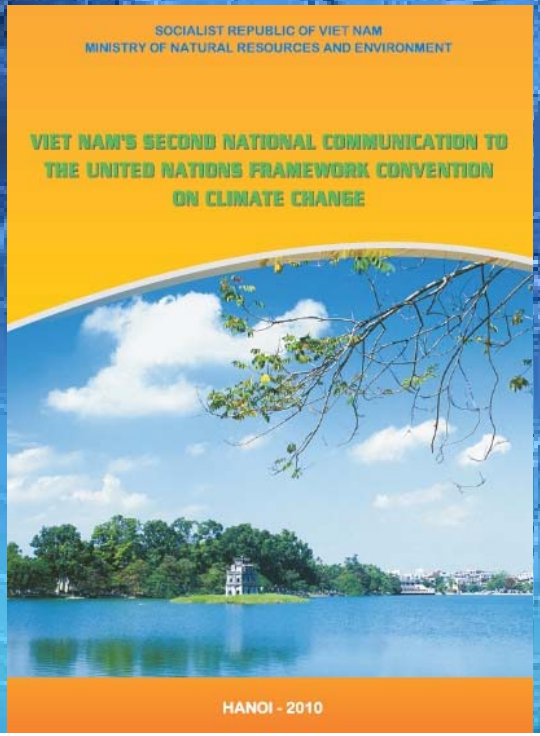
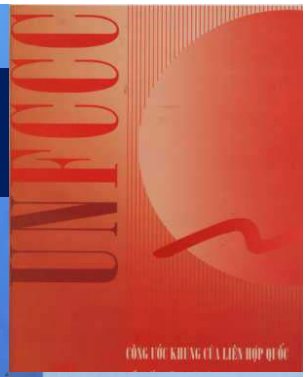
VIET NAM'S SECOND NATIONAL COMMUNICATION UNDER THE UNFCCC

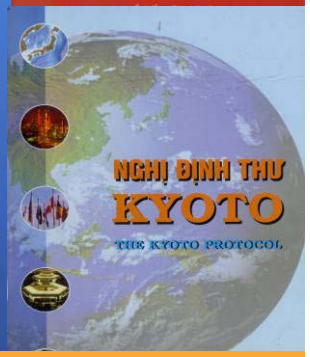
Tran Thuc, Ministry of Natural Resources and Environment of Viet Nam

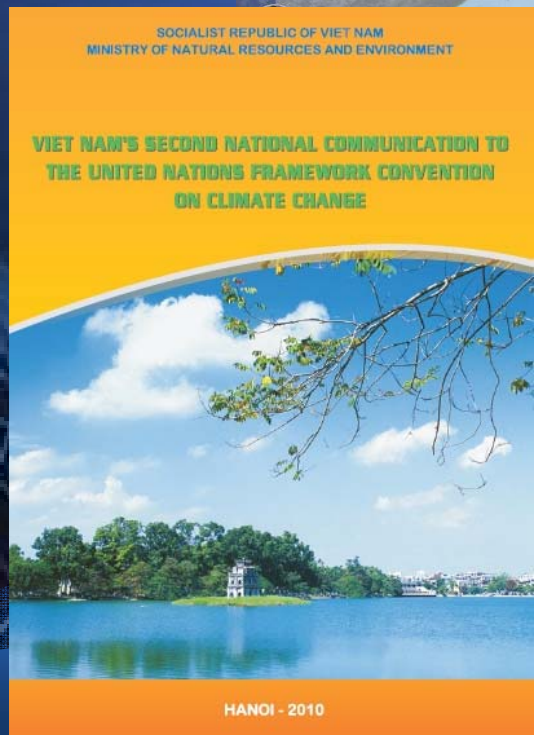


General Information

- Viet Nam ratified the United Nations Framework Convention on Climate Change in 1994 and Kyoto Protocol in 2002;
- Viet Nam: implement the obligation of development of National Communications as stated in Article 4.1 and 12.1 of UNFCCC;
- Viet Nam submitted the Second National Communication (SNC) to the UNFCCC Secretariat at the COP 16, Cancun, Mexico, December 2010







