



# Investing in a low-carbon India

**2-3 July 2018**

Taj Mahal Hotel, Man Singh Road, New Delhi, 110001

Climate change can threaten India's sustained growth and economic development. India's cities are also growing fast and urban citizens suffer from poor infrastructure, transport congestion and air pollution. Yet, India is taking decisive action, with ambitious targets to reduce emissions, invest in clean energy and improve disaster management. This conference will examine how India can best invest in a low-carbon future by highlighting opportunities for action that can make a difference and also help India to achieve its climate goals. Key challenges are to build infrastructure resilience to climate change, expand the uptake of clean energy and to respond to urbanisation pressures. Managing risk, coping with uncertainty and bringing solutions to scale is paramount. Mobilising the finance needed to meet these challenges will be essential and require innovative solutions from the public and private sectors to reduce risks and close knowledge gaps.

The conference will draw upon recent work by the Organisation for Economic Co-operation and Development (OECD) and the Observer Research Foundation (ORF). The OECD undertook a major project for the German G20 presidency on growth and investment opportunities arising from the transition to a low-emission, climate-resilient economy. The resulting report, [\*Investing in Climate, Investing in Growth\*](#), provides an analysis of how climate goals can be achieved while simultaneously spurring economic growth, competitiveness and well-being. It shows that combining strong climate action with fiscal and structural reforms will boost growth in both the short and long term. ORF acted as a knowledge partner for the report and their article on [\*India's Low-carbon Transition\*](#) provides context for this conference. ORF's recent and ongoing work on green investment will also enrich the discussion through the work on mobilising private capital for green energy, scaling-up investment from development banks and overcoming the barriers particular to emerging economies.

## *2 July 2018: Dinner*

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**19:00-19:05 Introduction by Ms. Gabriela Ramos, OECD Chief of Staff and G20 Sherpa of Dr. Rajiv Kumar, Vice Chairman, NITI Aayog**

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**19:05-19:20 Conversation with Samir Saran, President, ORF and Dr. Rajiv Kumar, Vice Chairman, NITI Aayog**

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**19:20-20:00 High Level Panel Discussion**

- Samir Saran, President, ORF
  - Gabriela Ramos, OECD Chief of Staff and G20 Sherpa
  - Jairam Ramesh, Member of Parliament, Rajya Sabha and Former Minister of Environment and Forests
  - Naina Lal Kidwai, Senior Adviser, Advent International Corporation and Former CEO, HSBC India
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**20:00-21:00 Dinner**

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## *3 July 2018: Conference programme*

**10:45-11:15 Registration and coffee/tea**

**11:15-12:00 Welcoming remarks**

- Samir Saran, President, ORF
- Gabriela Ramos, OECD Chief of Staff and G20 Sherpa
- Hardeep Singh Puri, Minister of Housing and Urban Affairs

**12:00-13:00 Session 1: Investing in the right infrastructure for low-carbon development**

A changing climate will affect India's future infrastructure needs, service reliability and returns on investment. However, great uncertainty remains regarding the exact implications that climate change will have on infrastructure systems. The OECD estimates that around USD 95 trillion of investments will be needed globally between 2016 and 2030 in energy, transport, water and telecommunications infrastructure to sustain growth, or around USD 6.3 trillion per year, even if governments take no further action.<sup>1</sup> For India, rapid urbanisation and population growth will put additional strain on transport and power infrastructure and add to the complexity of infrastructure investment. This session will examine what infrastructure should be prioritised to expand access to services and adapt to a

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<sup>1</sup> OECD (2017a), Investing in Climate, Investing in Growth, OECD Publishing, Paris, <http://dx.doi.org/10.1787/9789264273528-en>.



changing climate. The session will also address how risk management approaches can be used to manage uncertainty and adapt to a range of future climate outcomes.

Moderator: Anthony Cox, Acting Director, OECD Environment Directorate

Panelists:

- Damandeep Singh, India Director, Carbon Disclosure Project
- Ila Patnaik, Professor, National Institute of Public Finance and Policy (NIPFP)
- Kenichi Yokoyama, Country Director, Asian Development Bank
- Vaibhav Chaturvedi, Research Fellow, Council on Energy, Environment and Water (CEEW)

*Questions for discussion:*

- How are climate-change risks being considered in infrastructure planning and management?
- How can India improve the quality of existing infrastructure?
- What are key technical and financial barriers for expanding climate-resilient urban infrastructure and how can they be overcome?
- How can India scale up climate-resilient buildings and housing?

**13:00-13:30** *Networking break*

**13:30-15:00** **Lunch Session 2: Powering India's energy transition: Going beyond solar**

In 2015, India announced an ambitious goal to increase renewable power capacity to 175 gigawatts (GW) by 2022 through the development of solar, wind, bioenergy and small hydro. India has also made remarkable progress with half a billion people gaining access to electricity since 2000 and nearly doubling the country's electrification rate.<sup>2</sup> While progress is being made, there is still substantial investment needed to meet these targets. Large firms as well as small- and medium-sized enterprises (SMEs) will have an important role to play bring investment to scale and provide operational services.

This session will discuss key gaps to expanding investment in a range of renewables, improving grid infrastructure and closing energy access gaps.

Keynote Speaker: Ajay Mathur, Director General, The Energy and Resources Institute (TERI)

- Moderator: Geraldine Ang, Green Finance and Green Investment, OECD Directorate for Financial and Enterprise Affairs & OECD Environment Directorate

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<sup>2</sup> IEA (2017), Energy Access Outlook 2017, OECD/IEA Publishing, Paris, [www.iea.org/publications/freepublications/publication/weo-2017-special-report-energy-access-outlook.html](http://www.iea.org/publications/freepublications/publication/weo-2017-special-report-energy-access-outlook.html).



Panelists:

- Vikrom Mathur, Senior Fellow & Programme Head, ORF
- Upendra Tripathy, Director General, International Solar Alliance
- Raghunath Mahapatra, Head - Solar Business, Hero Future Energies
- Anil Srivastava, Director General, Development Monitoring and Evaluation Office & Advisor (Infrastructure Connectivity), NITI Aayog

*Questions for discussion:*

- Beyond solar, where are the key opportunities for renewable investment?
- What are the key barriers to scaling up renewable energy investment?
- What policy initiatives can catalyse green SMEs such as rooftop solar and microgrids?

**15:00-16:30**

**Session 3: Financing the way forward**

Private financing will be essential for meet India's investment needs. This session will explore how to attract private finance for projects and companies that can support the low-carbon transition. The session will highlight recent developments to blend public finance with private investment by using de-risking and credit-enhancing tools. It will also discuss how to improve access to finance for green SMEs.

Moderator: Samir Saran, President, ORF

Panelists:

- Robert Youngman, Team Leader, Green Finance and Investment, OECD Environment Directorate
- Rathin Roy, President, National Institute of Public Finance and Policy (NIPFP)
- Kanika Chawla, Senior Programme Lead, Council on Energy, Environment and Water (CEEW)
- Pankaj Verma, Associate Director – Environmental Risk, IDFC Bank
- Dhruva Purkayastha, Director- US-India Clean Energy Finance, Climate Policy Initiative

*Questions for discussion:*

- What are the latest efforts by development banks and other public financial institutions to attract private investment in India?
- What barriers specific to investment in projects and corporates are most acute and how to overcome them?
- What specific risk-reduction tools can be used to overcome barriers for domestic and international investors?

**16:30-17:00**

**Closing remarks**

Jayant Moreshver Mauskar, Advisor to India's Prime Minister on Climate Change

