Vietnam’s NDC Action Plans in the Energy and Industrial sectors

Danang, 2016
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2. Plan to implement Paris Agreement on Climate of Vietnam
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   - On construction.
   - Planed to construction.
   - Planed to find the support.
5. Structure of NAMAs for Industrial sectors
6. These policies are implemented.
   - Energy Efficiency
   - Renewable Energy
   - Cleaner Production
   - Strategic use of clean technologies
1. Sectors under management of MOIT

MOIT is a governmental agency performing state management on industry in following 12 branches and domains:

| 1. Mechanical engineering       | 7. Chemicals            |
| 2. Metallurgy                   | 8. Industrial explosives|
| 3. Electricity                 | 9. Mining and mineral processing industries |
| 5. Renewable energy             | 11. Food-industry       |
| 6. Oil and gas                  | 12. Other processing industries |
1. Sectors under management of MOIT

MOIT is a governmental agency performing state management on Trade in following 13 branches and domains:

1. Domestic goods circulation and market
2. Import and export
3. Cross-border trade
4. External market expansion
5. Market surveillance
6. Trade promotion
7. E-commerce
8. Trade services
9. International economic-trade integration
10. Competition management
11. Imposing safeguard
12. Anti-dumping
13. Anti-subsidy and other measures to protect consumer-interest
2. Plan to implement Paris Agreement on Climate of Vietnam

- Vietnam submitted the INDC on 2015.

- Vietnam signed the Paris Agreement on 22\textsuperscript{nd} April, 2016.

- Vietnam approval the PA on 31\textsuperscript{st} October, 2016

- Vietnam approval the Plan to Implement the PA on 28\textsuperscript{th} October, 2016. (Decision 2053/QĐ-TTg)
2. Plan to implement Paris Agreement on Climate of Vietnam

In decision 2053/QĐ-TTg, the MOIT’s responsibilities:

1. Task 2. Construction, supplement, modify policies to encourage the development of solar, wind energy; develop and implement Action Plans to develop renewable energy by 2030 and vision to 2050.

2. Task 5, 12. Develop and implement NAMAs for industrial sectors.

3. Task 6. Implementing mitigation of GHG emissions to implement the NDC in trade and industry sectors.
2. Plan to implement Paris Agreement on Climate of Vietnam

In decision 2053/QĐ-TTg, the MOIT’s responsibilities:

4. Task 11. Implement GHG inventory in sectoral level to contribute the National System of GHGs Inventory.


6. Task 53. Establishment of MRV system on mitigation for the sector level the industrial sectors.

7. Task 65. Implement the integration of climate change issues and green growth in policies, plan, master plan, prioritize programs for investment and development.
3. Solutions to reduce GHGs in NDC of Vietnam

1. Energy (17 solutions)
   + Promote Energy Efficiency Programme.
   + Develop Renewable Energy.
   + Invest into Clean Energy.

2. Agriculture (15 solutions)

3. LULUCF (9 solutions)

4. Wastes (4 solutions)
4. NAMAs to implement the NDC in the Energy and Industrial Sectors.

1. Supply side:

<table>
<thead>
<tr>
<th>Areas / Sectors</th>
<th>Contribute to INDC</th>
<th>Contribute to ...</th>
<th>Plan to publish</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Produce Electricity</td>
<td>X</td>
<td></td>
<td>DDP 7</td>
</tr>
<tr>
<td>2 Coal Mining</td>
<td>X</td>
<td></td>
<td>Master Plan</td>
</tr>
<tr>
<td>3 Petroleum</td>
<td>X</td>
<td></td>
<td>Master Plan</td>
</tr>
<tr>
<td>4 Natural Gas</td>
<td>X</td>
<td></td>
<td>2017</td>
</tr>
<tr>
<td>5 New Energy and RE</td>
<td>X</td>
<td>RE Strategy</td>
<td>????</td>
</tr>
<tr>
<td>- Solar</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Wind</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Biogas</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Biomass</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Small Hydropower</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Energy from Waste</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- Geothermal</td>
<td>X</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4. NAMAs to implement the NDC in the Energy and Industrial Sectors.

2. Demand side:

<table>
<thead>
<tr>
<th>Areas / Sectors</th>
<th>Contribute to INDC</th>
<th>Contribute to</th>
<th>Plan to publish</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Steel industry</td>
<td>X</td>
<td>MP of sector</td>
<td>2018</td>
</tr>
<tr>
<td>2. Pulp and Paper industry</td>
<td>X</td>
<td>MP of sector</td>
<td>2017</td>
</tr>
<tr>
<td>3. Chemical industry</td>
<td>X</td>
<td>MP of sector</td>
<td></td>
</tr>
<tr>
<td>- Fertilizer</td>
<td>X</td>
<td></td>
<td>2016</td>
</tr>
<tr>
<td>- Other subsector</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Metallurgical industry</td>
<td>X</td>
<td>MP of sector</td>
<td></td>
</tr>
<tr>
<td>- Some subsectors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Exploitation and processing of minerals industry</td>
<td>X</td>
<td>MP of sector</td>
<td></td>
</tr>
<tr>
<td>- Some subsectors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Garment and Textile industry</td>
<td>X</td>
<td>MP of sector</td>
<td></td>
</tr>
<tr>
<td>7. Footwear industry</td>
<td>X</td>
<td>MP of sector</td>
<td></td>
</tr>
<tr>
<td>8. Foods and beverage industry</td>
<td>X</td>
<td>MP of sector</td>
<td></td>
</tr>
<tr>
<td>- Some subsectors</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Mechanical industry</td>
<td>X</td>
<td>MP of sector</td>
<td></td>
</tr>
<tr>
<td>- Some subsectors</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
5. Structure of NAMAs in Industrial sectors.


