1) Two decades of negotiation
   • “Top down”
   • “Bottom up”
2) Why INDC?
3) Paris’ expectation
Climate Change Negotiation Process

- **Original Bali Process**
  - Bali Roadmap: *Obj*: to reach a post-2020 Agreement in 2009
  - Copenhagen Accord: Declaration of major economies outside the UNFCCC process
- **Post Copenhagen Reconstruction**
  - Durban Platform: 2nd commitment period under KP, lunch
  - Durban Platform to reach new Agreement by 2015.
  - Warsaw Pathway: Effective closure of Bali Process: details of KP-2CP
  - Doha Gateway: Call for Action: INDC applied to all
- **Durban Platform**
  - Warsaw Pathway: Deadline for an International Post-2020 Agreement
  - Lima Call for Action: INDC applied to all


- IPCC
- UNFCCC
- COP3
- COP11
- COP12
- COP13
- COP14
- COP15
- COP16
- COP17
- COP18
- COP19
- COP20
- COP21

- CBD
- Kyoto
- COP7
- CMP1
- CMP2
- CMP3
- CMP4
- CMP5
- CMP6
- CMP7
- CMP8
- CMP9
- CMP10
- CMP11

**Where we are?**

**How to get there?**

**Where we want to go?**
Where we are?

Global Emissions (1850 – 2011) (MtCO₂)

Vietnam: 2010: 246.8 MtCO₂eq; Projection: 2020: 474.1 MtCO₂eq; 2030: 787.4 MtCO₂eq
1850 - 1960: Mostly from developed

1960 - 2011: Appeared some big emitters
1990 – 2011: Rise of Asia

2007: Developing countries surpassed developed countries’ emissions
Cumulative GHG emission 1850 - 2011 (% world total)

- United States: 27%
- European Union (28): 17%
- China: 11%
- Russian Federation: 8%
- Japan: 4%
- India: 4%
- Canada: 3%
- Mexico: 3%
- Brazil: 2%
- Indonesia: 2%
- Rest of the World: 15%

Cumulative emission 1990 - 2011 (% world total)

- United States: 31%
- China: 16%
- European Union (28): 12%
- Russian Federation: 15%
- Brazil: 12%
- Indonesia: 10%
- India: 4%
- Japan: 4%
- Canada: 4%
- Mexico: 3%
- Rest of the World: 30%
GHG Emission of top 10 emitter by 2011

GHG Emission per capita of top 10 emitters by 2011
Emission intensity of top 10 emitters by 2011

- Top 10 emitter accounted for 72% world total (excluding LULUCF).
- 100 low emitters accounted for < 3%.

Energy sector > 75%

Global Top 10 Greenhouse Gas Emitters
In 2012, the top 10 GHG emitters accounted for more than two thirds of the global emissions total.
Find the newest data on global greenhouse gas emissions on the CAIT Climate Data Explorer.
Viet Nam

GHG Emission- total 2010 (without LULUCF)

- After: China, US, EU, India, Russia, Japan, Brazil, Germany, Indonesia, Canada, Iran, Mexico, South Korea, UK, Australia, France, Saudi Arabia, Italy, South Africa, Turkey, Ukraine, Poland, Argentina, Spain, Thailand, Nigeria, Pakistan, Kazakhstan, Venezuela, Malaysia, Egypt
- Before: Iraq, Angola, Holland, Uzbekistan, UAE,…

263.98 Mt CO₂e by 2010 (without LULUCF)
Ranked by 31

- 3.04 Mt CO₂eq/capita
- 64124 Ton CO₂eq/ Mil. GDP
Viet Nam

Where we want to go?
To prevent the temperature rising more than 2°C by the end of the century, total GHG emission should be limited below 1000 GtC.
Why Negotiation

Parties has agreed that:

1) CC has occurred and has been occurring;
2) CC was caused by the human-induced activities;
3) Human could intervene to slow down/reduce the CC;
4) Protecting the Earth’s climate system is common but differentiated responsibilities of all countries in the way that:
   • Developed countries should be pioneers
   • Demand and specific circumstances of developing countries should be fully taken into account

=> To negotiate on the specific responsibilities of each countries
How to get there?

