



Taiwan Environmental
Protection Administration

Taiwan's Climate Policy: perspectives and prospects

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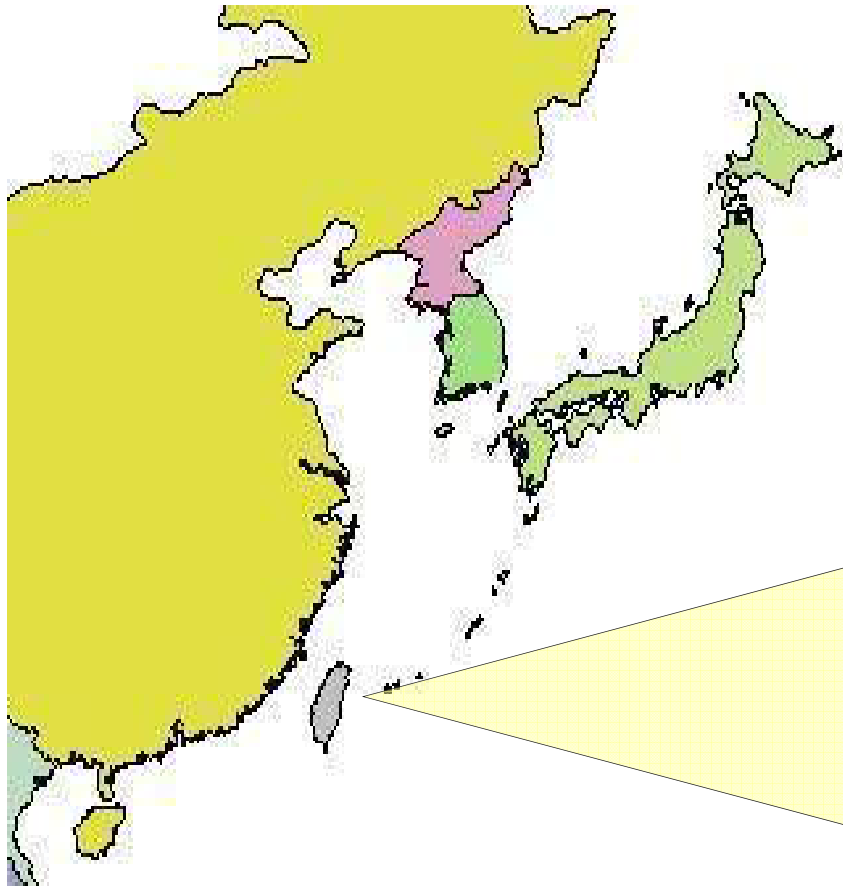
Dec 01, 2012



Taiwan, we and our challenges



Profile



- **Area: 36,000 square kilometers**
- **Population: 23 million**
- **Ranking 7th of the World Competitiveness Scoreboard 2012 (IMD)**
- **Per capita GDP : USD 35,227 in 2010 (PPP , IMF)**
- **World's 4th largest holder of foreign exchange reserves (2010)**
- **Composition of GDP by sector (2010): Agriculture (5.24%), Industry (35.92%), Services (58.84%)**
- **Natural Disasters : Typhoons, landslides, floods, and earthquakes. Taiwan is facing serious challenges of climate change.**



