US tech to convert rice stubble into biofuel, not smog

AJAI SHUKLA
New Delhi, 5 November

While Delhi's residents work through a blanket of choking smog, caused largely by farmers burning fields of rice stubble in Punjab, the key to at least alleviating this problem was turned in Bangkok on Monday.

The United States Trade Development Authority (USTDA) signed up to allocate a grant of $300,000-500,00 to Indian engineering firm, The Virgo Group, to carry out a 'scoping study' for setting up a plant near Bhatinda that will convert the stubble from harvested rice fields into green biofuel.

The scoping study will determine how much biofuel can be extracted from the rice stubble. Based on the study, Virgo's Bhatinda plant will customise Rapid Thermal Processing technology from Envergent Technologies – a subsidiary of US technology giant Honeywell – to convert agricultural waste into biocrude, reducing air pollution and creating a new fuel source.

The project is being strongly supported by the Punjab government, which signed an agreement with Virgo on February 11 for facilitating the plant, including with concessional land. Chief Minister Amarinder Singh himself attended that signing.

Also backing the project is US envoy to India, Kenneth Juster, who was at the signing in Bangkok.

"We are extremely grateful to the Government of India, Government of Punjab, USTDA, the US Embassy in Delhi and our technical collaborators Honeywell US in jointly working with us to overturn one of the most serious environmental challenges that India is currently facing," said Kanav Monga of the Virgo Group after the signing.

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Another key driver of this project is Punjab's finance minister Manpreet Badal, who belongs to Bhatinda, where the Bhatinda Refinery will blend the green biofuel with regular diesel.

The phrase being used for this ecology-friendly refining is 'eco-fine'.

Honeywell sources say the scoping study will take approximately 13 weeks, after which the company can begin customising the Rapid Processing Technology plant for Punjab's peculiar rice stubble.

This initiative brings together two imperatives of the central government. In August 2017, Prime Minister Narendra Modi called for the country to save $1.7 billion a year on imported hydrocarbon fuel, by blending green biofuels with standard ethanol.

Separately, the Union Cabinet and Delhi government are grappling with the problem of Delhi's toxic air, caused by rice stubble burning, which has not improved despite measures like taking vehicles off the road through an 'odd-even' scheme that allows them to ply only on alternate days. Converting rice stubble into biodiesel is seen as converting a problem into an opportunity.

Organisations like the Indian Air Force (IAF), whose aircraft consume 100 crore litres of aviation turbine fuel (ATF) per year, are seeing an opportunity in green biofuel. If it can achieve its goal to substitute 10 per cent of its ATF with biofuels, it would save 10 crore litres of ATF each year.

While only biofuel made from Jatropha has currently been certified for aircraft, there is a potential to source it from 150 million tonnes of surplus biomass feedstock across India, including from non-edible plants like castor pongamia, neem, mahua, sal and kokum.

Now, rice stubble presents an inviting new opportunity.

LCR may not adversely impact growth of NBFCs

Most of the firms are already carrying extra liquidity to meet debt obligations

SUBRATA PANDA
Mumbai, 5 November

The Reserve Bank of India's (RBI's) move to ask non-banking financial companies (NBFCs) to maintain liquidity coverage ratio (LCR) may not have any adverse impact on their growth parameters, as most of them have already been carrying extra liquidity on balance sheets.

"Almost all the NBFCs have been keeping additional cash on their balance sheet because of the uncertainty. So these guidelines are not going to change much for any NBFC. We are already incurring the cost of keeping a liquidity buffer so there will be only marginal impact on the margins. If at all, some NBFCs who are very aggressive now have to be a bit cautious," said chief executive officer (CEO) of a transport finance company.

Housing finance companies (HFCs) are also maintaining a liquidity buffer equivalent of 1-3 months of outflows on their balance sheets so that they can meet their debt obligations in a very tight liquidity scenario.

Deo Shankar Tripathi, CEO of Aadhar Housing Finance, said: "Most of HFCs have been keeping liquidity buffer equal to 1-3 months of outflow. This used to be kept in liquid mutual fund, bank fixed deposits (FDs), and bonds depending on their size. Now, the RBI has defined a proper frame work for liquidity coverage ratio, high quality liquid assets, and proportion of monthly inflow and outflow to be considered for liquidity coverage based on nature of inflow and outflow."

"LCR will not impact profitability of HFCs that enough liquidity as negative carry on such buffer has already been factored in. The companies, which maintained less liquid assets, may have some negative carry, slightly impacting their earning," he said.

