# The Key Strategies of Taiwan's 2050 Net-Zero Transition

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In response to global climate change, President Tsai declared that 2050 net-zero transition is the goal of the world and it's also Taiwan's goal on the World Earth Day of 2021. Taiwan's government has announced the "Taiwan's Pathway to Net-Zero Emissions in 2050" on March 30, 2022, hoping to gradually realize a sustainable society with net-zero emissions by conducting four transition strategies of "energy transition", "industrial transition", "lifestyle transition", and "social transition", and two governance foundations of "technology research and development" and "climate legislation".

Since 2050 net-zero emissions could not be achieved by the existing technologies and policies, the government has planned 12 key strategies to integrate interagency resources, and will formulate action plans for 12 main areas such as energy, industry, lifestyle, and so on. The key points of 12 Key Strategies of Taiwan's 2050 Net-Zero Transition are as follows:

#### Wind/Solar PV

Expand wind and solar PV deployment and maximize renewable energy.

## 2. Hydrogen

Gradually build infrastructure for hydrogen reception, transmission and storage, and hydrogen utilization systems.

The MOEA has set up a "Hydrogen Energy Promotion Taskforce" to jointly plan hydrogen energy development policies with the public sector, conduct international cooperation, and build demonstration systems.



Figure 1. 12 Key Strategies of Taiwan's 2050 Net-Zero Transition

## 3. Innovative Energy

Focus on the development of base-load geothermal and ocean energy.

# 4. Power Systems and Energy Storage

Target to build 1,500MW energy storage by 2025.

Comprehensively improve the resource control capabilities of the storage systems, strengthen grid infrastructure, and develop smart grid applications.

# 5. Energy Saving and Efficiency

To encourage various departments to introduce best available technologies and implement efficient energy uses by providing counseling services, incentives, and regulatory guidance. And develop innovative technologies to deploy energy conservation in the next stage.

## 6. Carbon Capture, Utilization and Storage

Use CCUS to remove emissions from industrial and energy facilities, and develop local carbon sequestration potential sites to launch safety verification site plans.

#### 7. Carbon-free and Electric Vehicles

Provide friendly measures and incentives for the use of electric vehicles, and improve the charging point and infrastructure of electric vehicles. Promote the upgrading and transition of related industry, and subsidize the replacement of electric vehicles to drive market demand. Review related regulations and mechanisms to increase the use of electric vehicles.

## 8. Resource Recycling and Zero Waste

The strategic goals are sustainable consumption and production, improvement of resource utilization efficiency, and value-added disposal of waste.

#### 9. Carbon Sinks

Target to increase natural carbon sink of 10 million metric tons CO<sub>2</sub>e by 2040. The strategy covers three aspects, including: promote the business model and technology research of forest carbon sink benefit, develop negative carbon farming model, conduct marine fishery and sample fishery carbon sink technology and its benefit evaluation research.

## 10. Green Lifestyle

Adopt multiple sharing model with the concept of use instead of owning, develop net-zero recycling buildings, promote low-carbon transportation network, and promote a zero-waste low-carbon diet.



#### 11. Green Finance

The Financial Supervisory Commission implements the "Green Finance Action Plan 2.0", and review the plan by referring to international sustainable finance practices and suggestions from international financial institutions.

Besides, the FSC announced the sustainable development roadmap of listed companies on March 2022. According to the schedule, listed companies will implement greenhouse gas inventory and verification in stages. The FSC also plans to conduct a sustainable financial evaluation, and will announce the evaluation methods before the end of 2022.

#### 12. Just Transition

In order to ensure that the core value of "leave no one behind" can be implemented in the promotion process of net zero transition, civil participation mechanisms such as the Just Transition Consultation Conference and the Just Transition Committee will be established. To collect opinions from the society and synthesize the image of fair transition, the government will hold consultation meetings, public hearings.

2050 Net-Zero Transition is a large project that spans generations, fields, and countries, and it is not only about competitiveness, but also about environmental sustainability. The competent authorities are now actively planning the 12 key strategies and will announce relevant action plans in the future. Finally, Taiwan will to achieve the long-term vision of net-zero transition.