

## **IV. Institutional and Legal Framework to Implement Climate Change Adaptation**

The Council for Economic Planning and Development of the Executive Yuan (now the National Development Council) initiated the development of Taiwan's climate change adaptation policy. In 2010 the Academia Sinica was commissioned to establish a cross-disciplinary team and invited relevant ministries, experts and scholars, NGOs, and industry representatives to set up the task force for Planning and Promoting Climate Change Adaptation Policy Guidelines and Action Plans. Review meetings, regional symposiums, and national climate change conferences were held successively to solicit opinions from all sectors and to build consensus. On June 25, 2012, the Executive Yuan approved the framework for Adaptation Strategy to Climate Change in Taiwan. Taking into consideration the practices of countries around the world, as well as the unique characteristics of the country's environment and historical experience, eight sub-groups in the adaptation field were established under the aforementioned task force to formulate relevant strategies, implement promotion mechanisms and supporting measures. In May 2014, the National Climate Change Adaptation Plan (2013-2017 NAP) was finalized in conjunction with various ministries.

Afterward, the Environmental Protection Administration (EPA) completed the legislation of the Greenhouse Gas Reduction and Management Act in 2015 and formulated the National Climate Change Action Guideline in 2017. In 2018, the EPA convened 16 ministries, including the National Development Council, to jointly draft the National Climate Change Adaptation Action Plan (2018-2022 NAP), which serves as the institutional framework for implementing the climate change adaptation works. The distribution of work among ministries is shown in Figure 12.

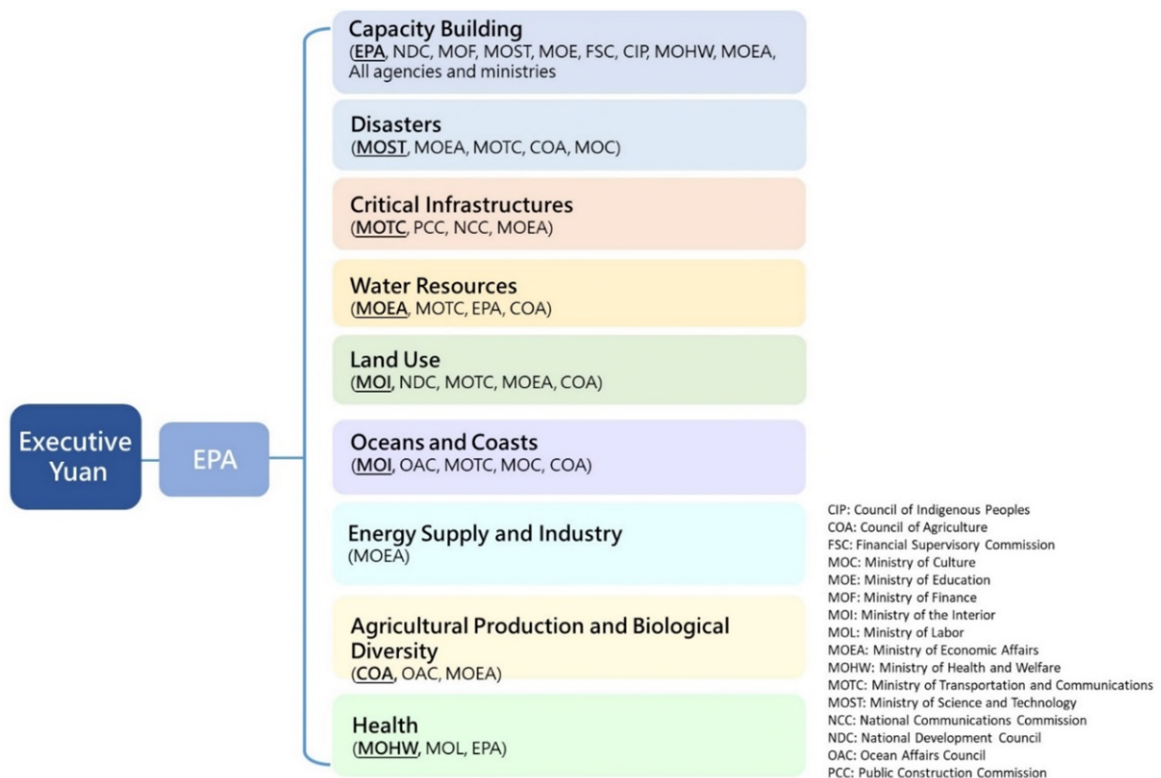


Fig. 12 Institutional work distribution among ministries

The legal framework to justify the implementation of climate change adaptation is mainly composed of *the Greenhouse Gas Reduction and Management Act, Spatial Planning Act, Coastal Zone Management Act, Water Act, Wetland Conservation Act, Agriculture Insurance Act and National Park Law*, which are highlighted in Figure 13.