The RBI introduced liquidity management framework for cash-strapped NBFCs wherein they have mandated non-deposit taking NBFCs with an asset size of ₹10,000 crore and all deposit taking NBFCs irrespective of the asset size to maintain a liquidity buffer in terms of LCR from December 1, 2020. LCR is the proportion of high liquid assets set aside to meet short-term obligations.

- RBI mandates non-deposit taking NBFCs with an asset size of ₹10,000 crore and all deposit taking NBFCs to maintain LCR from Dec 1, 2020
- Initially, NBFCs had to maintain a minimum of 50% of high quality liquid assets as part of the LCR, which will touch 100% by Dec 2024
- For non-deposit taking NBFCs with an asset size of over ₹5,000 crore and less than ₹10,000 crore, a minimum of 30% will be of liquid assets with LCR mandate from Dec 2020. This will eventually reach 100 per cent by 2024
- Core investment companies, smaller NBFCs, non-operating financial holding firms and standalone primary dealers have been exempted from LCR requirements

Initially, NBFCs have to maintain a minimum of 50 per cent of high quality liquid assets as part of the LCR, which will progressively touch 100 per cent by December 2024. Similarly, for non-deposit taking NBFCs with an asset size of more than ₹5,000 crore and less than ₹10,000 crore, a minimum of 30 per cent will be of liquid assets as LCR is starting from December 2020. This (liquid assets) will eventually reach 100 per cent by 2024.

However, core investment companies, smaller NBFCs (non-deposit taking), non-operating financial holding companies and standalone primary dealers have been exempted from the LCR requirements.

The RBI has also specified the kind of assets that it wants NBFCs to hold as high quality liquid assets. Cash, government securities, and marketable securities issued or guaranteed by foreign sovereigns will attract no haircut while other forms of asset will attract varying haircuts. Industry experts believe with the move to introduce LCR for the NBFCs, the regulator is slowly moving closer towards the benchmarks in place for banks.

According to Karthik Srinivasan, Senior Vice-President ICRA, "The RBI has been talking of increasing on-balance sheet liquidity of NBFCs. Now, they are basically saying one of the challenges have been that liquidity has become tight and like banks have been maintaining some sort of liquidity quotient, NBFCs need to maintain a liquidity quotient."

"Logically, it's a good move but this will certainly put some pressure on growth. But I guess at this point in time it's the availability of liquidity is the main concern and once the liquidity is there then the lenders will also get comfortable. There will be some impact on the margins and profitability in case one is not able to infuse the lending rates and protect their margins," he said.

Gold demand slumps 32% in Q3, likely to hit three-year low

DILIP KUMAR JHA
Mumbai, 5 November

Gold demand in the country declined 32 per cent in the July-September quarter to 123.9 tonnes. This makes it one of the lowest in third quarters since 2005 and the lowest quarterly demand since the second quarter of calendar year 2016.

Cumulative gold import declined 66 per cent in the quarter to 80.5 tonnes, from 236.8 tonnes in the same period a year before. Import of unrefined gold or dore was down 90 per cent to only 6.7 tonnes.

Even a large part of the jewellery demand was met by selling old jewellery. During the quarter, investment demand plunged by 35 per cent from the same period a year before, from 34.4 tonnes to 22.3 tonnes.

A World Gold Council (WGC) demand trend report, issued on Tuesday, says: "Indian consumers preferred gold-to-gold exchanges, which accounted for an average of 50-60 per cent of purchases, while retailers wound down existing stocks." Old gold sold without exchange was also 59 per cent higher in the quarter, to 36.5 tonnes. Gold supply from domestic sources set a new record at 120 tonnes on an annualised basis, breaching its previous best of 118 tonnes in calendar 2012. For the full calendar year, the WGC has forecast India's gold demand at around 700 tonnes. It was 760 tonnes last year.

For this year's three quarters ending September, cumulative gold demand was 5.3 per cent less at 493 tonnes, as compared to 523.9 tonnes in the comparable period last year.

China's gold demand fell 25 per cent, says WGC, to 199.1 tonnes. Demand was largely from institutional investors.

