

SUGAR

Haryana announces Rs 10 per quintal hike in sugarcane

The Haryana Government today announced hike of Rs 10 per quintal in the price of sugarcane, with Chief Minister Manohar Lal Khattar saying the growers in the State would get the highest ever price in the country.

The Chief Minister announced the decision to increase the State Advisory Price (SAP) for all varieties of sugarcane for 2016-17, an official release said here.

Khattar said that now farmers would get Rs 320 per quintal for the early variety of sugarcane, Rs 315 per quintal for mid variety and Rs 310 per quintal for late variety.

No increase in SAP was made during the last two years, he said.

Keeping in view the increase in the cost of production and the demand of farmers, the Sugarcane Control Board has increased the SAP.

“Farmers in Punjab and Uttar Pradesh are getting Rs 315, Rs 310 and Rs 305 per quintal for early, mid and late varieties, respectively,” Khattar said, as per the release.

The Chief Minister said the increase in SAP would lead to additional benefit of about Rs 60 crore to the farmers during 2016-17.

(Source-<http://sugarnews.in/haryana-announces-rs-10-per-quintal-hike-in-sugarcane/>, published on 13th December, 2016)

Praj to partner IOCL & BPCL to set up 2G bio-ethanol plants

Praj Industries Ltd to partner with Indian Oil Corporation Limited (IOCL) and Bharat Petroleum Corporation Limited (BPCL) to set up second generation (2G) bio-ethanol plants in the country. The company signed agreements to this effect with IOCL and BPCL on the side-lines of recently concluded Petrotech 2016 conference in New Delhi.

With IOCL, Praj has entered into a binding agreement for cost sharing to set up one 2G bio-ethanol plant each at Panipat (Haryana) and Dahej (Gujarat). These plants will have capacity to produce 100 kilo litres of ethanol per day. This is a progress milestone as per MoU signed earlier this year wherein IOCL selected Praj as its technology partner for setting up multiple 2G bio-ethanol plants based on its indigenously developed technology.

Similarly, BPCL has selected Praj as technology partner for setting up one 2G bio-ethanol plant in Orissa having the capacity of 100 kilo litres of ethanol per day. Project timelines and capital outlay estimations are under finalisation.

Second generation bio-ethanol technology uses (agri-residue) as feedstock. Farming community is expected to be benefited from additional revenues from agri-waste. Second generation bio-ethanol also helps reduce dependency on the imported crude oil, thereby saving foreign exchange. This technology will act as a socio-economic and environmental enabler.

"We are pleased with the progress of setting up of 2G ethanol projects by the OMCs. Praj is equally committed to partner with OMCs in their achievement of completing project targets. This is in line with Government of India's vision of increased contribution of renewables in India's energy portfolio," said Pramod Chaudhari, executive chairman, Praj Industries Ltd.

(Source-<http://sugarnews.in/praj-to-partner-iocl-bpcl-to-set-up-2g-bio-ethanol-plants/>, published on 12th December, 2016)

Record production of ethanol may cut fuel bill

Sugar mills recorded the highest ever production of ethanol of more than 110 crore litres during 2015-16 crop year, over 50% more than what was produced during the previous year.

According to food ministry officials, this resulted in achieving 4.4% ethanol blending in petrol, which was almost double of 2014-15. Government has set a target of increasing this blending of ethanol in petrol to 10% in its bid to reduce import of crude oil. Ethanol is produced from sugarcane molasses. Blending of ethanol in petrol helps in saving fuel, and consequently foreign exchange.

"During 2014-15 crop year, a total of about 68 crore litres of ethanol was produced and in the previous year it was only 37 crore litres. During last crop year, we, in association with the petroleum ministry, developed a national grid to improve the supply of ethanol to oil marketing companies. Sugar mills close to the oil depots linked," said a food ministry official. In November 2012, the UPA Cabinet had approved 5% mandatory blending of ethanol with petrol, which was notified by the Centre under the Motor Spirits Act in January 2013. Oil companies had to record this target by June 2013.

Earlier this year, Union petroleum minister Dharmendra Pradhan had said that it was found that blending can be raised up to 15-20% for both ethanol in petrol and biodiesel without a major change in existing car engines.

Sources said during this sugar season the ethanol production may be less than the achievement of last crop year due to less sugarcane production in Maharashtra.

(Source-<http://sugarnews.in/record-production-of-ethanol-may-cut-fuel-bill/>, published on 12th December, 2016)

COGEN

How clean is solar power?

THAT solar panels do not emit greenhouse gases such as carbon dioxide when they are generating electricity is without question. This is why they are beloved of many who worry about the climate-altering potential of such gases. Sceptics, though, observe that a lot of energy is needed to make a solar panel in the first place. In particular, melting and purifying the silicon that these panels employ to capture and transduce sunlight needs a lot of heat. Silicon's melting point, 1,414°C, is only 124°C less than that of iron.

Silicon is melted in electric furnaces and, at the moment, most electricity is produced by burning fossil fuels. That does emit carbon dioxide. So, when a new solar panel is put to work it starts with a "carbon debt" that, from a greenhouse-gas-saving point of view, has to be paid

back before that panel becomes part of the solution, rather than part of the problem. Observing this, some sceptics have gone so far as to suggest that if the motive for installing solar panels is environmental (which is often, though not always, the case), they are pretty-much useless.

Wilfried van Sark, of Utrecht University in the Netherlands, and his colleagues have therefore tried to put some numbers into the argument. As they report in *Nature Communications*, they have calculated the energy required to make all of the solar panels installed around the world between 1975 and 2015, and the carbon-dioxide emissions associated with producing that energy. They also looked at the energy these panels have produced since their installation and the corresponding amount of carbon dioxide they have prevented from being spewed into the atmosphere. Others have done life-cycle assessments for solar power in the past. None, though, has accounted for the fact that the process of making the panels has become more efficient over the course of time. Dr Van Sark's study factors this in.

