Performance Monitoring & Verification Protocols

Sri Lanka

Guidelines for Typical Applications of Options

Industrial/ Commercial Sectors

Concepts and Options for Determining Energy Savings

(Adapted from IPMVP-2002 & Indian M&V Protocols)

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This is a Summary Document extracted from Performance Monitoring & Verification Protocols Sri Lanka- Guide Lines for Typical Applications of Options Industrial / Commercial Sectors Concepts and Options for Determining Energy Savings (Adapted from IPMVP-2002 & Indian M&V Protocols) prepared for USAID-SARI/Energy Program by Nexant.

Purpose and Scope

The purpose of this protocol is to set out the framework and operational aspects of independently verifying energy savings and benefits from energy-efficiency projects and energy-service company (ESCO) contracts, applicable for industrial and commercial sectors. The aim is to enable ESCOs, end-users, financial institutions and consultants to speak with one voice. The protocol eventually will also help in funding of such projects by financial institutions by taking advantage of "emission trading."

Energy conservation measures covered herein include fuel and electricity-saving measures, through installation or retrofit of equipment, and/or

modification of operating procedures of available equipment and control systems.

This protocol is intended to be fuel neutral and can be applied to a broad range of applications. Essentially, for an ESCO contract, this document can help in selecting a measurement and verification (M&V) approach that is most appropriate for the project, taking into account the project costs, technology-specific requirements, and risk assessment.

This protocol is not intended to prescribe contractual terms between buyers and sellers of efficiency services, although it provides guidance on some of these issues. Once other contractual issues are decided, this document can help in the selection of the M&V approach that best matches project costs and savings magnitude, technology-specific requirements, and risk allocation between buyer and seller, i.e., which party is responsible for installed equipment performance and which party is responsible for achieving long-term energy savings.

The IPMVP 2000 and the Indian M&V protocols 2000 approach are found to be applicable to M&V of savings for energy-efficiency projects in the Sri Lankan scenario too. However, base-line adjustments have to be made for factors such as capacity utilization, throughput, power cuts, and interruptions. The complete protocol is available in the internet ;URL address is www.Sari-energy.org/ ProjectReports SLanka_M&Vprotocols_vol2

Structure of Sri Lanka-Specific Protocol

This protocol is based on the International Performance Measurement and Verification Protocol (IPMVP) 2000 and the Indian M&V protocols. The IPMVP is quite generic in nature and an effort has been made to provide specific approaches in this protocol.

This addresses the typical energy conservation measures (ECMs) in the Sri Lankan Industrial and commercial sectors in addition to the overview of the best practices available in the IPMVP and the Indian M&V protocols.

Some things that make Sri Lanka unique include relatively constant annual weather conditions, a single electric utility company (Ceylon Electricity Board), an evolving ESCO and financial industry, and significant opportunity for energy-efficient new construction.

Moving Forward & Future Work

The future work is in terms of adding more specific and elaborate case examples for each of the options as in the case of IPMVP and the Indian M&V protocols. A core group is to be formed on the egroupsURL, who will be constantly providing feedback on discussions for the need for a Sri Lanka-specific protocol and technical issues. This approach should be extended so that more members can get involved and share their experiences. This would enable constant improvement and updating of the protocol periodically, taking into account the developments that take place.

End-users and financial institutions need to be constantly kept informed as they are the major stakeholders in such energy-efficiency projects (apart from the ESCOs). Systems should be worked out for third-party M&V contractors and utilizing emission trading for funding energy-efficiency projects.

The next version could be the development of a number of examples under the Sri Lankan scenario of the popular ECMs. This would go a long way to ensuring adequate comfort for funding agencies (external) and internal (within the corporation) as well as the end-users.