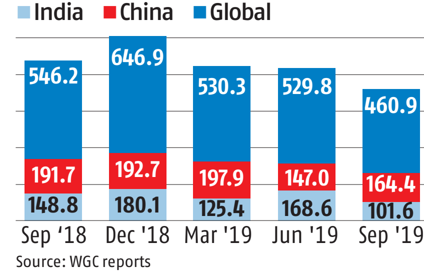
"The demand in India declined by 32 per cent in the third quarter, primarily due to weak consumer sentiment and high prices. Despite a step-up in buying during Akshaya Tritiya in the second quarter, the absence of any major festivals, monsoons and intervening inauspicious period like pitru paksha led to the muted demand," said Somasundaram P R, managing director at WGC's India arm.

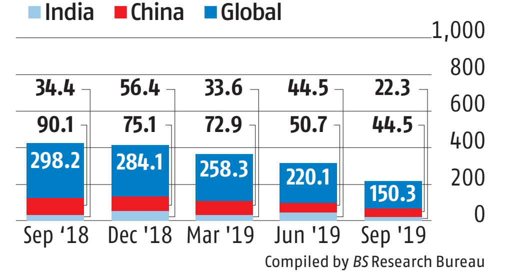
LOSING SHINE

India gold supply estimates (tonnes)

Quarter ended	Sep '18	Dec '18	Mar '19	Jun '19	Sep '19
Net bullion imports	236.8	168.3	175.0	247.4	80.5
Scrap	23.0	18.0	16.1	37.9	36.5
Domestic supply	2.2	3.5	4.0	3.2	2.4
Total supply	**262.0**	**189.8**	**195.1**	**288.5**	**119.5**

GOLD DEMAND





Source: WGC reports

Compiled by *BS* Research Bureau

Concerns over dilution of pre-qualification requirement for Kudankulam nuclear unit

JYOTI MUKUL
New Delhi, 5 November

The Nuclear Power Corporation of India (NPCIL) has relaxed pre-qualification requirement for main civil works for the fifth and sixth units of Kudankulam nuclear power plant, allowing contractors with experience in building 'commercial complex' to take part in the bidding process.

Last year, the corporation had allowed those with experience of building a 'bridge' to take part in the construction tender which has been diluted further this year.

In 2016, a contractor needed to have experience of similar work which included nuclear power plant, heavy industrial establishment, thermal or hydro power plant, ports, metros or airport terminals. By 2018, it was diluted to include even construction of bridges besides the earlier qualification.

NPCIL chairman and corporate communication team were unavailable for a comment.

The pre-qualification criteria also had mandatory quantity qualification, which has been diluted in the three categories of reinforced concrete quantity, formwork erection and fabrication and placement of reinforcement steel.

To have a strong backing for contractors, the tender conditions in 2016 for main plant civil works for the third and fourth units asked for bidders to have bank consent for working capital equivalent to 10 per cent value of the tender. In 2018, this was tightened to 20 per cent value of tender for Gorakhpur Haryana Anu Vidyut Pariyojana (GHAVP) first and second units' main plant works. However, this has been brought down again in the latest tender. The tender floated for the fifth and sixth units require completion of construction works in 64 months.

The qualification requires bidder to have one completed work, costing not less than the amount equal to 60 per cent of the estimated cost put to tender or two completed works, each costing not less than the amount equal to 35 per cent of the estimated cost put to tender.

'Ultra' isn't UltraTech copyright: Birla Corp denies infringement

AVISHEK RAKSHIT
Kolkata, 5 November

Birla Corporation is contesting UltraTech Cement's claim of copyright infringement over the use of the word 'Ultra' in its products. It argued that it is neither a violation of copyright, nor does UltraTech have exclusive rights over the word under dispute.

Sources aware of the development said that according to the Trade Marks Act, 1999, copyrighted words have to be used in the complete context and not in isolation. While UltraTech Cement has products and brands like UltraTech Concrete, UltraTech Ready Mix, and UltraCem, Birla Corporation has MP Birla Cement Ultimate Ultra and others. The word in question, the sources argued, is a composite trademark where the protection of the name is provided to the entire word and not part of a trademarked word.

Birla Corporation, the sources said, is basing its case on this premise that the use of the word 'ultra' is not limited exclusively to UltraTech.

Legal experts pointed out that according to the Trade Marks Act, if a trademark is registered as a series and consists of more than one feature, and if the applicant claims exclusive rights over all of the features separately, it has to seek registration for each part separately.

On the other hand, a Birla Corporation spokesperson said: "Since the matter is sub judice, Birla Corporation won't make any detailed statement on the dispute. However, the company is confident of defending its trademark MP Birla Cement Ultimate Ultra against any legal challenge." In August, UltraTech had moved the Bombay High Court, alleging that Birla Corporation has been infringing on its rights from July onwards after "launching" the MP Birla Cement Ultimate Ultra and the MP Birla Cement Ultimate Ultra 2.

