

# **Presentation of PMR Expression of Interest**

**Country:** Vietnam

**Presenter:** Nguyen Tuan Anh

**Date:** October 27, 2011





#### Content

- National Profile
- 2. Emission profile
- 3. Current policy framework
- 4. A new emerging policy framework
- 5. Key target sectors
- 6. Experience with market instruments
- 7. Conclusions
- 8. Focal point
- 9. delivery partners





#### **National Circumstances**



- Area: 331,051.4 km<sup>2</sup>
- Population: **86,936,464** (2008);
- Economic growth: 7.5% per annum over 2000 2008
- GDP per capita: 1110 USD/Capita (2010)
- GHG emissions total 169,2 million T CO<sub>2</sub>e (2010-/year, 2,1 T CO<sub>2</sub>e per capita and 0.52 kg CO<sub>2</sub> per \$1 GDP (2007)
- Energy: primary energy consumption increased 6.5% per annum from 32,235 KTOE (2000) to 50,221 KTOE (2007)
- Signed the UNFCCC (1992, ratified in 1994) and Kyoto protocol (signed 2002, ratified in 2004)

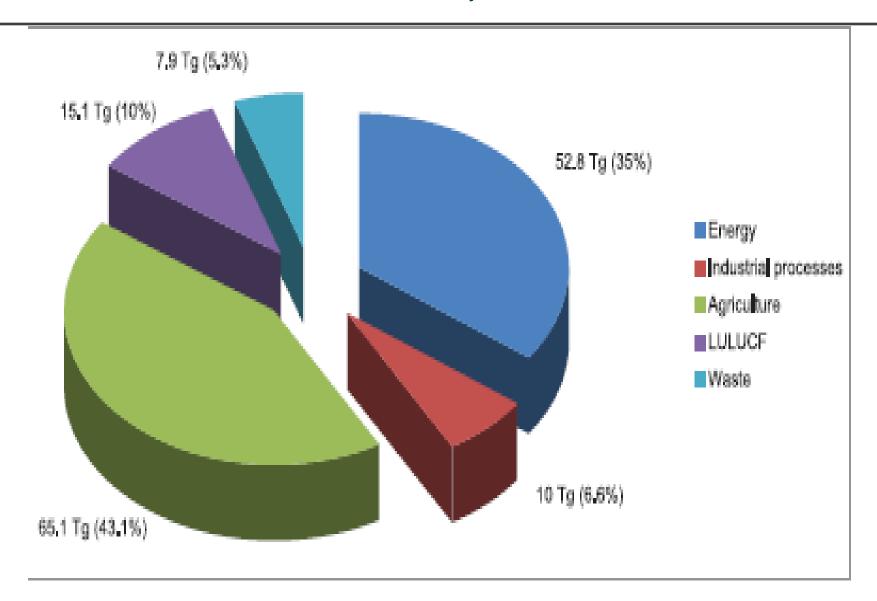
## Policy Context for GHG Reduction

- ◆ GHG emissions were at a very low level in the early 90's (0.3 T CO₂e per capita in 1990 to about 2 T CO₂e in 2010) but grew rapidly afterwards due to:
  - Rapid economic growth (7.5% average) that has lead to an increase in demand for energy and use of fossil fuel
  - Gradual reduction of hydropower which is replaced by coal and gas → dropping from 40% in 2005 to 10% in 2030 as total hydro power will remain stable as overall power supply is anticipated to grow.
  - Low industrial energy efficiency:
    - Steel plants: only 16% of the international energy efficiency standards, showed by UNIDO (2011) report
    - energy efficiency decreased by 23% from 1996 to 2008 (IEA)
  - Rapid shift to fossil fuel combustion engine for transport
- ♦ LULUCF and Agriculture remains important:
  - emissions from rice comprise 43% of total emissions
  - LULUCF is net carbon sink (20.1 million T CO<sub>2</sub>e by 2010)





