"We are actively supporting customers in achieving sustainability targets..."

Carrier India was established in 1986.
The company has 14 sales and service offices, more than 800 sales & service channel partners throughout India, ensuring efficient solutions and quality services at customer's doorstep. In an exclusive e-interview with Cooling India, Sundaresan Narayanan, Managing Director - Commercial HVAC at Carrier Airconditioning & Refrigeration (Carrier India), is fielding questions from P.K. Chatterjee (PK). Excerpts...



In the post-COVID-19 era, Carrier's Heating, Ventilation and Air Conditioning ("HVAC") business in India has demonstrated remarkable resilience and growth. Despite the challenges presented by the pandemic, our commitment to innovation and adaptability has enabled us to seize emerging opportunities in the market. As a global leader in intelligent climate and energy solutions, Carrier is at the forefront of pioneering innovations, ensuring that India's growing urban population thrives in healthy, sustainable, and energy-efficient buildings. Our focus on hightechnology commercial air conditioning products aligns seamlessly with India's commitment to combat climate change and achieve net-zero goals. Carrier is dedicated to building a robust manufacturing ecosystem for commercial air conditioning solutions. In the coming years, we remain steadfast in bringing our latest technology and solutions to further develop the supplier ecosystem, contributing to India's sustainable and energy-efficient future.

# What kind of transformation in consumer demand are you finding in this period?

In the current period, we've observed a significant transformation in customer demands, particularly post-pandemic. There's a heightened focus on digitally enabled lifecycle solutions, indoor air quality and environmental well-being, leading customers to prioritize HVAC solutions that not only offer effective temperature control and comfort but also contribute to a healthier indoor environment. At Carrier, we're aligning with this shift through a strategic portfolio transformation, positioning us as the global leader in intelligent climate and energy solutions that matter for people and our planet for generations to come. Our works with esteemed clients such as the Taj Palace Hotel and Capgemini's Bangalore campus showcase our commitment to reducing energy consumption and driving efficiency. As we continue to expand our portfolio, Carrier is actively accelerating the adoption of energy-efficient solutions, connected technologies and environmentally-responsible refrigerants to meet and exceed the evolving demands of our customers.

### How is Carrier India gearing up to meet the emerging needs of the new generation of customers?

At Carrier India, we are proactively aligning ourselves with the evolving needs of the new generation of customers. Recognizing the shift towards sustainability and efficiency, we are heavily investing in technological and commercial advancements to offer enhanced, safer, and competitive products and solutions. The new generation is more conscientious about their choices and environmentally aware, and we are dedicated to meeting these expectations. Carrier India is playing a significant role in

sustainability in India by introducing high-efficiency HVAC equipment with low Global Warming Potential (GWP) refrigerants. Additionally, our integration of HVAC equipment with our BluEdge™ Command Centers, utilizing AI and data analytics, allows for remote interventions to optimize energy consumption and enhance customer experience through predictive maintenance. Our specialized teams conduct audits and recommends interventions in existing HVAC systems, significantly reducing energy consumption. These initiatives not only address the new generation's preferences but also contribute to India's goal of achieving a net zero emission target by 2070 by lowering energy demand.

# Could you give me a brief idea of Carrier's expansion plans in India?

Carrier has a long legacy in India, which dates back to 1936 when it installed India's first-ever air-conditioning system at Rambagh Palace in Jaipur. Carrier India was the first major multinational corporation to set up local manufacturing of air-conditioners in India. We are committed to localizing more products in India thereby increasing our manufacturing footprint. As a fast-growing market for sustainable heating and cooling solutions and a manufacturing hub in Asia Pacific, India is a strategically important market for Carrier. We plan to leverage India as an export hub for Southeast Asia and other regional markets. In the next five years, Carrier envisions growing its commercial HVAC business in India by expanding our manufacturing footprint to produce energyefficient air conditioning products locally and scaling our Global Center of Excellence in India across Engineering, Digital, Shared Business Services and Data Analytics. Our Digital Hub in India, the largest in our global network, plays a crucial role in supporting all our businesses globally. Additionally, we are focusing on growing our highly skilled Indian workforce, currently employing over 800 engineers, with plans for further expansion.

### How is your focus on our prime minister's call for 'Make-in India'?

Carrier's commitment to the 'Make-in-India' initiative is deeply rooted in our longstanding presence in the country. Since 1936, when we installed India's first air-conditioning system at Rambagh Palace in Jaipur, Carrier has played a pivotal role in shaping the HVAC landscape. Formally established in 1987, Carrier India became the first major multinational corporation to locally manufacture air-conditioners in the country, marking a significant milestone in our journey. With a strong PAN India presence, including two state-of-the-art factories and three global centers, we stand as a testament to our dedication. Our Hyderabad Research & Design Center, inaugurated in 2010, exemplifies our commitment to cutting-edge innovation, facilitating product localization in alignment with the Indian government's 'Make in India' initiative. As a key player in the rapidly growing market for sustainable heating and cooling solutions, we view India not just as a market but as a strategic manufacturing hub. Our plans include leveraging India as an export hub for Southeast Asia and other markets, reinforcing our pledge to the vision set forth by the Prime Minister. We are encouraging our partners to participate in the local manufacturing ecosystem.

