

IFC Ramps up Investment in India to Drive Financial Inclusion, create Jobs, and Unlock Climate Finance



International Finance Corporation

New Delhi, India, April 30, 2024—Climate and housing projects, small and medium-sized businesses, and women in India are benefiting from IFC's record year of work with the private sector.

Thirty-two IFC-funded projects in India aim to spur jobs, boost private sector productivity, and drive financial inclusion while supporting the nation's ambitious climate goals for sustainable growth.

India has the largest volume of investments globally for IFC, with a portfolio of over \$8 billion of which approximately 36% is in equity investments. IFC's long-term financing, including mobilization, more than doubled from \$1.3 billion in FY22[1] to \$3 billion in FY23.

The total of IFC's commitments and board-approved funding so far in FY24 has already surged to \$3.8 billion (as of April 30, 2024), reflecting a robust trajectory.

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"IFC's partnership with India's private sector has seen remarkable growth over the past two years, fueling development impact across critical areas, especially housing, climate, and micro, small, and medium enterprises (MSMEs), while championing inclusion and gender equality," said Riccardo Puliti, IFC's Regional Vice President for Asia and the Pacific, who is visiting India this week.

"As the climate crisis intensifies amid new conflicts and fragility, this is a crucial year to cement our focus on India, supporting the private sector to drive impact and foster global and regional integration."

Addressing India's significant housing shortage (an estimated 275 million people need access to adequate housing), IFC's initiatives in FY24 will enable clients—Cholamandalam Investment and Finance Company, IIFL Home Finance Limited, and Vastu Housing Finance Corporation, among others—to finance over 270,000 affordable housing loans, of which 86,000 are for women.

Further, in line with India's substantial climate financing needs (cumulative investment requirement by 2070 is \$10.1 trillion), IFC's funding in FY24—including in manufacturing, agribusiness and services, and infrastructure—is poised to slash greenhouse-gas emissions (GHG) by over 12 million tons annually.

IFC's financing will also help financial institutions provide nearly 29,000 climate loans in critical sectors, including industrial decarbonization, renewable energy, electric vehicles, and green buildings.

BP Ventures invests in BluSmart mobility in \$25 million financing, for Expansion of Ride-Hailing Services



***BluSmart co-founder
Punit K Goyal***

“The round is seeing participation from BluSmart founders, existing investors and external investors including – a global climate and infrastructure fund, some global leaders, leading family offices and some founders of India’s largest start-ups.”

**Punit Goyal
Co-founder, BluSmart.**

BP Ventures invests in BluSmart mobility in \$25 million financing, valuing the company at \$250 million. The funding round is supported by notable investors such as BP Ventures, Survam Partners, Mayfield India Fund, 9Unicorns (now 100Unicorns), JITO Angel Network, Green Frontier Capital, Stride Ventures, Alteria Capital, and BlackSoil, among others.

BluSmart has expanded its infrastructure to encompass more than 4,400 EV chargers distributed across 36 EV charging superhubs. The company has achieved a significant milestone by adding 7,000 electric vehicles (EVs) to its fleet. Recently, BluSmart reported crossing an Annual Run Rate (ARR) of ₹500 crore (\$60 million), reflecting a growth rate of 102% over the previous year. The company's gross business value (GBV) has seen remarkable growth, achieving a compound annual growth rate (CAGR) of 300% over the past three years, positioning it well for sustained expansion.

In fiscal 2024, BluSmart recorded revenue of over ₹390 crore, up from approximately ₹160 crore in FY23. Earlier this year, the company secured \$25 million in funding through a combination of debt and equity, with support from Zurich-based climate finance firm ResponsAbility. BluSmart's ambitious goal is to expand its EV fleet to 10,000 vehicles by the end of 2024.

*Furthermore, BluSmart has entered the Dubai market with an official launch of **#RideSmartDubai** campaign.*

Neev Fund II invests \$25 million in green hydrogen company Hygenco



The investment was announced by UK foreign secretary James Cleverly during his two-day visit to the country. Ahead of his visit, the British government had announced that the UK-backed Neev is taking a GBP 22 million bet to help India's green energy transition.

