

## NEWS FLASH – 14<sup>th</sup> May, 2016

### SUGAR

#### ISO reduces sugar output prospects in India

The International Sugar Organization (ISO) forecast on Friday a 2016/17 global sugar deficit of about 3.8 million tonnes on rising consumption and reduced output prospects in number 2 producer India.

The London-based ISO, in its latest quarterly report, raised its 2015/16 global sugar deficit forecast to 6.65 million tonnes, from its previous forecast made in February for a deficit of 5.0 million tonnes.

(Source- <http://in.reuters.com/article/sugar-deficit-iso-idINKCN0Y414T>, published on 13th May, 2016)

#### India developing GMO drought tolerant sugarcane in face of water shortages

The GLP aggregated and excerpted this blog/article to reflect the diversity of news, opinion and analysis.

Indian Council of Agricultural Research (ICAR) is joining hands with the former agriculture minister Sharad Pawar-led Vasantdada Sugar Institute (VSI), Pune, to develop drought tolerant genetically modified (GM) sugarcane that will need less water for cultivation. The water guzzling sugarcane crop is blamed for worsening the acute water shortage in parched areas of Maharashtra.

The move is significant, considering the government's present stand of treading the path of genetically engineered crop cautiously amid strong opposition by anti-GM crop environmentalists and RSS-linked outfit Swadeshi Jagran Manch (SJM).

"It will, however, be a long-term project. Developing drought tolerant (less water consuming) GM sugarcane is not an end in itself. We know how difficult it is in India to go for commercial release of any transgenic crop", said an ICAR scientist.

Sources claimed that even positive reports based on field trial and bio-safety examinations of the crop could not get this transgenic variety. . . a green signal. But the effects of back to back droughts, mounting rural distress and the sheer economic and ecological costs of water intense crops might make planners more keen to develop GM sugarcane. Authorities hope that once the benefits of the new crop become evident, its acceptance will grow.

(Source- <http://sugarnews.in/india-developing-gmo-drought-tolerant-sugarcane-in-face-of-water-shortages/>, published on 10th May, 2016)

## Maharashtra farmers sell premature sugarcane to mills

Vikas Bhosale, whose farm is located on the bank of Ujani dam's backwater, sold his premature sugarcane to jaggery making units as he could not get enough water for the crop.

There are many others like the 41-year-old in a state that is facing the worst drought since 1972. What this indicates is a likely steep fall in sugar production next season, on top of this year's 19% drop in Maharashtra, the nation's top producer of the sweetener. Sugar mills in the state finished their crushing operations, producing 83.79 lakh tonnes of sugar compared with last year's 103.26 lakh tonnes. Next year, output could fall by as much as 28 lakh tonnes, according to some estimates.

With mill-level sugar prices ruling around Rs 36 a kg, under the government's watchful eyes, mills are desperate to keep the prices at least at the current levels. Meanwhile, even as the debate continues over whether it is worth to let the water-guzzling sugarcane take away all the water in a state where only 18% of the arable land is irrigated, sugarcane fields on huge tracks in western Maharashtra are turning yellow.

"Looking at the current condition of the standing crop, we think that the next year's sugar production will remain around 55 lakh tonnes. However, a better estimate will be available only after we get the ground-level assessment, which is being carried out by the government agencies," said Sanjiv Babar, managing director of the Maharashtra State Co-operative Sugar Factories Federation

Officials of the state sugar commissionerate confirmed the possibility of a substantial decline in sugar production next season. "Sugar production can decline by 20 lakh tonne to 25 lakh tonne in the next season," said an official.

(Source- <http://sugarnews.in/maharashtra-farmers-sell-premature-sugarcane-to-mills/>, published on 13<sup>th</sup> May, 2016)

## Maha: Latur village says no to water-guzzling sugarcane

Masurdi, a village around 40km away from parched Latur, which has the dubious distinction of registering the largest migration in the drought-hit district, is all set to become self-sufficient in the near future.

It has decided to do away with the water-guzzling sugarcane and shift to cultivate tur or arhur (pigeon pea) to avoid further loss to the ground water table level.

Masurdi gram panchayat (village council) on Monday passed the resolution unanimously, deciding not to grow sugarcane this season.

