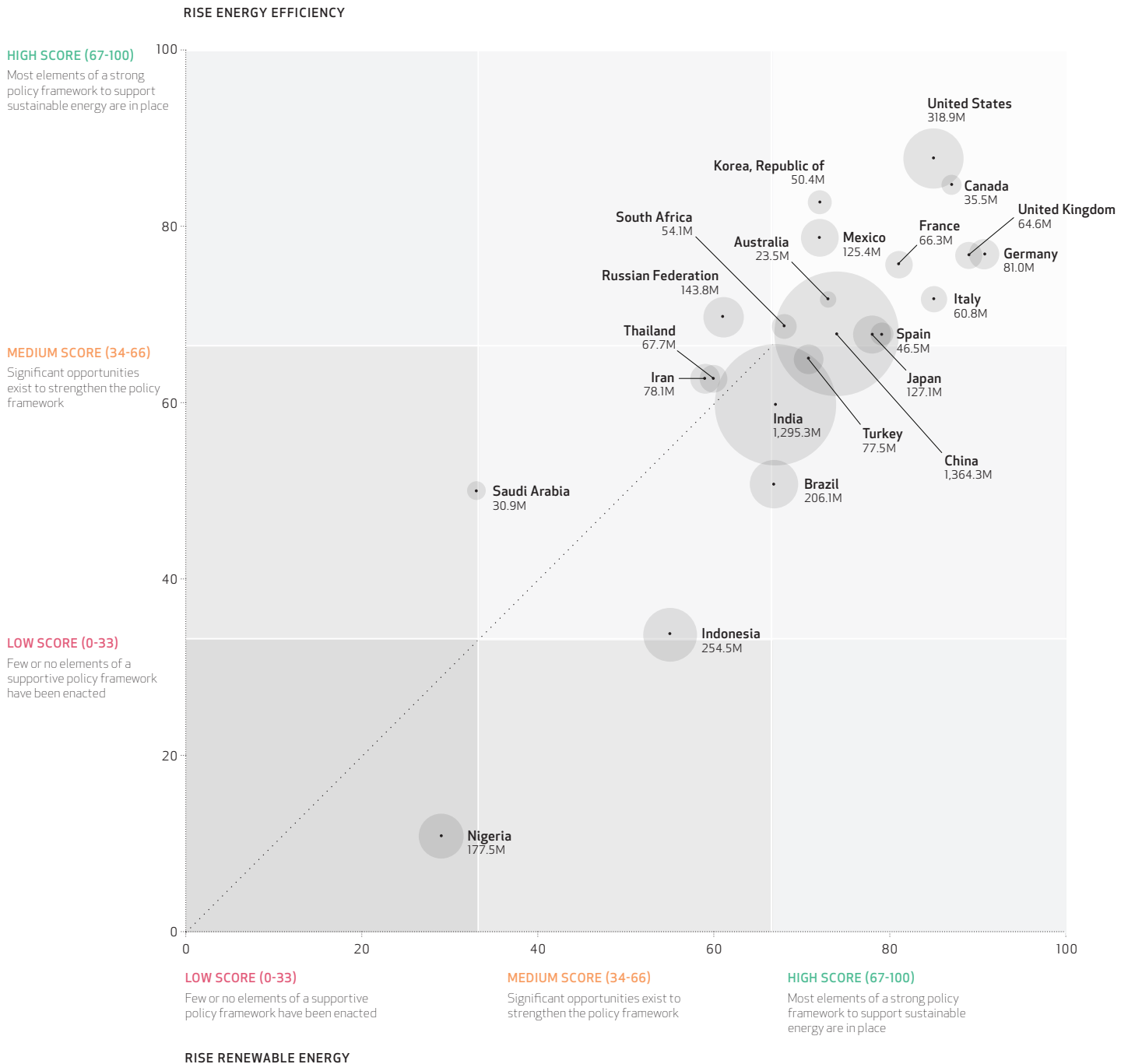
[Bloomberg New Energy Finance](#)

### Which high-impact countries have an enabling environment for investment in energy efficiency and renewable energy?

#### REGULATORY INDICATORS FOR SUSTAINABLE ENERGY (RISE) FOR ENERGY EFFICIENCY AND RENEWABLE ENERGY

#### KEY

Population, 2014 values (relative to countries shown)



Note: Regulatory Indicators for Sustainable Energy (RISE) is a suite of indicators that assesses the legal and regulatory environment for investment in sustainable energy.

Source: Regulatory Indicators for Sustainable Energy (RISE), World Bank Group, 2017. Data extracted from <http://rise.esmap.org/> on 06/23/2017. World Development Indicators, World Bank Group, 2014. Data Extracted from [http://data.worldbank.org/indicator/SP.POP.TOTL?end=2014&name\\_desc=false&view=chart](http://data.worldbank.org/indicator/SP.POP.TOTL?end=2014&name_desc=false&view=chart) on 06/20/2017.