Haryana-based green hydrogen company Hygenco has secured a GBP 22 million (\$25 million) investment from the Neev II Fund, managed by SBICAP Ventures. The fund aims to deploy over \$300 million in green hydrogen projects across India over the next three years. This investment will provide Hygenco with the necessary capital to commercialize its early pipeline.

Hygenco, which deploys large-scale, commercially viable green hydrogen solutions, will build, own, and operate multiple green hydrogen facilities across India, according to a statement from SBICAP Ventures.

India's Green Hydrogen Mission aims to establish a manufacturing capacity of five million tonnes of green hydrogen by 2030. "We will continue to provide capital to climate-focused, purpose-driven businesses," said Neev Fund's chief investment officer Akshay Panth.

Launched in 2015, Neev Funds receive support from domestic investors such as SIDBI, SBI Group, and the SRI Fund, with additional backing from the UK government's Foreign, Commonwealth and Development Office (FCDO), the Japan International Cooperation Agency (JICA), and the European Investment Bank (EIB).

Co-founded and led by CEO Amit Bansal, Hygenco aims to deploy green hydrogen projects across India within the next three years. The new investment will aid Hygenco in commercializing its early pipeline.

National Green Hydrogen Mission

The National Green Hydrogen Mission aims to position India as a global leader in the production, use, and export of green hydrogen and its derivatives. This initiative supports India's goal of becoming self-reliant (Aatmanirbhar) in clean energy, significantly reducing carbon emissions and fossil fuel dependency, and establishing India as a technological and market leader in green hydrogen.

Demand Creation:

- **Exports:** The mission will create export opportunities through supportive policies and strategic partnerships.
- **Domestic Demand:** The Government of India will mandate a minimum share of green hydrogen consumption for designated consumers, such as energy or feedstock, with the year-wise trajectory set by an Empowered Group (EG).
- **Competitive Bidding:** Aggregating demand and procurement of green hydrogen and green ammonia will occur through competitive bidding processes.
- **Certification Framework:** The Ministry of New and Renewable Energy (MNRE) will develop a regulatory framework to certify green hydrogen and its derivatives as produced from renewable energy sources.

Strategic Interventions for Green Hydrogen Transition (SIGHT):

- Two financial incentive mechanisms with a budget of ₹17,490 crore up to 2029-30:
 - Incentives for manufacturing electrolysers.
 - Incentives for producing green hydrogen.
- The mission will evolve specific incentive schemes and programs as markets and technology develop.
- Quality and performance standards will ensure that projects use government-approved equipment.

Enabling Policy Framework:

Policies will facilitate the delivery of renewable energy for green hydrogen production, including waivers on interstate transmission charges, renewable energy banking, and timely open access and connectivity.

Infrastructure Development:

The mission will develop supply chains to efficiently transport and distribute hydrogen, including pipelines, tankers, intermediate storage facilities, and last-leg distribution networks for both export and domestic consumption.

Regulations and Standards:

Coordination of efforts to develop regulations and standards in line with industry requirements for emerging technologies. Establishment of a framework to facilitate sector growth and harmonization with international norms.

Research and Development:

The Strategic Hydrogen Innovation Partnership (SHIP) will facilitate a public-private R&D framework, creating a dedicated fund with contributions from industry and government institutions to support comprehensive research and innovation programs.

Skill Development:

Coordinated skill development programs will be undertaken with the Ministry of Skill Development & Entrepreneurship to cover various segment requirements.

A significant part of this strategy is the promotion of Green Hydrogen, which holds promise for long-duration renewable energy storage, replacing fossil fuels in industries, clean transportation, decentralized power generation, and potentially aviation and marine transport. The mission also aims to bolster indigenous manufacturing, attract investments, create jobs, and support research and development.

By 2030, the mission targets the establishment of at least 5 million metric tonnes (MMT) of green hydrogen production capacity annually, alongside the addition of approximately 125 GW of renewable energy capacity.

