

Presenting Indian perspective at global conferences – N Karunamoorthy

The 22nd World Wind Energy Conference (WVEC) and the 3rd International Wind Power Technology Innovation Conference were held in Shantou, China, from 3–5 December 2025, in association with the Chinese Wind Energy Association. The event marked another significant milestone, following the successful completion of first and second International Wind Power Technology Innovation Conferences held earlier in Beijing and Shanghai, respectively.

The conference witnessed strong international participation, with around 1,500 delegates representing 26 countries in attendance. Experts, policymakers, industry leaders, researchers and technology providers came together to exchange knowledge and experiences across a wide spectrum of renewable energy technologies, including wind, solar, hydro and other emerging clean energy solutions.

A key focus of the conference was the role of renewable energy (RE) in fostering international collaboration and accelerating the global energy transition. Discussions emphasised strategies to streamline the growing utilisation of wind and renewable energy through supportive policies, advances in science and technology, manufacturing innovations, and enhanced research and development efforts.

The conference also covered critical themes, such as operation and maintenance, offshore and small wind technologies, integrated renewable solutions, capacity building and community involvement. In addition, broader economic and social aspects of renewable energy deployment were examined, highlighting the sector's contribution to sustainable development and inclusive growth. Overall, the event served as an important platform for shaping the future roadmap of wind and renewable energy worldwide.

WWEA releases guidelines for community engagement

The first day of the conference commenced with the World Wind Energy Association (WWEA) – an affiliate of Indian Wind Power Association (IWPA) – board meeting, in which members of the Chinese Wind Energy Association (CWEA) also participated. During the session, the board reviewed the activities and achievements of the year 2025 and deliberated on the proposed work plan and strategic priorities for 2026.

A major resolution adopted during the meeting was the formal launch of the World Wind Energy Academy and the Community Engagement Council (CEC), marking an important step toward strengthening capacity building and stakeholder involvement in the global wind energy sector. Windplus was recognised as the only WWEA member from India to be included in CEC.

On 5 December 2025, the World Wind Energy Association officially published the WWEA CEC Guidelines. These guidelines aim to establish clear standards and best practices for effective engagement with communities and citizens living in the vicinity of wind farms, promoting transparency, trust and long-term social acceptance of wind energy projects.

The guidelines can be accessed at <https://wwindea.org/ss-uploads/media/2025/11/1764156745-1d2e2af2-5694-4364-b087-a3dd16c6ec20.pdf>

Global wind market overview and India's perspective

Following the board meeting on 3 December 2025, an overview of the global wind market was presented by representatives from different regions of the world. These presentations provided insights into regional market dynamics, policy frameworks, technological progress and growth trajectories shaping the global wind energy sector.

Honoured to represent India on this global platform, my presentation was on 'Opportunities in wind energy: Policy and market trends shaping India's position in the global market'. The presentation highlighted India's evolving policy landscape and its growing strategic importance in the global wind energy value chain.

Key policy measures highlighted were the Indian government's introduction of a 4 GW offshore wind tender and its ambition to tender 10 GW of onshore wind capacity per year from 2023 to 2027. These measures reflect India's strong commitment to scaling up wind energy deployment and achieving long-term renewable energy targets.

The presentation also emphasised India's manufacturing strength, positioning the country as the second-largest hub in the Asia-Pacific region for onshore wind turbine assembly and component manufacturing, with an annual capacity of about 17 GW. With this robust manufacturing base and an expanding domestic market, India is effectively transforming its vast wind energy potential into a decisive force reshaping the global clean energy landscape.

Key takeaways from the conference

One of the key takeaways from the conference was the exemplary and diligent manner in which the Chinese government is aligning its renewable energy actions with COP resolutions – COP28's goal of tripling renewable energy capacity through improved efficiency, COP29's emphasis on limiting global warming to 1.5°C, and COP30's focus on translating commitments into implementation. These commitments were reflected in China's strong policy support, large-scale deployment and continuous innovation in RE technologies.

The conference also highlighted the critical role of wind energy in the global energy transition. As wind power's levelised cost of energy (LCOE) has reduced by nearly 40%, making clean energy increasingly competitive. In terms of environmental impact, wind energy demonstrated a significantly lower carbon footprint, with emissions of approximately 6 grams of CO₂ per unit, compared to 450 grams from natural gas and 900 grams from coal-based power generation.

Lessons from China

India is currently achieving only about 10% of what China accomplishes in a year in terms of large-scale development and execution. The primary reason for this gap lies in policy effectiveness and the speed of implementation.

A key takeaway from the presentations was China's strong focus on innovation and structural reforms. These reforms are not treated as optional adjustments but as necessary transformations to support long-term growth. Most importantly, there is a clear acceptance of structural change at all levels, which enables faster decision-making and execution.

Another notable observation is that communication is not a limiting factor. Even top leadership presentations are delivered entirely in Chinese, yet this has not hindered collaboration, understanding

or progress. What truly matters is clarity of intent, alignment of institutions and commitment to execution – not the language of communication.

China's success demonstrates that policy stability, innovation-driven reforms, and willingness to embrace structural change are far more critical than external communication or presentation style. These factors together create an ecosystem capable of sustained and rapid growth.

Conclusion

The overarching focus of the conference was on innovation, collaboration and sustainable growth as the pillars of the global renewable energy transition. Strong emphasis was placed on enabling better integration of people and communities into renewable energy development, while accelerating the shift towards a low-carbon energy system.

An inspiring personal insight was shared by Ms. Monica Oliphant, Senior Member of WWEA and a renewable energy expert with over 40 years of experience. At 80 years of age, she emphasised simple yet powerful principles for a healthy and balanced life. Her message reinforced a broader takeaway from the conference – continuous learning and adaptability are essential, both in personal life and in advancing the renewable energy sector.

Dr N Karunamoorthy is the managing director of Windplus Pvt Ltd. He is the honorary treasurer at Indian Wind Power Association (IWPA) and vice president at World Wind Energy Association (WWEA).

State-wise wind energy evacuation – November 2025

State	Installed capacity (MW) as on 31.10.25	State grid connected installed capacity (MW)	November-25			FY 2025-26 Cumulative		
			Demand met (MU)	Wind energy (MU)	%	Demand met (MU)	Wind energy (MU)	%
Andhra Pradesh	4,397.78	4,084.00	6,082.93	207.76	3.42	52,887.44	6,410.87	12.12
Gujarat	14,493.38	6,998.00	12,358.40	866.10	7.01	1,06,140.50	11,852.00	11.17
Karnataka	8,193.29	5,440.00	7,977.19	580.78	7.28	59,203.31	7,818.24	13.21
Madhya Pradesh	3,448.15	2,428.00	8,441.30	218.10	2.58	63,437.00	3,138.10	4.95
Maharashtra	5,716.31	5,005.00	15,904.80	386.70	2.43	1,33,787.90	6,466.60	4.83
Rajasthan	5,208.75	4,328.00	8,937.97	250.14	2.80	72,491.71	4,117.93	5.68
Tamil Nadu	11,938.34	9,392.00	10,076.13	325.95	3.23	89,318.33	13,371.27	14.97
TOTAL	53,396.00	37,675.00	69,778.72	2,835.53	4.06	5,77,266.19	53,175.01	9.21

An IWPA compilation