Beautiful Taiwan

Vulnerable Island with Rich Biodiversity

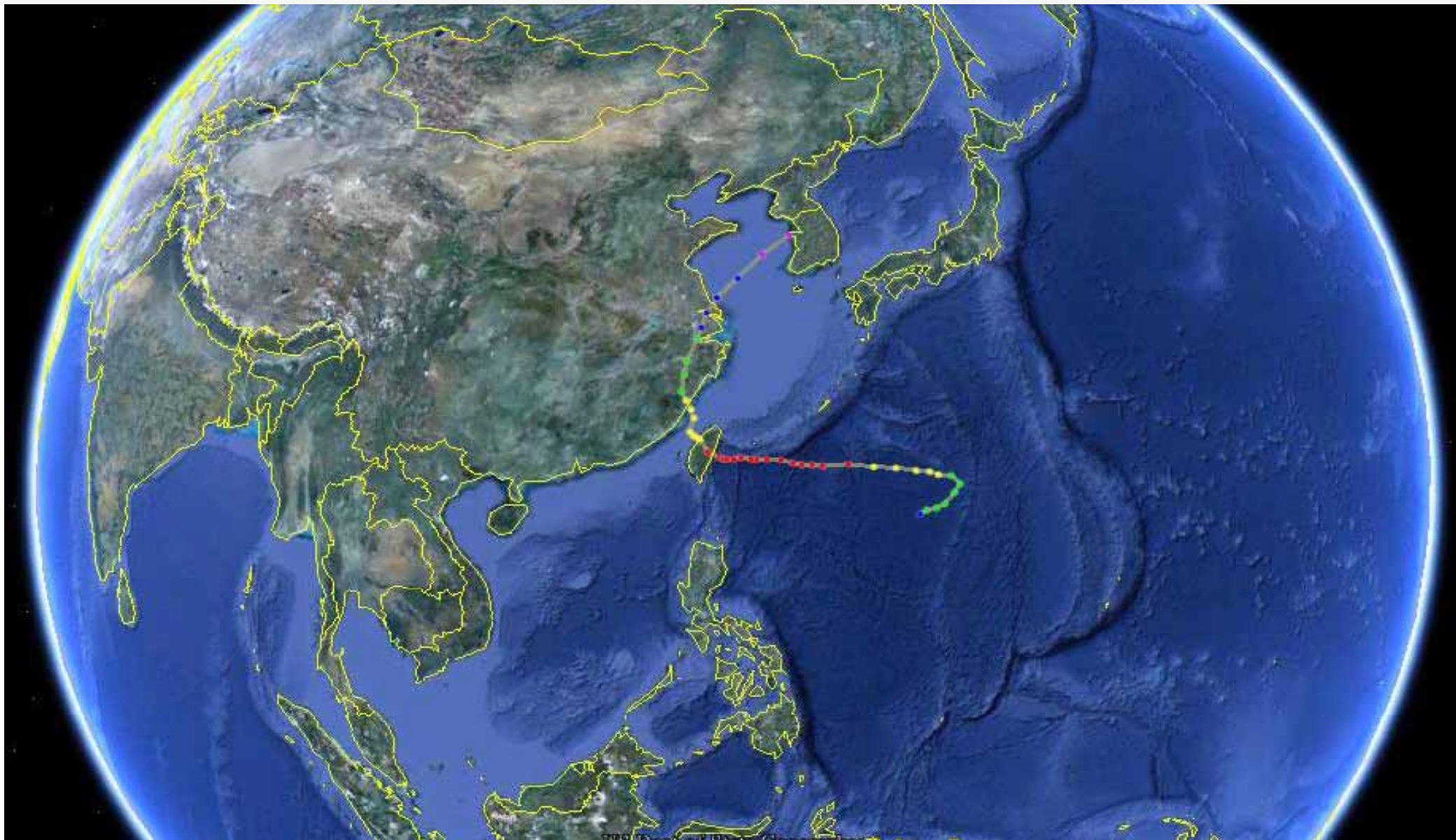
- Steep morphology:
 - 36,000 km² with Jade Mountain near 4,000 m high!
 - Covers both the tropical and subtropical zones
- Rich biodiversity
 - 50,000 species, 1.5% of the world
 - one-third is endemic



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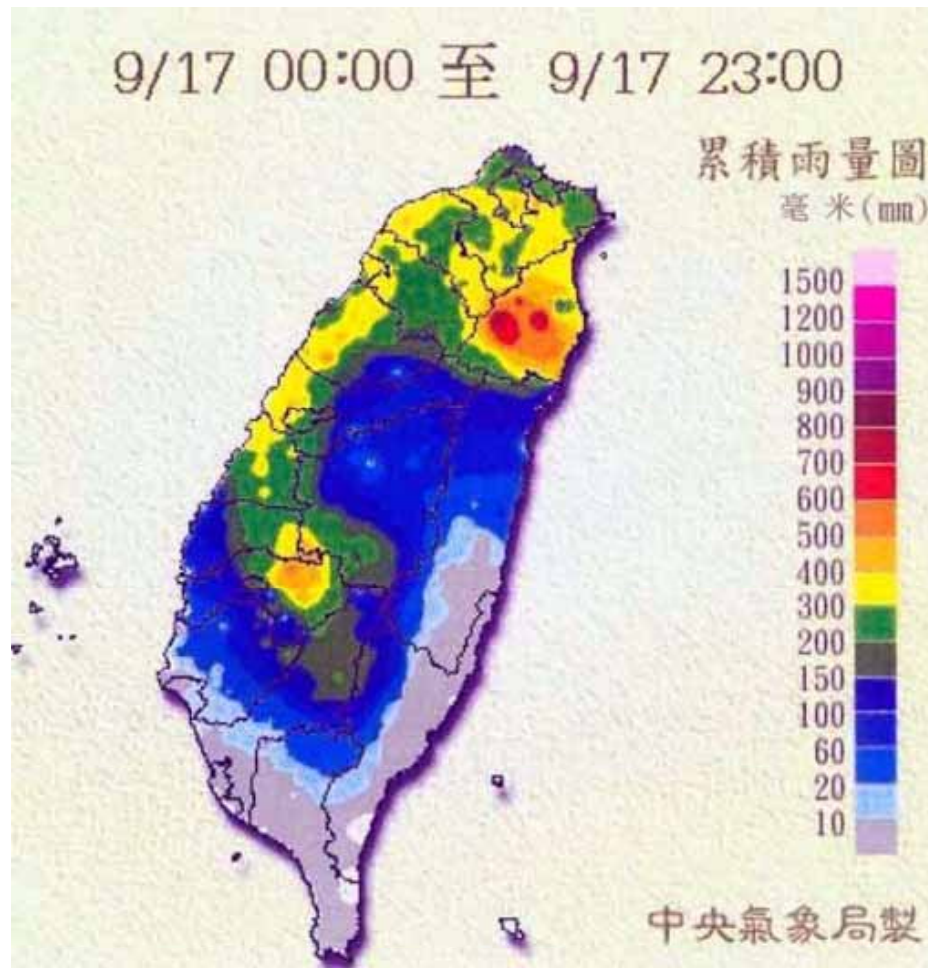
Taiwan, Indicator of Climate Change

