



Nationally appropriate mitigation actions (NAMAs)

Lessons from examples and research

1 October 2010

Christian Ellermann, Ecofys Germany, c.ellermann@ecofys.com

Dr. Niklas Höhne, Ecofys Germany, n.hoehne@ecofys.com

Content

- Overview of 'nationally appropriate mitigation actions'
- Open issues
- NAMA examples
- Conclusions

Origin

Paragraph 1 (b) (ii) of the Bali Action Plan of 2007:

*"**Nationally appropriate** mitigation actions' by developing country Parties in the context of sustainable development, **supported** and enabled by technology, financing and capacity building, in a **measurable, reportable and verifiable** manner."*

What is a NAMA?

Appendix II to the Copenhagen Accord

[illegible]

NAMA categories

- **Unilateral NAMAs**

Mitigation actions undertaken by developing countries on their own;

- **(Directly) Supported NAMAs**

Mitigation actions in developing countries, supported by climate finance from Annex I countries

- **Credited NAMAs**

Mitigation actions in developing countries generating credits to be sold on the carbon market (e.g. sectoral crediting).

Current developing countries' proposed NAMAs under Copenhagen Accord

	Unilateral	Conditional to support	Unclear
Target (climate neutrality)	Maldives	Bhutan, Costa Rica, Papua New Guinea	
Target (below BAU)	Brazil, Indonesia, Israel, Mexico, Korea, Singapore	Chile, Mexico, Papua New Guinea, South Africa	
Target (below base year)	Moldova	Antigua and Barbuda, Marshall Islands	
Target (intensity)	China, India		
Strategies, policies, specific projects	Colombia	Afghanistan, Congo, Madagascar, Sierra Leone, Brazil, Chile, Colombia, Ghana, Tunisia, Peru	Ivory Coast, Eritrea, Togo, Armenia, Benin, Cameroon, Central African Republic, Chad, Gabon, Jordan, Macedonia, Mauritania, Mongolia, Morocco, San Marino, Togo

See also www.climateactiontracker.org

NAMAs under development (selection)

- South Africa (renewables initiative, other sectors)
- Mexico (transport sector, building sector)
- Tunisia (solar plan)
- ... (more, but not public)

Testing NAMAs

- Identification of NAMAs and using templates to make NAMA proposals



Paper available at www.ecofys.com and in Environmental Liability (2010) 3

Content

- Overview of 'nationally appropriate mitigation actions'
- **Open issues**
- NAMA examples
- Conclusions