# How are you specifically addressing emerging challenge of cooling of Indian data centers?

With the increasing number of internet users and connected devices, the demand for data centers in India is growing rapidly. Carrier is equipped to support this expansion, helping data centers manage costs and energy usage while ensuring reliability, scalability and security. Our purpose-built solutions integrate efficient HVAC equipment, data center infrastructure management tools, and building management systems. This enables data center operators to reduce power consumption, enhance operational efficiency, and boost profitability over the long term.

Our cooling solutions, such as the 30XF & 19DV chillers, are specifically designed to meet the high efficiency and uptime requirements of data centers. Carrier's Nlyte Asset Lifecycle Management & Capacity Planning software streamlines asset lifecycle management, capacity planning, audit and compliance tracking. It simplifies space and energy planning, seamlessly connecting with IT service management systems and various business intelligence applications. These include Carrier's Abound™ cloud-based digital platform and BluEdge™ service platform, which track and predict HVAC equipment health, ensuring continuous operations.

# What are your offerings for the 'Smart Buildings' that are coming up in India?

Carrier is at the forefront in offering cutting-edge solutions that seamlessly integrate smart technologies to optimize energy consumption, elevate occupant comfort and streamline building management. The rapid pace of urbanization in India, akin to constructing a city the size of Chicago annually for the next decade, poses a significant sustainability challenge. Recognizing that buildings account for 40% of total global energy consumption, with HVAC being a major contributor, Carrier is committed to addressing this challenge. Our approach involves introducing high-efficiency HVAC equipment with low Global Warming Potential ("GWP") refrigerants. Moreover, we're connecting HVAC systems to our BluEdge Command Centers, leveraging AI and data analytics to intervene and optimize energy consumption. Our specialized team conducts comprehensive audits of buildings, providing tailored recommendations to significantly reduce energy consumption in existing HVAC systems. Carrier stands poised to play a pivotal role in offering the Smart Building while championing sustainability and energy efficiency.

# How actively innovative are you in providing solutions to commercial buildings?

Carrier lives at the intersection of secular trends, including climate change and sustainability, energy transition, societal trends where AC penetration is less than 10%, the adoption of alternative-fuel solutions accelerated by government regulations and incentives, and digitalization. We are well-positioned to address climate change as a key tenet of our growth strategy. At Carrier, we are developing innovative

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products and digitally enabled services that help customers reduce greenhouse gas emissions and achieve their sustainability goals. We are investing in intelligent climate and energy solutions through our research and development and external investments by Carrier Ventures globally.

Our commitment goes beyond being a product solution provider; we are actively contributing to India's journey toward a greener and more technologically advanced future. Excited about this sector's potential, also known as the Sunrise sector by the government of India, we aim to work together with all the relevant stakeholders to create an environment prioritizing innovation, sustainability and community well-being.

### How are you improving your Indian supply chain?

Carrier strongly supports the 'Make-in-India' initiative and has been manufacturing in the country since 1987. Currently, our manufacturing facility produces Light Commercial, VRF and midsized chillers within the country. Carrier recently expanded its HVAC products made in India with a range of air handling units (AHUs) and fan coil units (FCUs). These units are crafted to meet the diverse needs of India's commercial buildings, providing custom solutions for healthy indoor environments with high-efficiency air filtering needs. We aim to continue localizing more products in India. Additionally, we have set ambitious target to grow our business in India within the coming years. As part of this growth, Carrier will expand its manufacturing footprint and increase the sourcing of materials and components from Indian suppliers. By localizing production, our objective is not only to enhance selfsufficiency but also to foster a local supplier ecosystem, thereby reducing our dependency on imports. We will particularly focus on localizing high-technology products such as VRF and large centrifugal chillers. Moreover, to increase our sourcing from India, Carrier has established a Global Center of Excellence for sourcing materials to Carrier facilities globally.

### What would you like to specifically communicate to your potential Indian customers from domestic as well as other sectors?

At Carrier India, sustainability, service excellence and innovation are our top priorities. We are dedicated to helping India and the world address urgent sustainability goals. By leveraging advanced technology, we aim to help our customers avoid more than 1 gigaton of greenhouse gas emissions by 2030.

In India, we are actively supporting customers in achieving sustainability targets by enhancing energy efficiency in buildings. Our focus on customer satisfaction through service excellence, local manufacturing, and a deep understanding of the Indian market makes Carrier your trusted partner for heating, ventilation and air conditioning needs.

Experience the reliability and excellence of Carrier solutions that create comfortable, healthy indoor environments tailored to your specific requirements. With Carrier, you invest in cutting-edge HVAC solutions and contribute to a greener, more sustainable future for India and beyond.

