> **" R&D is a key pillar of our strategy, focusing on sustainable solutions that enhance efficiency, reduce emissions, and integrate renewable energy. "**
>
> — **Deepak Sharma,** Zone President, Greater India
> Managing Director & CEO, Schneider Electric India

Schneider Electric's (SE's) mission is to be the trusted partner in sustainability and efficiency. The company is a global industrial technology leader bringing world-leading expertise in electrification, automation and digitisation to smart industries, resilient infrastructure, future-proof data centres, intelligent buildings and intuitive homes. Anchored by its deep domain expertise, it provides integrated end-to-end lifecycle artificial intelligence (AI)-enabled industrial internet of things (IoT) solutions with connected products, automation, software and services. In this interaction with IEEMA JOURNAL, **Deepak Sharma, Zone President, Greater India, Managing Director & CEO, Schneider Electric India,** shares how the company is an influential leader in sustainability and more...

Schneider has gained a reputation as The Most Sustainable Company in the World, thanks to its commitment to driving Electricity 4.0 (electrification and digitisation) and helping customers achieve their decarbonisation goals. How does the company strive to be an influential leader in sustainability? Tell us about your initiatives in this direction.

At Schneider Electric, sustainability is central to our mission and deeply ingrained in our culture. We are dedicated towards developing cutting-edge solutions to bridge the gap between progress and sustainability. A key differentiator of our sustainability strategy is that we play on both sides of the equation. We not only reduce our own environmental impact but also empower others across the value chain to do the same.

We are honoured to be the World's Most Sustainable Corporation 2025 by Corporate Knights and the only company to rank first in the Global 100 twice.

For over 15 years, we have tracked our progress through the Schneider Sustainability Impact dashboard, aligned with the 17 UN Sustainable Development Goals. We are on track to achieve carbon neutrality in our operations by 2025 and aim to reduce absolute carbon emissions across our value chain by approximately 25 percent by 2030, making our operations 'net-zero ready'. Our long-term vision is to have fully carbon-neutral value chain by 2040 and net-zero CO_2 emissions across the entire value chain by 2050.

Through the Zero Carbon Project, we are helping our top 1,000 suppliers – about 70 of whom are in India – cut their carbon footprint by 50 percent by 2025. Additionally, we are enabling our customers to achieve their sustainability goals with innovative energy management and automation solutions. As of December 2023, we had already surpassed the halfway mark toward avoiding 800 million metric tonne (MT) of CO_2 emissions by 2025.

In India, our Green Yodha initiative has built a thriving community of impact-makers, including leading companies like Capgemini, Pepsico, Haldirams, Voltas, Titan Company, JSW Group and several others. With strong public-private collaboration, we are driving decisive climate action to create a decarbonised, resilient and thriving future for all.

How can AI and other technological advancements play a key role in facilitating sustainability?

AI has transcended mere buzzword status; it is now a vital component of India's manufacturing landscape, propelling the transition to Industry 4.0 and transforming operational practices. At SE, we are dedicated to addressing real-world challenges, fostering a sustainable, digitised and electrified future. By harnessing AI technologies, we drive industry transformation, enhancing both efficiency and sustainability.

With over 20 years of expertise in AI and machine learning (ML), and a global team of 350+ AI and data specialists, our EcoStruxure platform integrates advanced analytics and AI to deliver scalable, IoT-enabled solutions for diverse sectors, including buildings, data centres, infrastructure and manufacturing.

Our Hyderabad factory – recognised as a Sustainability Lighthouse by the World Economic Forum – exemplifies this commitment. It has achieved remarkable results: a 59 percent reduction in energy consumption, a 64 percent improvement in waste management, a 61 percent drop in CO_2 emissions, and a 57 percent decrease in water usage.

Beyond manufacturing, we apply AI to enhance customer engagement, optimise supply chains and refine people practices. Our "self-healing" supply chain platform, powered by adaptive ML and IoT, has improved manufacturing yields by 15 percent, generated over €100 million in value, and reduced delivery times by six days. This innovation earned us the Gartner Award for Best Supply Chain Process or Technology Innovation in 2022.