Monitoring, Mitigation, Adaptation



Typhoon Nari (Sept 2001)

Flooded Taipei MRT



Typhoon Morakot (2009):

Unpredictable Weather Impacts

- **Typhoon Morakot**
 - The deadliest typhoon in Taiwan's recorded history
 - Rainfall reached 2,900 mm within 3 days
 - Direct economic loss of NT\$4.2 billion (US\$292M)
- **Climate pattern has changed**
 - Months of severe drought before Morakot



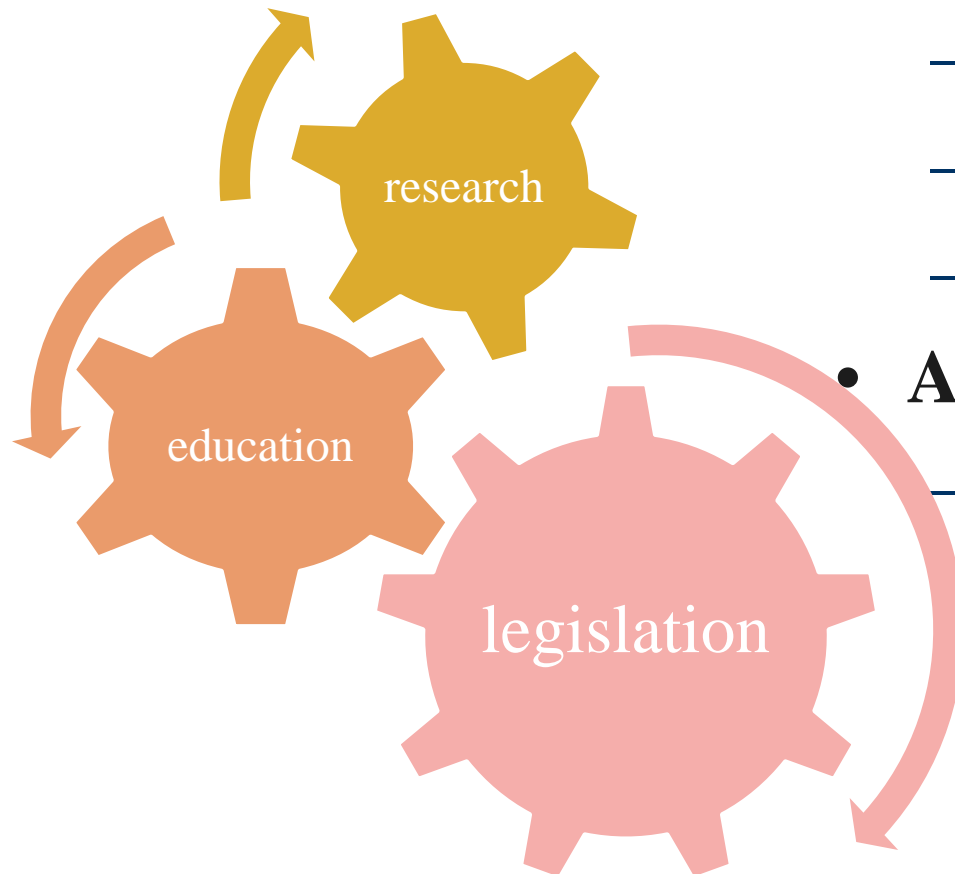
Vulnerability Witnessed: **Hotel collapsed**



Taiwan's strategies for combating climate change



Framework of Responding Strategies for Climate Change



- **Mitigation**

- Set up GHG reduction targets
- Energy policy revolution
- Building a low-carbon society