Kyoto Protocol 1997?
Kyoto Protocol

Developed countries cut their GHG emission by an average of 5% for the period 2008–2012 compared with 1990 level.

Should Kyoto Protocol be extended to 2012 – 2020?
Roadmap Map in Developing INDC Idea

From NAMA to INDC

NAMA taken in the context of sustainable development and supported by finance, technology, and capacity development

NAMA should be implemented in a MRV manner

The idea of INDC is emerged

Launching for developing countries using their own resources, (domestically supported NAMA)

Consider the draft text before the COP20

Invites all Parties to prepare INDC, submit before 5/2015.

INDC will become Appendix of 2015 Agreement

Annex I

Limit GHG Emissions

Economy Wide Reduction Targets

Post 2020

INDC

Non Annex I

Take Measures to Mitigate Emissions

NAMA

INDC

Applicable for all parties, including Annex I and Non-Annex 1
INDC: Intended Nationally Determined Contribution

1) Intended
   • Contribution is intended since its legality and types of contribution will be decided in the 2015 agreement ⇒ May be reviewed or adjusted.

2) Nationally determined
   • “Contributions” were developed by individual countries rather than a multilateral decision.

3) Contribution
   • “Contributions” to the 2°C target.
   • “Contribute” to achieving national goals related to a transition to a low-carbon economy, benefits from energy efficiency, deforestation reductions, and air quality improvements, etc.
   • Indicating “contributions” does not imply either the legality level and/or types of the contributions.
INDC in Climate Change Negotiation

Understanding of INDC:

• "Contributions" is compromise of “commitment” used for developed countries and NAMA which is used for developing countries

• “Contributions” to the GHG emission to achieve the 2°C target

• "Contributions" including adaptation, financing, capacity building, support and technology transfer;

Overall, INDC will be an important indication of the efforts of the international community in addressing climate change in order to achieve the “2°C target”.

196 countries will jointly be sharing the emission of the 2°C target.

• Developed countries suppose that they should be shared greater emission in view of existing infrastructure that’s could not be closed immediately. The developing countries could be bypassing the old technology for going ahead with green growth.

• Developing countries suppose that they need development and have right to use fossil fuel that are available, cheap and reliable. Why they have to use the renewable energy?
COP20 (2014): A Compromise

1) Developing countries:
   • Wanted the INDC to include plans for adaptation as well as mitigation, and they wanted developed countries to include financial support for poorer countries.
     => No commitments to new money were made, and the inclusion of adaptation plans will be optional, not compulsory.

2) Developed countries:
   • Wanted all countries to provide standardized information on their emissions targets and plans, to ensure transparency and comparability.
     => Key elements were agreed on, but only in the form of guidance, not as requirements. The proposal by EU and US that countries’ plans should be subject to some kind of assessment was dropped from the final text.

INDC in Climate Change Negotiation

Lima agreement creates obligations for countries without regard for the distinction between Annex I and Non-Annex I.

It uses a new phrase drawn from the recent agreement between the US and China: Countries’ responsibilities will be based on “Common but differentiated responsibilities and respective capabilities in light of different national circumstances”.

The firewall has been breached.

=> It ends the binary distinction, longstanding division of the world into only two kinds of countries, developed and developing.
37 parties (64 countries) submitted INDC

- 91.9% is GHG target
- 8.1% is GHG target and non GHG target
- 27 INDC included both mitigation and adaptation
- 10 INDC include only mitigation
### Submitted INDC

