



#### Parv Shah

bl. research bureau

The initial public offering of cryogenics equipment manufacturing company Inox India was open for subscription during December 14-18. Currently fully owned by the promoter group, post issue the promoter shareholding shall drop to around 76 per cent.

At the upper end of the price band, the total offer is around ₹1,459 crore, which is fully offer for sale and its market cap will be ₹5,990 crore. While the stock is priced at a trailing P/E of around 38 times, its closest global peer, Chart Industries (listed in the US), trades at a P/E of around 22 times. Chart Industries has also seen high revenue growth in the last three years but has generated lower margins than Inox India.

Overall, though Inox India operates in a niche segment and the company is performing well now, its business is vulnerable to the broader capex cycle (cyclical). Considering this, the valuation looks expensive. Hence, investors can wait and watch for better opportunities to enter the stock.

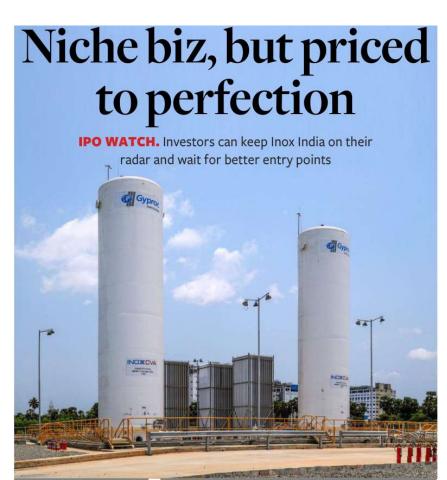
#### BUSINESS

The company manufactures and supplies cryogenic equipment, offering solutions across design, engineering, manufacturing and installation of equipment and systems. Typically, cryogenic equipment is used to store, transport and handle cooled gases in liquid form. They find application in industrial sectors such as industrial gases, liquefied natural gas (LNG), green hydrogen, energy, steel, medical and healthcare, chemicals and fertilisers, aviation aerospace, pharmaceuticals, and construction. Hence, the demand for cryogenic equipment is driven by the capex deployed in these sectors.

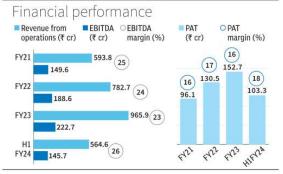
The company operates mainly three segments — industrial gas (70 per cent of revenue), LNG (25 per cent), and cryo scientific (5 per cent).

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Its industrial gas division designs, manufactures, supplies and installs vacuum-insulated cryogenic storage tanks and systems for the storage, distribution and transportation of industrial gases, wherein it provides turnkey as well as EPC







solutions. Air Liquide Global E&C Solutions, Hyundai Engineering and Construction, Navin Flourine, and All Safe Global are some of its customers in the segment.

Its LNG division manufactures, supplies and installs standard and engineered equipment for LNG storage, distribution and transportation as well as small-scale LNG infrastructure solutions suitable for industrial, marine and automotive application. Its customers here include Caribbean LNG Inc, IRM Energy Limited, Saint-Gobain India Private Limited, and Shell Energy India Private Limited.

The cryo scientific segment supplies specialised engineered equipment for scientific applications focused on satellite and launch facilities, cryogenic propulsion systems and research, and fusion and superconductivity. Here the primary customer is ISRO.

The company's principal raw materials include aluminium products (sheets, bars, plate, and piping), stainless steel products (sheets, plates, heads, valves, instruments and piping), palladium oxide, carbon steel products (including sheets, plates, sections and heads), valves and gauges, and fabric-

ated metal components. Inox India typically sources the raw material on spot basis, which exposes it to volatility in raw material prices. Further, nearly 45 per cent of sales are from exports.

#### FINANCIALS

Inox India has seen a CAGR of around 27 per cent in its operating revenue during FY21-23 to around ₹966 crore. This was mainly supported by 35 per cent CAGR growth during the period in the industrial gases segment, driven by sustained investment to improve India's medical oxygen infrastructure and revival of industrial demand for gases. EBITDA growth has been in line with the revenue growth, at around ₹226 crore; hence the company has been able to maintain its EBITDA margin of 23-25 per cent and pass on the volatility in steel prices to its customers. Further, revenue and EBITDA grew by nearly 16 per cent and 20 per cent, respectively, to around ₹565 crore and ₹487 crore during H1FY24.

