



Low Carbon Multiple Benefits for Sustainable Development

Mikiko Kainuma

AIM Team
National Institute for
Environmental Studies
27 June 2009
IGES, Hayama, Japan

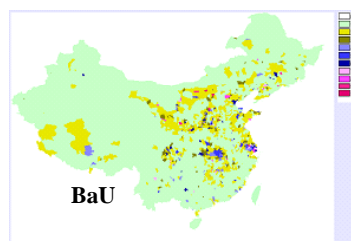


1

Energy saving could reduce air pollutants and improve health impact



BaU



BaU



Policy



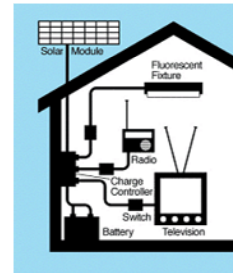
Policy

Geographical distribution of PM₁₀
emissions across China in 2020 (unit: ton)

Ambient concentration of PM₁₀
in urban areas of China in 2020 2

Local renewable resources for local demand could improve living standard

- Local renewable resources could increase electrification.
- Marketing technologies effective for local way of living could contribute to economic livelihoods of local communities.
- Training local youth/women to take up entrepreneurial services for design, assembly, delivery, and post-installation maintenance of new technologies could help poverty alleviation.



PV system in a house



LCS infrastructure improves living standards

- Low carbon transport needs good city design.



Vancouver

- Comfortable and green building improves livelihood and supports sustainable building industry.



フライブルク



ライデン

LCS can enhance energy and food securities

- Substitution of gasoline by domestically produced alcohol as a vehicle fuel avoids CO₂ emissions as well as reduces the demand for foreign currency.
- Energy efficiency improvement and local renewable resources could enhance energy security.
- LCS promotes seasonal local food and contributes to reduce the impacts on crop productivity.
- Local food production/consumption also cuts transport energy and enables local communities of farmers, low-scale processing & traders economically

5

Thank you!

6