Title: Quality of life for all: A sustainable development framework for India's climate policy reduces greenhouse gas emissions

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Abstract

This study placed improving quality of life at the centre of India's national climate policy and asked what happens to greenhouse gas emissions with such an approach. In the lead up to the Paris climate agreement in 2015, countries determined their contributions based on their priorities, contexts, and capabilities and prepared their Intended Nationally Determined Contributions. Following the agreement, these became each country's Nationally Determined Contribution (NDC). Using bottom-up scenario analyses, the sectoral interventions modelled in this research demonstrate that it is possible to get close to achieving the country's NDC targets while improving quality of life at the same time. A comparison of a Business-As-Usual (BAU) and a sustainable development (SD) pathway leading up to 2030 reveals that improvements in a range of sustainable development conditions are possible. These include reduction in air pollution, savings in water and land use, and savings in materials and resource requirements. These changes occur along with a nearly 30% reduction of greenhouse gas emissions and a 25% reduction in primary energy compared with BAU. Emissions intensity in 2030 is reduced in the sustainable development pathway by 16% compared with that in 2012 and fossil-free sources are able to contribute to about a third of India's electricity.