# Paving the way for low-carbon development strategies

#### Xander van Tilburg, Laura Würtenberger, Heleen de Coninck and Stefan Bakker

Energy research Centre of the Netherlands (ECN) Policy Studies September 2011

# **Executive summary**

Low-carbon development strategies have attracted interest in the climate negotiations as a soft alternative to voluntary or obligatory greenhouse gas emission reduction targets in developing countries. Several developing countries have taken the initiative to embark on the process of drafting an LCDS. LCDSs are usually thought of as happening on the country level, but depending on the size or the situation of the country, provincial or sector-specific LCDSs are also possible.

Although there is no internationally agreed definition of low-carbon development strategies, in this study we focus on integrated climate and (low-carbon) development government strategies that cover the intersection of development and green house gas mitigation. Adaptation issues are included only if they are related to mitigation actions.

This study explores two questions related to LCDS. First, what are the prerequisites for developing an effective LCDS, and what can a country do if these prior conditions are not entirely met? Second, given the large variety in countries' development contexts and variation in 'readiness' to engage in an LCDS, how can international support for the development of LCDS work in practice? The analysis combines desk research, interviews with experts and on-the-ground study in two countries.

## Purpose and building blocks

The ultimate *aim* of a low-carbon development strategy is to catalyse concrete actions that support development, but with less emissions than without intervention. To establish this, an LCDS can serve different audiences and have different purposes depending on the stakeholder. For governments an LCDS can be used to present a long term vision on climate and development and a strategic lowcarbon development pathway. It can also be used to establish a policy framework in which policies across different sectors are put in place and aligned. Moreover, governments can use an LCDS to increase awareness on climate change with stakeholders and present to them what low-carbon development could mean for each of the stakeholders. To the private sector, an LCDS can identify what is needed to establish a favourable investment climate for low-carbon development actions, and signal to potential investors what the long-term ambitions and priority sectors are, and what interventions, such as regulatory frameworks or policies, the government will undertake to help achieve these ambitions. In addition, an LCDS may also have a purpose internationally. It can help identify needs and priorities, and be used to coordinate donor support. In relation to other international climate instruments, an LCDS can provide a coherent framework for NAMA priorities and for measurement, reporting and verification (MRV) needs. Lastly, an LCDS can function as a reporting platform to international climate change community. Signalling national emissions and expected impacts of climate change can provide insight in global trends on results of existing mitigation actions and prospect of future policies.

Assessment of the	Analysis of low-carbon	Identification of policy aims,
current situation	development alternatives	actions, and interventions
<ul> <li>Data collection: What do the available data show on socio-economic indicators, greenhouse gas emissions, and existing policies and regulation.</li> <li>Capacity assessment: Is there capacity available domestically to analyse the climate and development data?</li> <li>Stakeholder mapping: Who has an interest in low-carbon development, and what are their roles and responsibilities?</li> <li>Institutional setup: Which government ministries, departments and agencies are involved and what are their roles and mandates?</li> </ul>	<ul> <li>Identify actions: What are costs, mitigation potential, and development benefits?</li> <li>Identify gaps and barriers: What are the reasons that actions are not implemented currently?</li> <li>Scenarios and modelling: What would be alternative development pathways and with what emissions impact?</li> <li>Baseline and targets: What would be the business as usual situation (baseline) and what targets correspond to the alternative low-carbon development pathways.</li> <li>Policy and impact assessment: Which policies and regulations can be used and what are the expected impacts on development and climate.</li> <li>Priorities: What are the priority sectors and actions, and what are the trade-offs when choosing one over the other?</li> <li>Needs assessment: What are the domestic needs in terms of finance, capacity building, technology and institutional setup.</li> </ul>	<ul> <li>Long term vision: What is the pre- ferred low-carbon development path- way (policy aim)?</li> <li>Targets and actions: What are the targets that the government sets itself, quantitative or qualitative, and which actions do these require?</li> <li>Finance: What budget is required and where does that come from (national budget, private investment, donor support)?</li> <li>Government intervention: Which policies and regulations will the gov- ernment establish to support low- carbon development? How are these integrated?</li> <li>Private sector investments: What level of investments in low-carbon tech- nologies is expected from private sec- tor investors and entrepreneurs?</li> <li>International support: How are the required actions linked to the interna- tional climate support framework (such as NAMAs and MRV)?</li> <li>Plan for implementation: What are the roles and responsibilities of all stake- holders?</li> <li>International reporting: Depending on the outcome of the negotiations, an LCDS may have to meet reporting re- quirements (future, if at all).</li> </ul>