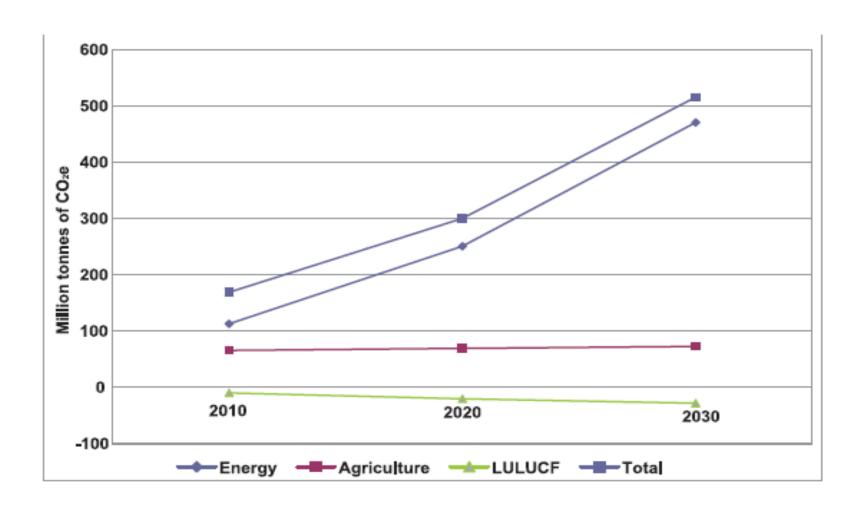
#### Overall emissions divided by sector - 2000







# Projected BAU GHG Emissions by sector to 2030



Source: Viet Nam Second National Communication





# Current Policy Framework

#### **Key Policies:**

- NTP-RCC/SP-RCC 2008-2015: National Target Program to Respond to Climate Change and the Support Program to Respond to Climate Change
  - Implemented through action plans by ministries and localities and coordinated by MONRE
- Regulations related to market based mechanisms:
  - CDM (GoV decision No 130/2007/QD-TTg, dated 02 Aug 2007 )
  - PES is legalized (MARD Decree No. 99 on the Policy for Payment for Forest Environmental Services /2010).
- National Forest Development Strategy 2006-2020:
  - Increase forest cover to 42% of land surface
  - Improve quality of forest through reforestation/aforestation programs
- Energy efficiency law and NTP (No. 50/2010/QH12):
  - Expected energy saving from 5% to 8% in period 2011 2015 (BAU).
- ◆ VII Power master Plan (GoV decision No. 1208/QD-TTg, dated 21 Jul 2011 on approval of national electricity development planning period 2011-2030)→Priorities in renewable energy (RE) development.
  - Increase of RE to 4.5% and 6.0% in 2020 and 2030, respectively
    - Wind power share: 0.7% in 2020, and 2.4% in 2030
    - Biomass electricity: 0.6 % in 2020, and 1.1% in 2030
    - Hydro Power plants: doubling of capacity (17,400 MW) in 2020
    - Nuclear power: 10.1% in 2030
  - Decrease of energy elasticity from 1.5 in 2015 and to 1 in 2020





# Emerging new strategic policy framework

- Green Development Strategy (GDS) by Ministry of Planning and Investment (expected to be approved by June 2012):
  - Initiate Low carbon development trajectories
    - Emission reduction target (proposed):10% reduction in 2020 from BAU, and 20% reduction from BAU if with international support
  - Greening production
    - Develop Green Business and Green existing businesses.
  - Stimulate Green lifestyles :
    - Green building/eco city development, enhancing resilience and green consumption
- ◆ Climate Change Strategy (CCS-VN) by Ministry of Nat. Resources and Environment (expected to be approved shortly):
  - Ensure food security, energy security, water security, poverty alleviation, gender equity, and social security.
  - Facilitate the transition to low carbon economy and green growth
  - Increase ownership and capacity of stakeholders to respond to CC.
  - Contribute to global community's efforts in addressing climate change.





#### Key Sectors Targeted by GHG Mitigation Strategy

# Second National Communication shows three sectors - Energy, Agriculture and LULUCF

- ◆ Energy (192,2 million T CO<sub>2</sub>e of emission reductions between 2000 and 2030):
  - Amongst others, Renewable (15,000 MW/potentially)
  - Use of more efficient equipments, super critical coal fired power plants etc.
  - Energy efficiency measures planned (around 7-8% reduction in energy efficiency)
- ◆ **Agriculture** (56 million T CO<sub>2</sub>e of emission reduction between 2000 and 2030):
  - Livestock: biogas, dietary supplements for diary cattle,
  - Crops (reducing CH<sub>4</sub> emissions from paddy rice):
    - Measurements by Can Thu University and EDF show a decline of 30% based on Intermediate wetting and drying) and balanced fertilizations which are being explored for voluntary markets
- ◆ LULUCF(3,000 million T CO<sub>2</sub>e of emission reduction between 2000 and 2040):
  - Sustainable management of natural forests
  - Reforestation and afforestation
  - REDD (around 30-35 million MT  $CO_2$ e per year) (this is not consistent with diagram of slide 6?)
    - Rehabilitation of Degraded land
    - Reversing On-going deforestation
  - Peat land and Mangrove rehabilitation (around 5 MT CO<sub>2</sub>e based on Wetland International figures)





