Comments on Japan LCS for Transportation Sector (Dr. Yuichi Moriguchi)

Rizaldi Boer
Centre for Climate Risk and Opportunity Management (CCROM)
Bogor Agriculture University
Estimated Global Emission by 2030

Transportation sector contributes 16% of the total emissions, i.e. 11 Gt CO$_2$/y. About 83% of the emission from road transportation

Potential Abatement for transportation sector is about 3.2 Gt CO$_2$/y

BAU and Mitigation Scenario Emission compare to 1990’s emission in 2020 from Japan Transportation Sector

Transportation sector contributes about 19% of the total Japan emissions and more than 80% of the emission from road transportation (motor vehicles).

Source: Based on Moriguchi (2009)
Global Scenario from McKinsey and Co (2009)

Combustion Engine Efficiency offers 29% reduction, Mix Technology word offer 33% reduction and HE world offer 35% reduction.

Japan Baseline scenario:
PC-HEV: 20%
LDV-HEV: 10%

Japan HEV+DM Scenario:
PC-HEV: 37%
LDV-HEV: 20%
LPC-BEV: 37%

HEV in Japan scenarios is higher than global scenarios. Further reduction from DM?

Electric Vehicle is an expensive technology

How much cost required by Japan to reduce emission by using HEV technology and its potential to be transferred to developing worlds?

*Will it be effective for developing countries?*

Emission growth from transportation sector under BAU is second largest after industries. Main contribution is from road transportation.

Developing Worlds

1. Adopt/Adapt advanced vehicle technologies with less/no CO2 emission (HEV) ~ too expensive

2. Improve transportation management, including advanced transportation control and development of mass rapid transit system.
How to push and assist developing countries reduce their emission from transportation sectors?

• New loan/ODA policies?
  – Restriction loan/ODA for toll road construction
  – Provide more support and types of concessional investment/ODA for supporting the development of Mass Rapid Transportation system since it also requires very high investment
  – Accelerate transfer of technologies on mass rapid transport system

• Debt swap system for the acceleration of adoption and implementation of cost effective mitigation technologies, and the improvement of transportation management and advance transportation control
THANK YOU!