## CONCEPT NOTE - CEO FORUM

#### **Reorienting Market Economies and Accelerating Development of Green Technologies for Sustainable Development Goals**

Day: 16<sup>th</sup> February, 2022 | Wednesday

Time: 1:00 pm to 2:00 pm IST (60 minutes) | Click here for time in your location

#### Introduction

The world is facing an unprecedented challenge in the form of socio-economic inequities, unemployment, climate change, environmental degradation, as well as health crisis. Business sector can play an important role in providing the much needed support in terms of technology development, propelling innovation and finance. Technology and innovation is at the heart of sustainable development. Innovations and technological solutions can help countries address their developmental needs, along with accelerating their economic growth. However, technological development can come at a cost of large amount of carbon emissions, further intensifying the carbon lock in. Thus, there is a need to innovate and invest in greener and cleaner technologies. With the known and unknown risks of developing these green technologies, the role of both state and markets becomes important. It is essential that the business sector and policymakers come together to unlock means such as finance and regulatory framework needed that is conducive for development, demonstration and deployment of these technologies and innovations.

#### Need for Collaborative Approaches to Innovation

The conventional view is that the technology is primarily developed in the Global North is simply transferred to the Global South. This model has disadvantages since technology transfer involves complex processes of sharing knowledge and adapting to these technologies to meet local conditions. Innovation is not limited to new breakthrough technologies and often involves incremental improvements and adaptations of existing technologies, processes and practices.

Green technologies compete with brown technologies currently in use, most of which have large environmental externalities and other social costs that are not factored into market prices. Private investors are often unlikely to invest in many new technologies without government support, especially when these technologies are not cost-competitive with the technologies that are already in place. Thus, there is a need to reorient market-based approach to innovation-based approach, for which the values are based on interactive learning, information exchange, and coordination between businesses, universities, research centres, policymakers and other stakeholders<sup>1</sup>.Various instruments are important for supporting green technologies such as financial support for R&D, regulation, technology procurement, technology legitimization, eco-labelling and standards. Private investment and scientific research in green technology is important; however, regulatory, financial, cultural, institutional, and policy instruments are equally important for understanding the problems and designing efficient and equitable solutions<sup>2</sup>.

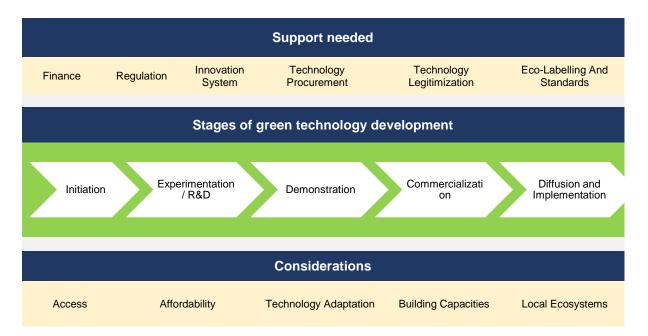
#### From Market-based Approach to Innovation-based Approach

Market prices do not fully incorporate the societal costs of using brown technologies, such as greenhouse gas emissions and other environmental risks, with which green technologies compete. Typical market-based solutions to this have been carbon taxes or "cap and trade"

schemes aimed at incorporating the societal costs into market prices, along with strong intellectual property rights to encourage investment in green technologies.

Hence reorientation of the markets is an absolute need, mainly to encourage the production, development and diffusion of greener products into the markets. This can be done by adopting an innovation-based approach. A Green National Innovation System (G-NIS) approach emphasizes the public-goods nature of many green technologies into the NIS framework, thereby making it a particularly useful and innovative policymaking tool in the context of long-term sustainable development.

Green technologies can be strengthened by investing in research and development by the private and public sectors. It is also essential to target barriers to its early-stages of innovation/ technology development as access to finance is especially difficult for firms engaged in green innovation, due to the relative immaturity of the market, and thus greater perceived commercial risk. Green innovations and policies can be given an impetus though green investments, demand-enhancing measures, innovation policies, standards, regulatory support and public procurement<sup>3</sup>.



Through this session, executive heads of various business houses will come together to deliberate on how best can the society move from a market-based approach to an innovation-based approach to develop green and clean technologies, taking a step closer to achieving the sustainable development goals.

## **Key Questions**

[1] In what way can the private sector contribute in all the stages in terms of initiation, experimentation, demonstration, commercialization and diffusion of green technologies for public goods?

[2] What are the various strategies and approaches that can be adopted to reorient market economies to focus on innovative green technologies to attain sustainable development goals? What policy signals are needed?

[3] How can green technologies be made affordable and accessible to all?

[4] How can all the stages of green technology development be de-risked?

#### **Session Format**

The session will be a moderated discussion which will start with remarks (2-3 minutes) by the chair. This will then be followed by the Leadership Addresses wherein each speaker will then get 5-6 minutes for delivering the Leadership Address. Speakers can choose to address all, few or one questions from the listed questions. After this, the chair will ask 1-2 questions based on issues emerging from the discussions from all the speakers present. Finally, the chair will crisply sum up the discussions. Strict time management is to be followed. There will be an on-screen timer for the same.

# **Session Speakers**

## Moderator

• Mr Manish Chourasia, Managing Director, Tata CleanTech Capital Ltd.

## Leadership Addresses

- Dr María Mendiluce, Chief Executive Officer, We Mean Business Coalition, Geneva, Switzerland
- Mr Hussain Al Mahmoudi, Chief Executive Officer, Sharjah Research Technology and Innovation Park
- Mr. Sunil Duggal, Group Chief Executive Officer, Vedanta Limited
- Mr. Rohit Chandra, Chief Executive Officer, OMC Power Pvt Ltd
- Mr Sumant Sinha, Founder, Chairman & CEO, ReNew Power Private Limited
- Mr Mahendra Singhi, Chief Executive Officer, Dalmia Cement (Bharat) Limited
- Mr Alexander Slater, Deputy Managing Director, U.S.-India Business Council

## Endnotes

<sup>3</sup> OECD (2011), Towards Green Growth, Paris: OECD Publishing.

<sup>&</sup>lt;sup>1</sup> United Nations (2011), "National policies for green development", In The World Economic and Social Survey (WESS), https://www.un.org/en/development/desa/policy/wess/wess\_current/2011wess\_chapter5.pdf

<sup>&</sup>lt;sup>2</sup> TERI (2015), "Science, Technology and Innovation for Low Carbon Development in India", https://www.teriin.org/projects/locci/pdf/res/Discussion\_Paper\_LCD\_STI.pdf