A decorative graphic at the top of the slide features a grid of squares in a light green color, set against a darker green background that has a wavy, curved bottom edge.

State of low carbon development policies at the national/sub- national level in Thailand

National Plan/Policy Related to Climate Change

The 11th National Economic and Social Development Plan (2012-2016)

Government Policy Statement of Ms. Yingluck Shinawatra, Prime Minister,



National Strategic Plan on Climate Change (2008-2012)

The National Master plan On Climate change (2012-2050)

Environmental Quality Management Plan (2012-2016)



**Specific Plans
eg. AEDP, EEDP etc.**

The 11th National Economic and Social Development Plan



The 11th National Economic and Social Development Plan

- Strategy for Promoting a Just Society
- Strategy for Human Development toward a Sustainable Lifelong Learning Society
- Strategy for Strengthening the Agricultural Sector, Food and Energy Security
- Strategy for Restructuring the Economy toward Quality Growth and Sustainability
- Strategy for Creation of Regional Connectivity for Social and Economic Stability
- **Strategy for Managing Natural Resources and Environment toward Sustainability**



Strategy for Managing Natural Resources and Environment toward Sustainability

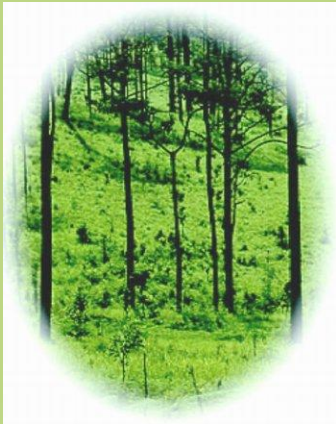
Objectives

- To conserve and, when necessary, restore natural resources and the environment so they are sufficient to stabilize the ecosystem and provide a firm foundation for the country's development.
- **To promote production and consumption that is environmentally sound in order to redirect the country toward a low carbon emission society.**
- To create resilience so as to be prepared to deal with impacts from climate change and worldwide environmental issues.
- To create fairness in access to and utilization of natural resources, and to protect benefits that the country receives from international agreements and commitments.

Strategy for Managing Natural Resources and Environment toward Sustainability

Targets

- Enrich the abundance of natural resources and biodiversity.



- conservation lands occupy at least 19 percent of total area.

-expand forest reserves up to 40 percent.



-attain at least 5,000 rai per year of mangrove coastal reforestation.

http://18ne.blogspot.com/2012/06/blog-post_08.html

Strategy for Managing Natural Resources and Environment toward Sustainability

Targets

- Improve efficiency of the entire water management system.
 - to alleviate water shortages.
 - prevent floods.
 - expand irrigation areas by 200,000 rai per year to increase food security.



<http://www.hatyaicity.go.th/index.php>



<http://health.kapook.com/view17971.html>

Strategy for Managing Natural Resources and Environment toward Sustainability

Targets

- Create a more pleasant environment by reducing the pollution and threats to health from development.

- Enhance the adaptive capacity to meet climate change challenges and disasters at all levels
 - community, regional, and countrywide.



Strategy for Managing Natural Resources and Environment toward Sustainability

Targets

- Improve efficiency of greenhouse gas mitigation.



<http://www.prangku.ac.th/UserFiles/File/e-learning/12-1.html>

- Increase efficiency in the management of natural resources and the environment such that communities can coexist in harmony with the forests.



(Draft) National Master Plan on Climate Change



<http://climatechange.jgsee.org/v2/detail.php?ID=483&typeid=2>

(Draft) National Master Plan on Climate Change

- Thailand Climate Change Master Plan is a framework of integrated policies and action plans relating to climate change.
- Its propose is to support climate change preparedness initiatives so that they are in line with Thailand's economic and socio-cultural contexts as well as sufficiency economy philosophy.



(Draft) National Master Plan on Climate Change

Objective

Thailand is able to continue its economic, social, and environmental developments in accordance with sufficiency economy philosophy and to cut greenhouse gas emissions by 2050, without impeding the country's gross domestic product (GDP) or reducing its growth of developmental capability and competitiveness.

Indicators

- Work plans/action plans on climate change of every sector and level for short, medium and long term sector.
- The rate of voluntary greenhouse gas emission reduction of every sector by 2050.



Strategy 2: Mitigation of greenhouse gas emissions and increase of greenhouse gas sinks.

Approach

- To promote capability of Energy Conservation, Alternative Energy, Green Energy and to reduce energy import from foreign countries with focuses on public participation.
- Operation project to reduce greenhouse gas emissions. Related to the forestry sector (REDD).
- To Promote and support the preparation of carbon footprint for all products and services.
- Developing System for imposing carbon tax and other environmental taxes with the use of the polluter-pay principle (PPP) in a way that is fair.
- **To Promote and support development Cities and communities toward Efficient and sustainably low carbon society.**

Examples of Specific Policy and Measure



Energy sector

EEDP

- To reduce energy intensity by 25% in 2030
- equivalent to the reduction of final energy consumption by 20% in 2030, or about 30,000 thousand tons of crude oil equivalent (ktoe)



<http://lamphunhospital.8m.com/pages/activity3.htm>

AEDP

- Target on using renewable and alternative energy at 25 % of total energy consumption by 2021, in 10 years

Building sector

Mandatory basis approach

➤ The new building energy Code

is one of the mandatory basis approach that is developed for new and Retrofitting Buildings only, > 2000 sq.m.