As the company operates on an asset-light model, it doesn't have significant debt on its balance sheet, resulting in D/E of around 0.08 times as on September 30, 2023.

#### OUTLOOK

Inox India has an order book of around ₹1,036 crore, which it expects to be executed in the next 6-12 months. Of the total order book, industrial gas comprises 53 per cent, followed by LNG and cryo scientific at 25 per cent and 22 per cent, respectively. The company has three manufacturing facilities and is setting up a fourth facility too. It has incurred capex of around ₹80 crore during H1FY24 and the management has guided for similar capex during H2FY24. As per CRISIL, demand for cryogenic equipment is expected to be driven by the increased demand for cleaner fuels such as LNG and hydrogen due to focus on reducing carbon emissions from conventional energy sources. A majority of the industries the company serves are cyclical in nature and hence vulnerable to global economic downturn. In FY23, the company derived 45 per cent of its revenue from exports and whether this may be impacted by the global economic slowdown needs to be monitored.



# '21 cos bid for incentives to manufacture electrolyser'

# 14 firms have evinced interest for incentives to set up production facilities of 5,53,730 tonnes of green hydrogen

#### **OUR CORRESPONDENT**

NEW DELHI: Reliance Electrolyser Manufacturing, Adani New Industries, L&T Electrolysers and Bharat Heavy Electricals are among 21 companies that have bid for government's incentives to set up 3.4 GW of annual capacity for manufacturing electrolyser, a critical component required for hydrogen production.

According to an official statement, the bids came in response to a tender by Solar Energy Corporation of India (SECI) inviting players for setting up 1.5 GW manufacturing capacity for electrolyser manufacturing. Bids for electrolyser manufacturers were invited on July 7 this year.

On July 10, state-owned SECI also invited bids for selec-



tion of green hydrogen producers for setting up production facilities of 4,50,000 tonnes of green hydrogen under the Strategic Interventions for Green Hydrogen Transition (SIGHT) Scheme (Mode-1-Tranche-I).

The SECI statement showed that 21 firms have bid for incentives for setting up 3.4 GW of electrolyser manufacturing capacity annually against 1.5 GW on offer. The other companies that have bid for incentives under the scheme are Hild Electric Private, Ohmium Operations, John Cockerill Greenko

Hydrogen Solutions, Waaree Energies, Jindal India, Avaada Electrolyser, Green H2 Network India, Advait Infratech, ACME Cleantech Solutions, Oriana Power, Matrix Gas and Renewables, HHP Seven, HomiHydrogen, Newtrace, C. Doctor & Company, Pratishna Engineers and LiveHy Energy, showed the statement.

Meanwhile, 14 companies have evinced interest for incentives to set up production facilities of 5,53,730 tonnes of green hydrogen, against the offered capacity of 4,50,000 tonnes. These firms are ACME Cleantech Solutions, Torrent Power, UPL, GH4INDIA, Aneeka Universal, Sembcorp Green Hydrogen India, Greenko ZeroC, CESC Projects, JSW Neo Energy, Welspun New Energy, Avaada GreenH2, Reliance

Green Hydrogen and Green Chemicals, HHP Two, and Bharat Petroleum Corporation.

In January 2023, the Union Cabinet had approved the National Green Hydrogen Mission (NGHM) with an outlay of Rs 19,744 crore with an aim to make India a global hub for manufacturing this clean source of energy. The mission is expected to lead to the development of 5 million metric tonnes (MMT) per annum of green hydrogen production capacity by 2030.

The mission aims to develop India as a global hub for production, usage and exports of green hydrogen and its derivatives. It is expected to promote multilateral engagement and collaboration with various international efforts in hydrogen and fuel cells.



# Is the world closer to phasing out fossil fuel?

What did the climate conference agree to in the Dubai Consensus? What are the challenges for the world to 'transition' away from fossil fuels and achieve net zero by 2050? What are the alternatives to coal and oil?

Jacob Koshy

The story so far:

he 28th edition of the Conference of Parties (COP) concluded in Dubai this week with 198 signatory countries agreeing that the world must "transition" away from fossil fuels in a "just, orderly and equitable manner" to achieve net zero by 2050.

