

## **Virtual Launch of the TERI-Shell Report**

### ***India: Transforming to a net-zero emissions energy system***

**By**

**Shri Amitabh Kant, CEO, NITI Aayog**

**Tuesday, 23<sup>rd</sup> March 2021**

**(2.00 – 4.00 pm)**

TERI and Shell have maintained a strong and active collaboration over the years to jointly examine the range of options for enhancing India's energy security and enabling energy transitions in a smooth and just manner at various points in time. At this juncture, when India's energy security discussions have started to see conversations tilting towards low carbon options, it is an opportune time for India to re-evaluate its energy strategy, and examine the choices, opportunities and risks in the energy sector as we attempt to visualise possibilities of an eventual move towards a net-zero emissions scenario. Therefore, TERI and Shell have once again come together to evaluate India's current options & limits across each of the energy sectors & sub-sectors, and to assess the gaps in technology & policy options to achieve net-zero emissions in the energy sector by 2050.

In this collaboration we have developed a Net-Zero Emissions scenario (NZE) to examine whether adequate opportunities exist to fully decarbonise the energy sector and highlight the areas where India's energy sector does not have enough choices for full decarbonisation by 2050. Further, energy efficiency, electrification and a switch towards decarbonised fuels constitute the three main pillars of India's decarbonisation strategy, with the need for a transformative move towards renewable electricity, hydrogen and bioenergy as the key fuels that would likely shift the pathway towards a net-zero emissions future. The study also indicates that the industrial and heavy freight transport sectors are likely to face limits in achieving full decarbonisation, primarily due to technological constraints which leave residual emissions in the system. This necessitates the need for carbon sequestration options to achieve net-zero emissions, including both technical and nature based solutions.

This study is the first comprehensive assessment of a net-zero emission strategy for India's energy sector. It is hoped that the findings from this study would encourage further deliberations and deep-dives into energy sub-sectors that would benefit policymakers and planners in charting out India's sustainable energy transition.

**AGENDA (2.00– 4.00 pm)**

<b>Session 1</b>	
<b>10 minutes</b>	<b>Welcome Address: Mr R. R. Rashmi (TERI)</b>
<b>15 minutes</b>	<b>Keynote Address and Report Launch: Chief Guest (Shri Amitabh Kant)</b>
<b>20 minutes</b>	<b>Presentation on Net-Zero Study (Dr Ritu Mathur, TERI, Dr. Mallika Ishwaran, Shell and Mr. David Hone, Shell)</b>
<b>Session 2</b>	
<b>50 minutes</b>	<b>Interactive session: Exploring the possibilities of attaining net-zero emissions in India by 2050</b>
	<b>Moderator: Mr R. R. Rashmi</b>
	<b>Panel Discussion:</b> <b>Tentative list of panellists:</b> <ul style="list-style-type: none"><li>• Shri Indu Shekhar Chaturvedi, Secretary, MNRE : TBC</li><li>• Shri Rameshwar Prasad Gupta, Secretary, MoEF&amp;CC : TBC</li><li>• Dr. Ajay Mathur, Director General, International Solar Alliance (ISA) : TBC</li><li>• Dr. S S V Ramakumar, Director (R&amp;D), IOCL</li><li>• Mr. Saurabh Kumar, Executive Vice Chairman, EESL : TBC</li><li>• Mr. Mohit Bhargava, General Manager (Hydrogen), NTPC Limited : TBC</li></ul>
<b>15 minutes</b>	<b>Q&amp;A Session</b>
<b>10 minutes</b>	<b>Concluding Remarks &amp; Way Forward: (Mr Nitin Prasad, Shell India)</b>