Around 200 farmers decided they will shift to crops like tur and soyabean because sugarcane requires a lot of water and is not suitable to their region.

The village, with a population of 2,700, has 1,030 hectares of land under cultivation, of which more than 80% or 800 hectares was used to grow sugarcane last season.

As water sources in the village have dried up following a deficient monsoon and most farmers lost their crop, at least 400 villagers mostly the young population has shifted to cities like Pune, Mumbai and Nashik in search of employment. A majority of those who have stayed back are elders and children.

After realising the ill effects of the water-guzzling crop, the villagers have agreed to change the crop pattern.

The decision is important because the scarcity of water in Latur, Beed and Osmanabad is attributed to sugarcane and sugar factories, which need lots of water compared to other crops.

Experts have been criticising the state government as well as politicians in the region for promoting sugarcane. Marathwada or Central Maharashtra has more than 60 sugar factories.

During the monthly meeting, farmer leader and former legislator Pasha Patel and village sarpanch Nana Barde made a presentation convincing farmers that even other crops like tur and soyabean could prove equally sustainable and also save a lot of water.

To convince the villagers, they also cited an example of Suresh Garad, a farmer from their own village, who earned Rs2.60 lakh by cultivating tur on just an acre of land. The income was much more than that of the sugarcane growers from the village.

"The village now has realized that the sorry state it is going through is because of their insistence to grow a crop that does not suit the water-deficient region. At least 60% of the villagers will now shift to tur and soyabean crop this season. We have convinced them that the two crops will prove equally cash intensive," said Barde.

He said the resolution was passed unanimously by the 200 farmers who attended the meeting.

Patel said, "I have held meetings in more than 150 villages to convince farmers about the importance of a change in the crop pattern. Villages in AUSA Taluka are all set to witness a sea change in terms of water sustainability in the near future."

**(Source- <http://sugarnews.in/latur-village-says-no-to-water-guzzling-sugarcane/>, published on 13<sup>th</sup> May, 2016)**

## Co-gen/Power

### Coal imports decline by 15% to 15.9 MT in April

#### India plans to completely stop thermal coal imports in 2-3 years that would result in an annual saving of Rs 40,000 crore

Country's coal imports fell by 15% to 15.9 million tonnes (MT) in April this year.

The imports stood at 18.7 MT in the same month last year.

"Provisional coal import figures: Reduction from 18.7 MT in April 2015 to 15.9 MT in April 2016. In value terms, from Rs 8,942 crore to Rs 6,023 crore (32%)," Coal Secretary Anil Swarup said in a tweet.

He further said reduction in imports during last fiscal led to a saving of an estimated Rs 24,000 crore in foreign exchange.

The government had earlier said in view of the rising production of the dry fuel, India plans to completely stop thermal coal imports in 2-3 years that would result in an annual saving of Rs 40,000 crore.

However, Coal and Power Minister Piyush Goyal is of the view that coking coal needs to be imported and his Ministry was ready to tie up with shipping companies for this purpose.

Coal India Ltd (CIL) produced 37.5 MT of the dry fuel in April as against the target of 37.6 MT.

In 2015-16, the Maharatna firm achieved a record production of 536 MT, which was 42 MT more than the previous fiscal. Its production grew 8.5% year-on-year. CIL was, however, eyeing 550 MT output.

CIL's output is fixed at 598 MT for this fiscal.

(Source- [http://www.business-standard.com/article/economy-policy/coal-imports-decline-by-15-to-15-9-mt-in-april-116051300727\\_1.html](http://www.business-standard.com/article/economy-policy/coal-imports-decline-by-15-to-15-9-mt-in-april-116051300727_1.html), published on 14th May, 2016)

### Expansion Of Japan's Coal Fleet Could Strand \$56 Billion

A new report has found that Japan's planned expansion of its coal-fired generating plants could strand anywhere from \$76 billion to \$56 billion worth of assets.

Specifically, despite increasing global focus on renewable energy development, Japan is still planning a massive expansion to its fleet of coal-fired generating plants, in which 49 planned

coal-fired plants comprising 28 GW are now in various stages of planning (though only four plants combining to total 1.9 GW are currently under construction). Continuing along this path will not only harm the country's environmental image and hinder any carbon emission targets, but will also end up costing billions of dollars in stranded assets.

