

# Low-Carbon Development Cooperation between India and Germany

## The Potential of Creating Low-Carbon Development Strategies Together

Low-carbon development is the call of the day for all countries across the world. The concept of low-carbon development roots in the objective to limit global temperature rise to well below 2°C while pursuing efforts to limit it even to 1.5°C – as agreed by all of the world’s governments in the Paris Agreement on climate change in December 2015, informed by climate science. In parallel, it must consider the need for energy security and sustainable development as outlined across the 17 Sustainable Development Goals (SDG) adopted by the United Nations General Assembly in September 2015. As such, low-carbon development plans reflect scientific needs and according international expectations on currently nationally determined climate targets ((I)NDCs) and energy strategies; they demand political long-term vision as well as technological revolutions. Low-carbon development requires the current economic and governance structures to undergo a transition in order to enable new welfare society models of decarbonisation. Moreover, individual lifestyles, ways of living and living conditions need to be added to the agendas for low-carbon transitions towards sustainable development scenarios. However, exact and comprehensive concepts to build low-carbon futures or visions of low-carbon and sustainable societies and economies that could be transferred to other regions and societies do not exist. Both industrialised and developing countries from their respective starting points need to identify their pathways to sustainable development, which will involve rapid changes to current unsustainable modes of development or leapfrogging directly to modern, clean and sustainable solutions. Pathways are individual for each country and none has walked its path fully yet.

This paper outlines how two countries with extremely different starting positions could jointly take up the challenges of developing low-carbon and sustainable futures: on the one hand, the industrialised Germany and on the other India, where rapid economic growth coexists with brutal development challenges.

The paper focuses on the potential for cooperatively shaping low-carbon development strategies of the two fundamentally different countries. Germany certainly needs to continue leading the low-carbon pathway with domestic action by implementing the Energiewende, driving technology innovation and providing financial and capacity building support to developing countries. Beyond learning from each other’s experiences (e.g. from Germany’s on-going Energiewende and commonly associated finance, technology and capacity building support for a similar energy transition in India) this short paper seeks to test ideas for cooperation in other areas, creating new knowledge for low-carbon sustainable development pathways. Such cooperation could explore alternative lifestyles, leapfrogging concepts and low-carbon development modules. Thus, the paper looks beyond the countries’ future energy mixes and their technology requirements trying to open doors for Indo-German exchange on guiding principles, innovative experiments from circular/green economies to sustainable lifestyles and supportive governance structures – without attempting to limit bilateral dialogue to only these fields.

Existing Indo-German fora at all levels – such as the Environment Forum, regular political high-level bilateral meetings and research exchange – offer platforms to host these discussions. Such a dialogue would also help lifting the bilateral discussion on an even more equal footing as both countries would have equally much to feed into the debate – in contrast to earlier exchanges around purely Germany's support for India.

## Guiding Principles for Low-Carbon Sustainable Development

The Paris Agreement evidently sets the environmental science-based threshold of keeping global temperature rise well below 2°C/1.5°C as a common guiding principle. While Germany has the historic responsibility and the economic capability to reduce its emissions rapidly, India also has its bit to contribute. This ambitious objective needs to be translated into respective national targets in the (I)NDCs. Bilateral cooperation should among others have the objective to create equality of opportunities.

Sustainable development solutions like low-carbon plans require to be rooted in solid and coherent guiding principles that describe a value-based foundation of the future development pathway. For any low-carbon plan in India it is imperative to address the social and economic poverty-related challenges of development and consider affordable costs and/or positive co-benefits. In a comparable way, Germany currently experiences the need to consider social principles for a just transition that tackles job losses in conventional energy industries – in particular coal – while proceeding with the Energiewende towards a phase-out of fossil fuels and a full decarbonisation.

Identification and further definition of guiding principles, which inform a national vision, can at the national level lead to more robust and coherent policy plans and higher societal acceptance of transformational undertakings such as low-carbon development. Simultaneously, guiding principles create trust in cooperative relationships by outlining common goals and thus enabling mutual support. Most importantly, they create a more holistic and thus more sustainable ground for the individual pathways towards sustainable development if identified in cooperation between countries with extremely different realities and experiences like India and Germany. Examples of such jointly agreed guiding principles could be human rights or environment and sustainability criteria for large-scale energy plants.