#### **Experience with Current Market Instruments**

- ◆ CDM: establish DNA and support to develop regulations, review and improve performance in 2010, with achievements:
  - 7<sup>th</sup> largest host country of CDM projects
  - 83 registered projects
  - 26 million T CO<sub>2</sub>e 2012 8 annually  $\rightarrow$  majority share of large scale hydro (78%) and methane capturing of land fills and industrial processes(11%).
- VCS: 3 VCS projects operational
- ◆ PES (Payments for Environmental Services): successfully piloted and legalized in Viet Nam

#### Furthermore:

- GoV has actively promoted ISO 14002 standards for larger companies to improve their environmental management
- Viet Nam is working on introducing energy efficiency standards.





### Interest in Market-Based Initiatives and Support from PMR

- Green Growth Strategy will set a voluntary reduction target and identify policy instruments, which will involve:
  - Possible sector based carbon budget to stimulate reductions evolving in cap and trade
  - Stimulate private sector investments in renewable energy and energy efficiency
  - Green Fiscal reform and Stimulating Green Consumption:
    - Carbon tax
    - Green Product standards
      - Product carbon footprints as a standard
      - Green value chains
- Market based instruments are anticipated to enable
  - the engagement of private sectors in meeting GHG reduction targets.
  - the spread of green and high technology
  - alternative finance mechanism for low carbon investments as opposed to public sector/Climate Finance related investments
  - The development of NAMA in priority sectors

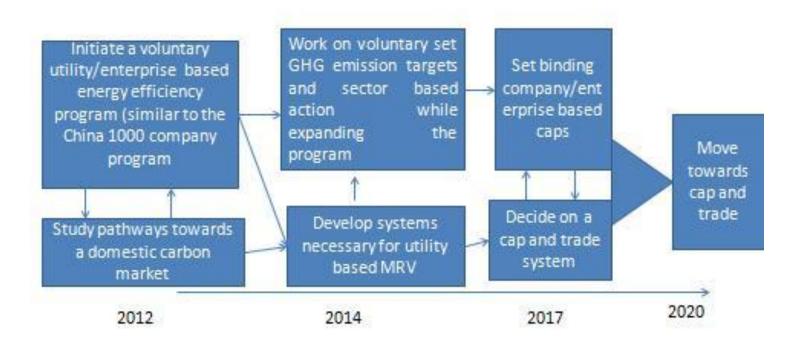




#### Market Based Mechanism to Achieve GDS/VNCCS Targets

# Moving towards cap and trade?

 Develop a domestic cap and trade systems (possible linked with international mechanism) by 2020







#### Other Relevant Initiatives and Partners

- UNDP:
  - CBCC-MONRE/MARD (capacity building for mitigation actions),
  - SD and CP (MPI) –(climate change in the planning system),
  - UN REDD and support for provincial (3)/sectoral (3) NAMA development.
- World Bank: Low Carbon Growth Study; SP-RCC / Climate Change DPO; MAIN, Climate Finance Task Force and Platform, Financial Mechanism for SPRCC Funding, GEF on Energy Efficiency, Carbon Finance Program, Low Carbon Transport Studies and Investment Program planned for Danang and HCMC; Power Sector Programmatic DPO, MAIN-Asia Capacity Building (Mitigation Activities Implementation Network in Asia)
- ♦ ABD: several projects focusing on Carbon Capturing and Storage, municipal and sect oral NAMAs development (as part of NTP-RCC actions plans), HCMH-Metro rail system.
- ♦ CTF (Clean Technology Fund): Viet Nam has received a 250 mil. USD soft loan, targeting to improve energy efficiency and reduce GHG emission in power and transport sector.
- ♦ SP-RCC (Support Program to Respond to Climate Change): Climate Change Development Policy Operation which consists of:
  - budget support component, for period 2009: 145 m USD, 2010: 220 m USD, by: JICA, AFD, WB and CIDA and
  - a policy dialogue between donors and the governments based on a policy matrix (51 Policy Action out of which the World Bank supports Energy efficiency, Water Resources Management, and cross-cutting issues)
  - TA support to implement policy actions
- ◆ JICA: Facilitates the establishment of a GHG emission inventory system, support for NAMA development and various other capacity building activities.
- ♦ Norway: support REDD/REDD+ through UN-REDD
- USAID: Low Carbon study and assessment for agricultural and LULUCF and REDD.