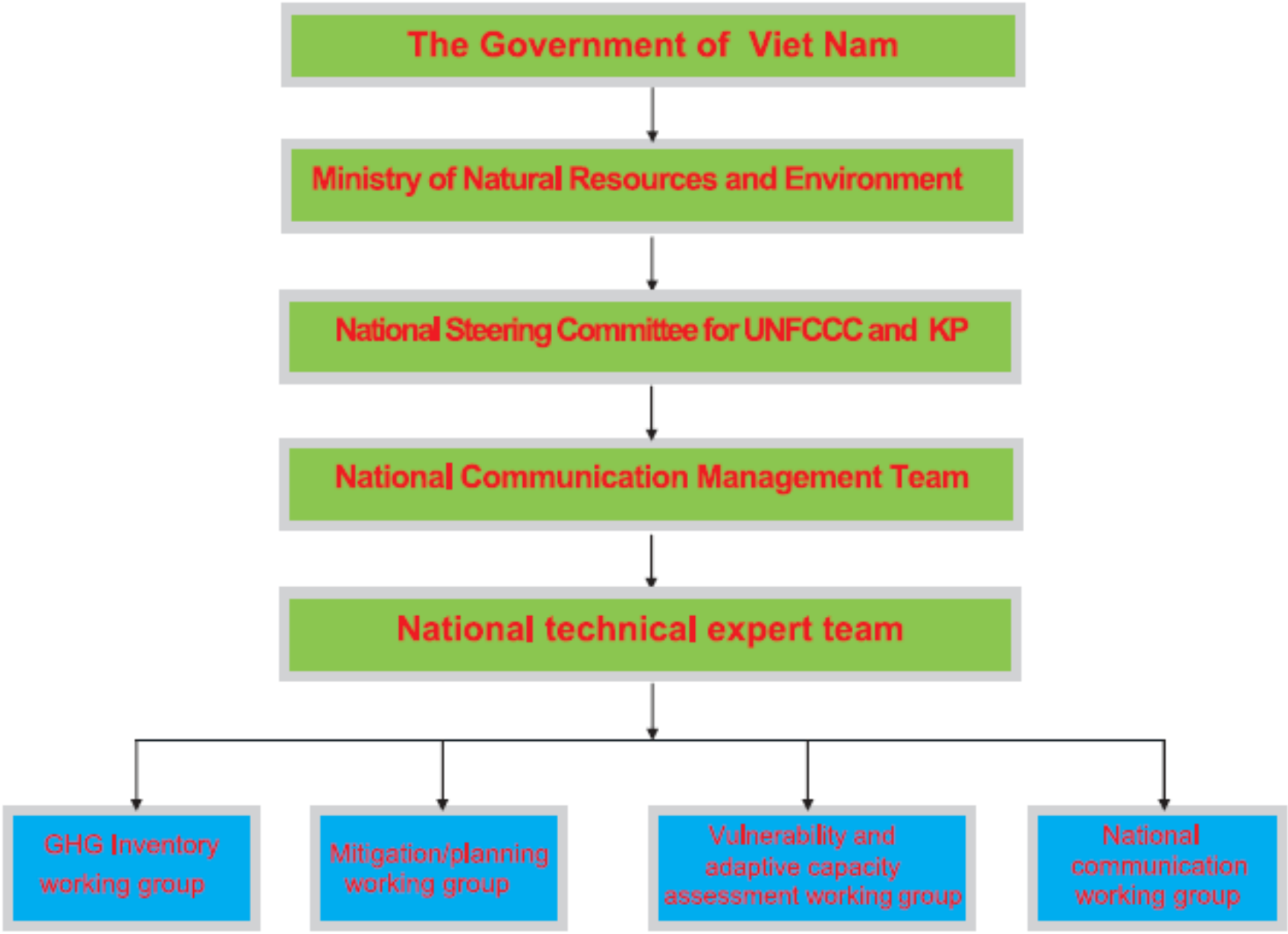
http://unfccc.int/national_reports/non-annex_i_natcom/items/2979.php

