# SESSION I - BANKING AND FINANCE

**BF01** 

# Banks Financing of Solar Water Heaters Projects in the Clean Development Mechanism (CDM) for Achieving Greenhouse Gas Emission Reductions

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Abstract—Solar Water Heaters (SWH) replace fossil fuels for water heating. Thus they help reduce Greenhouse Gas emissions. Therefore, use of this appliance, in principle, qualifies as a CDM project. However a single solar water heater system is a very small unit to generate sufficient CERs to be pursued as a CDM project. Therefore several units need to be bundled and/ or implemented as a programme, using an appropriate methodology and monitoring and verification protocol, in order to have a financially viable CDM project.

Bank of Maharashtra, a commercial bank in India engaged in financing SWH, was considered as the base for the study. The CERs were calculated considering Electricity and LPG as the baseline. For the purpose of sensitivity analysis, various price bands for CERs (between US\$ 15-25/CER) were considered. The analysis was carried out with bundling of SWH at BOM level, and at the Association of Banks (AOB)/ Ministry level (in which case SWH financed by several banks are bundled). Recently approved PoA approach was also considered in the analysis.

Keywords: Certified Emission Reductions (CER), Programme of Activities (POA), Financing structures, Bundling, Green house gases.

## Methodology

Detailed examination of published material, seminar proceedings and events at various CDM related meetings

Compilation of a Concept Paper for discussion with various stakeholders and identification of key issues affecting development of SWH based CDM projects

Consultations with stakeholders (in India)-To ascertain their perception of risk in undertaking CDM project and their views in the Indian context

### **Findings**

- The CDM project with bundling at an individual bank level with about 8600 installations, though cash surplus, would generate the cash just to meet its own sustainability. But it is a very small project.
- Bundling of installations by various banks, through an entity such as Association of Banks, would be a viable and sustainable CDM project due to benefits arising out of scale of economy.