Energy and freshwater in the context of blue economy

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Blue economy is seen as monetization of resources from the ocean in a sustainable manner. However, intangible resources like energy and freshwater from the sea are as important and can play a dual role in not only mitigating climate change, but also helping the economy through better health of the people, job creation, wealth generation, capacity building of the offshore industry and developing indigenous technologies. The energy–water nexus can be addressed efficiently with novel ocean technologies for harnessing both power and freshwater from the oceans. National Institute of Ocean Technology, Chennai, India has developed several technologies which can and have changed the lives of the coastal and island populations in a sustainable manner.

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loped countries would like to withdraw when they are known to be large polluters, and the less developed countries have larger issues like eradication of poverty and would need technologies and finances to implement the reduction of gas emissions. Subsequent COP meetings are still debating the issues involved. In such a scenario where consensus is not likely soon, the move to renewable sources of energy will continue to be slow.

The other reason for the slow move to renewables is the technological aspects leading to high costs. Most of the renewable sources are not baseload sources and the range of occurrence varies from region to region around the globe. The design and continuous operation of these technological systems with issues in grid integration are challenging. However, solar and wind energy today have been able to break the barrier to a large extent. In India, the targets and mandates set by the Government have led to larger pene-