What about research and development (R&D) for innovations in the decarbonisation journey? How much of the company's turnover is invested in R&D in the energy management business?

At SE, we are committed to driving innovations that accelerate India's decarbonisation journey. R&D is a key pillar of our strategy, focusing on sustainable solutions that enhance efficiency, reduce emissions, and integrate renewable energy.

With over 6,000 specialists in India, we develop products for both local and global markets. We are seeing exciting advancements in green materials, microcontrollers and next-gen designs that improve efficiency and minimise losses. By embedding AI into our products, we enhance performance and contribute to a sustainable future.

We are intensifying our R&D efforts to provide tailored electrical and automation solutions for the evolving energy landscape, supporting a more digitised India across critical infrastructure, industries, agriculture and micro, small and medium enterprises (MSMEs). Our global investment in R&D, including support functions, continues to rise, representing 5.4 percent of our 2023 revenue.

What are the company's plans in terms of driving systematic change to be carbon-neutral both, at the organisation and industry level?

At Schneider Electric India, we are on a mission to lead the way to carbon neutrality. Our ambitious plan is to achieve carbon-neutral operations by 2025 and a net-zero carbon footprint by 2050. By December 2023, we had already made significant progress, being more than halfway towards our goal of helping customers save and avoid 800 million tonne of CO2 emissions by 2025. Our EcoStruxure™ solutions and the Zero Carbon Project, which supports our top 1,000 suppliers in cutting their CO2 emissions by 50 percent by 2025, are central to this effort.

Furthermore, Schneider has made considerable strides in halving the carbon impact of its top suppliers through its Zero Carbon Project, resulting in a 36 percent reduction of their operational CO2 emissions.

How are you helping customers achieve their energy efficiency goals through your solutions?

At SE, we believe that electricity is the best vector for decarbonisation. By integrating energy management and automation, we enable our customers to optimise their energy usage, reduce operational costs and lower greenhouse gas emissions. Our solutions provide real-time data and analytics to help customers make informed decisions and achieve their sustainability targets.

This is further demonstrated by our significant investments in expanding our industrial footprint in India, with an investment of approximately Rs3,200 crore to add 1.2 million sq ft of manufacturing space by 2026. This expansion aligns with our goal of supporting the Atmanirbhar Bharat initiative and driving sustainable growth. We are also focusing on renewable energy projects, such as the fully automated solar panel factory in Rudrapur, Uttarakhand, and the new greenfield plant for battery manufacturing in Angul, Odisha.

We have numerous success stories in India, such as our collaboration with Capgemini to digitise its IT campuses in India, resulting in a 29 percent reduction in energy usage. Another example is our partnership with Reliance Industries at the Jamnagar refinery, where our control and automation solutions manage over 300,000 process points, making it the world's largest real-time process control network. These examples highlight how our solutions are driving energy efficiency and sustainability for our customers.

How are you participating at ELECRAMA 2025 and what are your plans for the exhibition?

We are excited to participate in ELECRAMA 2025, where as a group we will be showcasing our latest innovations and technologies through large, dedicated booths for our brands such as Schneider Electric, Lauritz Knudsen and more. Further, as the 'Official Sustainability Partner of ELECRAMA 2025, for the second consecutive edition, we are committed to promoting sustainable practices, innovation and solutions within the Indian electrical and automation industry.

Our focus will be on demonstrating how our solutions can drive the transition to a sustainable and resilient energy future. Visitors to the Schneider Electric and Lauritz Knudsen booths will have the opportunity to experience our products and solutions firsthand and learn how they can accelerate their energy efficiency and sustainability journey with our solutions. We will also be engaging in various thought leadership sessions and panel discussions to share insights and collaborate with industry leaders and policymakers on driving the future of energy in India.