Statesman, Delhi, 05/10/2025
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Yellow hydrogen can boost solar storage

AMAN MEHTA AND ALIYA NAZ

The world is currently in the middle of an energy transition. Nations worldwide are moving away from fossil fuel-based sources towards cleaner alternatives. This can be credited as a move towards reducing their Greenhouse Gas (GHG) emissions. Most countries opt for solar as it is a better option for short-term growth. But there is a small hurdle to this, that is, the intermittency of solar power.

Solar energy works to its fullest while there is sunlight, but at night or on a cloudy day, it does not generate energy. One of the viable choices would be to store the energy that has been generated, but the batteries for this are expensive, and they degrade over time. For a smaller country, opting for battery storage would be a terrible choice. The other issue is that India imports most of its lithium, which makes it vulnerable to any supply chain disruptions.

To overcome this limitation, Yellow Hydrogen is the game changer in terms of storing the power and using it whenever needed. Unlike Grey Hydrogen, which is made from natural gas and releases carbon emissions, Yellow Hydrogen is produced using solar power via electrolysis. This makes the source clean. Instead of relying on storing the excess energy generated in the batteries, we can store it in the form of hydrogen and use it whenever required. It can be stored for a longer time without fear of it degrading over time.

India has two major goals in terms of sustainability. They are 500 GW of renewable energy by 2030 and Net Zero by 2070. With a boost from government subsidies like PM Surya Ghar Muft Bijli Yojna is helping them push for a solar adoption. But without a reliable storage solution, India is still dependent on fossil fuels when there is no sunlight. This is where Yellow Hydrogen is a game changer. India can convert solar energy to hydrogen and store it while reducing its reliance on battery storage. It will help them with continuous power supply.

A recent study in the UAE tested solar-powered hydrogen production in a residential villa. The data received was that they generated 1,230 kg of hydrogen per year at an affordable levelised cost of energy. With the involvement of fuel cells, it had an improved efficiency. With this model being a success in the UAE, India can test similar technology.

It is a good debate that hydrogen production requires higher initial investments, and the storage can be tricky due to its lower density. But these challenges can be overcome. With R&D investments, it can be improved. India can integrate hydrogen production into the larger solar parks such as Bhadla Solar Park or Khavda Renewable Energy Park, located in the Thar Desert of Rajasthan and Kutch, Gujarat, respectively, and make it cost-effective. The cost can be reduced further with the involvement of local units and components.

If India transitions half of its energy storage needs to Yellow Hydrogen, it will lower industrial carbon emissions, reduce lithium imports, improve energy security, and create skilled job opportunities in the sector. Yellow Hydrogen is a game-changer for making solar power reliable and scalable. It would also help them diversify their energy sources and reduce their dependency on a single source of energy.

(The writers are, respectively, a student, Jindal School of Environment and Sustainability, and Assistant Professor, Liberal Arts and Humanities, O.P. Jindal Global University.)

Millennium Post, Delhi, 05/10/2025
Page No: 6, Size: 16.46cm × 15.05cm

AMID EU & NATO'S PUSH TO CUT SUPPLIES

'Hungary clings to Russian oil, gas'

BUDAPEST: As the European Union pushes to fully sever its reliance on Russian energy and the administration of US President Donald Trump urges NATO members to abandon Russian oil, one country's populist government stands firm.

Hungary and its leader, Prime Minister Viktor Orbán, have long argued Russian energy imports are indispensable for the country's economy and switching to fossil fuels sourced from elsewhere would cause an immediate economic collapse.

Orbán, who has long had the friendliest ties to the Kremlin of any EU leader, has vigorously opposed the bloc's efforts to sanction Moscow after its invasion of Ukraine in February 2022, and blasted attempts to hit Russia's energy revenues that help finance the war.

REPRESENTATIVE PIC

As the rest of Europe has weaned off Russian energy, Hungary has maintained, and even increased, its Russian imports, insisting no viable alternative exists.

But some energy experts — as well as Orbán's critics, who see his commitment to Russian energy as a symptom of his affinity for President Vladimir Putin — say the Hungarian leader's position is more about politics than pipelines.

Hungary's leaders argue its landlocked geography in the heart of Central Europe make it dependent on Russian fossil fuels delivered by pipelines built while Hungary was under Soviet dominance.

With no alternative sources and infrastructure to bring oil and gas to Hungary, officials say, the country's economy would cease to function without Russian supplies.

"If Hungary is cut off from Russian oil and natural gas, then immediately, within a minute, Hungarian economic performance will drop by 4 per cent," Orbán told state radio in September. "This would be catastrophic, the Hungarian economy would be on its knees."

But László Miklós, a chemical engineer and energy industry analyst, said there was "no rational explanation" for Orbán's government's reluctance to seek alternative fuel sources and ample infrastructure is already in place to supply Hungary with affordable, non-Russian oil and gas. AGENCIES

Millennium Post, Delhi, 05/10/2025
Page No: 2, Size: 16.38cm × 14.87cm

OPEC+ set for another oil hike as Saudi, Russia debate size: Sources

LONDON/MOSCOW: Eight OPEC+ countries are likely to further raise oil output on Sunday with the group's leader Saudi Arabia pushing for a large increase to regain market share and Russia suggesting a more modest rise, four people with knowledge of OPEC+ talks said.

Russia and Saudi Arabia, the two biggest OPEC+ producers, have over the past years sometimes disagreed on the size of output rises but ultimately found a compromise.

Moscow would prefer the group to raise output by 137,000 barrels per day from November, the same as the increase in October, to avert putting oil prices under pressure and because it would struggle to raise output due to sanctions, according to two of the sources.

