

Towards the Green and Sustainable Island Economy

Presented by Han Jia & Zhong Xin

National Institute for South China Sea
Studies

18-10-2011, Suwon



CONTENTS

- Basic Information of Hainan Province
- Rationale of Hainan's low Carbon Economy
- Actions and Achievements
- Problems and Recommendations

Basic Information



- The southernmost part of China, only tropical Island with tropical monsoon marine climate
- Land area of 35,400 km², maritime area of 200,000,000 km², coastline of 1,928 km
- annual average temperature: 22.5°C ~ 25.6°C
annual sunshine duration : 1,780 ~ 2,600 hours

Energy Resources



Rationale of Hainan's Low Carbon Economy Model

- Climate change concern for island regions
 - World-wide concern
 - GHG emission reduction target
 - Relatively vulnerable eco-system
- Inner call of Hainan's eco-tourism strategy
 - International Tourist Destination
 - Green, open, balanced and sustainable development model



Actions and Achievements

Changes in sectoral structure

Innovation in energy technology



Policies and regulations in support of energy saving and GHG emission reduction

Hainan set its goal of reducing 12% energy consumption in the 11th Five Year Economic Plan period while its GDP grows at the rate of 10%.



Eco-bus in Haikou

Increase of clean energy use

The percentage of renewable energy use in Hainan has occupied 30.6% of the total new energy consumption in 2009.

The installed capacity of PV power stations is 200 kilowatts, while 21 kilowatt projects are under construction.

Solar-energy water heating systems have been widely used both in urban and rural areas of Hainan



**Emphasize
solar energy
utilization**

Increase of clean energy use

Wind energy

- Five wind power stations
- Total new resource installed capacity of 249.5 megawatts, the wind power projects making up of 244.5 megawatts

Biomass Energy

- Biomass technology is prevalent in the countryside and now promoted to the industrial arena
- excrement of animals--- biogas fertilizer--- plantation.

Government's active involvement

- **Subsidy in energy-saving lamp bulbs.**
- **Aid in energy-saving reconstruction of road lamps and light systems of public buildings.**
- **Investment in sewage and garbage processing plants.**



Dramatic sectoral shift from energy-intensive to environment-friendly mode

- Economic mode is characterized with tourism and service industry, the added value of the service industry increases 19.6 percent in 2010.
- Abandon a number of energy-intensive enterprises, eliminates 400-thousand-ton steels, 138- thousand-kilowatt small thermal power generators, 1.76-million-ton cements, 21 thousand-ton paper manufacture, and 5 billion clay bricks.



Problems and recommendations

- **Promotion of the use of new clean energy.**
- **Implementation of strict permit standard.**
- **Increase of public awareness and participation in low carbon economy development.**





Thank you!