Against UltraTech's claim, the Birla Corporation spokesperson said: "MP Birla Cement Ultimate Ultra is a super-premium brand of cement which is being sold by Birla Corporation in multiple markets since early 2018. It was wrongfully alleged that Birla Corporation had started to use the trademark only in July 2019."

'We've most relevant patent portfolio for 5G'

Q&A

With Bharti Airtel Chairman Sunil Mittal kicking off a debate by claiming that Huawei has superior technology in 5G gear over European firms, **ERIK EKUDDEN**, chief technology officer at Ericsson, discusses with **Surajeet Das Gupta** claims about Chinese superiority on patents, lower pricing, and also on the 5G road map in India, especially after the SC order on the adjusted gross revenue (AGR). Edited excerpts:

Huawei has claimed that it has the maximum patents and many point out that they have an edge in the 5G technology space.

We have by far the largest contribution to standardisation. Also, by independent assessments, we also have the most relevant patent portfolio for 5G. No one has approved patents yet. But, based on independent assessments, we are leading. A report by Bird & Bird says we are leading by a margin when it comes to standard essential patents that are relevant to 5G.

I think we are very confident about the leadership in the technology space, and that is reflected in the fact that we are providing 20 5G commercial networks in all geographies around the world. If you take the example of the most competitive and advanced 5G market, which is South Korea, there are independent benchmarks, which show that Ericsson is providing higher performance by up to 20 per cent than the second best. All four major vendors are present in that market.

But one of your customers in India, Bharti Airtel, has said Huawei has superior 5G technology compared to others…

Our customers are our esteemed partners and they (Bharti) continue to be very strong partners. I cannot say anything about their view of course. We have had discussions with out our customers on many aspects such as how we can serve them better, how we can show there is an upgrade path, etc. But, I can't really comment on what perceptions they may have, especially related to our competition.

The other bone of contention is that Europeans sell gear which is more expensive than the Chinese, and they also offer cheap credit lines.

We have had large increases in our R&D (research and development) budget. That means that we can lower the cost of the platform and we have a more efficient way of building our 5G system, which again brings the cost down. And, that makes me also very comfortable that we have a cost position that is very competitive. So, again, I think this is a perception issue. I think there may be differences that come from history. And, I think it's very difficult to comment on those as well.

Indian telcos also point out that if the government does not allow the Chinese to sell 5G telecom gear, the Europeans don't have enough capacity to meet the demand. Is there any basis of this fear?

We have enough exactly for India and the global market. On the question of how many vendors will be allowed, it is for the governments to decide as it is a national issue. We don't have a view. But we have a very significant capacity and we have ramped it up so that there are no delays. As soon as our customers are ready, we are ready.

The recent SC order on the AGR (adjusted gross revenue) has put added pressure on the financial health of telcos. Over and above that, 5G spectrum prices are very high and many of the telcos say that won't participate in the auction? What is your view on these challenges?

I think there is a great opportunity in India. But all of this comes on the back of realising that the mobile infrastructure is the core infrastructure for the country.

Our message is the same around the world — investments are needed to bring coverage of the technology and bring capacity, needed for traffic growth. And then, it's important that there are no excessive burdens on the industry when it comes to spectrum costs because that would prevent building the national infrastructure.

I think there has to be a trade off that every government needs to do to get investments in an infrastructure that will serve the country in terms of innovation for many, many years to come. It cannot be and should not be taxed up front with heavy burdens.

India also seems to be planning to offer very limited spectrum. For instance, in 3,300-3,300 band 300 Mhz was available earlier. Now it seems there is only 175 Mhz available for three players. The global standard is that you need 100 MHz to power 5G. So can technology help in rolling out 5G with less spectrum?

Well, first of all, I think this is up to each and every one of our customers to decide on their road map for introduction of 5G. I think the beauty with the Ericsson solution is that we are already preparing for 5G with 4G equipment that is being rolled out today. In fact, most of the 4G equipment we're building in India are ready for 5G.

We have technologies such as dynamic spectrum sharing which allows 5G and 4G share spectrum seamlessly. You can actually use your existing spectrum and combine that with new spectrum in 3.5 Ghz and get a better user experience and actually use the spectrum more efficiently. But governments should allocate as much as possible of the 5G spectrum, as this will help in costs coming down.