- **Adaptation**

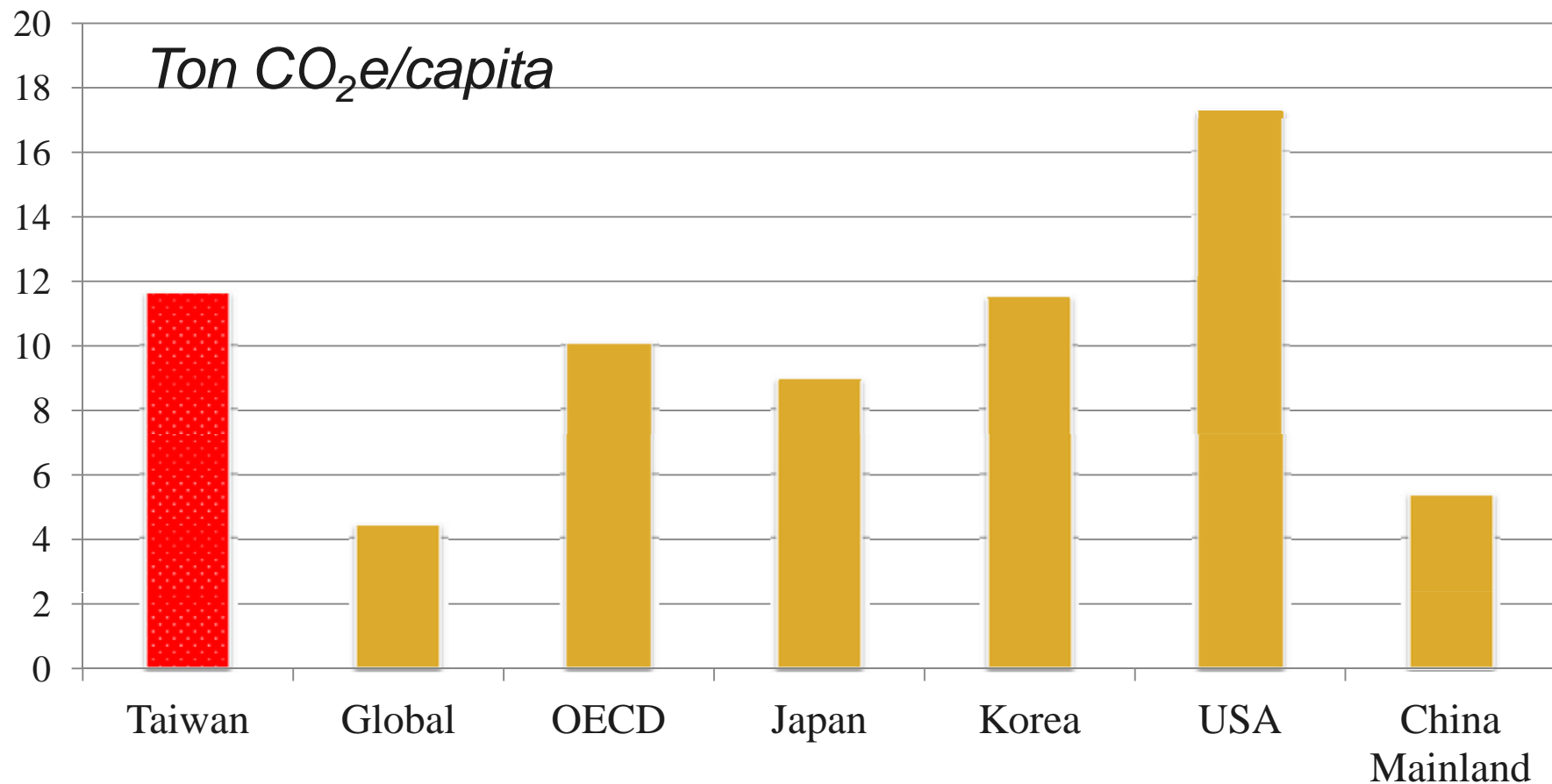
- National Climate Change Adaptation Strategies
- Incorporation of all public and private sectors



Mitigation

Facts about Taiwan

- Taiwan is a significant emitter



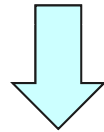
Our Threats, Needs, and Vision

• Threats

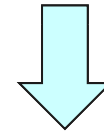
- Carbon reduction costs are relatively HIGH
- Lack of Voluntary Reduction Incentives
- Unable to attend UNFCCC and other international frameworks

• Needs

- Comprehensive Legislative Framework
- Incentives for Early Reduction by Major Emission Sources
- Build Climate Change Mitigation and Adaptation Capacity