The new report from the Sustainable Finance Programme at the University of Oxford's Smith School of Enterprise and the Environment examined the potential impact of stranded coal assets in Japan by creating three scenarios — where coal-fired power stations are stranded over 5-year, 10-year, and 15-year time frames; specifically, where coal-fired power stations become stranded assets by 2021, 2026, and 2031. The authors of the report “selected these three periods to reflect the different speeds and scales at which the risk factors identified in this report could realistically materialise.”

The results of the report are astonishing: In the 5-year scenario, where coal-fired power plants become stranded assets by 2021, the total value of stranded coal assets in Japan are estimated to be around ¥8,453 billion (\$76 billion). In the 10-year/2026 scenario, this value increases to ¥8,924 billion (\$80.2 billion); and in the 15-year/2031 scenario the value decreases to ¥6,857 billion (\$61.6 billion).

However, of greatest importance is the value of stranded assets that have been built after 2016, highlighted in the 10-year and 15-year scenarios. Specifically, the total value of stranded coal assets which are built after 2016 in the 10-year scenario amount to ¥6,223 billion (\$55.9 billion), while the total value in the 15-year scenario is ¥5,307 billion (\$47.69 billion).

The report, *Stranded Assets and Thermal Coal in Japan: An analysis of environment-related risk exposure (PDF)*, is likely the most up-to-date and comprehensive analysis of Japan's exposure to coal-related stranded assets. Factors impacting the highly uncertain future of Japan's power generators are many: “climate change policy and renewables subsidies, the prospect of nuclear restarts, energy efficiency, and macroeconomic factors like low levels of population and GDP growth.” These myriad future uncertainties could have huge impacts on Japan's current plans to expand its coal-fired fleet, potentially exposing the industry and its corresponding billions of investment dollars to “unanticipated or premature write-downs, devaluations, or conversion to liabilities.”

(Source- <http://cleantechnica.com/2016/05/13/expansion-japans-coal-fleet-strand-56-billion/>, published on 13<sup>th</sup> May, 2016)

## **Govt issues draft norms for development of onshore wind power projects**

The Union Ministry of New and Renewable Energy (MNRE) has come out with draft guidelines for the development of onshore wind power projects, aimed at accelerating the growth of wind power sector in the context of new technology and emerging regulations.

The document, which seeks suggestions and comments from all stakeholders by May 27, points out that the objective of new norms is to facilitate the development of wind power

projects in an efficient, cost-effective and environmentally benign manner taking into account the requirements of project developers, state and national imperatives.

### Wind power development

Most of the wind power development in India took place over the last 20 years and during this period, the wind turbine technology has evolved from low-capacity less-efficient turbines of 225 kW to high-capacity more efficient turbines of 3 MW being manufactured in India.

With the government guidelines issued from time to time, wind power sector's installed capacity reached 26.8 GW by the end of FY 2016 and now, India is globally placed at 4th position in terms of wind power installed capacity.

However, wind being intermittent in nature, large-scale deployment of wind power has posed challenges on grid integration. Regulatory authorities have tightened the regulation for grid integration of wind turbines.

Further, the Government has set a target of reaching 60 GW of wind power installed capacity in the country by 2022. To achieve the target, the current rate of deployment of wind power capacity is required to be more than doubled.

(Source- <http://indianpowersector.com/2016/05/govt-issues-draft-norms-for-development-of-onshore-wind-power-projects/>, published on 13<sup>th</sup> May, 2016)

### ReNew Power turns to solar as sector grows

After five years in the clean energy sector, India's ReNew Power Ventures is now taking the government's lead and turning its focus to solar power. Backed by Goldman Sachs, the company is hoping to double its business in the next year, boosted by growth in the highly competitive industry.

Sumant Sinha, chairman and chief executive of ReNew, has built one of the largest renewable energy companies in India, focusing on harnessing wind energy. The government has now set a target of 175 gigawatts of renewable energy, or 15% of total capacity, by 2022. Of that, 100GW is expected to come from solar power, 65GW from wind and the rest from biomass and hydro.