<table>
<thead>
<tr>
<th>Parties</th>
<th>Emission 2011 (Mt)</th>
<th>Summary of INDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Australia</td>
<td>685,05</td>
<td>Reduce emission by 26 to 28% compared to 2005 by 2030.</td>
</tr>
<tr>
<td>Canada</td>
<td>847,08</td>
<td>Reduce emission by 30% compared to 2005 by 2030</td>
</tr>
<tr>
<td>China</td>
<td>10684,29</td>
<td>Reach the peak of CO₂ emission by 2030. Reduce emission intensity (CO₂/GDP) by 60% to 65% by 2030 below 2005 levels. Increase the share of non fossil primary energy to 20%. To enhance the forest carbon stock by 4.5 billion m³ compared to 2005</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>149,91</td>
<td>By 2030, limiting the net emission of 145 MtCO₂ (64% compared to BAU) = reduce the total emission from 150 MT/year to 145 MT/year by 2030. 90 million of population</td>
</tr>
<tr>
<td>EU</td>
<td>4263,15</td>
<td>Commit for joint implementation to reduce emission at least 40% compared to 1990 by 2030 as concluded of EU on10/2014.</td>
</tr>
<tr>
<td>Gabon</td>
<td>7,17</td>
<td>By 2025, reduce at least by 50% compared to BAU, and extendable to 2030 and 2050.</td>
</tr>
<tr>
<td>Iceland</td>
<td>2,64</td>
<td>With EU to reduce emission by 40% by 2030 compared to 1990. If EU could not achieve the agreement, it will then set the national target.</td>
</tr>
<tr>
<td>Japan</td>
<td>1207.3</td>
<td>Reduce emission by 26.0% by 2030 compared to 2014 (25.4% compared with 2005)</td>
</tr>
<tr>
<td>Kenya</td>
<td>69,6</td>
<td>Reduce emission by 30% by 2030 compared to BAU</td>
</tr>
<tr>
<td>South Korea</td>
<td>661,39</td>
<td>By 2030, to reduce emission by 37% compared to BAU (BAU, 850.6 MtCO2eq) for all sector of the economy. SK will use the carbon credit.</td>
</tr>
<tr>
<td>Mexico</td>
<td>723,19</td>
<td>Reduce emission unconditionally by 22% of GHG and 51% of black carbon. Net emission reach the peak by 2026. To reduce emission intensity by 40% for the period of 2013-2030.</td>
</tr>
<tr>
<td>Norway</td>
<td>26,12</td>
<td>Reduce GHGs emission by at least 40% below 1990 by 2030.</td>
</tr>
<tr>
<td>New Zealand</td>
<td>58.47</td>
<td>Reduce emission by 30% by 2030 compared with 2005</td>
</tr>
<tr>
<td>Russia</td>
<td>2216,59</td>
<td>Limit the GHG emission by 70-75% compared with 1990 that might be the long term target making the maximum possible account of absorbing capacity of forest</td>
</tr>
<tr>
<td>Singapore</td>
<td>56,13</td>
<td>By 2030, reduce emission intensity by 36% compared with 2005, peak by 2030.</td>
</tr>
<tr>
<td>Switzerland</td>
<td>47,28</td>
<td>By 2030, reduce emission by 50% compared with 1990, i.e 35% for the period of 2021-2030. It might use carbon credit</td>
</tr>
<tr>
<td>US</td>
<td>6135,03</td>
<td>By 2025, cut the economy wide emission by 26 to 28% compared with 2005 domestically</td>
</tr>
</tbody>
</table>
Legal bidding

- Paris may get an agreement:
  - New Convention?
  - Protocol?
  - Decisions of COP?

- $2^\circ$C target might be included in the agreement. However, it would be difficult for legal bidding for each parties.

- In any cases, the legal bidding agreement might not only be legal bidding on target of emission reduction target.
INDC and Road to Paris (3)

“Top down” and “Bottom up”

• KP set the emission reduction goal for the developed parties, but it was not effective in practice (Canada has not complied and withdrawn from the KP without any punishment)

• INDC has applied the bottom up approach that might be more effective.

=> Paris could apply the “top down” approach by “cumulating” and assess the commitment compared with global target.

INDC is the foundation for agreement in Paris?

• Whether COP21 may have any breakthrough or not, INDC would be the roadmap for investors.

• If parties will reach an agreement in Paris => National GHG budget will be legal bided, investor may ask “Is the project included in INDC?”.

• If parties will not reach an agreement in Paris => INDC would be used as the reference indicator of “acceptable” for investment.

• The submission of INDC will be the indication for the assessment of contribution of parties => The parties making more contribution could be prioritized on climate finance.
Vietnam’s INDC

VIETNAM’S PREPARATION FOR INDC

- Vietnam’s INDC is being developed by MONRE in collaboration with MPI, MoF, MoIT, MARD, MoT, MoC, MoFA, and MOST.
- DMHCC serves as the national focal point to lead and coordinate with relevant agencies.
- Support from UNDP and GIZ for the development of INDC.
INDC DEVELOPMENT STEPS

1) Management process,
2) Technical process,
3) Consultation process.