# Does the wording of the agreement suggest that the end of fossil fuels is near?

Far from it. The Dubai Consensus, as this agreement is called, is significant only because this is the first time since 1995, when the first ever COP was held in Berlin, that there is a formal acknowledgement that emissions from fossil fuels are the main culprit driving global warming. So far, all agreements have only spoken of the need to stem "greenhouse gas emissions." This is despite it being common knowledge that three-fourth of such emissions and 90% of carbon dioxide are the result of burning coal, oil and gas. It was only in the 26th edition of the COP, in Glasgow in 2021, that countries agreed to tackle coal – the fossil fuel

There are no timelines yet, only consensus that all fossil fuels need to be done away with to prevent global temperatures from rising further with the biggest global-warming footprint - by agreeing to "phase down" its use. It's important to keep in mind here that "phase down" and "phase out" have no meaning on their own because they do not refer to any specific year by which the use of these fuels must terminate. Large, developing countries like India and China, have protested against the singling out of coal among fossil fuels, on the grounds that they need them for lifting their masses out of poverty and providing energy security. India, while rich in coal reserves, is still an importer of the product and has limited oil and gas reserves. China is rich in both coal and gas. The United States, that derives about a fifth of its energy from coal, has usually been supportive of calls to phase out coal but being heavily dependent on oil and gas reserves, has never voiced any call to action to eliminate the latter two. However, now that all fossil fuels have been included in the Dubai Consensus, it brings parity among fuels and acknowledgement that they all need to be done away with for the world to have a chance at preventing global, average temperatures from rising 1.5 degree Celsius over pre-industrial levels. But because there are no timelines yet, fossil fuels are going to be the mainstay of economies everywhere in the years to come.

Can fossil fuels be immediately replaced?

Nearly two centuries of industrialisation has meant that there is a well-oiled infrastructure system to extract, process and distribute coal, oil and gas to all kinds of power plants and convert them to electricity and combustible products, ranging from petrol and diesel to plastic. Then there is the infrastructure transmission grids and pipelines - to channel these stores of energy to houses and vehicles. Unfortunately, power from natural sources of power such as solar and wind are not as easily available, on demand, as fossil fuel: the sun because of its unavailability at night and wind due to the temperamental nature of the ocean and atmosphere. The infrastructure to store all of the energy produced this way is grossly inadequate. India's National Electricity Plan, 2022-27, plans to add nearly 87,000 MW in this period in the form of fresh coal-fired capacity: 27,000 MW via under-construction power plants and 60,000 MW from new plants.

Oil production in the U.S. hit record levels this year. Since 2010, the number of oil barrels per day has tripled and gas production has risen two and half times in the country. At COP deliberations this year, one of the trickiest conundrums was the large presence of oil and gas manufacturers and of course, the hosting of a climate summit in a petro-state. The Dubai Consensus agreement stating that a transition from fossil fuel, while necessary, suggests that "transition fuels" could play a role in "facilitating the energy transition while ensuring energy security." Though there is no definition of what these fuels are, natural gas has been touted as one of the contenders. Even though natural gas production leads to methane emissions, estimates by the International Energy Agency proffer that in balance, switching from coal-to-gas reduces emissions by 50% when producing electricity and by 33% when providing heat. This of course invites criticism that such a framing of natural gas advantages countries which have natural production and distribution capabilities for this gas.

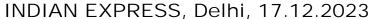
# What does the Dubai Consensus say about methane?

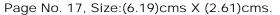
Methane is a potent greenhouse gas and has several times more heat-trapping capabilities compared to carbon dioxide. It is a key component of natural gas and responsible for about a third of planetary warming just behind carbon dioxide. "Accelerating and substantially reducing non-carbon-dioxide emissions globally, including in particular methane emissions by 2030," is necessary for humanity to have a shot at keeping average temperatures from rising beyond 1.5 degree Celsius by the end of the century, the agreement notes. The Global Methane Pledge to cut methane emissions 30% of 2020 levels by 2030 was signed on by nearly 150 countries at the COP-27 summit in Egypt, last year. China and the U.S. have also agreed to address industrial methane emissions, that result from natural gas production.

India has resisted pressure to cut methane emissions on the grounds that most of its methane results from the agricultural sector. However, it has unveiled plans to make its energy production processes more efficient to reduce its release.