India currently has just 5GW of installed solar power and 24GW of wind. According to a 2015 report by the consultancy KPMG, solar will become a major energy source by 2025 and could be up to 10% cheaper than coal by 2020. KPMG estimated that solar power will provide 5.7% of India's energy needs by 2020 and 12.5% by 2025.

(Source- <http://indianpowersector.com/2016/05/renew-power-turns-to-solar-as-sector-grows/>, published on 13<sup>th</sup> May, 2016)

## Smart Cities Need Smart Energy Sources

As India continues to industrialize rapidly, it is entering its most energy-intensive phase of economic growth — building new infrastructure and increasing the use of transportation. Its energy demand was nearly 700mtoe (million tonnes of oil equivalent) in 2010. According to a McKinsey report, "India: Towards Energy Independence 2030", this is expected to cross 1500mtoe by 2030. The increase in energy consumption is directly linked to the steady growth in population not only in India but also across the globe. According to the Ministry of Urban Development, it is predicted that the world's urban population will double by 2050. The urban population in India is currently 31% of the total population and it produces 60% of the country's GDP. In the next 15 years, we can expect 75% of India's GDP coming from urban areas. Thus, there is an urgent need for the nation to plan cities that can cater to such large scale urbanization.

(Source- <http://indianpowersector.com/2016/05/smart-cities-need-smart-energy-sources/>, published on 13<sup>th</sup> May, 2016)

## Strong growth potential for solar rooftop PV projects: ICRA

ICRA believes that the recent 500 MW SECI tender for award of rooftop solar PV projects is likely to jumpstart the domestic rooftop solar power expansion programme. The same is also likely to be facilitated by the falling capital cost of solar projects and the trend of increase in retail tariffs, which is making rooftop solar competitive for certain consumer categories. Given that existing grid connected solar rooftop capacity is at 166 MW as on Feb 2016, tendered capacity by SECI implies a significant jump.

The Solar Energy Corporation of India (SECI) has recently issued the single largest tender for award of 500 MW rooftop PV projects across states. Bidders are to be selected through a competitive bidding route, wherein the bid variable is quoted as the project cost and the levelised energy tariff respectively, and the same cannot exceed the pre-determined ceiling levels in both the routes. "We note that implementation of such projects by the bidders in the stipulated timeline (which is 12 month from the date of allocation in the 500 MW SECI tender) remains critical, given the clause of liquidated damage for delays in place. Further, the ability to maintain the operating performance within the stipulated parameters remains crucial for the bidder, both for recovery of subsidy as well as performance bank guarantee from SECI," says Mr. Sabyasachi Majumdar, Senior Vice President, ICRA Ratings.

The tender for award of these 500 MW rooftop PV projects is through a mix of two routes—namely the CAPEX (300 MW) route and the RESCO (Renewable Energy Service Company) route (200 MW). The successful bidders are also eligible for subsidy support from the Ministry of New and Renewable Energy (MNRE), GoI. For both the CAPEX and RESCO models, the bidders are to be selected through a competitive bidding route, and the bid variable in both models remains the aforesaid parameters. With subsidy support in place, SECI's tendered quantity is entirely domestic content-based.

(Source- <http://indianpowersector.com/2016/05/strong-growth-potential-for-solar-rooftop-pv-projects-icra/>, published on 13th May, 2016)

## India's Odisha to tender 500MW solar

The Indian state of Odisha has issued request for selections (RfS) for two separate tenders for 450MW and 50MW of solar PV capacity.

The tenders will come as part of the National Solar Mission Phase-II Batch IV.

Odisha also plans to set up solar energy projects in 198 villages as part of India's rural electrification programme. In February, the Odisha Renewable Energy Development Agency (OREDA) invited tenders from PV system suppliers and manufacturers to install, supply, commission or maintain solar PV power plants in the 198 selected villages.

The latest tender news comes the same day that Indian energy minister Piyush Goyal announced that India's rapidly growing power requirements will increase by 300% to 4,000TWh by 2030. India's current solar targets are for 100GW solar by 2022 with a potential goal of 230GW by 2030.

(Source- <http://indianpowersector.com/2016/05/indias-odisha-to-tender-500mw-solar/>, published on 13<sup>th</sup> May, 2016)

### Thought of the day

'Accept the challenges so that you can feel the exhilaration of victory.'

- George S. Patton