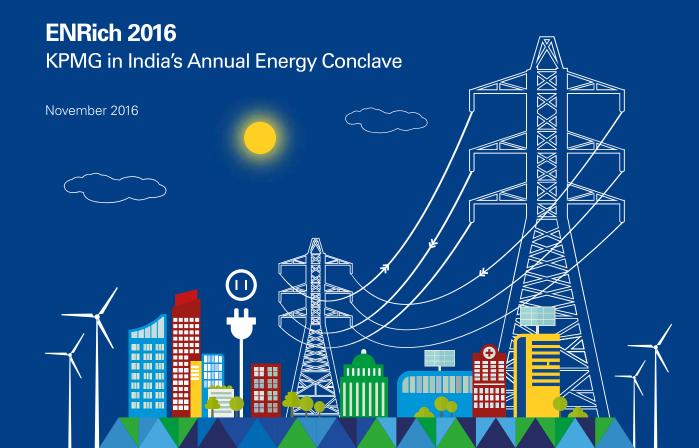


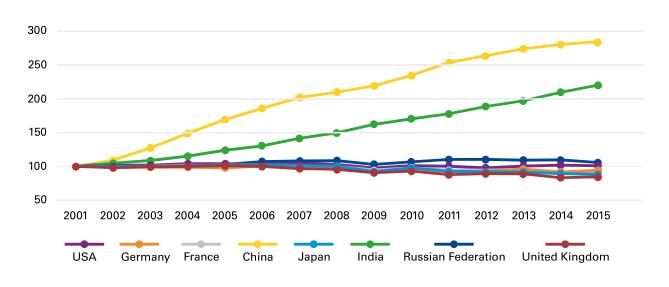
Renewing investments in the Indian energy sector



Energy, as a sector, plays an important – rather catalytic role – in the economic growth of any country. India's aspirations for rapid economic growth will demand concomitant growth in energy supplies. This will require investments across the board, including in commodities such as coal and hydrocarbons, generation assets and in energy delivery mechanisms.

Many major global economies are seeing either very slow growth, and in certain cases there has been de-growth. In the recent past, India's energy sector has been growing at a very fast clip. The large size, coupled with this fast growth rate over the past decade, has made India attractive as an investment destination. In the coming decades, this growth is likely to continue unabated as the young demographics propel Indian consumption, especially if economic policies are benign or encouraging. As seen in the recent past, irrespective of the government of the day, policies have largely remained consistent and indeed witnessing further liberalisation in a staged manner.

Figure 1. Energy transitions - Comparative changes in primary energy consumption



Source: KPMG in India's analysis based on data from BP Statistical Review of World Energy, 2016

India has witnessed multiple cycles of big investments followed by negative views around investments in the energy sector across the multiple sub-segments. Since economic liberalisation in the early 1990s, followed by the next wave in the early part of this millennium, investments have grown

sharply, both from the public and private sectors. The private investment space has witnessed growth from domestic and overseas investors, especially in power, and to more moderate extents in oil and gas and mining.

Table 1. Deal activity in key segments – April 2009 to May 2014 (USD Million)

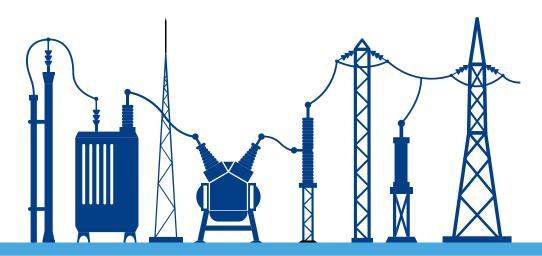
| Sub Sector/Deal type | Conventional power generation (thermal/gas/ hydro) | Renewable generation | Power transmission | Oil and gas | Total |
|--------------------------|--|-------------------------|-----------------------|----------------|--------|
| PE investment | 1,028 | 739 | - | 31 | 1,798 |
| Inbound strategic M&A | 601 | 234 | - | 5,017 | 5,852 |
| Domestic M&A | 237 | 451 | 45 | 7,509 | 8,242 |
| Total | 1,866 | 1,424 | 45 | 12,556 | 15,891 |

Source: KPMG in India's analysis, 2016. Transaction values available for the announced deals in the public domain have been used.

Table 2. Deal activity in key segments – June 2014 to October/November 2016 (USD million)

| Sub Sector/Deal type | Conventional power generation (thermal/gas/ hydro) | Renewable generation | Power transmission | Oil and gas | Total |
|--------------------------|--|-------------------------|-----------------------|----------------|--------|
| PE investment | 255 | 1,125 | 88 | 475 | 1,943 |
| Inbound strategic M&A | 449 | 594 | - | 12,614 | 13,657 |
| Domestic M&A | 4,227 | 2,772 | 458 | 2,261 | 9,718 |
| Total | 4,930 | 4,491 | 546 | 15,351 | 25,318 |

Source: KPMG in India's analysis, 2016. Transaction values available for the announced deals in the public domain have been used.



However, even as the economy has opened up and attracted investments, a series of challenges have stymied investment flow in the recent years. The market has witnessed extreme competition among the players and risk taking of unprecedented scale, sometimes ignoring the underlying fundamentals and the increasing regulatory challenges. This has resulted in significant stress in the industry and the associated financial system. A good part of policy attention in recent years has been on repairing the balance sheets of state-owned banks, many of which were major lenders to energy and infrastructure projects. Even as some progress has been made on those counts, the challenges continue to affect investor and financier interest significantly.