1) The Government has assigned MONRE to lead and coordinate with MPI and other relevant line ministries to conduct research, review and assessment of the impacts of emission reduction options.

2) Prime Minister has assigned the National Steering Committee for UNFCCC and Kyoto Protocol to lead and coordinate with Vietnam’s Climate Change Negotiation Working Team to develop Vietnam’s INDCs to the 2015 agreement (by Office of Government’s Dispatch 1454/VPCP-QHQT dated 11th August 2014).

3) MONRE has issued Decision 119/QĐ-BTNMT dated 22nd Jan 2015 on the establishment of Vietnam INDC Working Team.

4) International cooperation (support from GIZ and UNDP).
(2) Technical Process

Four sets of actions were defined:

1) Identification and analysis of existing information.
2) Analysis and identification of prioritized mitigation actions.
3) Analysis and identification of prioritized adaptation actions.
4) Development of INDC.

(3) Consultation Process

1) Workshop:
   • Kick-off workshop
   • Inception workshop
   • Mid-term workshop
   • Consultation workshop 1
   • Consultation workshop 2

2) Information and experiences sharing at national and international workshops
(3) Consultation Process
Information Sharing
Structure of Viet Nam’s INDC

INDC to be submitted to UNFCCC (Vietnamese, English)

- Introduction.
- Climate Change Mitigation.
- Climate Change Mitigation

Full Report

Background, Objectives, Scope

Mitigation Component
- Baseline Scenarios (BAU)
- Mitigation Options
- GHG mitigation Contributions
- Gaps and Needs

Adaptation Component
- Climate Change Impacts, Vulnerability
- Losses and Damages
- Adaptation Measures before 2020
- Adaptation Gaps
- Adaptation post 2020
- Capacity Building, Technology, Finance
- Monitoring and Evaluation

Progress

Aug 2014 - Dec 2014

- INDC Kick-off Workshop
- Team meetings
- Concept note & work plan
- INDC Writing

Jan 2015 onwards...

- Inception WS
- VPCC consultation WS
- Mid-term WS
- Consultation WS
- Submit to Government
- Review by Line Ministries
- Consultation

Technical Analysis

- Review by Line Ministries
1. Business As Usual Scenarios (BAU).
2. Mitigation Options.
3. Contributions in GHG Mitigation.

Included in:
- GHG Inventory in 2010: BUR1 (2014).

Unit: MtCO$_{2eq}$

<table>
<thead>
<tr>
<th>Sector</th>
<th>1994 (INC)</th>
<th>2000 (SNC)</th>
<th>2010 (BUR 1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>25.6</td>
<td>52.8</td>
<td>141.1</td>
</tr>
<tr>
<td>Industrial Process</td>
<td>3.8</td>
<td>10.0</td>
<td>21.1</td>
</tr>
<tr>
<td>Agriculture</td>
<td>52.4</td>
<td>65.1</td>
<td>88.4</td>
</tr>
<tr>
<td>LULUCF</td>
<td>19.4</td>
<td>15.1</td>
<td>-19.2</td>
</tr>
<tr>
<td>Waste</td>
<td>2.6</td>
<td>7.9</td>
<td>15.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>103.8</strong></td>
<td><strong>150.9</strong></td>
<td><strong>246.8</strong></td>
</tr>
</tbody>
</table>
### Unit: MtCO₂eq

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2020</th>
<th>2030</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>141,1</td>
<td>389,3</td>
<td>675,5</td>
</tr>
<tr>
<td>Agriculture</td>
<td>88,3</td>
<td>100,8</td>
<td>109,3</td>
</tr>
<tr>
<td>Waste</td>
<td>15,4</td>
<td>26,6</td>
<td>48,0</td>
</tr>
<tr>
<td>LULUCF</td>
<td>-19,2</td>
<td>-42,5</td>
<td>-45,3</td>
</tr>
<tr>
<td>Total</td>
<td>225,6</td>
<td>474,2</td>
<td>787,5</td>
</tr>
</tbody>
</table>

#### Vietnam's INDC on GHG Mitigation

**Unconditional contribution**

By 2030, through domestic efforts, Viet Nam will reduce GHG emissions compared to the BAU, in which:

- Reducing the emission intensity per a unit of GDP compared to the 2010 levels;
- Increasing the forest cover to 45%.

