

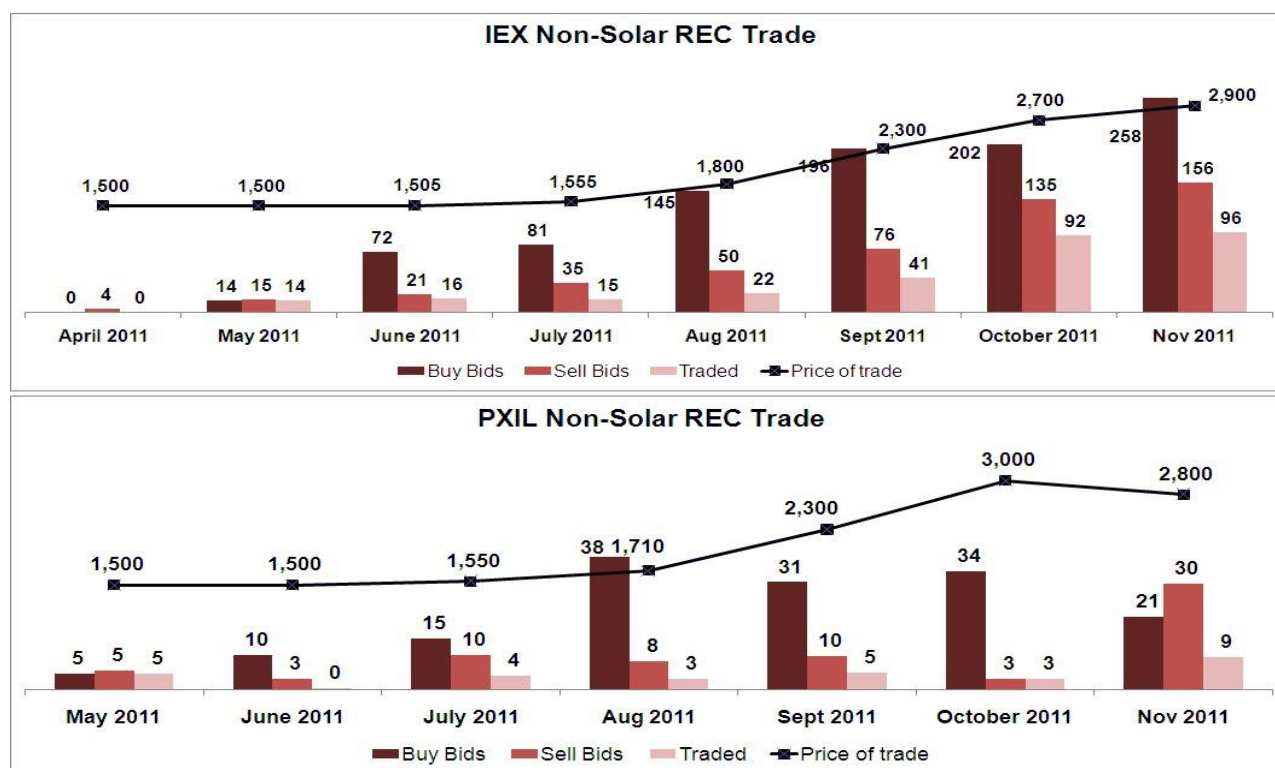
Momentum Continues – Record Prices at IEX

REC prices continue to rise for the sixth consecutive month at IEX

REC Trade November 2011		Buy Bids	Sell Bids	Volume Traded	Clearing Price Rs. per REC
Non-Solar	IEX	257,578	155,917	96,154	2,900
	PXIL	20,882	30,317	9,373	2,800
Solar	IEX	43	-	-	-
	PXIL	2	-	-	-