Forest sector

➤ To have at least 40% of the country's area as forest.



Transport sector

➤ Promote the use of biofuel, biodiesel and ethanol.



Measures both planned and implemented

| Sector | Number of measures | Implemented by national government | Also Implemented by Provincial and Municipal government |
|-----------------------|--------------------|------------------------------------|---|
| Energy supply | 10 | 10 | 2 |
| Transport | 8 | 8 | 3 |
| Building | 1 | 1 | - |
| Waste and waste water | 11 | 11 | 4 |
| Industry | 3 | 3 | - |
| Agriculture | 4 | 4 | 1 |
| Forestry | 7 | 7 | 5 |

Following measures developed under National Strategic Plan on Climate Change (2008-2012)

Low carbon development policies and measures at the sub-national level

Case study for sub-national level

- Advanced provincial local government

➤ **Bangkok**

- Advanced city local government

➤ **Muangklang Municipality, Rayong Province**

Bangkok

- Bangkok is a central hub for the national economy and development.
- Bangkok is one of the cities in the world with highest greenhouse gas emissions.
- Bangkok Metropolitan Administration started raising awareness of the people in Bangkok on climate change, promoting the reduction of greenhouse gas emissions, and creating new green areas since 2007.

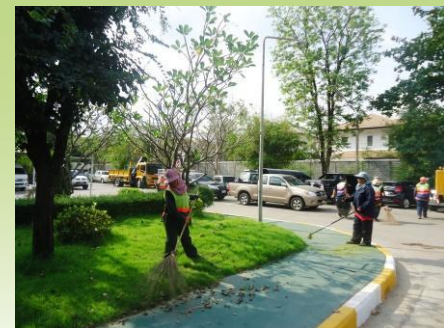


Bangkok (continued)

- The Action Plan on Global Warming Mitigation 2007-2012 has been prepared by Bangkok Metropolitan Administration (BMA).
- This action plan aims at least 15% of the total GHG emission reduction.
- The implementation of activities is under 5 initiatives;
 - Expand mass transit and improve traffic systems.
 - Promote the use of renewable energy.
 - Improve building electricity consumption efficiency.
 - Improve solid waste management and wastewater treatment efficiency.
 - Expand park areas.

Bangkok (continued)

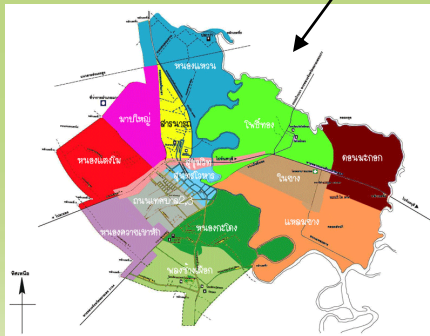
- According to the action plan,
 - Bangkok can reduce 1.16 million ton of CO₂ in 2008-2010 - evaluated from 2 initiatives; promote the use of renewable energy and expand park areas.
 - Bangkok can reduce 2.51 million ton of CO₂ in 2011 - evaluated from 4 initiatives; promote the use of renewable energy, improve building electricity consumption efficiency, improve solid waste management and wastewater treatment efficiency and expand park areas.
 - Total reduction of CO₂ emission is 3.67 million ton in 2008 – 2011.



Muangklang Municipality, Rayong Province



Rayong Province



Klang Municipality

- The municipality intends to be low carbon city and has continuously implemented environmental and energy projects, resulted in several nominations for awards on environment and climate change.
- Environmental problems include waste, wastewater, and air pollutions become the concern, especially municipal wastes.
- The municipality also faces problems on a rapid growth of the city and a reduction of green areas in the city.

Muangklang Municipality, Rayong Province (Continued)

- The reduction of greenhouse gases is carried out by participating carbon footprint project initiated by the Thailand Greenhouse Gas Management Organization (Public Organization).
- The 'Klaeng Model' is employed with a vision to 'Pursue low carbon city for better quality of live based on the sufficiency economy principles' by having 4 key strategies.

- City of trees
- City of waste minimization
- City of energy efficiency
- City of sustainable lifestyles

Muangklang Municipality, Rayong Province (Continued)

- After participated in carbon footprint for local organization project, has been supported by Thailand Greenhouse Gas Management Organization (Public Organization). The study has shown that Muangklang municipality activities generated 38,349 ton CO2 equivalent in 2009.
- In 2010, the study has shown that 5,000 ton CO2 equivalent has been generated from municipality activities.

