Outline

- Climate Change in Viet Nam
- Policies and Actions for Addressing CC
- National Climate Change Strategy
Current Status and Trend

Over the past 50 years:

- Annual temperature has increased 0.5°C.
- Sea water level has risen about 0.2 m.

CSIRO, IMHEN, 2013
Current Status and Trend

- **Annual mean**: Increases in the South, decreases in the North;
- **Dry season**: Slight change in the North
- **Rainy season**: Decreases 5-10% in the North, increases 5-20% in the South;

*Change in rainfall (%) over 50 past years*
Climate projection in 2050

- More frequent and longer heat waves over Viet Nam, more severe in the South.
- More extreme rainfall.

CSIRO, IMHEN, 2013
Climate projection in 2100

**Annual temperature**
- Low scenario (B1): 1.6 - 2.2°C
- Medium scenario (B2): 2 - 3°C
- High scenario (A1FI): 2.5 - 3.7°C

**Annual rainfall**
- Increase: 2 – 16%

**Sea Level Rise**
- Low scenario (B1): 49-64cm
- Medium scenario (B2): 57-73cm
- High scenario (A1FI): 78-95cm

*IMHEN, 2012*
If sea level rise 1 m:
- 39% of area will be inundated
- 35% population is directly affected

Sea Level Rise

<table>
<thead>
<tr>
<th>Province</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>AnGiang</td>
<td>2.2%</td>
</tr>
<tr>
<td>BacLieu</td>
<td>45.7%</td>
</tr>
<tr>
<td>BenTre</td>
<td>33.3%</td>
</tr>
<tr>
<td>CaMau</td>
<td>55.9%</td>
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<tr>
<td>CanTho</td>
<td>19.0%</td>
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<tr>
<td>DongThap</td>
<td>4.8%</td>
</tr>
<tr>
<td>VinhLong</td>
<td>15.6%</td>
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<tr>
<td>TraVinh</td>
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<tr>
<td>SocTrang</td>
<td>51.2%</td>
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<tr>
<td>TienGiang</td>
<td>30.3%</td>
</tr>
<tr>
<td>LongAn</td>
<td>28.5%</td>
</tr>
<tr>
<td>KienGiang</td>
<td>74.8%</td>
</tr>
<tr>
<td>HauGiang</td>
<td>79.4%</td>
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</tbody>
</table>
Vietnam's Policies and Actions for Addressing CC

- Set up Standing Office of Vietnam National Steering Committee for UNFCCC and KP;
- Set up Designated National Authority (DNC);
- National Target Programme to Respond to Climate Change (NTP-RCC) – December 2008;
- Support Programme to Respond to CC (2009)
- MONRE developed Vietnam Climate and Sea Level Rise Change Scenarios (2009 and 2012);
- **National Climate Change Strategy** approved by Prime Minister on 05/12/2011 at No. 2139/QD-TTg.
- National Action Plan to Respond to CC for 2012 – 2020 has been released, (Decision 1474/QĐ-TTg 05/10/2012)
Vietnam’s National Climate Change Strategy

STRATEGIC VIEWPOINT ON CC

- considers climate change response vital to the development of the country;
- associated with sustainable development toward a low-carbon economy;
- adaptation and GHG emission reduction must be carried out in parallel;
- responding to climate change is a system-wide responsibility, led by the Government;
Vietnam’s National Climate Change Strategy

- **Objectives:**
  - Sustainable utilization of national resources;
  - Carry out adaptation measures and GHG emission reduction;
  - Safeguard people’s life and properties;
  - Ensure the sustainable development goals.
  - Strengthen human and natural system resilience to climate change;
  - Develop the low-carbon economy to protect and enhance quality of life;
  - Ensure national security and sustainable development in the light of climate change and join forces with international community to protect the global climate system.
Vietnam’s National Climate Change Strategy

TASK 1. ACTIVELY RESPOND TO NATURAL DISASTERS AND MONITOR CLIMATE CHANGE IMPACTS

a. Early warning;
- Construct and operate effective climate change monitoring systems;
- Modernise monitoring systems and forecasting technology;
- Expand and strengthen meteorological and hydrological monitoring systems;

b. Mitigate natural disasters risks
- Review development plans and construction standard;
- Promote the "four-spot" principles and strengthen natural disaster mitigation capacity;
- Research and implement specific measures for effective prevention of natural disasters;
Vietnam’s National Climate Change Strategy

TASK 2. ENSURE FOOD SECURITY AND WATER RESOURCES

a. Food security;
   - Maintain sustainable land for agricultural cultivation;
   - Research and implement effective agriculture and husbandry schemes;
   - Research, develop and apply biotechnology, advanced manufacturing process towards a modern agricultural system;
   - ...

   - ...
Vietnam’s National Climate Change Strategy

**TASK 2. ENSURE FOOD SECURITY AND WATER RESOURCES**

**b. Water resources;**

- Develop database for use and change of water resources;
- Strengthen international cooperation;
- Develop integrated planning for water resources in all regions and major river basins;
- Upgrade and construct irrigation system, hydropower plants, and river dikes;
- Implement capacity building for water resource management.
Vietnam’s National Climate Change Strategy

**TASK 3. ACTIVELY ADAPT TO SEA LEVEL RISE IN VULNERABLE AREAS**

- Assess and forecast the impacts and vulnerability level to sea level rise;
- Develop master plan for socio-economic development to adapt to climate change;
- Develop protection measures for islands to cope with climate change, particularly sea level rise;
- Develop spatial planning and technical infrastructure for residential areas to cope with climate change;
- Assess and develop livelihoods and production process to cope with climate change and sea level rise.
Vietnam’s National Climate Change Strategy

- Task 4: Protection and Sustainable Development of Forest, Increasing Carbon Removals and Biodiversity Conservation
- Task 5: GHG Emission Reduction to Protect Global Climate System
- Task 6: Strengthen the leading role of the Government in responding to climate change
- Task 7: Develop effective community response to climate change
- Task 8: Develop scientific and technological advances to respond to climate change
- Task 9: Enhance international cooperation and improve national position in negotiations on climate change
- Tasks 10: Diversify financial resources and investments on CC
STRATEGIC PHASES of NCCS

- **Until 2012**: Imperative, non-delayable adaptation. Under current complicated international negotiation progress, emphasis to be put on capacity building science and technology, adjustment and development of green growth mechanisms, climate change adaptation and GHG mitigation policies in line with the international situation, which will be clearer after 2012.

