

Taiwan Sets Bold Carbon Reduction Targets at Smart City Summit & Expo (SCSE) 2025 to Accelerate Net-Zero Transition

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Taiwan strengthens climate ambitions with new 2032 and 2035 reduction targets, driving industrial transformation and sustainability.



With the consensus on achieving net-zero emissions by 2050 and its diverse scope, the Net Zero City Leaders Summit seeks to facilitate in-depth international exchanges to seize opportunities and possibilities for net-zero transformation, starting from the perspective of cities. Taiwan's journey towards net-zero energy will be showcased, and collaboration with global smart cities towards a net-zero future will be fostered.

The 2025 Net Zero City Leaders Summit consists of one main forum and three sub-forums, focusing on the three foundational transformations for achieving net-zero cities: energy transition, just transition, and net zero lifestyle. Through exchanges among domestic and international city representatives, the aim is to accelerate the practical realization of net-zero transformation.

In a decisive move to align with global Nationally Determined Contributions (NDCs) and bolster its commitment to climate action, Taiwan has revised its 2030 emissions reduction goals and introduced ambitious new targets for 2032 and 2035. These targets mark a critical step in Taiwan's journey towards a net-zero economy by 2050, positioning the nation as a leader in sustainable industrial transformation and clean energy innovation.

New Carbon Reduction Milestones

Taiwan's updated targets outline a progressive reduction in net greenhouse gas (GHG) emissions compared to 2005 levels:

- By 2030: Reduce emissions by 28% $\pm 2\%$
- By 2032: Reduce emissions by 32% $\pm 2\%$
- By 2035: Reduce emissions by 38% $\pm 2\%$

These commitments reflect Taiwan's proactive approach in driving carbon reduction across all sectors, enhancing economic competitiveness, energy independence, and environmental sustainability.

A Comprehensive Plan for Carbon Reduction

To realize its 2050 net-zero transition, Taiwan has launched the Taiwan Comprehensive Carbon Reduction Action Plan—a strategic blueprint integrating top-down policy frameworks with bottom-up industry-driven initiatives. This plan incorporates six flagship carbon reduction projects, ensuring deep decarbonization across industries while fostering technological innovation, regulatory adaptation, and financial incentives.

Key Pillars of Taiwan's Carbon Reduction Strategy

1. Top-down & Bottom-up Approach
 - The government leads major carbon reduction flagship projects, while industries propose self-driven sectoral reduction plans to ensure adaptive and effective implementation.
2. Six Key Innovative Mechanisms
 - Technological Innovation: Advancing green hydrogen, carbon capture, and renewable energy solutions.
 - Financial Support: Mobilizing public and private sector investments in clean energy projects.
 - Carbon Pricing: Implementing carbon fees and emission trading systems to drive decarbonization.
 - Regulatory Adaptation: Enhancing climate laws and green finance policies to accelerate industrial transition.
 - Green-Collar Workforce: Training professionals in sustainable industries to support economic transformation.
 - Community-Driven Initiatives: Encouraging citizen participation in net-zero policies and sustainable practices.
3. Four Major Transformation Goals
 - Energy Transition: Expanding solar, wind, hydrogen, and energy storage solutions.
 - Industrial Transition: Enhancing low-carbon manufacturing and circular economy models.
 - Low-Carbon Lifestyles: Encouraging green consumer habits and sustainable transportation.
 - Resilient Social Transition: Strengthening climate resilience and disaster preparedness.

By integrating policy support, market mechanisms, and innovation, Taiwan is actively shaping a climate-resilient future while driving economic growth and sustainability.

Sector-Specific Action Plans for Decarbonization

Under the Climate Change Response Act, Taiwan's carbon reduction efforts are sector-driven, with six key industries developing specialized roadmaps to achieve the 2050 net-zero target:

- Energy Sector – Expanding renewable energy capacity, smart grids, and carbon-neutral power generation.
- Manufacturing Sector – Promoting low-emission production, carbon capture, and circular economy models.
- Transportation Sector – Advancing carbon-free electric vehicles (EVs), green logistics, and mass transit systems.
- Residential & Commercial Sector – Implementing energy efficiency standards and smart building technologies.
- Agriculture Sector – Enhancing sustainable farming, carbon sinks, and methane reduction programs.
- Environmental Sector – Strengthening waste recycling, carbon offset projects, and green finance mechanisms.

Through these sectoral action plans, Taiwan is ensuring that each industry contributes strategically to the nation's carbon

12 Key Strategies to Reach Net-Zero by 2050

Building on its net-zero framework, Taiwan has introduced 12 key strategies to accelerate the nation's carbon-neutral transition. These strategies provide a clear roadmap for achieving climate resilience and green economic growth:

- Wind & Solar PV Expansion – Scaling up renewable energy capacity.
- Hydrogen Economy – Investing in green hydrogen development.
- Innovative Energy Technologies – Supporting next-gen clean energy solutions.
- Energy Storage & Smart Power Systems – Enhancing grid stability and efficiency.
- Energy Efficiency & Conservation – Implementing smart energy management.
- Carbon Capture, Utilization, and Storage (CCUS) – Deploying carbon sequestration solutions.
- Zero-Emission Vehicles – Accelerating the shift to electric and hydrogen-powered mobility.
- Circular Economy & Waste Management – Strengthening resource recycling initiatives.
- Carbon Sinks & Green Infrastructure – Increasing forest and wetland conservation.
- Green Living & Sustainable Lifestyles – Encouraging eco-friendly consumer behavior.
- Green Finance & Investment – Mobilizing capital for sustainable projects.
- Just Transition – Ensuring a fair and inclusive transition for all industries and communities.

These strategies serve as the foundation for Taiwan's long-term sustainability goals, ensuring a smooth and efficient transition toward a climate-resilient future.

Leading the Global Net-Zero Movement

Taiwan's new carbon reduction commitments reinforce its role as a global leader in climate action. By implementing robust policies, investing in clean technologies, and fostering international cooperation, Taiwan is pioneering a path toward a low-carbon future.

The success of this bold initiative will depend on the collaborative efforts of government, industry, and citizens. With a clear roadmap in place and strategic milestones set for 2030, 2032, and 2035, Taiwan is actively shaping a sustainable, net-zero economy—one that benefits both the environment and future generations.

A Shared Responsibility for a Sustainable Future

Taiwan's net-zero transition is not just a national ambition—it is a shared global responsibility. The government is calling on industries, businesses, and citizens to take collective action, reinforcing that climate change mitigation is a long-term commitment requiring continuous innovation, investment, and collaboration.

As Taiwan moves forward with its 2030, 2032, and 2035 carbon reduction targets, it is setting an example for sustainable economic growth, demonstrating that climate action and industrial competitiveness can go hand in hand. With comprehensive policies, technological breakthroughs, and cross-sector collaboration, Taiwan is leading the way toward a greener and more prosperous future.

Taiwan's Vision for a Net-Zero Future

With decisive climate policies, forward-thinking innovation, and a commitment to sustainability, Taiwan is taking bold steps to accelerate carbon reduction and achieve net-zero emissions.

As industries embrace decarbonization and citizens adopt greener lifestyles, Taiwan is proving that economic growth and environmental responsibility can thrive together. Through technological advancement, international cooperation, and strategic carbon reduction initiatives, Taiwan is not only securing its own sustainable future but also contributing to global climate solutions.

The path to net-zero is clear—and Taiwan is leading the way.

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