

Non-Technical Summary for the Gold Standard Project 'India One Solar Thermal Power Plant' GS 1304

Energy is one of the most important requirements in this world to function properly. Its availability and regular supply are of paramount interest. As we are all aware energy/ fuel prices are rising day by day and the negative effects of global warming are more and more visible. Coal consumption and electricity generation are nowadays recognized as one of the prime contributors to global warming and respective climate change. It has been postulated that these climatic changes would be even more adverse in upcoming decades.

The proposed project activity exploits solar energy in a proper manner and the power is produced with no net greenhouse gas emissions, hence the project contributes to sustainable development. In the project activity, the electricity is generated from solar energy to meet the captive energy requirements of Brahma Kumaris Campus at Village Talheti, Tehsil Abu Road, District Sirohi, Rajasthan. The generated electricity will be used internally for in-house consumption and thus will avoid the use of grid electricity which in India is primarily dominated by coal based thermal power plants. The project will demonstrate, at a commercial level the potential and technical viability of solar energy and utilization for power generation through solar thermal route. In the absence of the project activity, the same amount of electricity would have been generated by burning of coal resulting in greenhouse gas (GHG) emissions into the atmosphere. The generation of electricity from solar energy will contribute to reducing greenhouse gas (GHG) emissions in the current energy mix. In addition to reducing the GHG emissions the project activity will limit emissions of SOx and NOx, since these emissions are higher in coal based power plants as coal consist of carbon, hydrogen, oxygen, nitrogen, sulphur and mineral matter.