

124 Countries Ranked by Ability to Deliver Secure, Affordable and Sustainable Energy

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- Energy systems of 124 countries ranked according to economic, environmental and energy security indicators
- Norway, New Zealand, France and Sweden top the rankings; Colombia and Costa Rica are non OECD countries in top ten
- Regional analysis highlights EU28, MENA, BRICS, North America, Sub-Saharan Africa and ASEAN

- Explore the [interactive report](#), [rankings](#) and [full report](#)

Geneva, Switzerland, 11 December 2013 – In support of the global transition to a new energy architecture,

the World Economic Forum today released the [Global Energy Architecture Performance Index Report 2014](#). Prepared in

collaboration with Accenture and designed to help countries spur their efforts to meet energy challenges and

opportunities in innovative ways, the Index assesses regions and 124 countries according to economic growth,

environmental sustainability and energy security performance, analysing the complex trade-offs and dependencies

that affect country efforts.

“ Resource wealth or economic development alone do not guarantee high performance on the Index ” explained Roberto Bocca, Senior Director, Head of Energy Industries, World Economic Forum. “ For an effective energy system countries need to focus on all three sides of the energy triangle - environmental sustainability, security of supply and affordability ” .

Norway tops the Index [rankings](#), followed by New Zealand and France. The top ten is dominated by EU and OECD countries with the exception of Costa Rica and Colombia. 41% of energy supply in the top ten countries comes from low carbon energy sources, compared to a global average of 28%.

European Union and Nordic countries top the rankings, underscoring the ability of service sector economies to prioritize investment in the development of low-carbon economies and address climate change through renewables and energy efficiency. The drive for sustainability has meant some trade-offs in energy affordability – underpinning the policy debate in Europe as utilities and consumers struggle with pricing and an uncertain policy landscape.

The performance of BRICS countries (Brazil, Russia, India, China and South Africa) is impacted by the prevalence of

energy- and emission-intensive industries. Ranked 21st, Brazil is the top performer in this cluster, extracting 50%

more GDP per unit of energy use than the average of the other BRICS countries. China, the world's largest energy

consumer, has successfully increased access to energy for its population but continues to struggle with rising

energy imports and pollution levels.

Energy systems in the Middle East and North Africa (MENA) are broadly defined by the resource wealth of the region, the prevalence of

energy subsidies and energy inefficiency impacting consumption and emissions. Ranked best performing region on

energy security, the analysis reveals disparity of resource distribution, with three of the 17 countries importing more

than 90% of net energy needs.

performance highlights the disparity in resource allocation across the region where energy systems are fossil fuel dominated. The demand for energy is expected to rise and likely to put further strain on these energy systems. Interconnections in the gas and electricity systems through the ASEAN 2015 integration plans will play a key role in addressing these challenges.

Performance across North America shows contrasting circumstances, from the import and fossil fuel dependence of the Caribbean nations, to the resource wealth of Canada, the United States and Mexico. Costa Rica shows remarkable results. As one of only two upper middle-income countries to rank within the top 10, government strategy driving the transformation of its energy system aims to make Costa Rica the world's first carbon-neutral country, with 99% of electricity output from renewable energy sources.

The context in sub-Saharan Africa is marked by the challenge to access energy. An average 39% of the region ' s population has access to modern energy supply compared with 100% access rates in OECD countries. South Africa succeeded in

raising rural electrification rates from 37% to 67% between 2000 and 2010, but with electricity production

dominated by coal, South Africa demonstrates the complex trade-offs the region faces in balancing the

environmental and access dimensions of energy aims.

The [Report](#) finds that many developing countries still struggle to supply citizens with basic energy needs, providing

electricity to less than 50% of their total population. It also highlights the over-dependence of many energy

systems, with 32% of countries dependent on imports to meet more than half of their energy needs. However,

energy trade can have positive impacts for both importing and exporting countries but can pose economic and

energy security risks, in particular when coupled with dependence on few trading partners.

“ Our analysis concludes that there is no single way forward; each country must work with its own resources and

constraints, making difficult choices and trade-offs, ” said Arthur Hanna, Managing Director, Energy Industry,

Accenture, and a Member of the World Economic Forum ’ s Global Agenda Council on New Energy Architecture.

“ The Index helps nations take stock of their energy transition challenges and address key barriers to success, such as market distorting subsidies, continued uncertainty around energy policy and funding for research and development of new energy sources and technologies. ”

Notes to Editors

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