Saudi Arabia would prefer to see double, triple or even quadruple that figure - 274,000 bpd, 411,000 bpd or 548,000 bpd respectively, as it has the ability to ramp up production quickly and wants to grow market share, the sources said.

OPEC has no plans to raise output by 500,000 bpd, it said on Tuesday.

OPEC+ has reversed its strategy of output cuts from April to boost market share and in response to pressure from US President Donald Trump seeking lower oil prices, *Reuters* reported.

At their peak, OPEC+'s total output reductions amounted to 5.85 million bpd, made up of three elements - voluntary cuts of 2.2 million bpd, 1.65 million bpd by eight members, and another 2.0 million bpd by the whole group.

The eight producers plan to fully unwind one element of those cuts - 2.2 million bpd - by the end of September.

For October, they started removing the second layer of 1.65 million bpd with the increase of 137,000 bpd.

The eight OPEC+ countries will hold an online meeting on Sunday, two sources said on Friday.

Goldman Sachs on Tuesday said that it expected the group to raise its quotas by 140,000 bpd. AGENCIES

Pioneer, Delhi, 05/10/2025
Page No: 8, Size: 23.20cm × 16.46cm

Hungary clings to Russian oil, gas as EU and NATO push to cut supplies

ASSOCIATED PRESS
n Budapest(Hungary)

As the European Union pushes to fully sever its reliance on Russian energy and the administration of US President Donald Trump urges NATO members to abandon Russian oil, one country's populist Government stands firm.

Hungary and its leader, Prime Minister Viktor Orbán, have long argued Russian energy imports are indispensable for the country's economy and switching to fossil fuels sourced from elsewhere would cause an immediate economic collapse. Orbán, who has long had the friendliest ties to the Kremlin of any EU leader, has vigorously opposed the bloc's efforts to sanction Moscow after its invasion of Ukraine in February 2022, and blasted attempts to hit Russia's energy revenues that help finance the war.

As the rest of Europe has weaned off Russian energy, Hungary has maintained, and even increased, its Russian imports, insisting no viable alternative exists. But some energy experts - as well as Orbán's critics, who see his commitment to Russian energy as a symptom

of his affinity for President Vladimir Putin - say the Hungarian leader's position is more about politics than pipelines.

Orbán warns economy would be on its knees'

Hungary's leaders argue its landlocked geography in the heart of Central Europe make it dependent on Russian fossil fuels delivered by pipelines built while Hungary was under Soviet dominance.

With no alternative sources and infrastructure to bring oil and gas to Hungary, officials say, the country's economy would cease to function without Russian supplies. "If Hungary is cut off from Russian oil and natural gas, then immediately, within a minute, Hungarian economic performance will drop by 4 per cent," Orbán told state radio in September. "This would be catastrophic, the Hungarian economy would be on its knees."

But László Miklós, a chemical engineer and energy industry analyst, told The Associated Press there was "no rational explanation" for Orbán's Government's reluctance to seek alternative fuel sources and ample infrastructure is already in place to supply Hungary with affordable, non-Russian oil and gas.

"Disconnection from Russian energy in an integrated European market should not be a problem, all conditions are there. It's the intention that is missing," Miklós said.

EU countries moved quickly to slash their imports of Russian oil and gas after Russia invaded Ukraine, instituting an embargo on Russian oil in 2022 and, this year, announcing a proposal to gradually stop the import of all Russian gas and oil into the bloc by the end of 2027.

Hindustan Times, Delhi, 05/10/2025
Page No: 22, Size: 6.38cm × 10.42cm

BPCL pushes growth with natural gas initiatives

Bharat Petroleum Corporation Limited (BPCL) strengthened its commitment to India's clean energy future by launching #TheGoodPrint initiative. This sustainability-led approach focuses on promoting natural gas adoption across sectors through targeted outreach and incentives.

As part of this initiative, BPCL's Gas Business vertical launched two focused campaigns — AHA CNG and PNG Utsav — aimed at encouraging both individuals and businesses to adopt natural gas as a cleaner, safer, and more economical fuel alternative.

Punjab Kesari, Delhi, 05/10/2025
Page No: 4, Size: 9.08cm × 8.89cm

दयालपुर में पीएनजी लाइन डालने के कार्य का उद्घाटन

पूर्वी दिल्ली, (पंजाब केसरी): मुस्तफाबाद विधानसभा से गैस सिलेंडर से आजादी की मुहिम को रफ्तार देते हुए दिल्ली विधानसभा के डिप्टी स्पीकर एवं स्थानीय भाजपा विधायक मोहन सिंह बिष्ट ने दयालपुर में पीएनजी गैस पाइल लाइन डालने के कार्य का उद्घाटन किया। उन्होंने कहा कि घर-घर गैस का कनेक्शन हो जाने के बाद क्षेत्र में रहने वाली उनकी माताओं और बहनों को हर महीने गैस सिलेंडर बुक करने और उसके आने का इंतजार से छुटकारा मिल जाएगा। विधायक कार्यालय प्रतिनिधि कपिल बंदूनी ने बताया कि उद्घाटन कार्यक्रम के मौके पर जिलाध्यक्ष मास्टर बिनोद, निगम चेयरमैन पुनीत शर्मा, मंडल अध्यक्ष धनप्रकाश, पार्षद अरुण भाटी, बी.डी. जोशी, स्थानीय आरडब्लूए के पदाधिकारी एवं बड़ी संख्या में स्थानीय लोग उपस्थित रहे।