



National Dialogue on Emerging ESCO Scenario in India

Mitigating Risk through EPC Contracting to Scale-Up Financing

Summary Notes from the Discussions and Deliberations – Prepared by AEEE Team

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Introduction

Alliance for an Energy Efficient Economy (AEEE) with support from Shakti Sustainable Energy Foundation (SSEF) organised the **National Dialogue on Emerging ESCO Scenario in India Mitigating Risk through EPC Contracting to Scale-Up Financing** on 21st March 2016 in New Delhi.

This event was the culmination of five workshops, three roundtables and a multi- and bilateral organisation meet, that were organised in Pune, Bangalore, Ahmedabad, Chandigarh, Hyderabad, New Delhi and Kolkata.

In each workshop, ESCOs, EE Consultants and Financial Institutions participated and discussed the issues surrounding Energy Performance Contracting (EPC), as well as, the role of Financing. SDBI joined AEEE as a National Partner and presented the newly launched Partial Risk Sharing Facility (PRSF), targeting SME customers. The Indo German Chamber of Commerce also partnered with AEEE at these workshops.

Dialogue Highlights

During the inaugural session, Dr Satish Kumar, Chairman of Alliance of Energy Efficient Economy gave an overview about the day long workshop and also highlighted the growing importance of energy efficiency in the power sector.

One of the important aspects of the project was the launch of the ESCOnet site by Mr Krishan Dhawan, Chief Executive Officer, Shakti Sustainable Energy Foundation (SSEF). He lauded AEEE's initiative of spreading awareness about ESCOs, development of the EPC contract, and enabling financing for the ESCO projects. Dhawan stated, "While government policy can play a key role, the private sector also needs to step up. There is a significant opportunity for the ESCO business if companies are able to develop good business model and a pipeline of bankable projects. Presently, in India, the ESCO business remains an underserved one and it is important that it takes off."

Dr Ashok Sarkar, Senior Energy Specialist, World Bank, delivered his voice message via skype. He spoke about the importance of energy efficiency in the global context and as a key lever to tackle climate change. In his presentation, he spoke about the global ESCO scenario and the situation in India and the steps that need to be taken to boost it. He talked about the Partial Risk Sharing Facility and the World Bank's support in creating it. In China, such a PRSF scheme combined with the government support played a key role in creating the ESCO market.

Dr. G. C. Datta Roy, Founder, CEO and Advisor, DESL who was also the Founder Vice Chairman of AEEE, emphasized the need for taking more initiatives which can give boost to the ESCO market in India. Dr.



Roy added that the ESCO market in China has grown manifold because of strong support from the government in the 12th five0year plan which was much needed. The US ESCO market is primarily focused on buildings and that also on Federal buildings because of the uniqueness of the US Federal buildings. EESL has shown that ESCO model can flourish in the municipal sector and they will need to replicate it in the buildings sector. Industrial sector is complex because of confidentiality, IPR and other business issues and it will be difficult for ESCOs to penetrate the sector as has been the case in the US. Dr. Datta Roy appreciated the support given by Shakti Sustainable Energy Foundation and the World Bank to AEEE and the work that it is doing in the field of energy efficiency.

ESCO Scenario – Best Practices and Lessons Learned

During the first session of the Dialogue, was chaired by Dr Pradeep Dadhich, Deputy Director, IRADE. Dr Koshy Cherail made a presentation, giving a brief about AEEE, its membership base among EE and ESCO companies, as well as, SSEF support programme to develop the ESCO Contract, and the National Workshop series. He also highlighted AEEE’s learning from the Utilities supported ESCO programme. Pradeep Kumar, adviser at AEEE made a presentation on the learnings from the workshop, while Shashank Jain, SSEF shared the Foundation’s vision in supporting ESCO market development as a way to create the 50 GW energy efficiency resource. He outlined that the journey has been mixed but successes have been minimal and some new thinking may be needed to enable the ESCO market development and expansion.

