

Nomination of Dr. Satish Kumar for I-Star Award for Energy Efficiency

India presents incredible potential in the energy efficiency sector; there is little doubt that the infrastructure development needed in that country can become a major growth engine for the global economy over the next 10-20 years. It is in this context that I recognize Dr. Satish Kumar (Chief of Party for the USAID-supported ECO-III project) for his critical work in India, and nominate him for the I-Star Award for Energy Efficiency. I have known Satish for 10 years and have actively collaborated with him over the last three years while leading LBNL's EE work in India. I list Satish's accomplishments under four major headings:

1. Helping Develop a National Program on Building Energy Efficiency in India

Satish has shown exemplary leadership by working closely with India's Bureau of Energy Efficiency (BEE) to push a very ambitious building energy efficiency agenda. Considering that 70% of India's commercial sector that will exist in 2030 is not yet built, Satish's awareness and training work to ensure minimum energy performance standards through implementation of the Energy Conservation Building Code (ECBC) will have significant benefits. According to the BEE, ECBC has the potential to save 1,700 GWh (approx. 300 MW of power plant offset) in the first year of implementation. Satish and the ECO-III project have shown tremendous vision by working with 18 leading architecture and engineering colleges to produce the next generation of architects and engineers through "train the trainer" programs to build capacity of the faculty members to teach Building Physics and Building Energy Simulation at these institutes. This pool of highly skilled labor can also help India become a leader in energy technology, as the demand for skilled manpower will increase in the coming years.

Many international organizations (e.g. LBNL, IEA, World Bank, McKinsey) have struggled with limited or no reliable data to characterize the energy consumption in the building sector. The ECO-III project has worked with BEE to launch a much-needed benchmarking effort for energy use in the commercial building sector, as well as a Building Star Labeling program. By encouraging a performance-based labeling approach, this program has the potential to materially reduce energy consumption, offsetting hundreds of MWs in generation capacity.

2. Development of a Replicable Model for State-Level Municipal EE Programs

ECO-III is also playing a critical facilitation role in a project to dramatically improve the efficiency and service levels of municipal street-lighting and water-pumping for the entire state of Gujarat. This project has already attracted an investment of \$60 million dollars through an MOU that has been signed between the Power Trading Corporation and Gujarat Urban Development Corporation. The project implementation model is being used to replicate similar state-level programs in the municipal sector all over India.

3. Institution Development and Market Transformation

Under the leadership of USAID, the ECO-III project is helping to create three Regional Energy Efficiency Centers to focus on a) Building Envelope and Simulation Research at Center for Environment and Planning in Ahmadabad; b) Demonstration of Energy-Efficient Furnace Technology for Small and Medium Enterprises at See-Tech, Nagpur; and c) Establishment of a Center to Promote Energy-Efficient Home Appliances at Kolkata. ECO-III, with active support from the Alliance to Save Energy, has also played a critical role in the creation of an EE organization, the "Alliance for an Energy-Efficient Economy," which has initiated plans to be the leader in the field of monitoring, verification and evaluation in India, in partnership with Efficiency Valuation Organization and LBNL.

4. Helping EE through International Cooperation and Information Sharing

Satish has played a critical role in facilitating cooperation between the many US-India energy efficiency activities that have taken place over the last 2.5 years. He has worked closely with LBNL on DSM programs and in helping launch a national Data Center Initiative in partnership with NASSCOM, India's power IT and ITES Industry association.

The ECO-III project is a team effort and its significant contributions are documented in detail on the project web site – www.eco3.org. The significance of Satish's work can be gauged from the endorsement of Dr. Ajay Mathur, Director General of BEE:

I am glad to place on record BEE's appreciation of the momentous work done under the ECO-III Project as part of Indo-US bilateral cooperation. ECO-III project has promoted energy efficiency in the commercial sector and helped push it as one of the topics on the National Agenda for energy efficiency ... I would particularly commend the exceptional work of Dr. Satish Kumar, Chief of Party and IRG for this.

For all the above reasons, I would like to nominate Dr. Satish Kumar, Chief of Party, ECO-III project, for the I-Star Award for Energy Efficiency.