Vision



Moving toward a Low-carbon Society

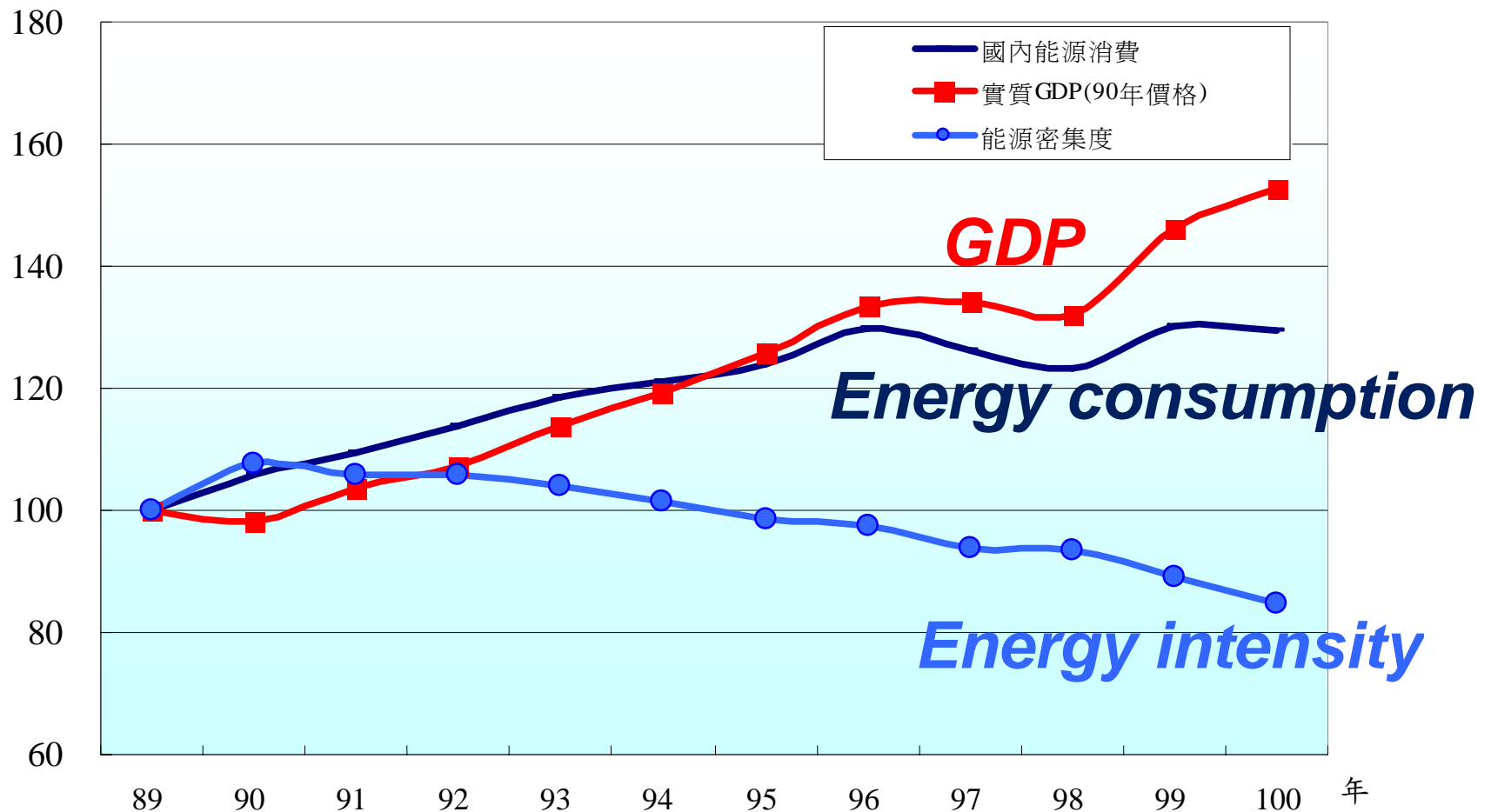


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Energy Saving Achievements:

Decoupling of GHG emission and Economic growth

2010-2011



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Taiwan's Vision toward **Low-Carbon Growth**

Top Down

Short-term : CO₂ emissions return to 2005 level in 2020.
Mid-term : CO₂ emissions return to 2000 level in 2025.
Long-term : CO₂ emissions return to 50% of 2000 level in 2050.

**Actions for Responding
Copenhagen Accord**
At least 30% GHG
reduction compared to
BAU in 2020.

**Golden Decade: “Low-carbon, Green-energy Island”
(2012-2020)**

Green Energy
Carbon Reduction

Eco
Homeland

Disaster
Prevention &
Rescue

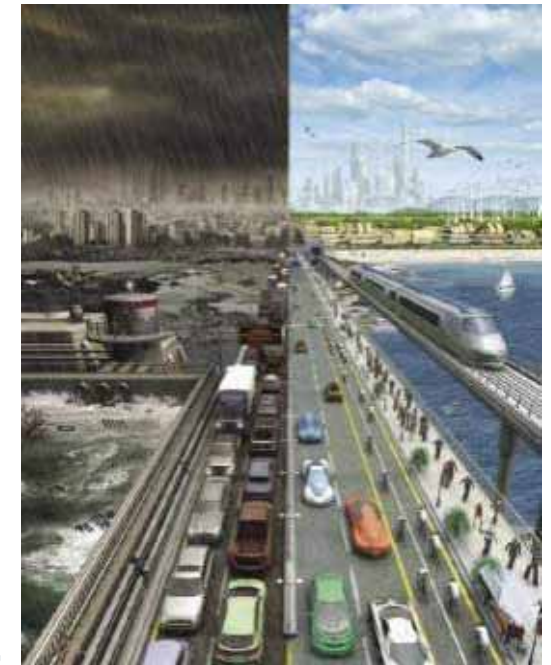
2009 The 3rd National Energy Conference's Decisions