**Conditional contribution**

The contribution could increase if Viet Nam receives international support through bilateral and multilateral cooperation as well as implements mechanisms under the Global Climate Agreement.
<table>
<thead>
<tr>
<th>Sector</th>
<th>Unconditional</th>
<th>Conditional</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Reduction compared to BAU (%)</td>
<td>Reduction compared to (MtCO$_{2eq}$)</td>
</tr>
<tr>
<td>Energy</td>
<td>7,1*</td>
<td>48,3</td>
</tr>
<tr>
<td>Agriculture</td>
<td>11,6</td>
<td>12,7</td>
</tr>
<tr>
<td>Waste</td>
<td>8,6</td>
<td>4,1</td>
</tr>
<tr>
<td>LULUCF</td>
<td>83*</td>
<td>37,5</td>
</tr>
<tr>
<td>Total</td>
<td>13%</td>
<td>102,6</td>
</tr>
</tbody>
</table>

1) Increase the role of Government in CC response
2) Improving effectiveness and efficiency of energy use; reducing energy consumption
3) Changing the fuel structure in industry and transportation
4) Promote effective exploitation and increase the proportion of new and renewable energy sources in the nation’s energy production and consumption.
5) Reduce greenhouse gas emissions through the development of sustainable agriculture, improve competitiveness of agricultural production
6) Management and sustainable development of forest, increasing carbon removals and biodiversity conservation
7) Waste management
8) Communication and awareness raising
9) Enhancing international cooperation
1. **Climate Change Impacts in Viet Nam**
   - CC, CC scenarios, Impact and Vulnerability, Losses and Damages

2. **The Need to Include an Adaptation Component in the INDC**

3. **Climate Change Adaptation until 2020; Gaps in Policies and institutions, Capacity, Finance, Technology**

4. **Climate Change Adaptation in the 2021 – 2030 period**
   - Pro-active Response to Hazards and Climate Monitoring
   - Ensuring Social Security
   - Response to Sea Level Rise and Urban Inundation

5. **The need for capacity building, technology transfer and finance for climate change adaptation**
   - Strengthen the capacity to adapt to climate change at national and local level.
   - Technology transfer:
   - Finance for climate change adaptation

---

**Advantage**

**International:**
COP’s decision: "Invites all Parties to consider communicating their undertakings in adaptation planning or consider including an adaptation component in their INDC.

**Domestic:**
- Following construction oriented economy towards low-carbon, have laws, strategies and policies: Resolution 24-NQ-TW on "Actively respond to CC, strengthen natural resources management and environmental protection"; Disaster Prevention Law (2013); LEP (2014); Strategy on Climate Change (2011); Green growth Strategy (2012); Action Program.
- BAU is determined and communicated in BUR1.
- Experience in management of CDM projects, developing NAMA, JCM.
Challenges

**International:**
- No specific guidance on INDC from UNFCCC.
- Difficult to reflect adaptation contributions because each country has different circumstances, conditions and different solutions.
- Financing for climate change uncertainty, lack of specific commitments.

**Domestic:**
- Need significant investment for mitigation options, especially in energy.
- Management capacity, implement mitigation activities are limited.
- National GHG inventory system and MRV not yet in place.
- Lacking a legal basis for liability in greenhouse gases inventory and MRV.
- Coordination mechanisms and implementation of adaptation and mitigation.
- Preparation time is pretty short.

Conclusion

1) Preparation of INDC is the responsibility of all Parties. VN continues to show positive and proactive role by developing and submitting development and INDC on time.

2) INDC will become a legally binding commitment. Therefore, type and level of contribution must be feasible, achievable and ambitious compared to other parties that have the same condition.

3) In the short term, it may need great resource to implement INDC. However, in the longer run, INDC may also bring about the benefit of transferring the green technology, restructuring the economy toward the low carbon economy and improving the competitiveness of the economy.

4) INDC is the common effort => Apart from the implementation of national resources, VN will perform much better if there is international support.

5) It will certainly undergo rounds of negotiation on “fair” and “ambitious”.