Hydrogen can be classified into three types based on extraction methods: Grey, Blue, and Green. Grey Hydrogen is produced through carbon-intensive processes like coal or lignite gasification and steam methane reformation (SMR) of natural gas or methane. Blue Hydrogen is derived from natural gas or coal gasification, combined with carbon capture storage (CCS) or carbon capture use (CCU) technologies to mitigate carbon emissions. Green Hydrogen, the most environmentally friendly, is produced via electrolysis of water using electricity from renewable sources. The carbon intensity of Green Hydrogen depends on the extent to which renewable energy is used in its production.

Zerodha, Gruhas invest \$ 4.2 million in Solarsquare



***IIT Bombay grads
Neeraj Jain, Shreya Mishra, Nikhil Nahar***

Rooftop solar startup SolarSquare has successfully raised \$4.2 million in new funding from existing investors, including Zerodha, Abhijeet Pai, Nikhil Kamath's Gruhas, Lowercarbon Capital, and Good Capital.

According to regulatory filings, SolarSquare's board approved a special resolution to allot 7,589 Series B compulsory convertible debentures at an issue price of ₹46,710, raising ₹35.44 crore. Key investments include Lowercarbon Capital with ₹20.74 crore, Good Capital with ₹3.32 crore, Gruhas PropTech with ₹6.22 crore, and Zerodha Technology with ₹3.98 crore.

SolarSquare, co-founded by Neeraj Jain and Nikhil Nahar, specializes in the design, installation, and financing of rooftop solar systems for residential and commercial properties. Despite facing a ₹35 crore loss in FY23, the company experienced a significant 35.4% growth in operational revenue, reaching ₹107 crore during the same period.

To support its expansion plans, working capital needs, and general corporate purposes, SolarSquare intends to issue debentures that will convert into preference shares at its next funding round, expected to occur at a valuation of \$75 million. Post-allotment, SolarSquare is estimated to achieve a valuation of approximately ₹394 crore (\$48 million), as assessed by TheKredible.

However, subsequent funding rounds may alter this valuation. In February, SolarSquare broadened its portfolio by acquiring PV Diagnostics, reinforcing its commitment to advancing sustainable and efficient solar energy solutions across broader markets.

LEO CAPITAL INVESTS \$ 3 MILLION IN SPRIH



Sprih Co-founders - Akash Keshav, Ravi Singhal, Rohit Toshniwal, and Hemant Joshi

Sprih, a platform dedicated to carbon emissions management, has successfully secured \$3 million in seed funding. This funding round was spearheaded by Leo Capital, with contributions from global entrepreneurs and climate experts.

The funds will be directed towards expanding sales and marketing efforts to support Sprih's global growth. Additionally, they will be invested in acquiring talent for developing AI models focused on climate solutions and expanding the partner ecosystem to help customers implement these solutions.

