

# Centre for the Fourth Industrial Revolution (C4IR) India – an Impact Journey

JANUARY 2025





# Our vision

## Solve for India, solve for the world



As the world's largest democracy embarking on a massive digital transformation, India is a key political, social and economic player that will shape the course of the Fourth Industrial Revolution.

Narendra Modi, Prime Minister of India, at the launch of the Centre for the Fourth Industrial Revolution in India



India's model serves as a global template for leveraging technology as a catalyst for shared human progress while ensuring environmental sustainability. The inspiring and groundbreaking innovations by the country's young, educated and ambitious population are propelling India's progress in the Intelligent Age. C4IR India in the past six years has shown that it is dedicated to supporting initiatives that drive innovation and sustainable development, and the impact achieved with initiatives like AI4AI, AVIATE and FIRST Cancer Care is a testament to this ongoing commitment.

Klaus Schwab, Founder and Chairman of the Board of Trustees, World Economic Forum





# Advanced energy solutions dialogue series India

## **Mission:**

Engaging leaders in frontier segments of the energy system. Enabling acceleration, reducing from decades to years the time needed to deploy advanced solutions – such as clean fuels and hydrogen, advanced nuclear technologies, energy storage and carbon removal – at industrial scale. Providing a platform, as India emerges as a global powerhouse in advanced energy solutions, through its dialogue series for business and policy-makers to move bigger and faster.



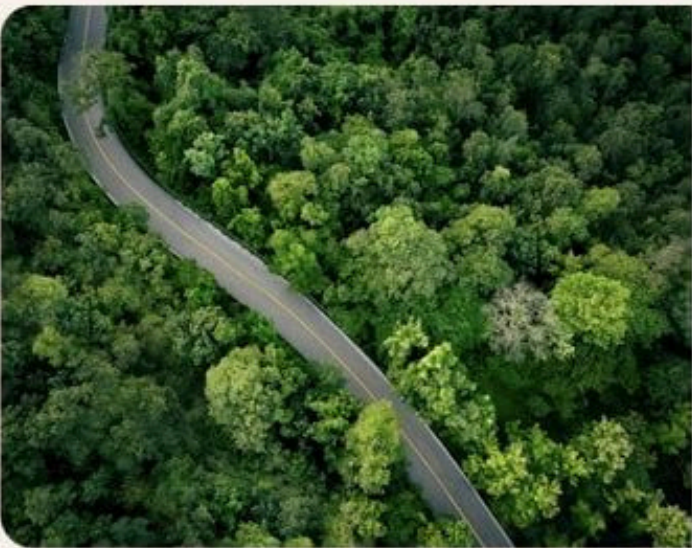


Context

India is adopting ambitious goals for deploying solutions such as clean hydrogen, energy storage, carbon capture and sustainable aviation fuels. This includes a target of 5 MMBTU<sup>10</sup> production capacity of green hydrogen and an electrolyzer manufacturing capacity equal to 40 GW by 2030. This will more than double the total global existing manufacturing capacity at the end of 2023. Achieving this is expected to require 42 GW of battery storage capacity. There has also been an increasing interest in accelerating advanced nuclear technologies in the fuel mix.

These energy transition goals go hand in hand with the country's "Make in India" ambitions, which aim to build the nation's supply chains and industrial capacity. Creating strong industries and supply chains in India is a central part of the country's advanced solutions strategy.

Various central-level policies and regulations have been implemented over the past few years to promote domestic manufacturing of advanced energy technologies and components. The Make in India production-linked scheme is an example of such an intervention to incentivize incremental sales from products manufactured domestically.



In so many ways, the world's energy future will depend on India's energy future.

Jennifer Granholm, US Secretary of Energy

Objective

The dialogue series aims to support the deployment of advanced energy solutions in India to aid its increasing role in global advanced energy solutions supply chains. The dialogue series also informs the global industry vision for the advanced energy solutions community. The key objectives include:

Articulating the impact on job creation, investment and healthcare savings in India by building out domestic supply chains

Exploring the role India can play in global advanced energy solutions supply chains

Suggesting policy tools to achieve this vision

Community



## Milestones

### Milestones planned



FEBRUARY 2025

High-level meeting at India Energy Week, Delhi



SEPTEMBER 2025

Advanced energy solutions vision workshop, Hyderabad



Serving as a trusted hub for public-private dialogue, collaboration and knowledge-sharing, the Centre for the Fourth Industrial Revolution (C4IR) has made significant contributions to India's transition towards a sustainable energy economy. We are grateful for our association with C4IR and the platform it provides for the seamless exchange of ideas, which drives technological, commercial and policy breakthroughs. As dedicated partners to stakeholders whose actions are vital in securing India's energy resources, reducing environmental impact and fostering sustainable economic resilience, we look forward to continued collaboration with C4IR.

Purusharth Singh, Co-Founder, White and Brief's Sidebar