NATIONAL CIRCUMSTANCES

- ✓ Viet Nam located in Southeast Asia, land area of 331,051.4 km^2, two major river deltas - the Mekong River Delta and the Red River Delta.
- ✓ Climate: monsoon tropical climate with annual mean temperature varying from 12.8°C to 27.7°C; average annual rainfall ranges from 1,400 to 2,400 mm.
- ✓ Water resources: Nine major river systems
- ✓ Population (2000): 77.6 mil.
- ✓ Agriculture land is about 9.3 mil. ha
- ✓ Forest land (2000) is about 11.6 mil. ha
- ✓ Annual industrial growth is 10-15%

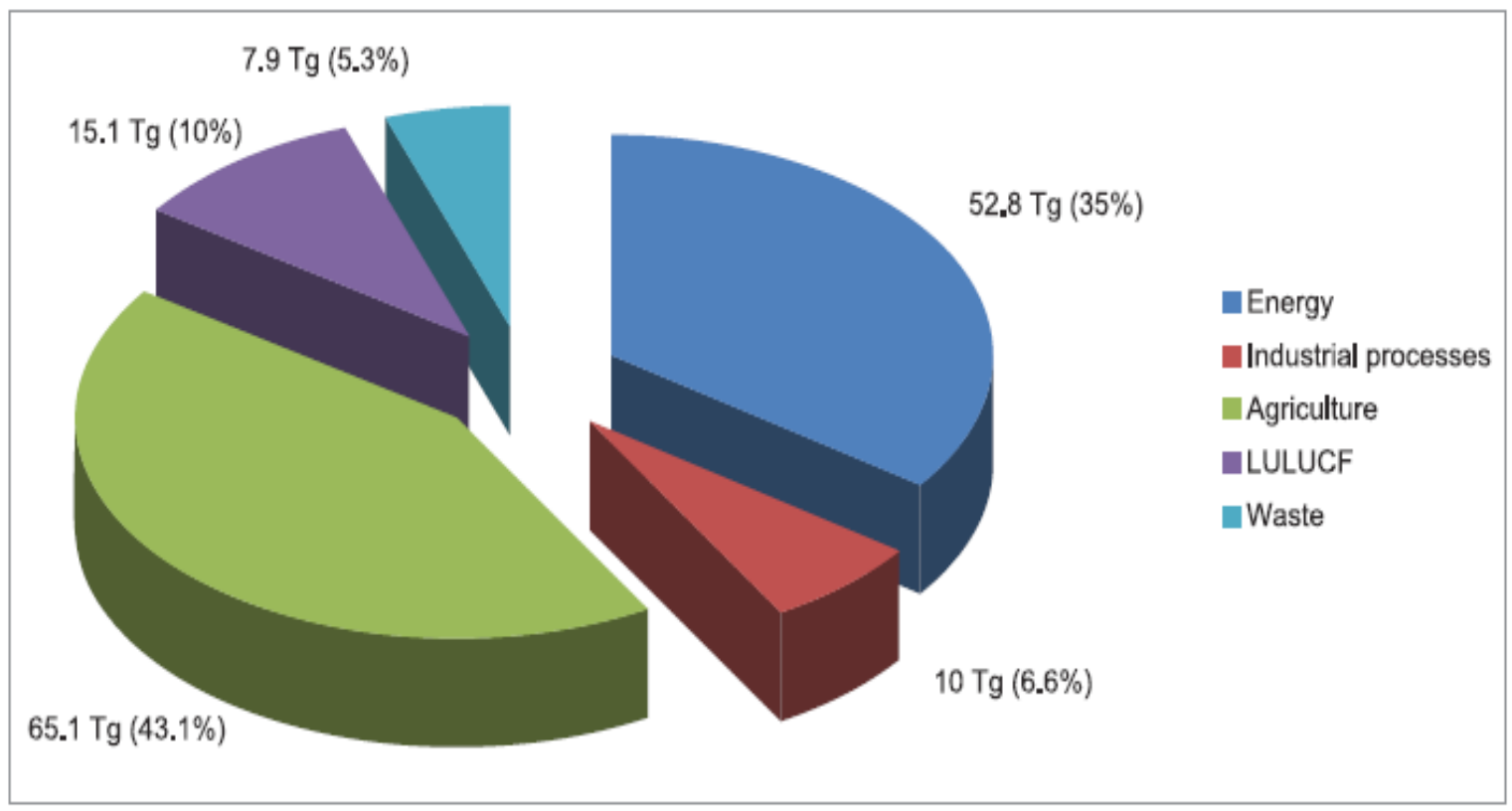
- ✓ Transportation: road transportation is the dominant mode of transport
- ✓ Energy: primary energy consumption in 2000 was 32.235 KTOE
- ✓ Economic growth: 7.5% per annum between 2000-2008
- ✓ Health and education: average life expectancy is 67.8; Basic education lasts for 12 years and is divided into three levels.