- **2013 – 2025**: Aiming to be a modern industrialised country, it is likely that after 2025 that Vietnam has to focus on GHG emission reduction to protect the earth’s climate system. Climate change adaptation and GHG emission reduction must be carried out in parallel, in association with socio-economic development actives.

- **2026 – 2050**: With Vietnam being an industrialised country, GHG emission reduction will become criteria of the socio-economic development processes. The strategic tasks will be reviewed and adjusted to ensure the low-carbon economy and resilience to climate change impacts.
PRIORITY PROGRAMMES of NCCS

1) The National Target Programme to Respond to CC, development of extended plan for 2016-2025;
2) The National Scientific Programme on CC;
3) The Hydrometeorological Observation Network and Forecasting Technology Modernisation Programme by 2020;
4) The water resources management and CC adaptation programmes for Mekong and Red River Deltas;
5) The GHG emission inventory, reduction and management of emission reduction activities;
6) The CC response programme in megacities;
7) Sea dyke and river embankment upgrade and reinforcement program under CC and SLR conditions.
8) Public healthcare improvement program in the CC and SLR conditions.
9) Socio-economic development program in inhabited island to cope with CC and SLR.
10) Pilot program for community’s response to CC with an aim for further expansion.
Challenges

- Little understanding of climate change;
- Weak institutional system for climate change issues;
- Struggle to form low-carbon economy;
- Private sector engagement and co-benefit sharing remain limited;
- Policy development and mainstreaming into SEDP remains slow and weak;
- Limited technology and experience.
Conclusions

- Climate change is real and seriously affecting Vietnam;
- Climate change is top priority for Vietnam;
- Socio-economic development cannot be separated from responding to climate change;
- Experiences to respond are available and embedded in communities;
- Potential to learn and apply international experience;
- National sustainable development can be achieved if responding smartly and effectively.
Thank you
National Climate Change Strategy

TASK 4. PROTECTION AND SUSTAINABLE DEVELOPMENT OF FOREST, INCREASING CARBON REMOVALS AND BIODIVERSITY CONSERVATION

- Accelerate the progress of afforestation and reformation projects, encourage the business sector to invest in economic forestation.
- Protect biodiversity, especially resilient ecosystems and species to climate change; conserve the gene pools and protect highly endangered species by climate change.
- Develop and implement protection and sustainable management of existing natural, special-use and production forest areas.
- Promote green urban and residential areas.
- Institutionalise the communication of participatory approaches.
- Build capacity and increase efficiency of the evaluation, forecast, prevention and monitoring and emergency response to forest fires.
National Climate Change Strategy

**TASK 5. GREEN HOUSE GAS EMISSION REDUCTION TO PROTECT GLOBAL CLIMATE SYSTEM**

- a) Development of new and renewable energies

  - Review the planning of multipurpose hydropower development; by 2020: total capacity of hydropower plants reaches 20,000-22,000 MW.

- Increase research and development of renewable and new energy generation technologies, include wind, solar, tide, geothermal, biofuels and cosmic energies; develop policies to encourage stakeholders’ participation in the promotion of renewable energy use.

- Increase the share of new and renewable energies by 5% of the total commercial primary energies by 2020 and 11% by 2050.
Task 5. Green House Gas Emission Reduction to Protect Global Climate System

- b) Energy saving and efficiency

Restructure the economy toward reducing energy-intensive industries and create incentives for sectors to reduce energy consumption.

Develop and implement incentive policies for energy efficiency in economic sectors.

Research, develop and apply energy-efficient, fossil fuel-free, low-emission technologies, equipment and products.

Study to develop an appropriate price system for efficient use of energy and encourage new and renewable energy development.

Apply advanced technologies to increasing electricity generation efficiency and reduce GHG emission.
Goal and Objectives

**Overall goal:** GG & LCE will become the mainstream of sustainable economic development & strengthen social economic development

**Objective 1:** Restructure the economy and increase competitiveness through efficient use of resources and address environmental degradation

**Objective 2:** Assess and promote the use of high technology development to increase efficiency in natural resource use, reduce GHG intensity of the economy and respond to climate change

**Objective 3:** Improve the quality through green employment, sustainable lifestyles, green infrastructure/building and restored natural capital
Targets of Green Growth Strategy

2020

- GDP per capita doubled compared to 2010;
- Reduced energy consumption per GDP by 1.5 to 2% per year;
- Establish modern economic structures;
- Reduce intensity of GHG emissions by 8-10%;
- Improve the efficiency of using natural resources;
- Address env’ degradation;
- Gradually creating the conditions to switch to a green economy and develop a sustainable developing and stable country.

2030

- Reduce total GHG emissions at least 2% per year;
- Env’ degradation addressed and natural capital improved while improved basic standards for clean and green technology established

2050

Green Economic Development is mainstreamed