Efficient and effective NAMAs

Deep dive session - Designing NAMAs
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Designing NAMAs

- How to overcome barriers effectively?
- What is efficient?
- What is feasible?
- What support is available?
Contents

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• What does the private sector want?
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• What is efficient?

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• What is effective?

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What do we mean by ‘efficiency’?

- **Economic/prioritisation perspective** (MAC curve)
- **Social/sector perspective** (regulation vs market based, ‘environmental economics 101’)
- **Public budget perspective** (i.e. catalysing or leveraging private sector investments)
Efficient use of public funds

- Total cost of mitigation action
  - Eg. RE investment, new waste facility, new transport

Finance strategy 1:
- Public share
- Private share

Finance strategy 2:
- Public share
- Private share

Finance strategy 3:
- Public share

Increasing efficiency of use of public funds
Why that definition of ‘efficiency’?

Estimated annual investment needs to reach SDGs and potential private sector contribution (trillions of USD)

Potential private sector contribution to bridging the gap

- At current level of participation: 0.9 trillion USD
- At a higher rate of participation: 1.8 trillion USD

Source: UNCTAD 2014
Cautions

- The higher the leverage ratio, the stronger the private sector influence and the lower the likely financial additionality
- National strategies and policies must be respected
- Foreign investment entails risks as well as rewards
- There are opportunity costs when using limited public investment to leverage private investment
- Many approaches transfer risk to public institutions – some risk needs to be shared with private sector
- It is important to track results as it is difficult to assess what private investment may have been catalysed
- Positive developmental impacts should be present

Source: adapted from Griffiths 2012
What does the private sector want?

<table>
<thead>
<tr>
<th>Core business environment (not low-carbon)</th>
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<tbody>
<tr>
<td>• Customs (import and export)</td>
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<td>• Ease of starting, operating, closing a business, including licensing and registration</td>
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<td>• Labour market (skills &amp; flexibility)</td>
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<td>• Property entitlements, incl. land</td>
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<td>• Taxes</td>
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<td>• Contract set-up and enforcement</td>
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<tr>
<th>Investment climate (partly low-carbon)</th>
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<td>• Legal institutions, rule of law</td>
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<td>• Education policies, human &amp; institutional capacities (overlap with business capacity)</td>
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<td>• Macroeconomic policy framework, political stability</td>
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<td>• Financial market, access to finance</td>
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<td>• Infrastructure (energy, transport)</td>
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<th>Targeted policies (low-carbon specific)</th>
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<td>• Cluster policies (including long-term policy signals &amp; short-term policy incentives)</td>
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<td>• Targeted research &amp; development policies</td>
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<td>• International cooperation on low-carbon technology (including tech. transfer and trade policy)</td>
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<tr>
<td>• Business development services (overlap with business capacity)</td>
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<td>• Value chain promotion (including standards and codes)</td>
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Source: Stadelmann & Michaelowa 2011
What does the private sector want? simplified

- Feed in tariffs increase returns
- PPAs reduce risk
- Not attractive
Barriers for private investment

- Return on investment
- Investment risks (e.g. breach of contract, currency risk)
- Low-carbon policy risks
- Specific technology and operational risk
- Cost of capital and access to capital
- Market and project size
- Human resources and institutional capacity

Source: Gupta et al. (2014)
Types of support

Examples of four types of support/instrument

1. Risk cover
2. Cheaper finance
3. Lower the income required
4. Direct asset support

Source: Lutken 2014
Types of support

**Cost**
(Asset and Finance)
- Grants and rebates
- Tax credits/deductions
- Soft loans
- Government equity

**Risk adjusted returns**
(Income and Risk)
- Premiums for PPAs
- Feed-in tariffs
- Carbon price signal
- Credit enhancement
- Total credit insurance
- Production/savings guarantees
- Local currency finance

Decrease cost
Increase return
Decrease risk

Source: Gupta et al. (2014)
What is efficient?

- Highly stylised spectrum of policies/instruments for catalysing private sector investment
- In reality the ‘efficiency’ of any approach is context specific
- Plan for policy sustainability or phase-out

Figure: adapted from Lutken 2014
What do we mean by effective?

- An effective instrument successfully achieves the stated objectives.
- An intervention can be efficient in terms of public expenditure, but may not have an impact if it isn’t appropriate targeted and implemented.
What is effective?

– Accurately assess market barriers and financial market conditions;
– Target market segments where the project economics are compelling;
– Address the lending/investment criteria of commercial financial actors;
– Appropriate to the level of development of the financial sector
– Build on existing policies/programmes/organisations
– Work with experienced implementing partners
– Develop plans for public or donor-supported technical assistance programmes to build capacities and fill gaps

Source: Adapted from Maclean et al. 2008
Summary

- Think about effectiveness and feasibility, while using available support efficiently
- Efficiency is not an aim in itself
- Various instruments can achieve an outcome, but have differing support and capacity requirements
- Vital to take into account the context; design must be built on strong barrier and market analysis
Thank you

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Examples of efficient and effective actions

- **China Utility-based Energy Efficiency Finance (CHUEE) Program**
  - Risk Sharing Facility: takes partner banks’ financial risk by guaranteeing loans they make to climate-smart energy projects.
  - Technical Assistance: helps banks build their pipelines, portfolios, experience and expertise in the sustainable energy finance market

- **Thailand Energy Efficiency Revolving Fund and ESCO Fund**
  - Concessional lending through the EERF to commercial banks
  - ESCO venture capital and equity (plus and other forms of support)

- **Plus many others**
References

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- Gupta et al. (2014) IPCC WG III - Chapter 16: cross-cutting investment and finance issues
- Ghandi et al. (2012) Unlocking the potential: Subnational policies to improve energy efficiency financing
- Maclean et al. (2008) Public finance mechanisms to mobilise investment in climate change mitigation
- Lutken (2014) Financial Engineering of Climate Investment in Developing Countries
- Stadelmann & Michaelowa (2011)
**ECN and NAMAs**

**ECN Policy Studies**

Energy research Centre of the Netherlands since 1955

- Research NGO – not for profit
- Over 500 staff in seven research areas
- 60 staff in Policy Studies unit
- Main think tank for Dutch government on energy and climate.

**Global Sustainability group**

Within ECN Policy Studies 15 staff work on issues of ‘global sustainability’ with the mission to help *mobilizing public and private investment through low carbon energy policies and measures.*

Our focus is on four key themes:

- Policy and strategy development
- Increased policy effectiveness
- Scoping and prioritisation
- Renewable energy deployment

**Clients include:** European Commission, UNFCCC, UNEP, UNDP, CDKN, DFID, GIZ, BMUB, World Bank and the IPCC

**Experience working in:** a diverse group of countries including Indonesia, Kenya, Thailand, Ghana, South Africa, Argentina, Brazil, Mexico, Kuwait, etc.
ECN and NAMAs

ECN experience on NAMAs

- In-country experience in developing concrete NAMA proposals
- Assistance for attracting implementation funding.
- Convene stakeholders on NAMA prioritisation and design
- Robust analyses on costs and benefits, mitigation potentials, feasibility, financial risks, and business models

- NAMA trainings for various audiences
- Thought leadership on the concept of NAMAs, bringing insights to international dialogues, reviews, and workshops
- Conceptual studies on the role of NAMAs

- Half-yearly NAMA Status Reports
- Comparative case studies, country profiles, and policy briefs
- Publications on issues such as development impacts, sectoral priorities, finance, and ODA

Highlighted project: MitigationMomentum
Encourage learning on NAMA development, and assist selected countries with developing a NAMA proposal ready for finance
www.mitigationmomentum.org
funded by IKI/BMUB