## Low-Carbon and Sustainable Lifestyles

Leaders of different disciplines realise that technological solutions like renewable energies and energy efficiency alone will not be sufficient to create low-carbon development futures that are sustainable, too. On India's urging, the Paris Agreement in its preamble includes the mentioning of sustainable lifestyles. India might have had in mind the difference between Western unsustainable lifestyles and Indian traditional ways of living and challenging living conditions when arguing for this inclusion in the agreement. Need-based consumption, the use of natural materials and resource aware behaviour like reuse are only few examples of traditional Indian lifestyle values. Germany, however, might relate to these terms through the challenges of behavioural and structural overconsumption but also through a variety of experimental attempts to address overconsumption with modern sustainable living ideas and green trendsetting in cities. German transition towns<sup>1</sup> explore and experiment with urban and rooftop gardening, energy cooperatives, organic clothing, repair cafés, public transportation use and many other concepts.

Recombined in synergy, these complementary approaches and values from Germany and India could create convincing new models of modernized traditional lifestyles suitable for and in favour of a world that manages to stay well below 2°C aiming for 1.5°C. Parts of the German society begin to explore alternative and more sustainable lifestyles than what India's middle class currently copy-pastes (or potentially

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<sup>1</sup> See Transition Initiativen Netzwerk at <http://www.transition-initiativen.de> in German for more information.

“indianises”) as high-status and highly unsustainable Western lifestyle. Correction of misconceptions about the so called “developed” world’s lifestyle that influences India to a great extent and identification of ways for India to leapfrog into a low-carbon and overall sustainable lifestyles would contribute largely to achieving the global climate targets. A reminder of values would help guide Germany’s transition to more sustainable and low-carbon lifestyles. In consequence, a “new normal” in regard to lifestyles could be explored by Indo-German cooperation.

## **Innovative Business Models for Low-Carbon Economies**

Serious and mainstreamed sustainable or low-carbon lifestyle approaches will have to be reflected in new business models for a low-carbon, green and sustainable economy. Since the foundation of the Club of Rome and certainly since the widely discussed cradle to cradle concept, literature suggests a circular economy that decouples economic growth from resource use.

Indian start-ups heavily experiment with new business models in all thinkable sectors from working space cooperatives that create appropriate flexibility in the work culture matching the expanding service sector to tackling development issues with solar-powered water ATMs<sup>2</sup> or websites and smartphone apps to distribute left-over food to the poor<sup>3</sup>. Young Indian entrepreneurs show great creativity to fill sustainability niches with innovative business models. In Germany, even post-growth concepts are being studied. A committee of enquiry of the German Bundestag prepared a report on “Growth, prosperity, quality of life”<sup>4</sup> that suggests a new terminology and concept of prosperity and new measurements for prosperity that considers not only material wealth but also social and ecological dimensions of prosperity. Yet again, the very different realities of India and Germany can benefit the two countries and others to jointly develop new concepts of sustainable economic structures instead of simply copying from each other.

## **Supportive Governance Structures**

Both sustainable lifestyles and new business concepts for a low-carbon economy can only succeed against the current unsustainable mainstream and be sustained in the long-term if they find support by appropriate governance structures. In both India and Germany, such fundamental transitions require larger shifts in administrative mind sets for enabling policies rather than regulating and controlling governance. The German example of feed-in tariffs (FIT) demonstrates how policy solutions can largely contribute to low-carbon development by creating enabling structures. It is also an example for the difficulty of transferring or adjusting a concept to the Indian realities, where FIT so far had limited success. Especially, the conceptual involvement of private citizens is missing in India’s implementation plans for her sustainable development agenda. This includes a need for participative approaches in decision making processes. On the other hand, Germany can learn from India’s closeness to local communities in policy execution for example in the health sector, where personal or family care taking instead of pure hospital care is common practice.

Detailed Indo-German exchange on enabling and community-near policy would facilitate low-carbon and sustainable development enormously and could as well find adoption in third countries beyond India and Germany.

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<sup>2</sup> Read more about Water ATMs of e.g. Piramal Saravajal at <http://www.sarvajal.com/water-atm.php>

<sup>3</sup> Read more for example about India Foodbanking Network at [www.indiafoodbanking.org](http://www.indiafoodbanking.org), about FEEDING INDIA at <http://feedingindia.org> or

<sup>4</sup> Committee of enquiry of the German Bundestag, 2013: „Wachstum, Wohlstand und Lebensqualität“, <http://dip21.bundestag.de/dip21/btd/17/133/1713300.pdf>

## Conclusions

The authors suggest Indo-German cooperation on low-carbon development to reach far beyond dialogue on and provision of German support for an Indian low-carbon energy mix. An Indo-German dialogue on low-carbon development should allow exchange in partnership on more fundamental aspects of a low-carbon development such as sustainable guiding principles, lifestyles, sustainable business concepts and economic and governance structures.

In regard to low-carbon development, there is not only a lot to learn *from each other* in an open Indo-German dialogue but also a lot to *jointly develop*.

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