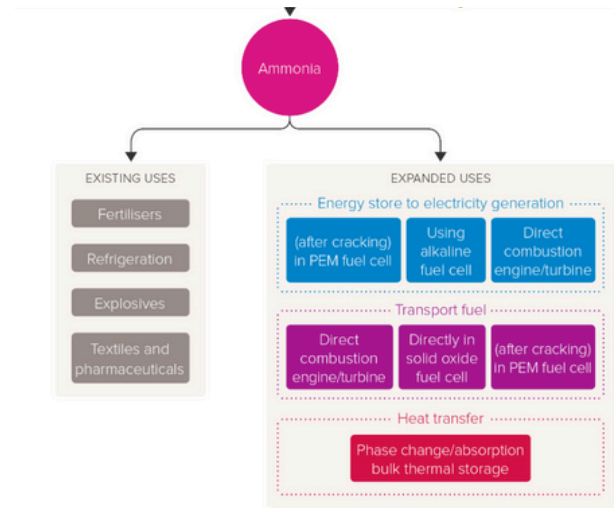
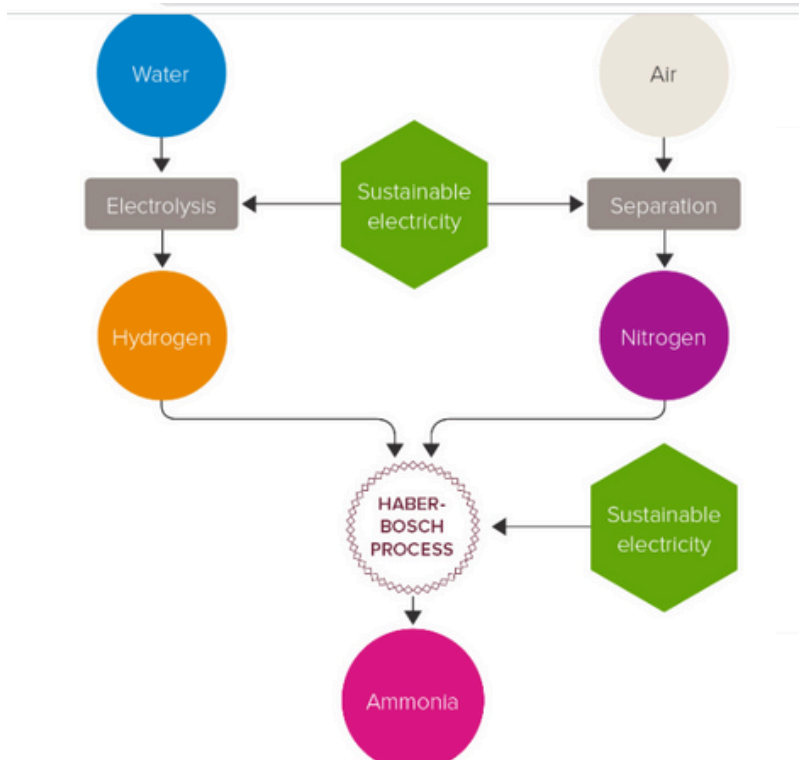
Founded in 2022 by Akash Keshav, Ravi Singhal, Rohit Toshniwal, and Hemant Joshi, Sprih is a climate technology platform designed to assist companies in streamlining their journey towards sustainability.

Sprih collaborates with both public and private companies in sectors such as manufacturing, construction, chemicals, paints, pharmaceuticals, IT, and higher education. Some of its clients include Indigo Paints, Hero Motors, Arvind SmartSpaces, Espi Industries, and InfoBeans.

The start-up also has research partnerships with prestigious institutions like IIT Kanpur and IIT Bombay. Over the next year, Sprih aims to expand its customer base in India and increase its presence in the USA, Europe, and other key global markets.

"It is essential for CEOs to make their businesses sustainable. With stricter climate laws and trade agreements globally, businesses face significant challenges. At Sprih, our mission is to create a better future by providing businesses with the tools to turn these challenges into opportunities, thereby gaining a competitive edge through sustainability," said Akash Keshav, CEO and Co-founder of Sprih.

GREEN HYDROGEN & AMMONIA



The Royal Society

There are opportunities and challenges in producing and utilizing green ammonia as a zero-carbon solution in the transition to net-zero carbon dioxide emissions. Green ammonia, a crucial gas in reducing emissions, is produced using hydrogen from water electrolysis and nitrogen from the air, both powered by sustainable electricity.

The resulting hydrogen and nitrogen undergo the Haber-Bosch process, which combines them at high temperatures and pressures to form ammonia (NH_3). Unlike conventional ammonia production, which relies on methane and steam methane reforming (SMR) and contributes significantly to global CO_2 emissions (about 1.8%), green ammonia is entirely renewable and carbon-free.

The decarbonization of ammonia production is essential for achieving net-zero targets by 2050. Current ammonia production is highly carbon-intensive, with 90% of emissions stemming from the SMR process. The shift towards low-carbon hydrogen is imperative for reducing these emissions. Blue hydrogen, derived from SMR with carbon capture and storage (CCS), and green hydrogen, produced via water electrolysis with sustainable energy, are the primary methods for creating carbon-free hydrogen at scale.

Green ammonia presents various opportunities. It can serve as an effective energy storage solution due to its ease of storage as a liquid at moderate pressures or low temperatures, and an existing global distribution network for ammonia facilitates its transportation.

Additionally, green ammonia can be used as a zero-carbon fuel in engines or fuel cells, emitting only water and nitrogen. The maritime industry is likely to be an early adopter, potentially replacing fuel oil in marine engines with ammonia. Furthermore, ammonia can function as a hydrogen carrier, offering a more efficient and cost-effective alternative to bulk hydrogen storage, which requires high-pressure cylinders or cryogenic tanks.

