The Sustainable Development Goals, which the world endorsed in 2015, are reflective of much of India’s development agenda. They clearly recognise that economic growth, industrialisation, infrastructure and access to energy are the baseline for sustainable development, while equally highlighting the importance of preserving the environment, dealing with climate change and leading sustainable lifestyles. India’s national priorities mirror the goals contained in the SDGs: indeed, India is working towards 175 GW of renewable energy by 2022, enhancing its energy efficiency, levying a coal cess, making cities, transport and buildings smart, and deploying massive afforestation capacities. These plans are illustrations that India is committed to framing its development so that it stays within ecological limits, and so that it is rooted in its traditions and values of conservation and moderation, but simultaneously committed to a brighter and more sustainable future. By establishing an ambitious legal and political framework to promote sustainable development and to deal with climate change, India has manifested its strong political will, in line with the post-2015 agenda.

It is important now, to focus on solutions, and on how India plans to implement the post-2015 agenda. Partnerships, and harnessing technology and innovation are undoubtedly at the centre of the way forward, as both of these would help in achieving each and every SDG. Indeed India’s INDC specifically calls for ‘joint collaborative R&D for such future technologies.’ India’s investments in environmentally sound technologies has indeed increased; but India faces unique challenges, especially owing to the size of its population and the extent of deployment and access to corresponding necessary environmentally sound technologies.

India’s technology needs are situated in a double economic context, where on the one hand India stands out as a growing economy with a more and more competitive industry at the global level, a large middle class (market), and technically qualified labour; while on the other hand, it faces major challenges with 70% of its population in rural areas, 22% under poverty levels
(statistic from 2011-2012), and low levels of access to health services, nutrition and drinking water. Clearly, India’s technology strategy must differentiate between the needs of different segments of the economy and of different groups of consumers.

India has to face the following issue when thinking of technology solutions to implement the post-2015 agenda: when talking about decentralised solutions, will they be able to develop at a large scale and fast enough so that the benefits they bring are able to meet India’s international goals on climate? And when talking about centralised solutions, will their economic impacts be large enough for the benefits to reach the poorer? Consequently, India must strike a balance between centralised and decentralised solutions, which have a high potential of delivering multiple benefits while contributing to high growth. This is the only way that India can deal with the unprecedented challenge of simultaneously responding to development needs as well as containing the climate change related implications of thereof.

Since technology is fundamental to the elaboration of solutions to implement the post-2015 agenda, and is often a factor shaping institutions, it is one of the most appropriate entry points to develop national and international cooperation action strategies, to move forward on the sustainable path. The Paris agreement strengthened international cooperation on climate technologies and on capacity building. However, challenges for India remain regarding accelerated diffusion of climate technologies. Indeed, strengthening capacity and skills to enable the absorption of technologies, R&D, innovation and production in most developing countries is a long-term process where international efforts can help, but the key is in the role played by national institutions and stakeholders. In addition, the establishment of enabling conditions is in effect necessary for the development, transfer, adaptation and deployment of technologies; the development of local institutions and capacities to guide, handle and support these processes is just as necessary. This is not an easy task, especially when the definition of “technology transfer” is generally accepted but not uniformly adopted in practice. Indeed, certain Parties consider it to be exclusively the sale of technologies, along with perhaps a few basic operational skills.

Given that the technology framework under the Paris Agreement remains to be designed, it would be interesting to dig further into understanding how India envisions it and what India expects from it. Further, it would be interesting to get the point of view of local actors involved in technology transfers on the ground, on the real effect that the Paris Agreement could have on technology transfer, and to identify which are the missing pieces to facilitate technology transfer in India.

It would also be useful to identify relevant options and requirements for technology partnerships as well as identify the enablers and obstacles at the pre-commercialization, commercialization, and diffusion stages; and which are appropriate business models for successful technology development and deployment in India. Indeed, focusing on specific technology needs could help rapid diffusion, especially as there is visible interest from certain international agencies to support and promote specific technologies. This would help to build concrete technology partnerships. A list of potentially required technologies to implement the post-2015 agenda is attached to this note in Annex A, as a starting point for discussions, although such a list is non-exhaustive especially considering that technology evolves continuously and that some does not exist yet.
A joint seminar between TERI and the French Embassy in India could enable the investigation of these points. The seminar would include Indian experts, businesses and civil society representatives in order to get diverse perspectives from all stakeholders with regard to the most relevant technologies, challenges in diffusion/scaling-up, and sharing ideas on how their adoption could be enhanced. Following the discussions we seek to put together the outcomes of the discussion to the presidencies of COP21 and COP22.