Traded volumes rise along with prices – Trade Value crosses Rs. 30 crores

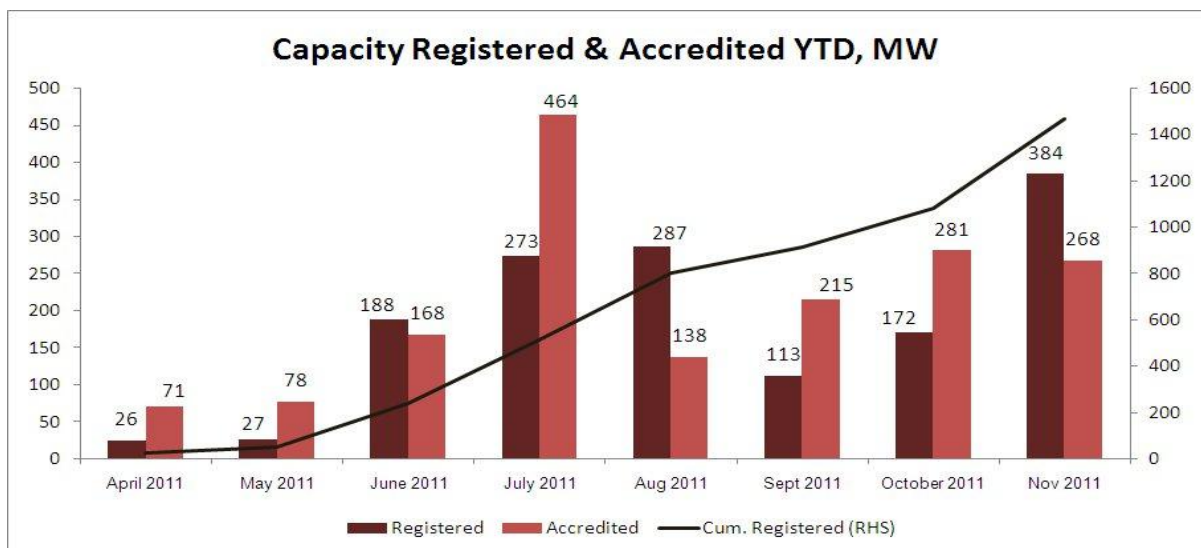
The eighth REC trading session on Wednesday 30th November saw further strengthening of the REC market. IEX accounted for most of the traded volumes as before. The final price realization of Rs. 2,900 was the highest till date and was accompanied by a steady rise in traded volumes. Traded volumes at PXIL too were at an all time high though with a slight dip in price, settling at Rs.2,800 per REC.



*Buy bids, Sell bids and Trade numbers in thousands

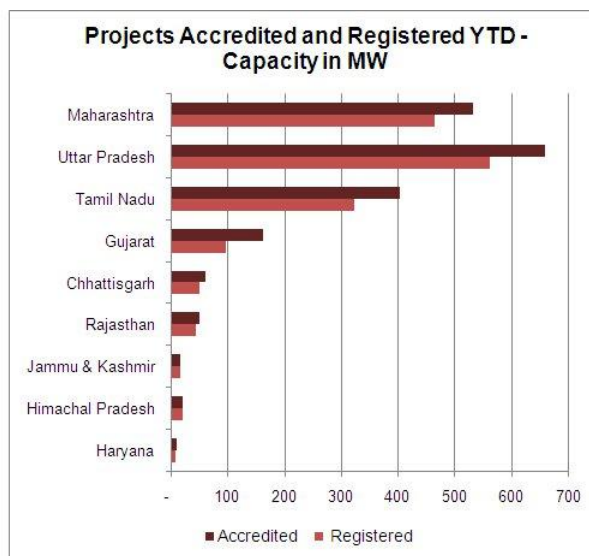
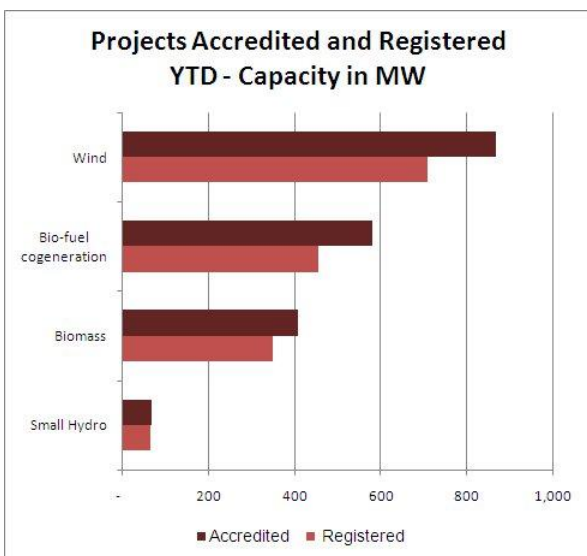
Source of data – IEX, PXIL