Panel games

To estimate the number of solar panels installed around the world, Dr Van Sark and his team used data from the International Energy Agency, an autonomous intergovernmental body. They gleaned information on the amount of energy required to make panels from dozens of published studies. Exactly how much carbon dioxide was emitted during the manufacture of a panel will depend on where it was made, as well as when. How much emitted gas it has saved will depend on where it is installed. A panel made in China, for example, costs nearly double the greenhouse-gas emissions of one made in Europe. That is because China relies more on fossil fuels for generating power. Conversely, the environmental benefits of installing solar panels will be greater in China than in Europe, as the clean power they produce replaces electricity that would otherwise be generated largely by burning coal or gas.

Once the team accounted for all this, they found that solar panels made today are responsible, on average, for around 20 grams of carbon dioxide per kilowatt-hour of energy they produce over their lifetime (estimated as 30 years, regardless of when a panel was manufactured). That is down from 400-500 grams in 1975. Likewise, the amount of time needed for a solar panel to produce as much energy as was involved in its creation has fallen from about 20 years to two years or less. As more panels are made, the manufacturing process becomes more efficient. The team found that for every doubling of the world's solar capacity, the energy required to make a panel fell by around 12% and associated carbon-dioxide emissions by 17-24%.

The consequence of all this number-crunching is not as clear-cut as environmentalists might hope. Depending on the numbers fed into the model, global break-even could have come as early as 1997, or might still not have arrived. But if it has not, then under even the most pessimistic assumptions possible it will do so in 2018. After that, solar energy's environmental credentials really will be spotless.

(Source-<http://www.economist.com/news/science-and-technology/21711301-new-paper-may-have-answer-how-clean-solar-power?fsrc=scn/fb/te/bl/ed/howcleanissolarpower>, published on 10th December, 2016)

Coal India Q2 profit slumps 77.39 per cent to Rs 600 crore

State-run mining giant Coal India BSE -2.89 % on Tuesday reported a consolidated net profit of Rs 600 crore for the September quarter against an ETNow poll of Rs 2,105 crore.

The recent quarter profit was lower by 77.39 per cent against Rs 2,654.34 crore profit posted in the year ago period, according to the company's regulatory filing.

Total income from operations in the second quarter stood at Rs 16,212 crore compared with Rs 17,489.87 crore in the year ago period.

Net sales during the quarter were at Rs 15,645.05 crore against Rs 16,957.59 crore posted last year.

Employee benefit expense at the company rose to Rs 8,406.93 crore from Rs 7,334.28 YoY.

Total consolidated expenses also saw a rise to Rs 16,161.97 crore from Rs 14,733.56 crore reported in the corresponding quarter a year ago.

(Source-<http://economictimes.indiatimes.com/markets/stocks/earnings/coal-india-q2-profit-slumps-77-39-per-cent-to-rs-600-crore/articleshow/55962090.cms>, published on 13th December, 2016)

India clarifies stand on Nepal power trade, says will work with transparency

At a time when India's new regulations for cross-border trade of electricity have raised eyebrows in Nepal, the Indian embassy said on Monday it will facilitate and promote such trade with greater transparency, consistency and predictability in regulatory approaches.

After new guidelines were issued by India's power ministry on December 10, the Nepali media reported they included discriminatory provisions that prohibit private and third country hydropower developers in Nepal from exporting electricity to India with a one-time approval.

The guidelines state only companies in Nepal that are wholly owned by the Indian government or the private sector, or private companies with 51% or higher Indian stake will be eligible to export power and that they will be given one-time approval to sell power.

Nepal has decided to talk with India about this issue, according to media reports. India currently is engaged in cross-border trade of electricity with Bangladesh, Bhutan, Nepal and Myanmar.

The embassy, while clarifying India's position, said, "The guidelines specify the institutional framework and required processes to facilitate power trade. It also broadly specifies about the participating entities, and provisions have been made such that maximum entities get opportunity to trade electricity with India."

For ease of doing business, India has simplified the process for all government-owned companies of neighbouring countries, the embassy said. This does not debar other companies or entities from participating in the trade of electricity. "The guidelines also facilitate determination of tariff for such trade of electricity," it added.

Though power exchanges are not operational in neighbouring countries and they do not have significant experience of trading through such exchanges, India has taken the lead in promoting trade of electricity. "The modalities and products of such power trade through the exchanges will be as per the extant power market regulations," it said.

The guidelines also referred to the transmission system, scheduling and accounting, grid operation safety and security and gave the broad contours for cross-border trade of electricity. The detailed process and procedure will be made more transparent through regulations which will be issued shortly by the Central Electricity Regulatory Commission.

With the issuance of the guidelines, it is expected that the hydropower potential of neighbouring countries will be developed in a fast track mode as stakeholders would have transparency in the utilisation of power projects, the statement said.

The trade of electricity has increased in the region in recent years. India has been able to supply 6 billion units (BU) of power within three years to Bangladesh. Around 2 BU of electricity has been supplied to Nepal during the last two years. More cross-border connections have been planned.

(Source-<http://www.hindustantimes.com/india-news/india-clarifies-stand-on-power-trade-with-nepal-says-will-work-with-transparency/story-eOD25b5oYGOj6Wy2d6z9XP.html>, published on 13th December, 2016)

Quote of the day

'Keep your face always toward the sunshine - and shadows will fall behind you.'

- Walt Whitman