In the meantime, the expanding energy economy requires funding to grow. By a broad measure, the energy sector requires about USD270 billion over the next four to five years. However, the ability to finance the infrastructure development efficiently is being questioned for several reasons, principally among which is the stress that the banking system has seen due to the poor financial position of the industry. Two challenges emanate from this. Firstly, banks are wary of lending to companies with weak balance sheets. This leads to the second challenge wherein unless the promoters and industrialists actually grow their businesses, their balance sheets will never be healthy enough to partake of these opportunities. Breaking the logiam on investments thus has to be the core focus of policy action in the sector. Fresh thinking and innovative measures are required to catalyse investments and growth.

The government of the day has already initiated a series of measures to fundamentally transform the energy economy and citizen services, including flagship schemes like 24X7 Power for All, clean energy ambitions that have been since turned into formal international commitments through ratification of the CoP 21 agreement, the new Hydrocarbon Exploration and Licensing Policy (HELP) that seeks to address the challenges of upstream oil and gas and reduce import dependence, the new bio-fuel policy announced to accord momentum to second generation bio fuels, and above all the Ujiwal Discom Assurance Yoiana (UDAY) scheme that seeks to fundamentally address the power distribution sector finances. The new upstream bid grounds for Discovered Small Fields (DSF), which is a precursor to larger offerings under the HELP policy, has witnessed high initial interest from participants globally, and the government hopes to get the ongoing bid round closed successfully.

The investment cycle however is yet to see adequate uptick, in part because these are early days since the policy changes but also because, as previously mentioned, the balance sheets of the existing players in the private sector are yet to recover. Barring select areas like renewables where there is new money coming in, the traditional energy segments are still struggling, although interest remains high. Given the policy initiatives, we believe investments should be gaining significant momentum especially in renewables, stressed asset play, oil and gas (especially upstream) and transmission. The key for that translation would be seamless implementation of the initiatives, resolution of stressed assets by government as key stakeholder, and regulatory interventions that are urgently required by the sector.

Part of the approach in the interim is for the public sector to step up investment activities. However, the public sector will also need money from the private sector, especially debt to scale up. Given the cost of funds in India and the stretched bank balance sheets, there is a need to access international capital markets and raise debt at efficient rates. While the examples of such raises are few, they are increasingly becoming more popular. As the market deepens and acquires credibility, the costs would come down and innovation would go up. This needs to be methodically driven to overcome the current logiam.

The public sector, however, can only be a bridge and ultimately private capital would need to scale up in the coming years. This would require new providers of capital, both for debt and for equity. Private Equity (PE) flows have reduced substantially, and it is difficult to see it change on a large scale. However, India should be of interest to strategic investors, providers of long term capital for debt and equity, including the pension funds and the attendant financial innovation that it would bring in. Indeed we are seeing a new investor class emerging, like pension/sovereign funds, long term strategic investors, especially as India moves to a large amount of brownfield assets play, and thus taking out from the equation large amounts of pre-development, construction risks from the play. The interest from different corridors demonstrates that this is not a oneoff activity.

Financial innovation needs to be emphasised upon. India has already seen initial issuances of masala bonds and green bonds. This market, including bond markets at the domestic levels, needs to be deepened. Capital that supports clean development in energy and related sectors like transport need

to be actively courted. New kinds of insurance and guarantee products need to be introduced to take into account some of the risks that capital routinely faces when deployed in India, including from utilities, operators and regulatory authorities. All of this is achievable provided thought and attention are applied and legacy problems are resolved in a focused and deliberate manner. Indeed some initial successes in this regard has already been witnessed with the successful issuances of green bonds by Hero Future Energy and Renew Power (with partial credit guarantee from IIFCL), and with organisations like NTPC successfully issuing masala bonds. It is noteworthy that with increasing issuances such products are progressively witnessing finer pricing.

Given the transition that the sector is witnessing, it is also important that investments flow into some of the evolving areas as well, rather than being limited to some of the traditional requirements. Policy must work to ensure that the new players and the new products get sufficient sustenance. Foremost among the requirements would be stability of fiscal and sector regulation, a fair field of play between Indian and foreign players and reduction of procedural challenges that sometimes diminish interest. While there is a marked increase in engagement by investors, it is important that the key initiatives are implemented religiously across sub-segments so that the intent of rapid scale-up of energy investments turns into reality over the next few years.



This article has been authored by Anish De, Partner and Head - Strategy and Operations, Infrastructure, Government and Healthcare, KPMG in India



KPMG in India contacts

Nitin Atroley

Partner and Head

Sales and Markets **T**: +91 124 307 4887 E: nitinatroley@kpmg.com

Utkarsh Palnitkar

Partner and Head

Infrastructure, Government and Healthcare Life Sciences T: +91 22 3090 2320

E: utkarshp@kpmg.com

Manish Aggarwal

Partner and Head

Corporate Finance - M&A, Infrastructure and Government Services

Energy and Natural Resources

T: +91 22 3090 2625

E: manishaggarwal@kpmg.com

KPMG.com/in

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