The second session focussed on ‘**Scaling up ESCO Markets - through M&V based EPC Contracting.**’ The session was chaired by Prabir Neogi, Chief Executive, Corporate Affairs, RP Sanjiv Goenka Group. Mr. Neogi stressed on the need to look into the government policy as well as the ecosystem with regard to the development of the ESCO market. During this session, Sumit Shukla, Investment Officer, IFC Projects Experience spoke about the work done by IFC in the field of ESCOs especially in the street lighting sector in some cities. Mr Rajiv Kumar, Deputy General Manager, SIDBI, introduced SIDBI’s Partial Risk Sharing Facility (PRSF) for Energy Efficiency Scheme. This facility was launched under World Bank support of USD 37 million, with a Technical Assistance Component of USD 6 million. Mr Neeraj Varma, Manager, EE Centre, SIDBI, PRSF presentation the PRSF scheme.

The viewpoint of the ESCOs, central to the uptake and success of PRSF, was presented by Milind Chittawar, CEO, SEETech Solutions. He focused on how the ESCO market can grow and how the government can come forward to help them. ESCOs from Greetude Energy, Schreder, Honeywell, Schneider-Electric among others participated and shared their views on how the scheme should help create a much bigger ESCO market by acting as a catalyst.

Panel Discussion on ESCO Financing

The Policy dialogue on **ESCO Financing – The Emerging Scenario**, was culmination of the day’s event. The session was chaired by Dr Satish Kumar. At the very outset, Dr Kumar said, “Energy Efficiency should be the first fuel that should be happening, whether we are looking at the municipal sector or the buildings sector.” He further said that for the ESCO ecosystem to develop, it is important that private sector ESCOs need to be doing more deals and closing contracts on the back of the success enjoyed by EESL. He also compared the ESCO market in India to China by highlighting the big gap between the two as China’s ESCO market is probably 25x on a range of metrics – number of ESCO companies, investment in the sector, people employed in the sector, etc.



Pankaj Sindwani, Head of Cleantech Sustainability at Tata Cleantech Capital, stated, As far as the ESCO financing is concerned, in the last three years, Tata Capital has financed about 10-12 ESCO projects out of the 30-40 proposals and the results have been mixed. It is important that the ESCOs show that they are financially sound and have good management teams to complement their technical focus and strength. For the market to grow, the financial institutions would like to see all round depth in ESCOs rather than the historical focus on technical capabilities.

Mr. Sumit Gupta, Group President and Country Head Food & Agribusiness Research Management, Yes Bank stated, "It is imperative for the ESCOs to realise that the project should make business sense to the financial institutions. It is also important for end customers to be financially sound so that banks have lower repayment risks." He also emphasized that EE financing need to scale up to a level where these are not one-offs and financial companies can start to look at portfolios of energy efficiency projects to bring efficiencies in the entire process.

Meanwhile, Salil Garg, India Ratings & Research, Fitch Group, There is need to adopt a roadmap for energy efficiency financing, which is similar to that of the renewables financing wherein the initial support was provided through equity financing in combination with the support of favourable policies and regulations from the government followed by debt financing which has now led to renewable energy projects getting AAA rating. Currently, there are no EE projects that come for rating and the situation is similar to what renewable projects faced 10-15 years ago and that needs to change. For EE sector, debt financing is being asked to somewhat play the role of equity financing and that is one of the reasons the market has failed to take off. He suggested that the concept of cash-flow being generated from reliable stream of energy savings and the return on investment potential need to be sold to equity investors who can provide early investments – just the way they have done it for roof top solar market. This coupled with the fact that the EE financing market can be in tens of billions of dollars and if some of these early business start-ups can be backed by large and reliable business houses then the market will have a better chance of taking off and fulfilling the potential.