Evidence shows that countries differ significantly in terms of development context, possibilities and priorities. As a result of this variation it is ineffective to approach developing an LCDS with a a generalised template. That said, an LCDS development process can have different 'building blocks'. Although it would not be justified to say that some of the building blocks are optional, the specific (country) context may determine which of the building blocks below are included, and how much they are emphasised.

#### Lessons learned and readiness

Most of the emerging best practices and lessons learned for LCDS development suggest that the requirements for development of a successful LCDS are high. Creating an effective LCDS needs to be

a participatory process under strong senior leadership within the government. It needs to involve relevant stakeholders from the start of the process to enable the creation of ownership of the outcomes. The process should work towards consensus on priority sectors and integrated policy interventions, and the decision making should build on sound data, and scientific and economic analysis as well as a high quality factual basis.



The ideal circumstances for starting the development of an LCDS are rarely met in practice, and there are substantial differences in the "readiness" among countries to develop an LCDS. In this context, readiness relates to strengths and weaknesses in three categories: the fact base, analytical and institutional capacity, and the awareness and engagement of all relevant stakeholders. Differences in readiness and in the process of strategy development will determine which outcomes can realistically be achieved.

Countries that are not very advanced in terms of low-carbon development planning, can effectively start the process of developing an LCDS at any time, as the process itself can be used to build the fact base, technical and institutional capacity to interpret the facts and awareness and buy-in among decision makers and stakeholders. By treating the development of an LCDS as an continuous process,

data quality, technical and institutional capacity and awareness can improve over time, leading to better strategies and improved outcomes.

In addition to tailoring the process to the country context and readiness, this study shows that it is important to align the technical and political process of LCDS development in order to ensure that the strategy has strong buy-in, is properly integrated into the policy process and informed by sound analysis. As political processes may be unpredictable and because the outcomes of the strategy may only improve gradually in an iterative process, it is also important to be realistic in planning the LCDS process without expecting fast results.

It is safe to assume that no country, developed or developing, meets the ideal conditions for lowcarbon economic development. Treating LCDS as a quick fix for lack of strategic orientation will therefore lead to yet another ineffective climate instrument.

## International support for LCDS

The national context and the readiness to develop an LCDS differ greatly across countries, and therefore a detailed prescription of the instrument (the contents, methods and tools) may be impossible and counterproductive, and would not do justice to this variation across countries. A standardised methodology for developing an LCDS, or restrictions on the timing of its preparation process, may be ineffective, and rather than specifying a target or producing a document, an LCDS should facilitate or provide a process that, depending on the developing country's readiness, meets needs to develop and to fill capacity, knowledge and information gaps.

Technical assistance needs to support a process that has its own pace, and should allow for flexibility and tailoring to the national context and the specific expectations about the LCDS process. Support for developing an LCDS could focus on individual building blocks or on the process. Ensuring buy-in and ownership of the development and outcomes of the LCDS, requires stakeholder involvement and participation.

For more information, please contact:

Xander van Tilburg Energy research Centre of the Netherlands Email: vantilburg@ecn.nl; phone: +233 548779405 (Ghana) phone: +31 224 564863 (Netherlands) Energy research Centre of the Netherlands (ECN) Unit Policy Studies Radarweg 60 1043 NT Amsterdam The Netherlands www.ecn.nl/ps/iec