Institutional Structure for Implementing SNC Project in Vietnam



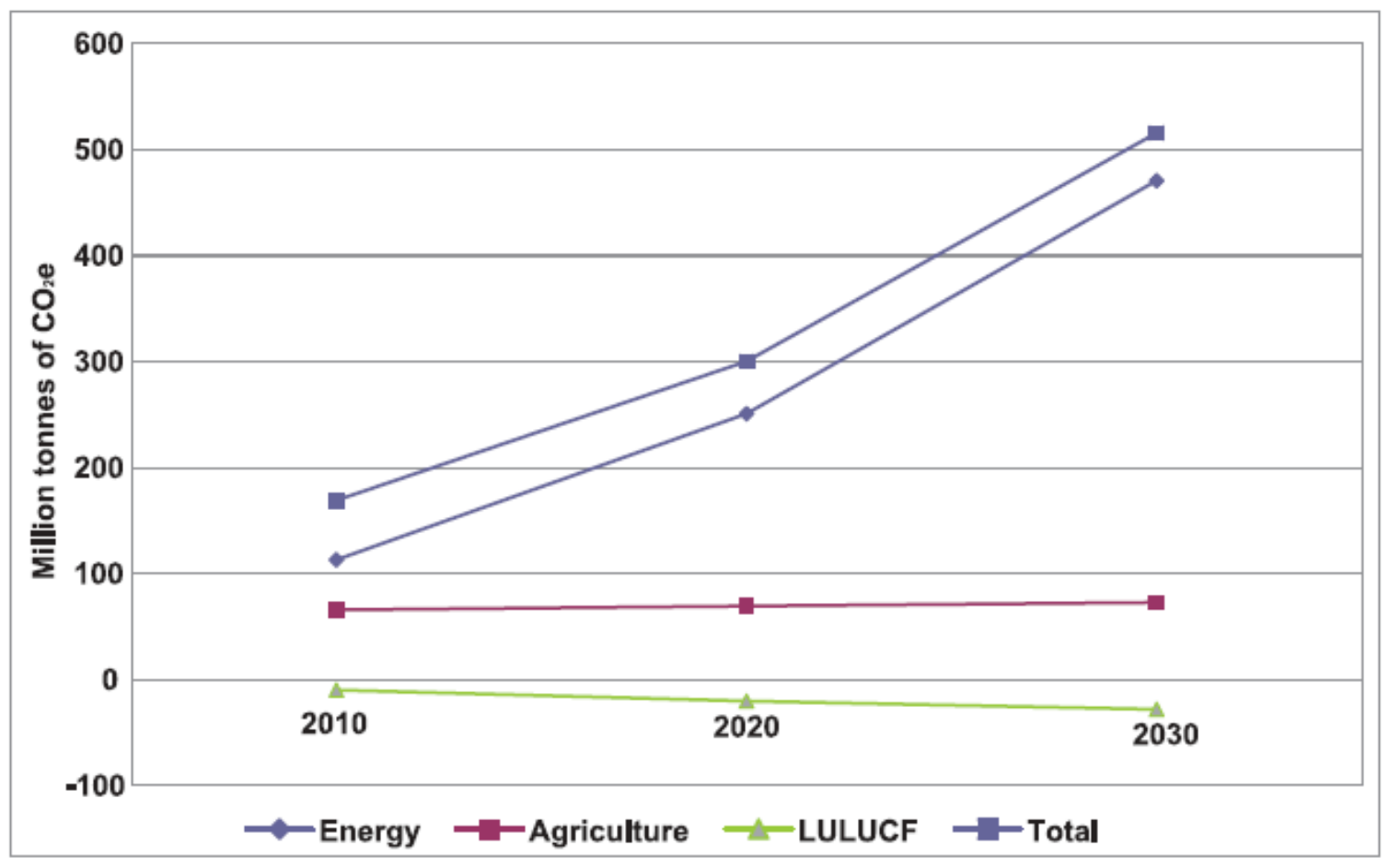
Summary of National GHG Inventory for 2000 under SNC