Saurabh Kumar, Managing Director of Energy Efficiency Services Limited (EESL), indicated that the total revenue at EESL will be close to about Rs. 4,000 Crores which will likely increase to Rs. 7,000 Crores (~1 billion) very soon. While the initial thrust has been on DELP and municipal street lighting, EESL is working with CPWD and even agricultural pump sets where it has a target to replace more than one million pumps although so far it has only replaced 4,000 pumps. "It is important to delink the savings with payments and a deemed savings approach has to be adopted. He also shared that 15-20 municipal corporations have put out bids for ESCOs that are open to all ESCOs and not just for EESL." He also added that EESL is working with the Indian Railways on a large energy efficiency program. in response to a question, he agreed that EESL is essentially doing lease financing and favouring an annuity model because as a financing entity, EESL wants assured payments and hence the deemed savings approach has been the preferred approach for validating energy savings.

There was a fair amount of discussion whether the deemed savings model, preferred by financiers, will be equally acceptable to the end customers because while it reduces the repayment risks for financial institutions, it significantly enhances the risks for end customers especially in solution based projects that not only rely on the energy-efficiency of appliance or equipment but also good design and engineering skills and superior implementation and commissioning. The ESCOs present at the workshop voiced their deep reservation that private sector ESCOs can sign contracts with end customers on the



back of a deemed savings approach. Dr. Kumar said that while different kinds of financing models (e.g. vendor financing, end-use leasing, shared savings, guaranteed savings, etc.) has been around and used globally, it won't be right to adopt "One Size Fits All" approach if one has to fully realize the potential of the energy efficiency sector. He lauded the role of EESL as it is helping create the market for EE products (e.g through LED bulk procurement which can be extended to super-efficient air-conditioner) and services (e.g. through municipal LED street-lighting system) and advocated for robust and reasonable business models that is fair to all the stakeholders leading to win-win proposition that is possible in EE projects.

Concluding Remarks and Next Steps

ESCOs have been viewed as one of the important levers in scaling up through project implementation to realize the energy efficiency potential in India and world over. This is even more critical in the aftermath of the COP21 agreement and submission of INDCs by the Government of India that calls for renewed focus on energy efficiency. India has made some efforts to help create a favorable environment for the ESCO market but the results have been mixed in terms of actual outcomes on the ground. Many of India's energy efficiency policies (PAT, EE in existing buildings, DSM programmes in municipal and agricultural sector, EE in MSME, operationalization of PRSF and PRGF, supporting GOI commitments as per Biennial Update Reports submitted to UNFCCC, and the implementation of ISO 50001 etc.) would do much better if the ESCO eco-system is vibrant, capable and more robust. Many of these programmes perpetually underperform in the absence of evaluating policy intent against goals using measurable results on the ground. ESCOs still remain one of the best option to scale up implementation but both the ESCOs and financial institutions need to better understand each other's strengths and come up with innovative business and financing models that will take the market beyond the usual discussion of barriers and challenges. The underlying value proposition of using energy savings as a cash flow remains attractive to many end segments and customers and a recast of the public-private partnership model is needed which will clearly identify the roles and responsibilities of the private and the public sector. A clear articulation of the business model along with the size of the market and the risks involved by the technical community (e.g. a new breed of ESCOs who are equally adept at developing technical solutions and packaging them in a way that is easy to explain to the financier community), revisiting the equity vs. debt financing debate after taking a fresh look at the EE sector in the aftermath of the success enjoyed by the renewables sector and the fact that EE is universally claimed as the first fuel and an engaged and active policy setting and regulator environment that is eager and willing to take actions to reap the multiple rewards offered by energy efficiency (e.g. significantly reducing the power generation and fuel import requirements leading to improved energy security, improved air quality and environmental pollution, and increasing the size and competitiveness of the Indian economy by helping create a clean technology and services sector in India). A redoubling of efforts to strengthen ESCO business would makes good sense for business, economy and environment and must be pursued vigorously at all levels and through the participation of multiple stakeholders.