# Next Step: Organization of work and estimated timeline

In the preparation phase of the proposal, the following activities will be implemented:

- <u>Activity 1</u>: Study market based mechanism in annex 1 countries and *PMR* member countries to understand their effectiveness in the VN context (planned by February 2012)
- <u>Activity 2:</u> identify and assess different carbon market mechanisms and identify feasible and appropriate market mechanisms suited for Viet Nam for further consideration which will inform the organizing framework (by June 2012)
- <u>Activity 3</u>: Organize consultation workshops to engage relevant stakeholders and government agencies to determine appropriated carbon market schemes for achieving the objectives and goals of VNCCS and GDS strategic directions. (by September/October 2012)
- <u>Activity 4</u>: Develop the PMR Project Proposal of Viet Nam for *submission to PMR Assembly approval through* consultations with all stakeholders (by December 2012)
- <u>Activity 5</u>: Finalize and approve the PMR Project Proposal and translate the proposal into English for submission to PMR Assembly (December 2012)





# Conclusions – Summary of market readiness priority areas for PMR support

The key priority areas for PMR support are:

- ◆ To enable Viet Nam to effectively participate in existing and new initiatives to be decided by UNFCCC/KP agreements, which may include:
  - To enhance capacity for implementation of the CDM and National Appropriate Mitigation Action (NAMA) or bilateral offset mechanisms.
  - To ensure Vietnamese organizations/firms to have access to green climate fund
  - To study possible NAMAs in the key sectors -energy, industry and agricultural sector - to achieve voluntary emission cuts set in the GDS
- ◆ To assess, study and pilot domestic market based instruments to meet GHG reduction targets in a cost effective manner and achieve sustainable development and green grow in Viet Nam:
  - Establish a functioning GHG emission MRV system.
  - Develop market based mechanism to meet domestic policy goals:
    - Review the current practice of cap and trade mechanism in other countries
    - Identify key design elements in establishing the cap and trade mechanism considering the technical, institutional and economic capacity of the country
  - Assess the possibility on introduction of carbon tax





#### PMR Focal Point & Institutional Partners

#### **Domestic Partners:**

- MONRE-Technical agencies such as DMHCC, IMHEN and ISPONRE
- MOIT (Ministry of Industry and Trade, involves as well power generation, industry (Steel and Cement)
- MARD (Ministry of Agriculture and Rural Development)
- MoC (Ministry of Construction)
- MPI (CIEM(Central Institute for Economic Management), FERD, DSI and GEI)
- Ha Noi/Ho Chi Minh/Da Nang People Committee (PC)





#### Contact Information for PMR Focal Point

#### PMR focal point:

#### Ministry of Planning and Investment

◆ Department of Sciences, Education on Natural resources and Environment (DSENRE)

Add: 6B Hoàng Diệu str., Ba Đình dist., Hà Nội City., Viet Nam.

Tel:+84-8043310 / +84-8044471 (Special Government Line)

Fax: +84-4-37339912

hmaipham@mpi.gov.vn / tuananhmpi@yahoo.com

#### Ministry of Natural Resources and Environment of Viet Nam

Department of International Cooperation (ICD)

Add: 83 Nguyen Chi Thanh str., Dong Da dist., Ha Noi City., Viet Nam

Tel:+84-4-38357929/38357910

Fax: +84-4- 38352191

Email: icd-monre@monre.gov.vn





# **Delivery Partners**

The Government of Viet Nam proposes co-implementation:

- 1. ADB as the Principal Delivery Partner, and
- 2. WB as the Secondary Delivery Partner

Government of Viet Nam, ADB and WB have greed with this arrangement based on the facts that:

- ADB has a strong carbon market expert team in the Asia-Pacific Region, a series of climate change projects to support Viet Nam, and strong interest in supporting Viet Nam to implement PMR activities, and
- WB has an excellent team to manage PMR project, has strong interest in supporting Viet Nam PMR activities.
- Large Vietnam climate change program as well as strong global knowledge on PMR, climate finance and carbon markets being involved in many other countries in the World with these products;



