

Taiwan injects momentum into the global transition to net-zero emissions

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November 2022

The world has embarked on the transition to net-zero emissions. The innovative approaches to international cooperation highlighted in the Paris Agreement—which calls for wide cooperation by all countries to meet global reduction targets—are gradually taking shape. Taiwan is willing and able to cooperate with international partners to jointly achieve net-zero transition, mobilize global climate action, and ensure a sustainable environment for future generations.

As the world's 21st-largest economy, Taiwan has an important influence on economic prosperity and stability in the Indo-Pacific region. In particular, Taiwan's semiconductor industry occupies a pivotal position in international supply chains. The industry actively cuts the use of energy resources in its production processes by developing new technologies and new models. Through ever-evolving semiconductor innovations, it has developed numerous smart applications of electronic devices and promoted global energy conservation. Taiwan is carrying out substantial climate actions and vigorously advancing energy transition. As of May 2022, cumulative installed renewable energy capacity had reached 12.3 GW, a significant 60 percent increase from 2016.

From 2005 to 2020, Taiwan's GDP grew by 79 percent. Over the same period, greenhouse gas emission intensity fell by 45 percent, demonstrating that economic growth has been decoupled from greenhouse gas emissions.

On Earth Day of April 22, 2021, President Tsai Ing-wen announced Taiwan's goal of net-zero emissions by 2050. In March 2022, the Executive Yuan published *Taiwan's Pathway to Net-Zero Emissions in 2050*. The roadmap outlines four major transition strategies in energy, industry, lifestyles, and society. Resting on the twin governance foundations of technology research and development (R&D) and climate legislation, the strategies are supplemented by 12 key substrategies. These are wind and solar power; hydrogen; innovative energy; power systems and energy storage; energy conservation and efficiency; carbon capture, utilization, and storage; carbon-free and electric vehicles; resource recycling and zero waste; natural carbon sinks; green lifestyles; green finance; and just transition. By integrating intragovernmental resources, Taiwan will develop a step-by-step action plan to reach its targets.

In building the foundations of technology R&D needed to achieve net-zero transition, Taiwan will focus on five areas: sustainable energy, low carbon, circularity, carbon negativity, and social science. The Greenhouse Gas Reduction and Management Act is being amended and will be renamed the Climate Change Response Act. The amendments will make net-zero emissions by 2050 a long-term national reduction target, improve the effectiveness of

climate governance, add a chapter on climate change adaptation, strengthen information disclosure and public participation, and introduce a carbon pricing mechanism. The act will provide economic incentives for emissions reduction, guide low-carbon and green growth, and contribute to completing the foundations of national climate legislation and governance. Taiwan's long-term vision for 2050 is to make the transition to net-zero emissions the new driving force of national development. By creating competitive, circular, sustainable, resilient, and secure transition strategies and governance foundations, Taiwan will stimulate economic growth, encourage private investment, create green jobs, promote energy independence, and improve social well-being.

Due to political factors, Taiwan is excluded from international organizations and cannot participate substantively in discussions on global climate issues. It is difficult for Taiwan to stay abreast of current developments and properly implement related tasks. This will create gaps in global climate governance. Taiwan has limited independent sources of energy and an economic system that is oriented to foreign trade. If it cannot seamlessly link with the international cooperation mechanisms under the Paris Agreement, this will not only affect the process of Taiwanese industries going green but will also undermine the stability of international supply chains. Presented with the threat of carbon border adjustment measures, Taiwan's overall competitiveness could be seriously hit if it is unable to fairly participate in international emission reduction mechanisms. This will also weaken the effectiveness of international cooperation and undermine the global economy.

Making the transition to net-zero emissions is an inescapable collective responsibility of this generation. It will only be possible to achieve the target if the international community works together. In the spirit of pragmatism and professionalism, Taiwan is willing to make concrete contributions to tackling global climate change. The COVID-19 pandemic has shown that whatever the situation, Taiwan has enormous potential to contribute to the world in extremely helpful ways. Taiwan should be given equal opportunity to join international cooperation mechanisms in response to climate change. We hope the international community will support Taiwan's immediate, fair, and meaningful inclusion.