National greenhouse gas inventory for 2000 was conducted in accordance with the Revised Guidelines of IPCC for energy, industrial processes, agriculture, LULUCF, and waste sectors, with respect to the most important greenhouse gases: CO_2, CH_4 and N_2O.



Total GHG emissions in 2000 amounted to 150.9 Tg CO_2 equivalent.

Projections of GHG emissions from main sources for 2010, 2020 and 2030

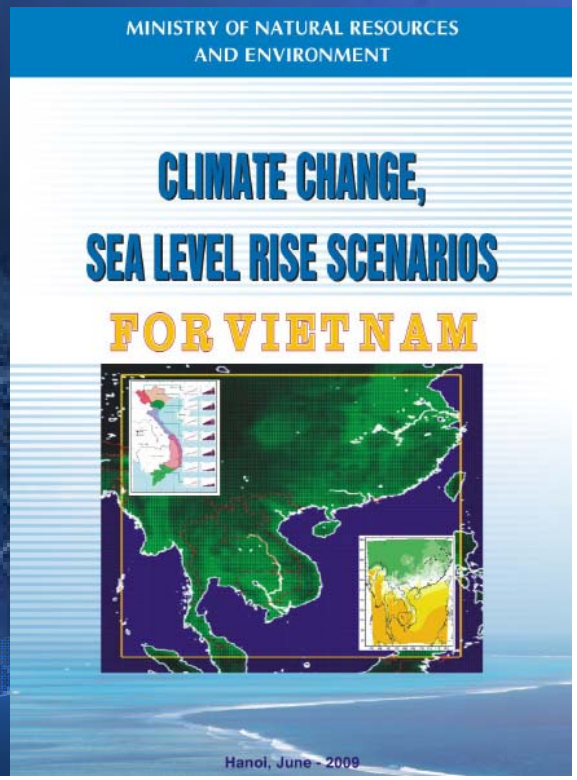


Emissions from energy, agriculture and LULUCF sectors are projected to be 169.2, 300.4, and 515.8 Tg CO_2e in 2010, 2020, and 2030, respectively. Energy sector accounts for 91.3% of projected total emissions for 2030.

Climate Change Impacts and Adaptation Measures

- Climate change scenarios for Viet Nam in the 21st century which were announced in 2009 include temperature, rainfall and sea level rise.
- Assessment of climate change impacts on seven sectors are based on medium climate change scenarios.