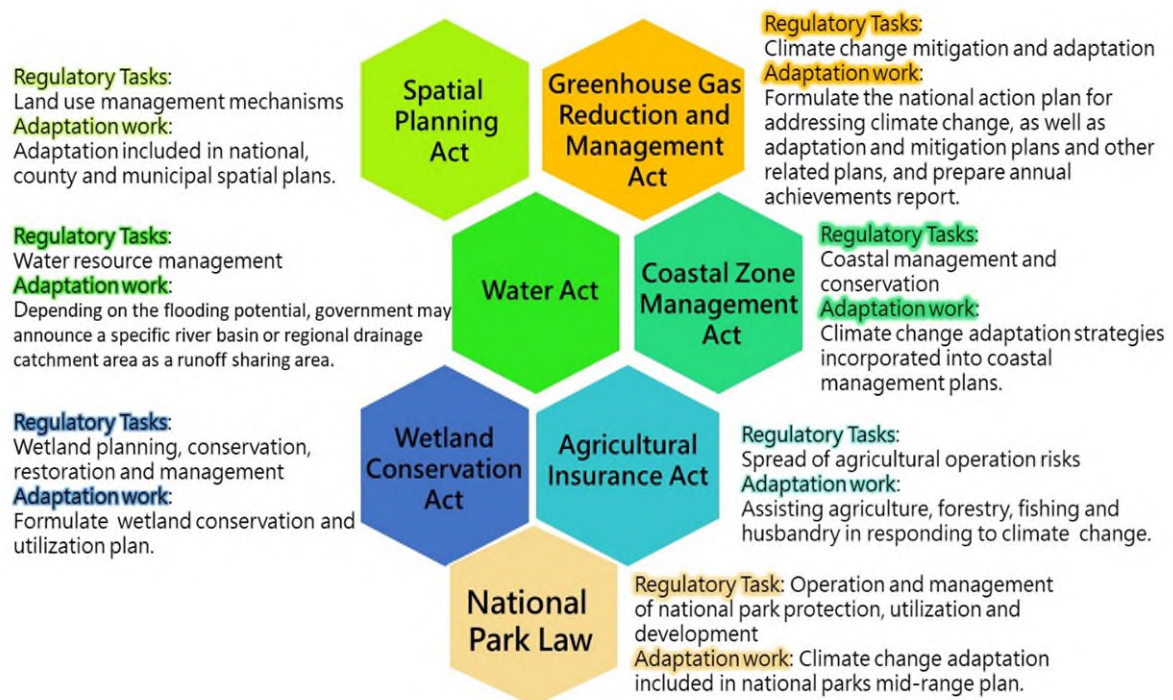
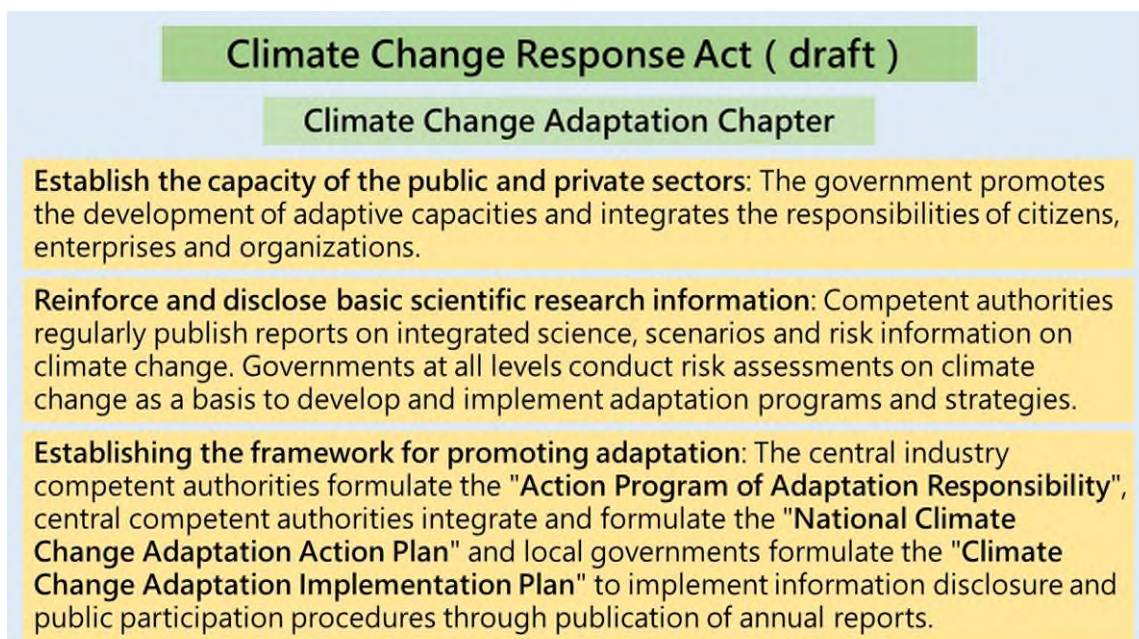


