Rush to renewables in India
Rush to renewables in India

India’s energy sector is on the move, with power capacity and demand rising fast. Driven by urbanization and a growing middle class, the country is now fourth on the list of the world’s top energy consumers.

This huge need for power is the primary driver of India’s renewable energy sector, which is also being boosted by strong Government support and the country’s strong wind power industry (currently the world’s fifth largest). But while FY13 saw power generation from renewable sources soar to 12.3% of the country’s total energy mix (up from 7.8% five years ago), much of India’s renewable energy potential remains untapped.

Untapped potential

In many ways, India is a country made for renewable energy. With almost endless sun and vast land, the nation boasts abundant untapped renewable energy resources and significant potential to produce energy from biomass derived from agricultural and forestry residues.

Key policy initiatives

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>✴ Launch of the NAPCC</td>
<td>✴ GBI scheme for wind energy</td>
<td>✴ Notification of solar-specific RPOs</td>
<td>✴ National Electric Mobility Mission Plan 2020 launched</td>
</tr>
<tr>
<td>✴ State-specific feed-in-tariffs (FITs) for wind energy</td>
<td>✴ Solar policies/tariffs announced by several states/SERCs</td>
<td>✴ Formulation of national clean energy fund (NCEF)</td>
<td>✴ Release of Guidelines for Green Large Area Development by MNRE</td>
</tr>
<tr>
<td>✴ Notification of renewable purchase obligations (RPOs)</td>
<td></td>
<td>✴ Launch of renewable energy certificates (RECs)</td>
<td>✴ Establishment of Central Financial Assistance (CFA) to set up small/micro hydropower projects</td>
</tr>
<tr>
<td>✴ Generation-based incentives (GBI) scheme for solar power</td>
<td></td>
<td>✴ Launch of Jawaharlal National Solar Mission (JNNSM)</td>
<td>✴ Constitution of offshore Wind Energy Steering Committee (OWESC) by MNRE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>✴ Launch of a smart-grid task force</td>
<td>✴ Solar Energy Corporation of India (SECI) set up</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>✴ Offshore Wind Energy Policy (draft) announced</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>✴ GBI reinstated in FY13 after it lapsed at the end of FY12</td>
</tr>
</tbody>
</table>

Source: EY analysis
The ability of renewable energy to be scaled up and down and distributed widely, without the need for big grids, also makes it well suited to India. Its large population is spread widely throughout the country, and many people are located in remote areas that lack the critical infrastructure needed to deliver conventional power. Increased use of renewables also offers India the opportunity to reduce its dependence on expensive imported fossil fuels, improve energy security and meet climate change goals.

The potential of India’s renewable energy market is boosted by strong Government support and incentives and a liberal approach to foreign direct investment (FDI).

Wind still dominates, solar set to shine

Wind energy contributes about 19GW of India’s installed capacity, making it the overwhelmingly dominant renewable energy source. Small hydropower contributes 3.6GW, as does bio energy — although ambitious targets aim for 10GW capacity from biomass by 2020. Solar adds 2GW of installed capacity.

But while it may lag far behind wind, solar is emerging as the shining star of India’s renewable energy segment, boosted by strong Government support, which has set targets to install 9GW of solar power by 2017.

The capital crunch

This regulatory uncertainty is a key challenge for the sector. India has a policy of renewable purchase obligation, wherein specific segments of energy consumers are mandated to source a set percentage of the energy through renewable sources. While the announcement of this policy was hailed as a tipping point for the Indian renewable energy sector, the policy has yet to be enforced.

Some Indian regions have recently altered capacity targets during projects’ bidding processes, while others have reduced tariffs and changed deadlines for submissions. These sudden shifts are discouraging for investors, especially those developers and suppliers who had already invested based on original proposal processes.

Another big challenge is a lack of the infrastructure needed to connect power generated from renewable energy to the power grid.

But perhaps the single biggest threat to growth in India’s renewable energy market is the high cost of capital. India’s higher interest rates, the falling value of the rupee and short-term lending rates have caused the cost of capital to soar to 13% or more (compared to about 6% in other markets), making Indian renewable projects extremely expensive. A recently announced Government policy that allows solar projects to receive direct grants covering as much as 40% of the upfront cost of building projects will help, but the high cost of capital will continue to be a problem with no easy answers.

Local insights key to success

A country as hungry for energy as India has little choice but to embrace renewables. With abundant natural resources and a supportive Government, the nation’s renewable energy market looks primed for success. But to truly reach its growth potential, India must do more to stabilize the regulatory environment and offer certainty around its energy policy framework. The high cost of capital will also remain a challenge for the foreseeable future though increased FDI may help to bring it down. For those keen to invest in India’s energy sector, partnering with local advisers who understand the complexities of India’s energy regulators, tax laws and utilities sector will be a critical success factor.

Sanjay Chakrabarti
Partner, India Cleantech leader, Ernst & Young LLP
sanjay.chakrabarti@in.ey.com
+91 22 6192 0000

Sanjay advises large and midsize Indian companies as they establish their renewable energy businesses, including under the National Solar Mission, and he supports foreign technology providers with their India business strategy. He is also actively engaged in advocating policy framework for the renewable space, specifically on the financing side, and is currently working with the Indian Wind Turbine Manufacturers Association.

How we can help

EY has teams in 13 offices across India and extensive experience working with clients in government, utilities, cleantech sectors, and the corporate environment. We have supported foreign investors, including Fortune 500 clients, to evaluate the opportunities and to establish successful operations in the Indian renewable energy sector. EY India provides Assurance, Tax, Transactions and Advisory services, as well as focused cleantech knowledge.

Read our publication Mapping India’s Renewable Energy growth potential: status and outlook 2013.
About EY
EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit ey.com.

About EY's Global Power & Utilities Center
In a world of uncertainty, changing regulatory frameworks and environmental challenges, utility companies need to maintain a secure and reliable supply, while anticipating change and reacting to it quickly. EY's Global Power & Utilities Center brings together a worldwide team of professionals to help you succeed — a team with deep technical experience in providing assurance, tax, transaction and advisory services. The Center works to anticipate market trends, identify the implications and develop points of view on relevant sector issues. Ultimately it enables us to help you meet your goals and compete more effectively.

© 2014 EYGM Limited.
All Rights Reserved.

EYG no. DX0237
CSG/GSC2014/1289862
ED None

In line with EY's commitment to minimize its impact on the environment, this document has been printed on paper with a high recycled content.

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax, or other professional advice. Please refer to your advisors for specific advice.

ey.com