

STRATEGY OF VIETNAM TOWARDS ADDRESSING ENVIRONMENT AND CLIMATE RISKS

BUI CACH TUYEN, Assoc. Prof. Dr.

Director General

Vietnam Environment Administration

ENVIRONMENT AND CLIMATE

- Vietnam has been facing environmental pollution and climate risks,
- Vietnam has to face greater vulnerability because of its reliance on agriculture, its lower tolerance to coastal and water resource changes, and lower financial, technical, and institutional capacity to protect environment and adapt climate risks,

Environmental issues

- As a result of rapid economic development, population growth, industrialization and urbanization, Vietnam has been facing significant environmental challenges
- Vietnam's “hot issues” of pollution including solid waste, wastewater, air pollutants, current and potential pollutions due to mining activities, in which water pollution of river basins and solid waste treatment being the biggest challenges

Solid waste generation

- Vietnam has annually generated 12.8 million tons of domestic solid waste, 2.6 million tons of industrial solid waste, 150.000 tons of medical waste, in which, 130.000 tons of hazardous industrial waste, 21.000 tons of hazardous medical waste.
- Concerning medical wastewater, 62.3% of hospitals have no wastewater treatment system; the rest of 37.7% have wastewater treatment systems equipped with simple techniques or not met environmental standards. Furthermore, only 30% of wastewater volume daily generated from hospitals or medical centers are treated.

Wastewater pollution

- There are, currently, 348 industrial parks in 61 provinces of Vietnam plus thousands of production, commercial and service enterprises
- 204 industrial parks located along three major river basins including: Nhue-Day, Cau and Dong Nai river system
- (204/348 industrial parks, accounting for 58.6%)

- In Mekong river delta area, there are 33 industrial parks in 12 provinces in the region, making up 9.5% of the total number of industrial park nationwide,
- Inspection and supervision data in some recent years showed that there are positive changes but almost all production enterprises and industrial parks still discharge wastewater exceeding national technical regulations on environment into the river, lake and ocean, etc.,

Nhue –Day river basin

- In 2008, environmental inspection data obtained from 230 enterprises, industrial parks, industrial clusters and seven craft villages which were potential to cause serious environmental pollution (referred to as “inspected entities”=IE), with a total wastewater volume of 199,442 m³/day in the area of Hanoi, Ha Nam, Nam Dinh, Ninh Binh and Hoa Binh,

- 83 % of IE, carried out Environmental Impact Assessment (EIA) or Environmental Protection Commitment (EPC) as regulated, but only 7.4% followed the approved items of EIA and EPC,
- 46.5 % of IE, carried out periodical environmental monitoring,
- 45.1% of IE, invested in construction of wastewater treatment facilities, but only 6.6% met Vietnamese technical regulations,

- 51.7 % of IE paid environmental protection fees for wastewater as regulated,
- 73.2 % of IE, are required to have air emission treatment, but 25.4% met Vietnamese technical regulations;
- 17.5 % of IE carried out hazardous waste management and treatment as regulated.

Cau River Basin

- 60% of IE did not construct the central wastewater treatment system, (located mostly in Bac Kan, Thai Nguyen, Bac Giang and Vinh Phuc provinces).
- 46.4% of IE already or partially fulfilled the obligations according to the 2008 supervision conclusions,

Limitations in state management on environmental protection in provinces

- State-owned enterprises, operating industrial parks, do not have enough funds for construction of central wastewater treatment facilities,
- Industrial park management do not strictly follow functional zoning plans in the industrial park, which result in environmental problems,
- Difficulties in planning and investment in technical infrastructure as well as investment in waste treatment system due to the neglect of environmental requirements,

- Lack of skilled personnel in Provincial Industrial Park Management Board,
- Administrative procedures in environmental protection are complicated and lengthy; feedback is slow and has not met state management requirements,
- 1% of state budget for environment in the province has not been appropriately allocated; resources for environmental inspection and supervision have not be enhanced but reduced in some departments,

- The assignment and decentralization of environmental management between the Department of Natural Resources and Environment and the Provincial Industrial Zone Management Board has not been clear, leading to the status “one province has two departments counseling for the provincial people’s committee on state management of environment”.

Dong Nai River System Basin

- In 2009, the supervision and inspection of 250 violated enterprises and industrial parks in 2008 in the area of Ba Ria –Vung Tau, Binh Duong, Dong Nai and Ho Chi Minh City showed that some enterprises had followed the legal regulations on environmental protection and significantly overcome violation damages in 2008.
- However, a high number of enterprises violated hazardous waste management regulations and some industrial parks did not finish the construction of the central wastewater treatment system as required.

Mekong River Basin

- There are 33 industrial parks in 12 provinces in the south-west region of the Mekong river delta area, making up 9.5% of the total number of industrial park nationwide
- The supervision data showed that inspected industrial parks and enterprises did not have wastewater treatment system; in particular Tra Noc 1 and Tra Noc 2 industrial parks produced thousands of m³/day of wastewater with high concentration of pollutants discharged to the receiving environment. In An Giang province, six inspected marine product processing enterprises discharged wastewater, exceeding allowed Vietnamese technical regulations, to the environment.