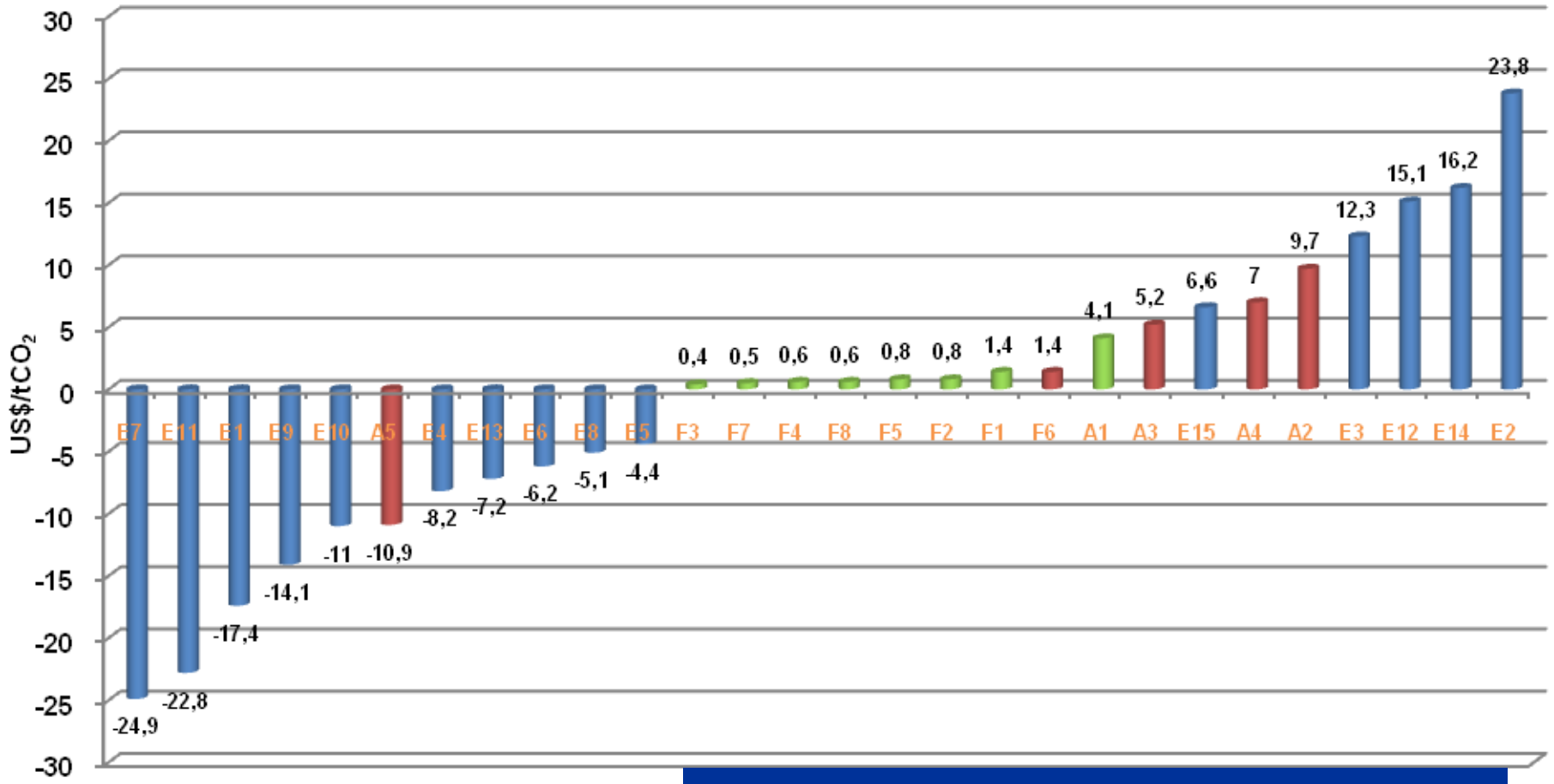
1) Water resources;
2) Coastal zones;
3) Agriculture;
4) Forestry;
5) Aquaculture;
6) Energy and transportation;
7) Human health.