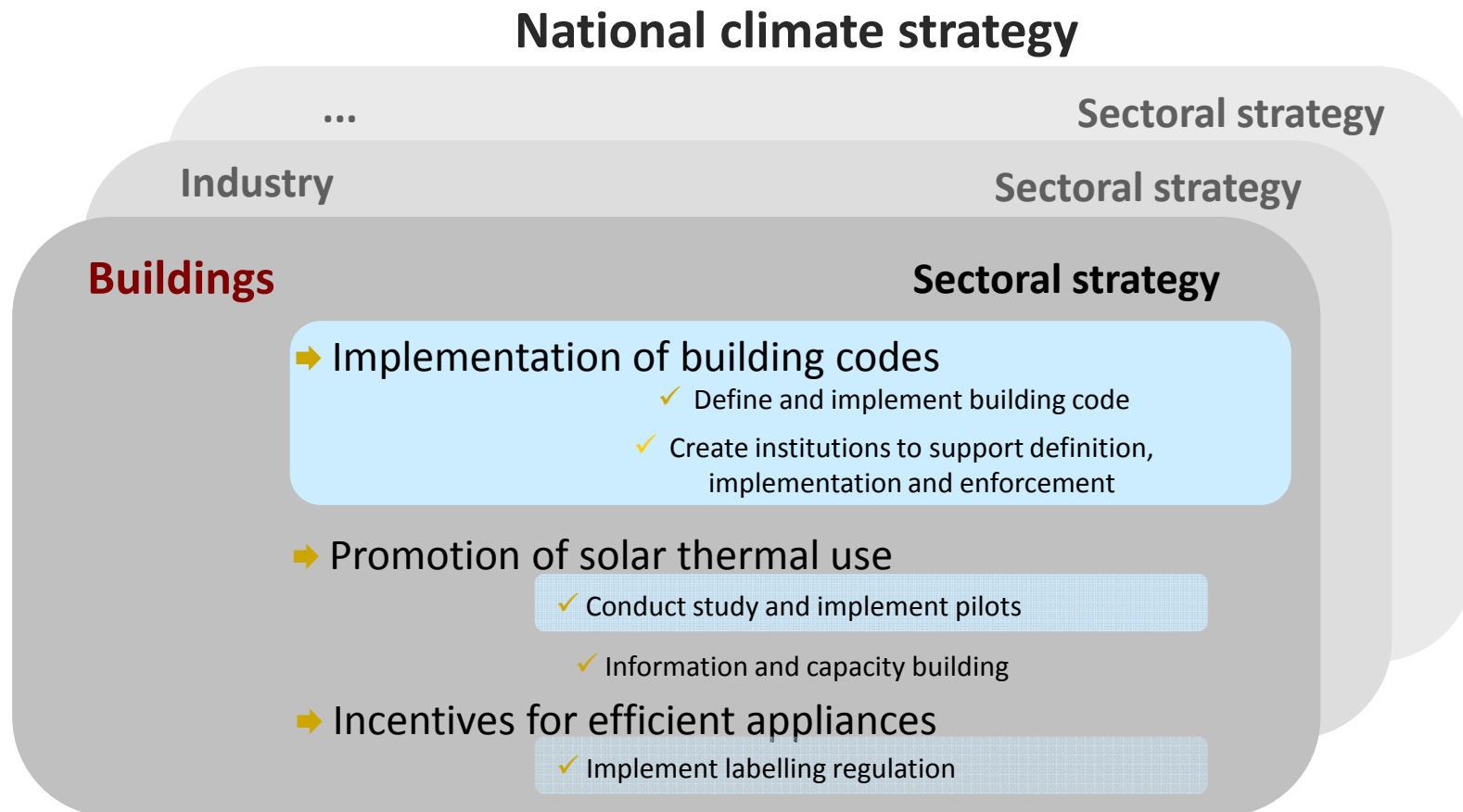
Open issues

1. What is a NAMA?
2. Split between unilateral and supported
3. Measurement, reporting and verification of reductions
4. Measurement, reporting and verification of support

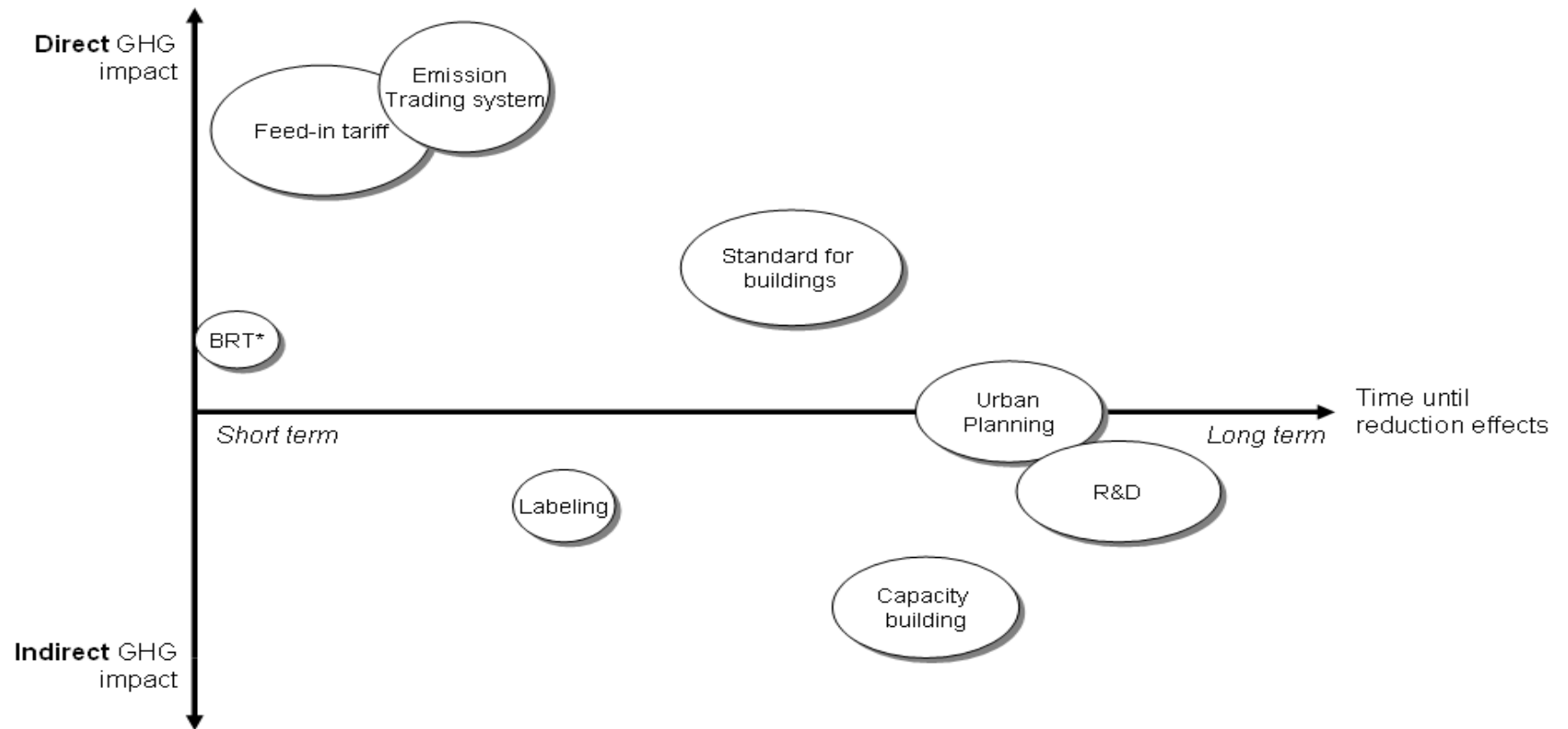
1. What are 'Nationally Appropriate Mitigation Actions' (NAMAs)?