2011
50 Low Carbon
Communities

2014
6 Low Carbon Cities

2020
4 Low Carbon
Life Cycles

Bottom Up

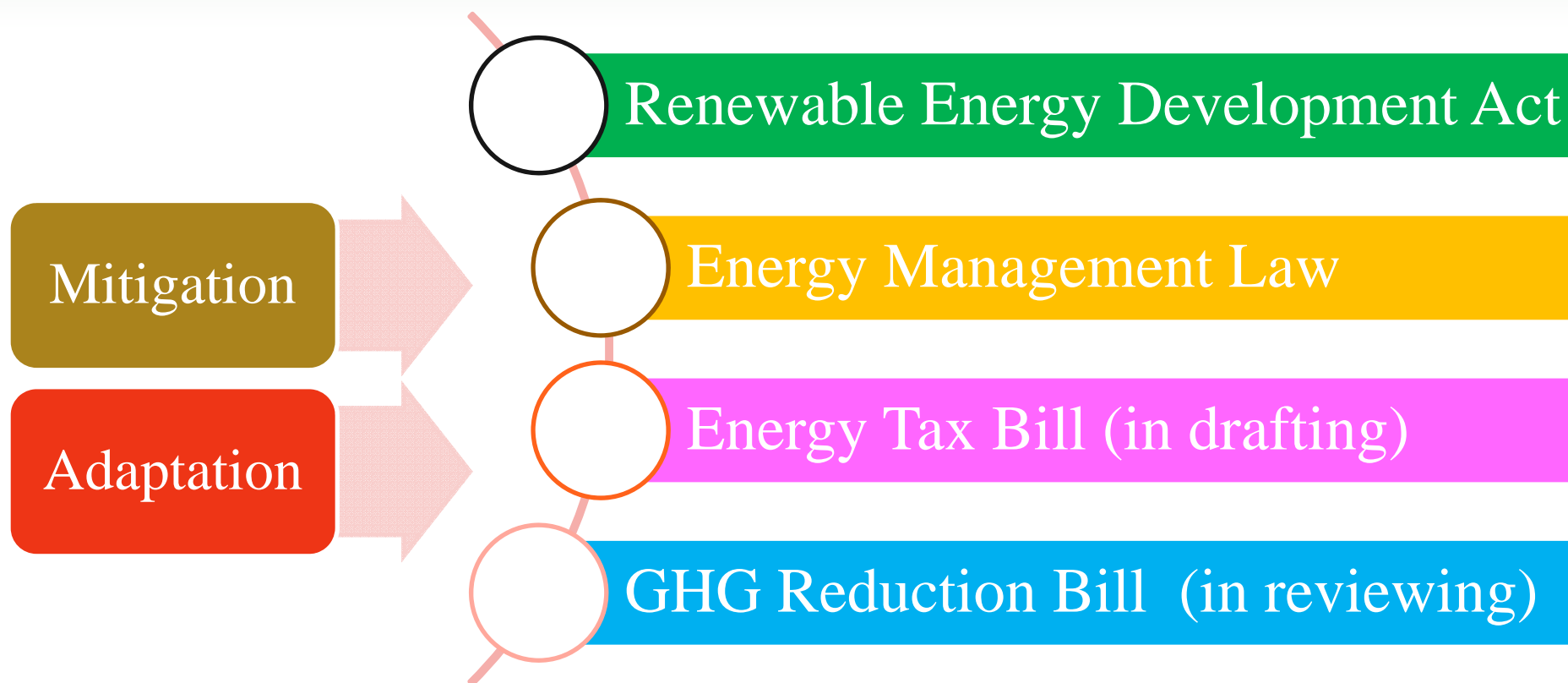


Source: Science American



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GHG Reduction and Energy Related Legislation