Ammonia can be "cracked" to release hydrogen gas when needed, making it a versatile option for various applications, including proton exchange membrane (PEM) fuel cells.

In summary, the production and use of green ammonia offer significant potential in the pursuit of net-zero emissions, addressing critical challenges in energy storage, fuel use, and hydrogen transportation. This aligns with global efforts to tackle climate change and promote sustainable energy solutions. The Royal Society's briefing underscores the necessity of advancing green ammonia technologies to meet future energy needs while mitigating environmental impact.

Financing India's Decarbonisation Ambition

Mike Bloomberg, N Chandrasekaran, and Shemara Wikramanayake



To support the growing adoption of electric vehicles (EVs), India needs to significantly increase the number of EV charging stations. This infrastructure is crucial to alleviate range anxiety among consumers and ensure the practicality of EVs for long-distance travel. The expansion of this network is essential for the widespread adoption of EVs, which are a cornerstone of India's strategy to reduce greenhouse gas emissions from the transportation sector.

Beyond infrastructure, there is a pressing need for improved financial mechanisms to make EVs more accessible to a broader population. Enhanced financing options could include favorable loan terms, subsidies, and incentives that lower the overall cost of ownership. These financial solutions are necessary to encourage consumers and businesses to transition from conventional internal combustion engine vehicles to electric ones.

This involves creating systems where materials are reused, recycled, and repurposed, thus minimizing waste and reducing the demand for new resources. Such investments are crucial for sustainable economic growth and environmental protection. A circular economy approach can significantly reduce the carbon footprint of various industries by ensuring that materials and products are kept in use for as long as possible.

There is a need for substantial investment in green hydrogen production and its application in hard-to-abate sectors such as steel, aluminum, and cement. These industries are some of the largest emitters of CO₂ and require innovative solutions to achieve decarbonization. Green hydrogen, produced using renewable energy, can serve as a clean alternative to fossil fuels in these sectors, thus significantly reducing their carbon emissions.

The Climate Finance Leadership Initiative (CFLI) is poised to play a crucial role in mobilizing private sector investment. The involvement of CFLI member GIC India Private Ltd in supporting the production of 5 million tonnes of green ammonia per annum by 2030 is highlighted. This initiative, developed by AM Green and supported by Malaysia's Petronas, represents a significant step towards meeting 20 percent of India's green hydrogen production target by 2030.

India has demonstrated significant progress and ambition in addressing climate change, particularly through the goal set by Prime Minister Modi to reach 50 percent clean energy by 2030. This progress is driven by government policies that have reduced renewable energy costs, boosted electric vehicle (EV) demand, and positioned India as a prime location for clean energy investment.

However, challenges remain in the transition to EVs due to their high upfront costs and limited financing options, as well as the need for more EV charging stations. Additionally, conservation of resources, including water, is essential for sustainable development, necessitating increased private investment to build a circular economy.

India's heavy industries, such as steel, aluminium, and cement, are crucial to its industrial power but require more investment in low-carbon technologies like green hydrogen to maintain a leading role in the global low-carbon supply chain. Collaboration with the private sector and multilateral finance institutions is essential to scale these innovations affordably.

The Climate Finance Leadership Initiative (CFLI) India, launched with government support, is a collaborative effort to overcome financing barriers and attract private capital to climate projects. CFLI India brings together financial institutions, businesses, government agencies, and multilateral lenders to drive financing for nascent climate innovations.

Key initiatives under CFLI India include:

- Macquarie and the United Nations Green Climate Fund creating a platform to provide fleet electrification solutions, leveraging \$200 million in public capital to unlock further private investment.
- Tata Motors and partners enabling customers to spread the cost of EVs over longer timeframes with lower interest rates.
- Innovative financing structures for sustainable infrastructure, including water projects, by Tata Group, Larsen & Toubro, and Kotak Mahindra Bank.
- Support for India's National Green Hydrogen Mission, with GIC Private Limited financing the production of 5 million tonnes of green ammonia per annum by 2030.

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