Air pollution

- Air pollution in Vietnam mainly originated from transportation, construction, industrial and other activities ,
- Dust, SO₂, NO₂, CO, PM, etc. are common pollutants,
- For example, the average dust content in Hanoi and Ho Chi Minh City are 2-4 times higher than regulated standards

CLIMATE CHANGE SCENARIO IN VIETNAM

- Recent studies showed that during the last 50 years, Vietnam's annual average surface temperature has increased by approximately 0.5 - 0.7 °C,
- The sea level along its coastline has risen by approximately 20 cm,
- The El-Nino and La-Nina phenomena increasingly bring about adverse impacts,

- Climate change has resulted in more severe and/or frequent occurrences of natural disasters, especially cyclonic storms, floods and droughts becoming more extreme in Vietnam.
- Mean surface air temperature shall increase between 1.1 – 1.9 oC in low and between 2.1 – 3.6 oC in high emission scenario,

- Rainfall shall increase between 1.0 – 5.2% in low and 1.8 – 10.1% in high emission scenario ,
- Sea level shall rise by 65 cm in low and by 100 cm in high emission scenario.
- Salinity intrusion in the Mekong Delta region is expected to increase, resulting in changes to cropping patterns and productivity and impose negative impacts on aquatic and terrestrial ecosystems

- The impact of climate change is likely to be crucial to water resources, agriculture, forestry, fishery, energy, transportation and health sectors.
- An updated 2009 version of the future scenarios has officially been published by the Ministry of Natural Resources and Environment of Vietnam as “Climate Change, Sea Level Rise for Vietnam” in the year 2009.

Existing and perspective strategies of Vietnam towards addressing environment and climate change

- Resolution No. 41-NQ/TW of Politburo concerning environmental protection in the period of accelerating national industrialization and modernization,
- National Strategy for Environmental Protection until 2010 and vision toward 2020,
- Law of Environmental Protection 2005
- The most important strategy of Vietnam to respond and adapt climate change was adopted and promulgated by Prime Minister on National Target Programme (NTP) to Respond to Climate Change at Decision No. 158/2008/QĐ-TTg

National Target Program (NTP) to Respond to Climate Change at Decision No. 158/2008/QD-TTg

- To identify the extent of climate change in Vietnam due to global climate change and assess climate change impacts on every sector, area and locality.
- To identify measures to respond to climate change.
- To promote scientific and technological activities to establish the scientific and practical basis for climate change response measures.
- To consolidate and enhance the organizational structure, institutional capacity and the development and implementation of policies to respond to climate change.
- To enhance public awareness, responsibility and participation; and develop human resources to respond to climate change.
- To promote international cooperation to obtain external support in response to climate change.
- To mainstream climate change issues into socio-economic, sectoral and local development strategies, plans and planning.
- To develop and implement action plans of all ministries, sectors and localities to respond to climate change; to implement projects, and first of all pilot projects to respond to climate change.

Viet Nam has been developing strategies for adaptation with climate change in all social-economic sectors and in all areas of country, especially the strategy to adapt with sea level rise in the coastal areas. A number of significant climate change related strategies have been adopted, including:

- Strategic Orientation for Sustainable Development in Vietnam.
- Global Environment Facility Strategy for period of 2001- 2010.
- Strategy of Forestry Development in Vietnam for the period of 2006-2020
- Strategy of Transport Development in Vietnam to 2020
- Strategy for Application of Nuclear Energy for Peaceful Purposes to 2020
- National Strategic Program on Energy Saving and Effective Use for 2006 - 2015

National Strategy for Environmental Protection

- Prevent and control pollution: apply measures to prevent environmental pollution; formulate plans on pollution control of national, branch and local levels in order to check, handle and control sources causing environmental pollution and deterioration throughout the country as well as in each branch and locality; apply environmental sound technologies.
- Overcome the situation of serious environmental pollution and deterioration in polluted sites, areas and regions
- Protect and sustainably exploit natural resources.
- Protect and improve the environment in key areas: urban centers and industrial parks; sea, coastal areas and off-shore islands; river basins and submerged land areas; rural and mountainous areas; natural heritages and cultural heritages.
- Conserve nature and bio-diversity: protect and develop nature conservation zones and national parks as well as protect bio-diversity.

Challenges and difficulties in implementation of strategies of environment and climate change in Vietnam

- Vietnam is a developing country, so national resources for environmental protection, responding and adapting to climate change are still limited.
- Reducing GHGs is a challenge for Vietnamese enterprises, especially small and medium enterprises, because they do not have sufficient capacity to apply new technology and adopt energy efficiency methods or clean energy;
- Climate change affects the poor in rural areas more than others, and they are least able to adapt;
- Management at the local levels have not paid appropriate attention to environmental protection and climate change issues, including responding to it and adapting to its consequences;
- The system of legislation and policy for environment and climate change have been developed but it is fragmented and its effectiveness in practice need to be improved .

CONCLUSION

- Many current Vietnamese laws and policies are consistent with the principles of sustainable development,
- Law amendment is needed, also some former legal documents need to be revised,
- In 2009, more than 30 legal documents relating to environmental protection were prepared by Vietnam Environment Administration experts,
- In 2010, more than 20 legal documents will be written,
- The strategic orientation of sustainable development in Vietnam specified that environmental protection was strong consideration for the development processes towards sustainability in Vietnam,

- With regards to climate change, the general orientation is to integrate options for environmental mitigation and adaptation on climate change in all socio-economic development activities, plans, programs.

THANK YOU