Overall trade value increased by over 15% over last month to reach Rs. 30 crores in November, compared to Rs. 26 crores in October. Registration and accreditation of projects picked up further – November was the third straight month to see increases in both categories.



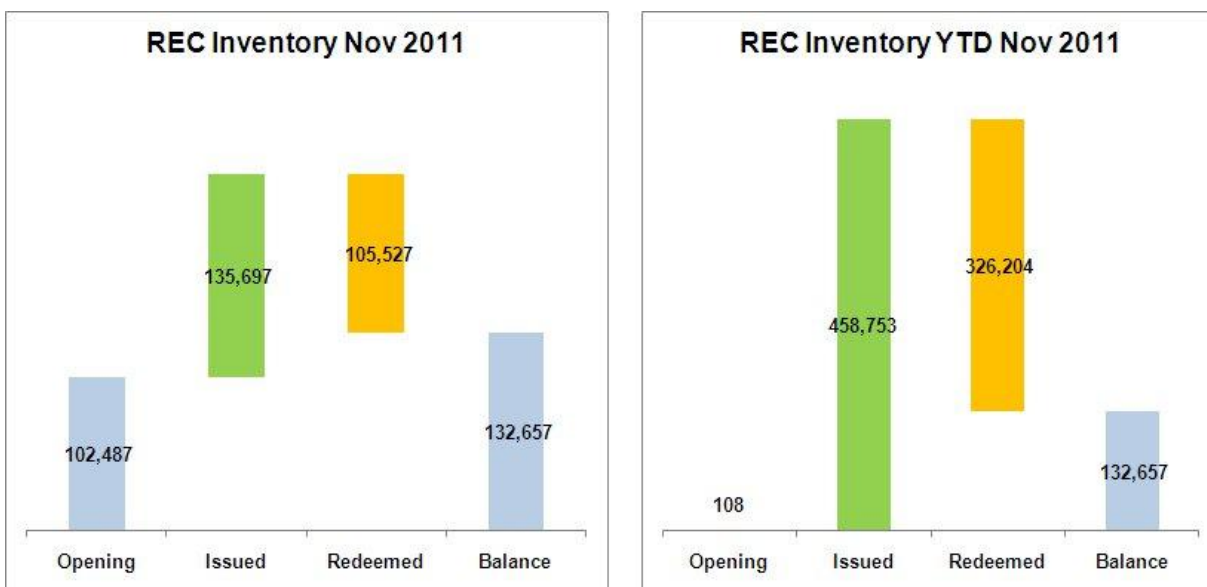
YTD – Year to Date (April to Nov 2011); Source of data – REC Registry of India

In total, 384 MW of capacity was registered in November whereas another 268 MW was accredited. With these additions, the capacity registered year to date has touched 1,469 MW while the capacity accredited now stands at 1,684 MW.



YTD – Year to Date (April to Nov 2011); Source of data – REC Registry of India

Uttar Pradesh overtook Maharashtra in terms of projects registered and/or accredited with a total of 560 MW registered and 658 MW accredited, YTD. Other leading states remained the same with the top four still accounting for more than 90% of the total projects. Wind continues to lead all types of renewable energy in the trading market with 45% of share in registration, followed by bio-fuel co-gen and biomass, together accounting for another 51%.