- National emission (intensity) target
- Sector strategy / sector crediting baseline / sectoral emission target
- Government policy programme
- Single project

What can be a NAMA?



GHG effects of actions over time

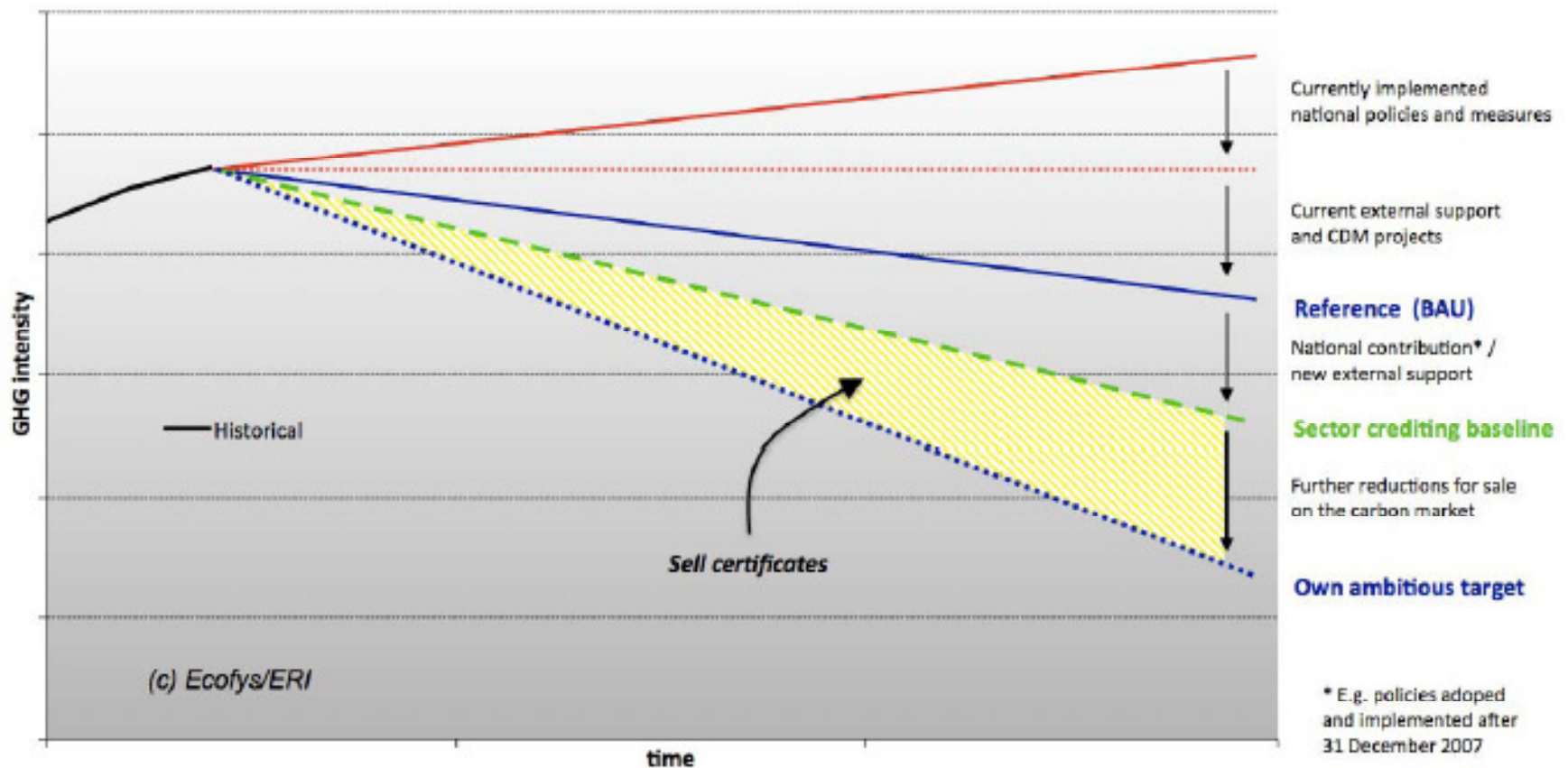


2. Split between unilateral and supported

- No strict additionality needed
- Possible ways to split
 - All measures more costly than \$0.00/t (“no regret”) are supported
 - All measures beyond “no regret” and “co-benefit” are supported
 - All action after 2010 is supported
 - “First of a kind” – “NAMA toprunner”: Supported if no other country with similar circumstances has done it before

2. Split between unilateral and supported

- Example for credited actions



3. MRV of emission reductions

Unilateral NAMAs: Mitigation actions undertaken by developing countries on their own	MRV according to national standards
(Directly) Supported NAMAs: Mitigation actions in developing countries, supported by climate finance from Annex I countries	MRV according to guidelines adopted under the UNFCCC
Credited NAMAs: Mitigation actions in developing countries generating credits to be sold on the carbon market (e.g. sectoral crediting).	

Actions reported every two years in national communications

Possible MRV indicators

- GHG emissions, measured or based on fuel used
- GHG emissions, modelled
- Proxies for GHG emissions
 - Energy used
 - Material produced
- Other than GHG emissions
 - **Technical**: build units, capacity, no. of vehicles
 - **Economical**: funds granted, investment triggered
 - **Process**: number of workshops conducted, study completed

4. MRV of support

- What are “new and additional” resources for climate investments as called for in the Copenhagen Accord?
 - How can climate-related finance be tracked?
 - How can additional support be defined?
-
- Large potential for overlap with Development Aid efforts
 - Learning from existing systems (GEF, World bank) is essential

Content

- Overview of nationally appropriate mitigation actions
- Open issues
- **NAMA examples**
- Conclusions


Examples

- Piloting energy efficient buildings in Mexico
- Optimizing bus transport in Mexico City
- Enhancing vehicle renovation in Mexico
- Renewable electricity support program
- Support proportional to emission reduction

Optimizing bus transport - Components

- **Develop regulatory framework:** enabling a bus system optimization