2. BAU of each sector/subsectors.

3. Potential to reduce GHG emission and the targets to reduce.

There are at least 2 targets, one should be implemented by companies, enterprises on themselves and one is the ready if there have more source support from other sources. (Approach like targets in NDC).
5. Structure of NAMAs in Industrial sectors.

4. The solution in the AP to implement NDC for each sector.
   + Technical solutions:
   + Mechanism solutions (legal, economic tools...).

<table>
<thead>
<tr>
<th>No</th>
<th>Solutions</th>
<th>Legal base</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Related to EE</td>
<td>Law of Energy Efficiencies (2010)</td>
<td>Have to do by themselves</td>
</tr>
<tr>
<td>3</td>
<td>Use RE</td>
<td>Strategy of Development RE (2015)</td>
<td>Incentive if have a support</td>
</tr>
<tr>
<td>4</td>
<td>Invest the Clean Technology</td>
<td>Strategy of Apply the Clean technology (2013) and some other Strategies.</td>
<td>Incentive if have a support</td>
</tr>
</tbody>
</table>
5. Structure of NAMAs in Industrial sectors.

5. MRV System

6. Organizing and Implementing

7. Annex: The priorities projects to implement AP.
6. These policies contribute to implementing NDC, NAMA in Energy and Industrial Sectors

I. Policies on Energy Efficiency

*With the target of saving in Energy Consumption: 1-1,5%/year.*

2. Decree detailing the Law on economical and efficient use of energy and measures for its implementation (2011).
3. Circular providing for training, grant of certificates of energy management and energy auditors (2011).
I. Policies on Energy Efficiency

5. Circular providing for elaboration of plans, report on implementation of plans on economical and efficient energy use; implementation of energy audit (2012).

6. Decision announced the list of companies large using energy annual (from 2011 – 2015).

7. Circular on energy consumption norms for beer and beverage production industry (2016).


9. Some other programs: Energy saving labeling, Earth Hours...
6. These policies contribute to implementing NDC, NAMA in Energy and Industrial Sectors

II. Policies on Renewable Energy


2. National power development plan from 2011 to 2020 with visions extended to 2030 (PDP VII – Revised - 2016)

3. Mechanism supporting the development of wind power project (2011, 7.8 Cents/KWh).


6. These policies contribute to implementing NDC, NAMA in Energy and Industrial Sectors

II. Policies on Renewable Energy

II.1. Some targets for development RE (From PDP7-Revised)

1. The power supply structure from RE:

   + 2020: 7%.
   + 2030: 10%.

1.1. The power supply from Wind:

   + 2020: 0,8%.
   + 2025: 1,0%
   + 2030: 2,1%.

1.2. The power supply from Biomass:

   + 2020: 1,0%
   + 2025: 1,2%
   + 2030: 2,1%.

1.3. The power supply from Solar:

   + 2020: 0,5%
   + 2025: 1,6%
   + 2030: 3,3%.
6. These policies contribute to implementing NDC, NAMA in Energy and Industrial Sectors

II. Policies on Renewable Energy

II.2. Some targets for development RE (From PDP7-Revised)

2. The capacity of power plan from RE:

<table>
<thead>
<tr>
<th>No</th>
<th>Total Capacity of electricity</th>
<th>2020</th>
<th>2025</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Total Capacity of electricity</td>
<td>60.000 MW</td>
<td>96.500 MW</td>
<td>129.500 MW</td>
</tr>
<tr>
<td>2</td>
<td>Capacity of sources</td>
<td>9.9%</td>
<td>12.5%</td>
<td>21.0%</td>
</tr>
<tr>
<td>3</td>
<td>Product of electricity</td>
<td>6.5%</td>
<td>6.9%</td>
<td>10.7%</td>
</tr>
</tbody>
</table>
6. These policies contribute to implementing NDC, NAMA in Energy and Industrial Sectors

II. Policies on Renewable Energy

II.3. Some policies will be constructed in future:
3. Mechanism supporting the development power project from other kind of RE (2017-2020).
4. Find finance and invest projects on RE – focus on the piloting from state companies and ready scale up to private sectors (2016-2020).
6. These policies contribute to implementing NDC, NAMA in Energy and Industrial Sectors

III. Policies of Cleaner Production in Industry

Cleaner production is a preventive, company-specific environmental protection initiative. By analyzing the flow of materials and energy in a company, one tries to identify options to minimize waste and emissions out of industrial processes through source reduction strategies.

- National Promotion Program.

- Focus on SME.
Challenges / Barriers

1. How to Convert / Calculate the targets of available MPs of every sector to the target of reduce GHGs equivalent. Those contribute to Reduce / Increase CO$_2$?

2. Price of electricity still quite low.

3. Lack off detail policies with joining from commerce bank.

4. Design of projects reduce HGHs emission for Enterprises/ Investors and Guideline to evaluate and approval project for the Investor (Banks).
Thank you!