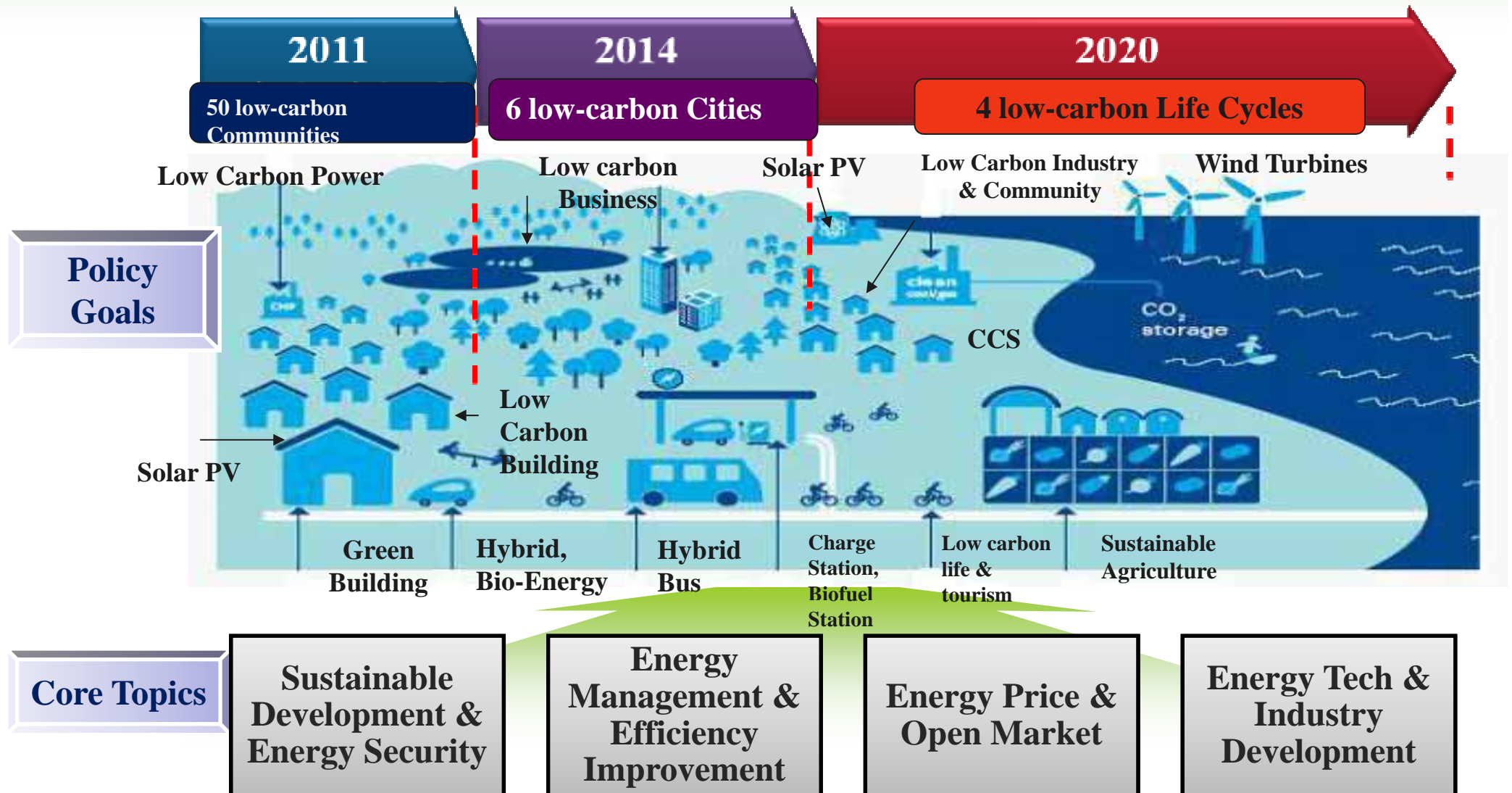


Key action: declare GHG's as air pollutants



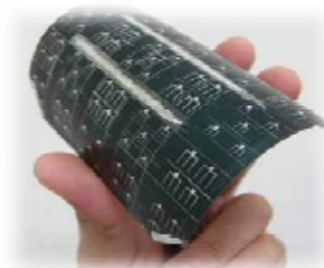
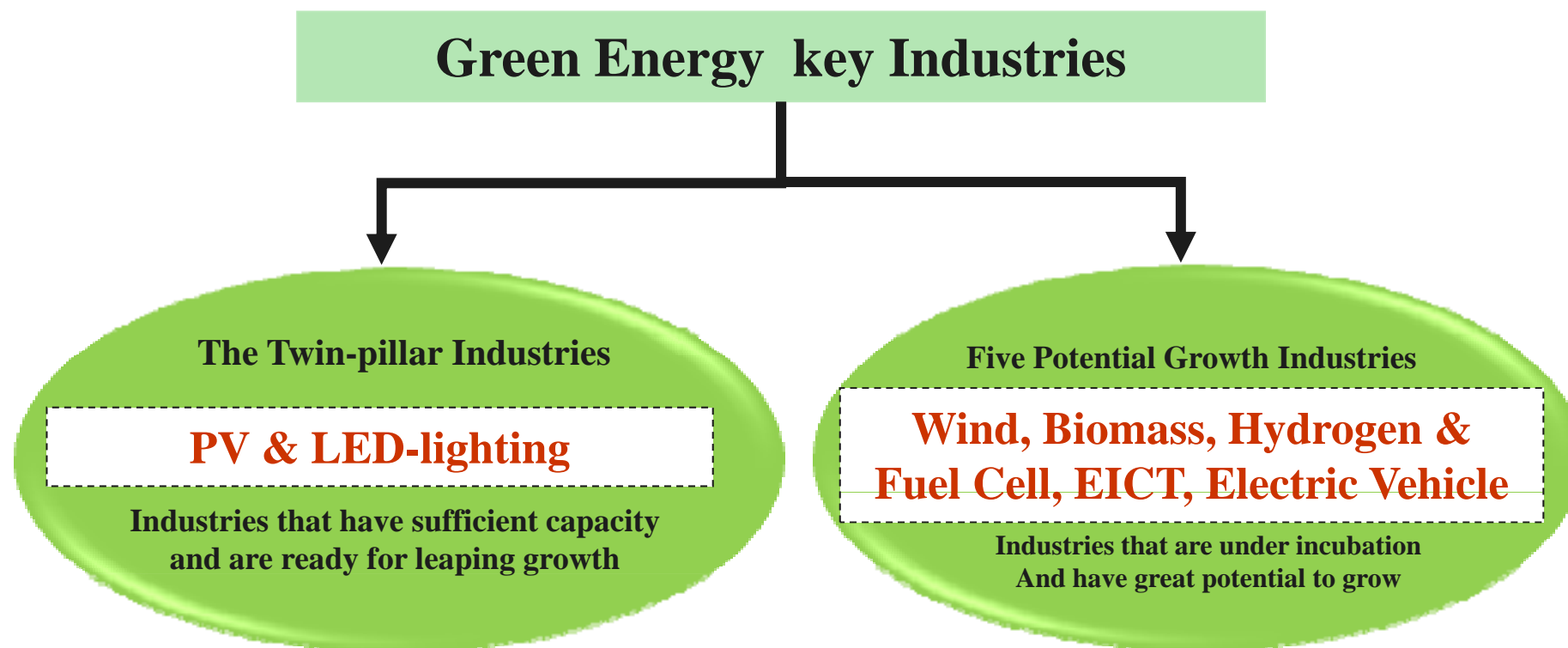
Low-Carbon & Sustainable Homeland Visions

According to “The Third National Energy Conference” Decisions on April 15/16 2009



Dawning Green Energy Industry Program (since 2009)

- Key Industries for Development



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Overall Adaption Strategies



Implementation in territorial planning and management

Enhancing disaster prevention and avoidance capacities in environmental, social and economic systems.

Carrying out comprehensive riverbasin governance.

Prioritizing high-risk regions for climate change.

Enhancing prevention and protection capacities for adaptation in Urban Areas.



Impacts and Challenges

Disasters

Health



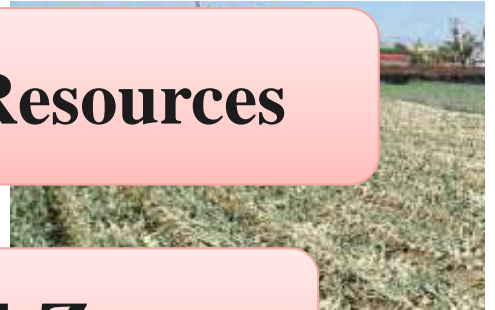
Infrastructure

Water Resources

**SECTOR BY
SECTOR**

Land Use

Coastal Zones



**Energy Supply
and Industry**

**Agricultural
Production and
Biodiversity**



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Public Participation– new form of dialogue

2020

2030

2040

2050



Condensing Public Consensus →

□ Hosted series *the World Café Dialogue* in different districts –

- Taipei City (Initial Meeting, Aug, 2011)
- YiLan County (300 Participants, Oct. 2011)
- Tainan City (320 Participants, Nov. 2011)
- New Taipei City (300 Participants, Nov. 2011)
- Taichung City (330 Participants, Feb. 2012)

□ Collecting Public Ideas and Communicating with Government Representatives

→ *Policy Consensus on Climate Change Impacts*

Public Participation

Climate Change Summit

- ✚ Four Goals: Partnership, Dialogue, Involvement, Challenge.
- ✚ Overall Consensus Dialogue in Taipei, 19 May 2012.
- ✚ After two years of preparation, 855 issues were identified and divided into 61 topics under four discussion groups.



Perspectives



Think Globally, Act Locally

- ❑ **Cooperation among developed countries:** efforts on technological innovation towards further emissions reductions.
- ❑ **Cooperation with developing countries:** dissemination and promotion of technologies and the establishment of a new market mechanism.
- ❑ **Support for developing countries:** efforts special consideration for vulnerable countries.



Empowerment Global Participation

- ❑ The Climate Actions could be conducted through the approaches of multilateral cooperation, transparency, and global participation.





*Global warn***ing**:
we sink or swim together

————— Make **Taiwan** part of the solution

Let's work together!



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