**Ticking clock:** Climate activists protest against fossil fuels during COP-28 in Dubai, UAE on December 8. REUTERS







### CRUDE WATCH

## OIL PRICES TAKE A SMALL LOSS

Brent and US crude futures finished at a small loss following a seesaw session, in which prices fell more than \$1 a barrel at one point on Friday, as traders tried to reconcile mixed signals for oil demand in the coming year. **REUTERS** 





# West preaching on fossil fuels? That's rich

# **SWAMINOMICS**



#### SWAMINATHAN S ANKLESARIA AIYAR

Climate summits are occasions for massive hypocrisy. COP28 in Dubai has just ended with a vague commitment to transition out of fossil fuels, without addressing the issue of climate justice.

Climate activists have castigated the UAE for having the gall to host a climate summit while being a leading producer of the very fossil fuels they seek to ban. The Guardian and other media have accused the UAE of "greenwashing" — using vague statements and public relations tricks to cover its plans to expand oil and gas production. Thousands of words have been written on the supposed perfidy of the UAE in claiming to combat climate change while negotiating more deals for oil exploration.

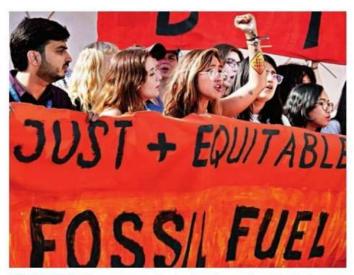
Sorry, but the critics themselves are guilty of the worst hypocrisy. They are taking the position that to produce oil is a sin. But why? The production of oil does not release carbon dioxide into the atmosphere — the use of oil does, whether in cars, trucks or airplanes. The activists should be pinning the blame on countries using oil, above all the US that has the highest per capita usage. Instead, they want to stop even the poorest countries in Africa and elsewhere from providing what rich countries are unwilling to stop consuming.

Guyana, one of the poorest countries in Latin America, has just found a lot of offshore oil. So has Ghana. India, Mozambique and Indonesia have massive coal deposits that they seek to exploit for domestic consumption and export. If India finds a big oilfield tomorrow, should it refrain from exploiting it? Absolutely not.

Developing countries have contributed very little to the total greenhouse gases in the atmosphere. Why should they not be able to produce what the rich countries produced to become rich? A major reason why the industrial revolution started in Britain was its abundant coal availability. The US then became the leading world economy after World War II, helped by being the world's biggest producer of oil and coal. It still exports both. So, why pick on the UAE?

The UAE is not a poor country. But if it stopped producing oil by say 2030, a highly prosperous country would be bankrupted. The activists do not care a damn about that. But the UAE is absolutely correct in saying it seeks a "just, orderly and equitable" transition from fossil fuels.

The West has been the greatest contributor to the stock of one trillion tonnes of greenhouse gases since 1890. The US share in this is 19%, the EU and China



FULL OF GAS: On a per capita basis, the main culprits for emissions are richer countries

have shares of 13% each and India's share is just 4%. So, developing countries have no reason to stop producing or consuming fossil fuels until viable alternative technologies arrive. The Kyoto Protocol of 1992 laid down that the principle of "common but differentiated" responsibilities. The activists are violating this in their bid to stop all new production of oil and coal, which will mainly hit poor countries.

Western countries and their NGOs prefer to focus on current and future emissions. Without a doubt China and India are growing faster and account for a rising proportion of current emissions. Even so, on a per capita basis the main culprits are the richer countries. Thinktanker Sanjeev Ahluwalia writes that the US with 4% of the world population has an 11% share of current emissions, a ratio of almost three to one. China with 18% of the world population has an emissions share of 30%, a ratio of less than two to one. India with a population share of 18% has an emissions share of just 7%, a ratio of less than one to two.

The West now seeks to ban coal usage very soon (though Donald Trump could change this if he is re-elected). There is a move to stop all international financial institutions from financing further coal production or coal-based power plants. That suits the West because it has already reduced its dependence on coal and switched to gas in a big way. Britain, once the most coal-dependent country, has almost entirely switched to gas. The US is exploiting massive gas deposits in shale formations.

But not all developing countries are so fortunate. Doubtless, coal is a dirty fuel. Yet India will require coal for many decades. India, like China, is massively expanding solar and wind energy, and accelerating electrification of vehicles. Yet, says power minister RK Singh, India needs to add an additional 80 GW of coalbased power to meet demand by 2030. India also aims to increase coal production massively to end coal imports.

"The hypocrisy around renewable energy propagated by developed countries stands exposed...the West, which is itself dependent on 75% fossil fuels, cannot lecture us," Singh says. Quite so. ■