Fig. 13 main regulations for driving climate change adaptation

## 1. Greenhouse Gas Reduction and Management Act

In 2015, *the Greenhouse Gas Reduction and Management Act* of Taiwan entered into force, making the country one of the few countries in the world to write the long-term carbon emission reduction goal into law. As the global warming increases, the EPA proposed a draft bill in October 2021, renaming the bill as the Climate Change Response Act,

as part of the effort to expedite carbon emission reduction and strengthen climate change adaptation. The draft was submitted to the Legislative Yuan for deliberation on April 21, 2022. The highlight of the draft bill is to write the 2050 Net-Zero emission goal into law, upgrade the level of climate governance, add a special chapter on climate change adaptation, strengthen emission controls and incentive mechanisms to promote reduction, and charge carbon fees which would be earmarked for carbon emission reduction purposes. The primary coverage of the climate change adaptation is illustrated in Figure 14.



**Fig. 14 Summary of Climate Change Adaptation Chapter of “Climate Change Response Act” (draft)**

## 2. Spatial Planning Act

The substantive contents of the Spatial Planning Act include establishing a national spatial plan, confirming the priorities of the spatial plan, delineating the functional zones of the land, establishing a licensing system, establishing an information disclosure mechanism, including citizen participation in supervision, promoting environmental restoration and sustainable development, protecting civil rights, as well as developing a compensation and relief mechanism. The Spatial Planning Act came into force on May 1, 2016, stating that the contents shall include climate change adaptation strategies and "the content of the national spatial plan for special municipality and counties shall include climate change adaptation plans."

## 3. Coastal Zone Management Act

Taiwan is surrounded by sea, with a coastline of 1,566 kilometers and a large coastal land area. To implement integrated coastal management and promote the sustainable development of coastal areas, the government promulgated the Coastal Zone Management Act in February 2015, stating that "disaster prone coastal zones shall adopt indented buildings or adjust its land use in response to climate change and the risk of coastal disaster." It also states that "the Central Competent Authority shall formulate an integrated coastal zone

management plan for the conservation, protection, utilization, and management of land in coastal zones."

#### 4. Water Act

The *Water Act* is the legal basis for water resources administration and construction of waterworks in Taiwan. It's aimed to ensure the supply and demand of water resources. Climate change, a higher frequency of extreme rainfalls, high urbanization, and large-scale land development in the middle and upper reaches of rivers all contribute to the increased risk of flooding. Therefore, a new chapter on Runoff Allocation and Outflow Control was added to the law in May 2018, requiring land and building developers to jointly share the responsibilities for flood retention and water storage to improve the overall flood resistance of the land.

#### 5. Wetland Conservation Act

To ensure natural flood retention and other functions of wetlands, maintain biodiversity, and promote ecological conservation and wise use of wetlands, the *Wetland Conservation Act* was enacted in February 2015. Wise use is the core spirit of the law, with conservation and use plans formulated for each wetland according to its different characteristics, while respecting the existing use by citizens to strike a

balance between citizen's rights, local development and environmental protection. Among them, "wise use" refers to the use of wetland resources inclusively within the ecological carrying range of wetlands, maintaining quality and quantity in a stable state, and providing timely, appropriate, and permanent management of biological resources, water resources, and land.

## 6. Agricultural Insurance Act

According to statistics, the average annual agricultural loss from natural disasters in Taiwan over the past 20 years is approximately NT\$12.3 billion. Given the increasing severity of global warming and climate change, it is necessary to help the sectors of agriculture, forestry, fishery, and husbandry spread agricultural business risks by enacting a special law. *The Agricultural Insurance Act* came into force in Taiwan on January 1, 2021. The critical measures include subsidizing farmers' insurance premiums, establishing a risk-spreading mechanism, providing insurers with preferential taxation and assisting in damage inspection, etc., to ensure farmers' income security.

## 7. National Park Law

National parks are established to protect the nation's unique natural scenery, wildlife and historical sites, as well as set aside areas

for public recreation and scientific research.” The vast natural vegetation areas of national parks are important sites for carbon sequestration that can help mitigate climate change. In response to global environmental changes, national parks can help promote ecological restoration, environmental education, and eco-tourism experience, reduce the impact of recreational behavior on the environment, enhance people's reflection on global warming and contribute to the implementation of the concept of sustainable development.