YTD – Year to Date (April to Nov 2011); Source of data – REC Registry of India

November opened with an inventory of over one lakh RECs and ended with a net addition of roughly thirty thousand RECs. Total issuances have crossed the 400k mark this year. Of these, 71% have been redeemed by November 2011.

In Summary

Overall, November has been a good month for the REC market – higher prices, higher traded volumes and healthy ratio of RECs redeemed to RECs issued – all these continue the process of consolidation and price discovery that was started last year. These developments are in line with our forecasts last month. We expect that this market-making process will be supported by structural improvements viz. better evacuation infrastructure at a micro-level and better economic management at a macro-level in the coming months.

Wind Energy – Turning Conventional

The last two years have highlighted sharply the integration of our economy with global markets through energy supply chains. At a crucial time for the economy, energy supplies are not being able to match the Indian economy's growing appetite. With crude price linked to international markets, negligible growth in production by Coal India, and growing competition for limited resources world-wide, increase in cost of energy is making the Government's job tougher when it comes to taming inflation.

While domestic production of coal has remained stagnant over the last three years, prices of imported coal have risen. Indonesia's decision to link coal prices to international benchmarks and the Australian government's decision to increase duties on exported coal have contributed significantly to this increase. Crude imports turned costlier while domestic gas production by private sector declined by 27% since March 2010. At the same time, debt burdened State Electricity Boards are finally beginning to pass on increase in input costs to consumers through long delayed hikes in tariffs ranging from 5% to 35%.

In summary, dependence on scarce imports, limited domestic supply and distribution infrastructure and rising demand have together resulted in a cumulative increase in industrial as well as consumer prices of conventional energy. Moreover, there are no short term remedies to any of these factors. It is in this backdrop that we review the status of wind energy in India.

Wind energy in India has for long been driven by incentives like accelerated depreciation, tax holidays and preferential tariffs. However, with the increase in the cost of conventional energy, wind energy is gradually turning from “alternative” to “conventional” in the country’s energy mix. Among other alternatives, India’s nuclear plans are limited to 20,000 MW by 2020, solar energy is still in its infancy while other sources like biomass and small hydro as an industry have not been able to grow significantly.

With mandated forecasting of wind energy from next year, repowering of old/existing wind sites and better technology, the sector is expected to contribute more. In addition, the potential from offshore wind is still being determined with CWET carrying out surveys to augment existing onshore potential. It is now left to the State Governments to build necessary infrastructure to ensure evacuation of this energy.

These structural factors, along with the need to limit climate change, provide a strong argument in favor of further promoting wind energy in India. The recent trend of investments in wind energy – the shift from Accelerated Depreciation to Generation Based Incentives, the emergence of IPPs like Mytrah and KSK with a long term vision and investment by major names like Goldman Sachs – all these point towards a more conventional and brighter future for wind energy in India.

agneya

Promoted by alumni of IIM Ahmedabad and IIM Bangalore, we at **agneya** work with Renewable Energy Generators to manage their REC accreditation, registration, issuances and trading. We also work with companies covered by the Renewable Purchase Obligation (RPO) on optimum ways to fulfill these obligations. **agneya** also provides services in the following areas –

Renewable Energy Project Management – advising clients on the best possible portfolio of renewable energy (wind, solar, bio) across tariff regimes, technology options, electricity sales structuring and availing incentives like REC and GBI.

Electricity Market Regulations – advising clients on regulatory aspects of electricity market, options for realizing the maximum value from their energy assets and minimizing costs related to regulatory compliance.

Carbon & Energy – measuring carbon footprint, energy audits and current/future energy profiling to assess risks and opportunities related to energy security and climate change.

Sustainability – building robust long term foundations for business i.e. managing economic, environmental and social aspects of business. These include water management, sustainability management and reporting.

For further information on Renewable Energy Certificates or other services, please contact us at –

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