

Assessing and communicating development impacts

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Why development benefits?

Priorities of developing countries

Driver of low-carbon development

Why an impact assessment?

Alignment with development priorities

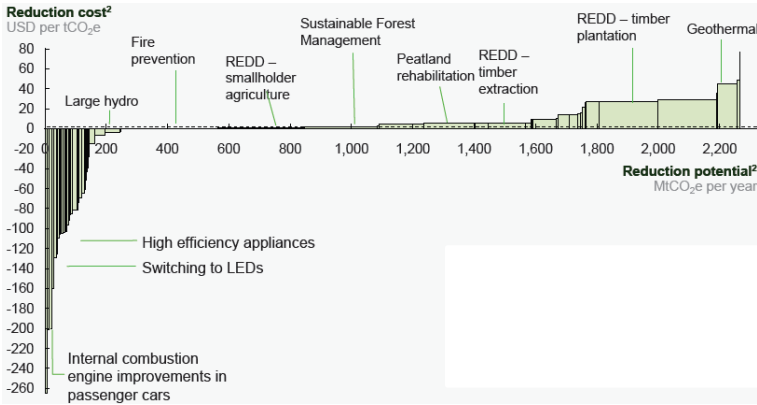
Communication with decision makers

*Germany's solar PV feed-in tariff
China's energy efficiency targets*

Mitigation

Development

\$ and tCO₂-eq



Social

Economic

Environmental

The challenge

Development impact assessment

- Project from LEDS Global Partnership (LEDS GP)



ECN



Deutsche Gesellschaft
für Internationale
Zusammenarbeit (GIZ) GmbH



International
Institute for
Sustainable
Development

- Visualisation with aims of:
 - Communicating development impacts
 - Facilitating decision making
- Allows various analysis approaches
- Field-testing tool

Kenya case study

| | Climate | | | Development | | | | |
|--------------------------|--|---|-------------------|-----------------------------|-------------|-------------|-----------------|---------------|
| | Abatement potential (MtCO ₂) | Abatement cost 2030 (USD/tCO ₂) | Adaptation impact | Congestion and road quality | Road safety | Air quality | Energy security | Food security |
| Improved passenger stock | 0.6 | 128 | — | — | ● | ● | ● | — |
| Improved HDV stock | 0.8 | -35 | — | — | ● | ● | ● | — |
| Bioethanol | 0.55 | -15 | ◡ | — | — | ● | ● | ◡ |
| Biodiesel | 1.2 | 66 | ◡ | — | — | ● | ● | ◡ |
| BRT system for Nairobi | 2.3 | n/a | — | ● | ● | ● | ● | — |
| LRT system for Nairobi | 0.6 | n/a | — | ● | ● | ● | ● | — |
| Shift of freight to rail | 0.8 | n/a | — | ● | ● | ● | ● | — |

Context

- Developing a Climate Change Action Plan
- Low emissions, but many low-carbon development opportunities
- Action Plan covers 8 elements, including long-term low-carbon climate resilient development pathway,
- Participatory, multi-stakeholder process
- Six sector analysis

energy

transport

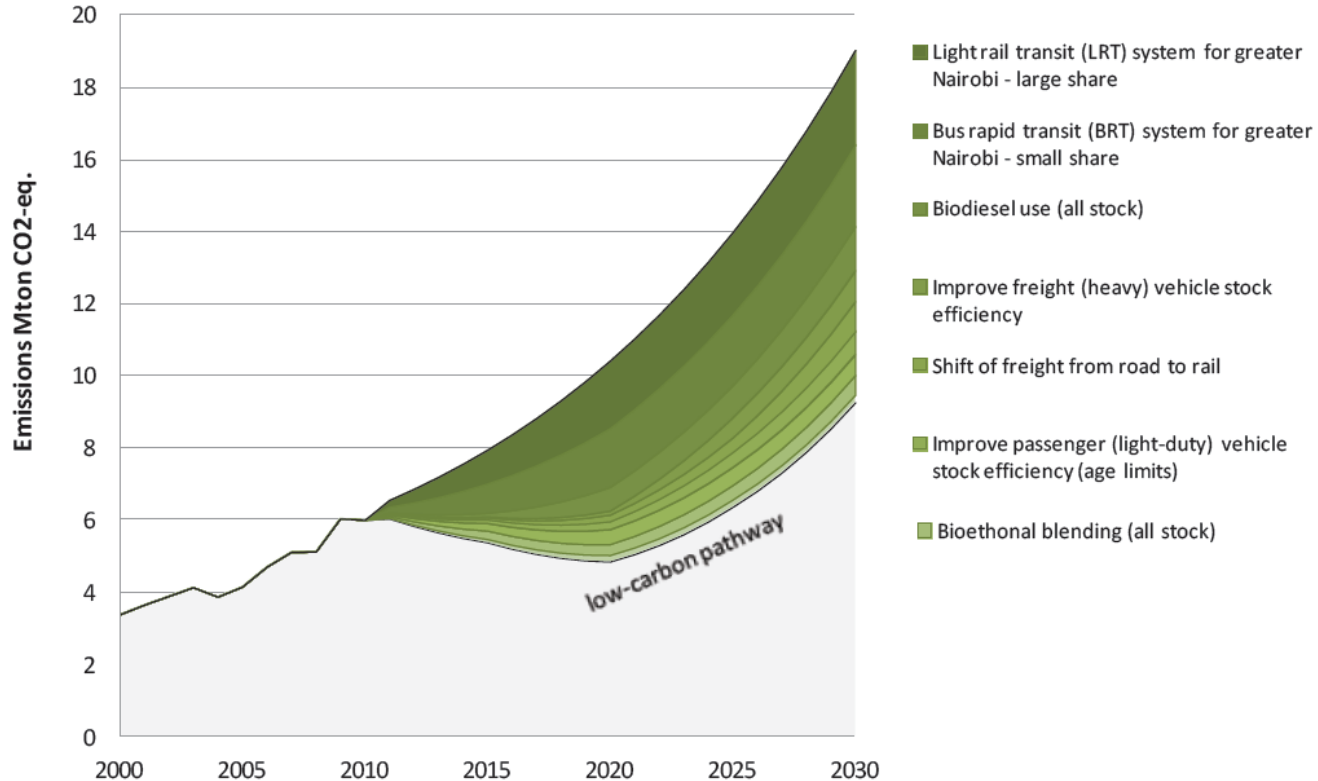
waste

forestry

industry

agriculture

Transport sector mitigation potential



DIA tool in transport sector

| | Climate | | | Development | | | | |
|--------------------------|--|---|-------------------|-----------------------------|-------------|-------------|-----------------|---------------|
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- High positive
- ◐ Positive
- Neutral / minor impact
- ◑ Negative
- ◕ Uncertain

Initial experiences

Value

Sustainable development impacts and alignment with government priorities are important for prioritisation

Provides

catalyst for discussion

summary of the total analysis

basis for comparing options

Questions

Need for quantification of key indicators?

May be a need to better reflect political priorities, but how?

Next step: Case study in the electricity sector comparing DIA and stricter multi-criteria analysis

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For further information on the Mitigation analysis of the Kenya Climate Change Action Plan: Deborah Murphy, IISD (Project coordinator): dmurphy@iisd.ca

For further information on the Kenya Climate Change Action Plan: Stephen Mutua King'uyu: Ministry of Environment, Kenya: skinguyu@environment.go.ke