Capacity building support of MRV for local governments by IGES/KUC

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IGES
Cities as the largest source of global CO$_2$

Source: “WRI GHG Protocol City Project: Experience and Lessons Learned”, March 2013, Wee Kean Fong
Rapid urbanization causes many problems

<table>
<thead>
<tr>
<th>Sector</th>
<th>Problems</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy</td>
<td>Increase in energy demand; Cost; etc.</td>
</tr>
<tr>
<td>Transport</td>
<td>Frequent traffic jam; Traffic accidents; Air pollution; etc.</td>
</tr>
<tr>
<td>Waste</td>
<td>Improper solid waste management; Odor; Contamination of ground water; etc.</td>
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<tr>
<td>Water</td>
<td>Access to clean water is limited; Lack of wastewater treatment; flood prone; etc.</td>
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<tr>
<td>Green</td>
<td>Diminishing green space; Heat island phenomenon; etc.</td>
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</tbody>
</table>

GHGs

Climate change

Quality of life? Sustainable development?
Needs of mitigation actions by maximizing co-benefits

- Regulations
- Incentive provision
- New technology
- Awareness-raising etc.

GHG emissions

Co-benefits

MRV

(Measurement, reporting & verification)

Bad

Good

Environmental conditions
Local governments play an important role

**Action plan**

- GHG accounting skills

**Network**
- Learning & transferring good practices
- Attracting investors

**Local government**

**Management**
- Planning & monitoring
- Budget
- Institutional arrangement
- Capacity building

**Mitigation**
- Introduction of technology
- Awareness-raising
Background:
Local governments play an important role for realizing sustainable and low-carbon city development.

Needs & Gaps:
- Clear target setting (vision)
- Sustainable institutional setup
- Effective low-carbon policy & measures
- GHG accounting skills
- Awareness-raising

Our approach for capacity building:
- JICA NAMA/MRV Training Course in Kitakyushu (3 weeks);
- On-site workshop with local stakeholders;
- Baseline studies & sharing good practices of other cities;
- Support for action plan development;
- JCM feasibility studies in Surabaya & Haiphong.

Co-benefits
- Horizontal deployment
- Efficient decision making
- Regional leaders
- Low-carbon & sustainable cities in Asia!
<table>
<thead>
<tr>
<th>Population</th>
<th>Surabaya</th>
<th>HCMC</th>
<th>Cebu</th>
<th>Nonthaburi</th>
<th>Phitsanulok</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 million</td>
<td>7 million</td>
<td>0.87 million</td>
<td>0.25 million</td>
<td>0.12 million</td>
</tr>
</tbody>
</table>

**Objectives of inventory development**

- In line with the national policy
- In line with the national policy
- Municipal government’s initiative
- -
- Mayor’s initiative

**Producer**

- BAPPEKO & ITS
- HCMC Climate Change Bureau
- World Bank
- Municipal government
- Municipal government

**Year**

- 2011
- 2012
- 2010
- 2012
- 2013

**Scope**

- City-wide
- Municipal-level / City-wide
- City-wide
- Municipal-level
- Municipal-level

**Gas**

- CO2, CH4
- CO2, CH4
- CO2
- CO2, CH4, HCFCs
- CO2

**Guidelines**

- 2006 IPCC GLs
- GPC 2006 IPCC GLs
- 2006 IPCC GLs
- ICLEI (2010)
- GPC 2006 IPCC GLs

**Sector**

- Energy
- Solid waste
- Wastewater
- Agriculture & Husbandry
- Energy
- Solid waste
- Water
- Energy
- Solid waste
- Water
- Fugitive emissions
- All urban sectors

**Data source (AD)**

- Data from municipality
- Data collected by municipality
- World Bank (2013)
- Data collected by municipality
- Data collected by municipality

**Data source (EF)**

- IPCC default values
- IPCC default values, IEA, IGES grid EF
- -
- IPCC default values, TGO, TH database, etc.
- Same as Nonthaburi

**GHG inventory development status in FY2013**

- Sustainable low-carbon city development
Some lessons learnt from our experience - 1

1. **Challenging to mainstream climate change** into existing **planning and policy** processes
   - They are aware of the issue, but not a real priority / not fitting with local government legal mandate

2. **Incentives and benefits** for low-carbon city measures are required
   - Measures should be ‘no-regrets’ and contribute to real economic, social and environmental benefits.

3. **Limited authority of single municipality** in certain sectors such as transport & energy
   - However, local government (municipalities) can still be an effective leader in convening, coordinating and educating local stakeholders such as residents, private sector, schools etc.
   - Local governments can be a source of innovation to influence national policy
Some lessons learnt from our experience - 2

4. “MRV” is a good opportunity to realize existing urban development plans;
   - Chance to attract investments for improving the quality of life.
   - However, local governments need to appeal their capability of GHG accounting skills.

5. Interpretation of guidelines is required (IPCC guidelines, GPC, etc.);
   - Hard to understand for the first readers. Hands-on training would be helpful.

6. National GHG inventory is a good reference for local governments;
   - It indicates data sources. Breakdown data may be available from local departments.
   - Provision of a manual by national governments may be of helpful as part of support for action plan development.

7. Difficult to **sustain data collection** on an annual basis
   - Inter-departmental coordination and cooperation is crucial
   - Leadership from the high-level is essential

Summary

- City governments play an important role for a sustainable & low-carbon city development;
- Capacity building is needed (incl. technical aspect)
- IGES Kitakyushu Urban Centre provides relevant supports (e.g., GHG inventory development) for city governments in Asia
- National governments can facilitate local governments’ actions by providing incentives and support.
THANK YOU FOR YOUR ATTENTION

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