Greenhouse Gas Emission Mitigation Options

- ✓ Based on the indentification of GHG sources and sinks, GHG mitigation options were developed for three main sectors: energy, agriculture and LULUCF.
- ✓ 28 GHG mitigation options were developed and assessed:
- 15 options for energy sector (including transportation),
- 5 options for agriculture sector and 8 options for LULUCF sector.

Mitigation Potential and Cost of 28 Options in Energy, Agriculture and LULUCF



A - Mitigation options in agriculture sector
E - Mitigation options in energy sector
F - Mitigation options in LULUCF sector

Total mitigation potential for the 28 options is 3,270.7 Tg CO_2e. Energy contributes 192.2, agriculture 56.5, and LULUCF 3,022 Tg CO_2e.

Other Outcomes

- ✓ **Environmentally sound technologies application (ESTs)** are considered for assessment, adoption, transfer and application; ESTs continue to be integrated into science and technology policies, strategies, plans and programmes at local and national levels.
- ✓ **Systematic observation and climate change research:** Hydro-meteorological and environmental observation system includes Surface-based, Upper-air, Agro-meteorological, Hydrological, Marine hydro-meteorological station network, and Network of air and water quality monitoring.
- ✓ **Education, training and public awareness raising:** Awareness raising activities have been broadened in both content scope and participant diversity.

Limitations and Contraints

National GHG inventory

- ✓ Data availability reliability, data collection process.
- ✓ Data collection system for GHG inventory,
- ✓ Technical experts in GHG inventory at Ministry and Sector level.
- ✓ Research, assessment and verification of country-specific emission factors.

Climate change impact and adaptation measures

- ✓ Application of MAGICC/SCENGEN in developing scenarios.
- ✓ Database for impact assessments and adaptation measures development, particularly data for cost-benefit analyses.
- ✓ Tool for impact assessment and response measure development, particularly for cross-sector or inter-regional assessments.
- ✓ Technical experts.

Limitations and Constraints

GHG mitigation options

- ✓ Insufficient long-term planning information and data.
- ✓ Some IPCC emission factor defaults for energy technologies may not be suitable.
- ✓ Technical capacity in development of mitigation options.

Adoption of environmentally sound technologies

- ✓ Outdated technologies, Insufficient investment and technical experts for transferring and application of modern, environmentally sound technologies.

Systematic observation and climate change research

- ✓ Insufficient and inadequate Hydro-meteorological network, infrastructures and telecommunication systems.
- ✓ Limited technical capacity.
- ✓ Lack of multi-sectoral approaches to assess CC impacts.

Limitations and Constraints

Education, training and public awareness-raising

✓Weak CC education, training and awareness-raising plans and programs at national level.

✓Higher-education curricula and content remain experimental in nature. No course material or curricula for primary and secondary education levels.

✓Diffusion of basic information on CC relies on efforts of specialist bodies, NGOs and international collaborative projects.

Lessons Learnt

- Strong institutional framework for project management.
- PMT and NST were reconstituted under the auspices of MONRE in cooperation with relevant ministries, private sector and NGOs. NST comprised five working groups composed of qualified experts, scientists from ministries, agencies, private sector, NGOs. National CC Steering Committee provided guidance to the PMT. Close and effective cooperation among MONRE, PMT, NST and other agencies is the most important factors for the successful implementation of the project.
- Support from Vietnamese Government, Ministries, local authorities and cooperation, assistance from GEF, UNEP, UNESCAP.

Next Steps

- Application of new models for adaptation and mitigation assessments with support from international organizations.
- Education, training and public awareness on CC at all levels.
- National groups of qualified experts from public, private sectors, NGOs. Cooperation between MONRE and ministries, agencies, private sector, NGOs.
- Proposal for the Third National Communication (TNC)
- Consultation workshop to review major results, outcomes of SNC project and propose activities for TNC with participation of national and international experts/organizations.
- Preparation of TNC project document with the assistance from UNEP, GEF, UNESCAP.
- Submission of TNC project document to UNEP, GEF for approval and implementation.

THANK YOU
FOR YOUR ATTENTION

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