- **Develop institutional framework:** set up new regulatory- operation- and management entities
- **Planning:** new route design, concession management
- **Establish fund:** finance scrapping of replaced buses
- **Awareness raising:** inform the public of new transport options
- **Planning and implementation:** public transport monitoring system


Optimizing bus transport – Assessment

- 
- Develop regulatory framework
 - Develop institutional framework new entities
 - Planning new route design
 - Establish fund for scrapping
 - Awareness raising
 - Plan and implement monitoring system
- Complexity and basis for GHG calculation
 - Determination of financing need
 - Attractiveness for donors
 - Potential for leveraging private investments
 - Non – GHG benefits
 - MRV metric
 - Other important issues

Renewable electricity support - Components

- **Install a feed-in tariff system:** Coverage of incremental costs for renewable electricity generation by developed country
- **Capacity-building** to expand national technical and regulatory expertise
- **Supporting set up** of institutions to operate the system
- **Provide investment** to enhance grid capacity to support increased supply of renewables

Renewable electricity support - Assessment

- 
- Feed-in tariff with costs covered by developed countries
 - Capacity-building to expand expertise
 - Supporting set up of institutions
 - Provide investment to enhance grid capacity
- Complexity and basis for GHG calculation
 - Determination of financing need
 - Attractiveness for donors
 - Potential for leveraging private investments
 - Non – GHG benefits
 - MRV metric
 - Other important issues

Content

- Overview of nationally appropriate mitigation actions
- Open issues
- NAMA examples
- **Conclusions**

Conclusions

- Many open issues remain on NAMAs → room for shaping the rules
- NAMAs allow strategic, long-term, transformational measures and comprehensive packages
- Can also address difficult CDM sectors (e.g. transport, buildings)
- Measurement not necessarily on emissions
- Determination of split between unilateral and supported difficult
- Strong link to development cooperation
- Initiate fast track bilateral pilots of new types of actions, support, measurement, reporting and verification to support the international negotiations

Please contact us for more information

Ecofys Germany GmbH

Am Wassermann 36
50829 Cologne
Germany

T: +49 (0) 221 270 70 100

E: info@ecofys.de

W: **www.ecofys.de**