



# Webinar: Energy Efficiency Finance Platforms & Protocols

## *Global experience and design considerations*

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### **Background**

Evidence-based data and information play a critical role in building investor confidence in energy efficiency measures. Standards and protocols also help build familiarity and confidence in energy efficiency projects amongst financial actors, providing a consistent and trustworthy process. Pairing these with capacity building and outreach efforts builds recognition that energy efficiency projects do deliver and are an attractive risk-reward proposition.

India's Bureau of Energy Efficiency (BEE) is developing a new Energy Efficiency Finance Platform (EEFP) that will serve as a mechanism to help stimulate funding for energy efficiency projects in India. The platform builds upon BEE's strong track record of supporting energy efficiency measures and will help to highlight the benefits and risks of energy efficiency projects in India through market-based evidence and benchmarking of investments with partner financial institutions.

This online event, organised by BEE and the OECD's Clean Energy Finance and Investment Mobilisation (CEFIM) programme, discussed global experiences in the design and implementation of similar finance platforms and protocols used to facilitate and encourage investment in energy efficiency. The insights, lessons learned and good practices from those experiences can help to improve access to finance, mitigate investment risk and increase opportunities to scale-up capital for energy efficiency in India and in other countries.

### **Summary of discussions**

The Energy Efficiency Financial Institutions Group (EEFIG) was established in Europe to bring together stakeholders – from project developers and technicians to financial actors and policy makers – to address barriers and bring forward opportunities for energy efficiency finance in Europe. The EEFIG group over the past either years has led to over 20 energy efficiency initiatives in Europe, including the De-risking Energy Efficiency Platform (DEEP) and European Investor Confidence Project (ICP). One of the major outputs of this 500+ member group was its 2015 report highlighting the role of energy efficiency as the “first fuel” – a principle that has since now been enshrined under Article 3 under the new *Fitfor55* package by the European Commission.

DEEP is one of the critical tools developed under EEFIG, allowing users to see, through real project data, the economic value of energy efficiency projects. DEEP takes into account information on the risk and returns of energy efficiency measures through indicators like average payback period and the cost per unit of energy saved. It underscores that energy efficiency is the cheapest “fuel” in Europe and allows users a number of features and functionalities to use this information. For example, the platform can be used to benchmark and compare information across the 17 000+ projects in the database, which can help build the business case for energy efficiency investments. It can also be used for policy development, for example to identify support schemes that address needs like longer payback periods.



One critical element of DEEP is its confidentiality and anonymity. This was a critical design element in getting financial institutions to provide data, where discussions found that having aggregation and anonymity across at least ten projects was sufficient to get this to happen. The development of DEEP, and more recently the updated DEEP 2.0, highlights the importance of simplicity (i.e. basic minimum data points) that can ensure a minimum number of projects and financial indicators are being submitted. A realistic data structure that provides options (e.g. ability to submit further details for those that have it and are willing to share) is crucial to the success of these types of platforms. Over time, this can be built to allow for additional elements or more advanced metrics.

ICP is a tool design to build a common language for energy efficiency finance protocols. Lack of standardisation in terms of how energy efficiency projects are developed, documented and verified is a barrier to finance. It also means that energy efficiency projects are often treated as unique financial considerations, which leads to costly due diligence and limits replication as well as access to wider capital markets. ICP is working to overcome this by bringing standardisation to energy efficiency projects to define an asset class, improve the usefulness of data sets and lay the foundation for capital markets, as has been done for other sectors like auto loans and mortgages. ICP protocols help to ensure that investors have a clear signal under a common project platform. The protocols have a quality-assurance process to offer investor ready energy efficiency (IREE) projects, which like other standards such as LEED, helps make the projects more attractive to investors, while increasing confidence in those investments and streamlining the overall process. One such example is use of ICP protocols by PG&E in the United States, which has helped to reduce overhead and project development costs by anywhere between 25% and 90%. ICP also helps improve actuarial data around energy efficiency assets and investments.

BEE is working to meet India's sustainable development ambitions, where as much as USD 5 trillion in investment is needed to 2030 to meeting climate change goals in the energy sector. Energy efficiency can help to reduce the energy and carbon intensity of economic activities in India, and the investment potential, for instance in small and medium enterprises, is still huge. BEE has been working to support financing of energy efficiency projects through a number of initiatives under the National Action Plan for Climate Change and National Mission for Enhanced Energy Efficiency. This includes initiatives like the Performance, Achieve and Trade (PAT) scheme and the newly created EEFP.

EEFP is looking to create mechanisms for financing of energy efficiency projects and increase capacity building with financial institutions to increase the flow of finance to energy efficiency projects. 672 officials have been trained through the EEFP initiative so far, and there are related supporting efforts like investment bazars and BEE guidelines for financing energy efficiency projects in India. The EEFP aims to facilitate matchmaking of energy efficiency projects, and a facilitation centre under EEFP will also support development of energy efficiency project pipelines, in addition to working with banks to develop this capacity. BEE also has a new credit line with kfW for energy efficient housing, applying support for sub-loans for projects that can achieve 25% energy savings.

### **Panel of Indian financial institutions on energy efficiency financing**

The Power Finance Corporation (PFC) is the largest financing institution for energy efficiency in India, and the Ministry of Power has recently appointed PFC to lead on financing for energy efficiency progress in India, building upon schemes like PAT and the Ujala lighting programme. There still is a long way to go on energy efficiency finance, and PFC is looking at how to address impediments, increase the "bang for buck" of energy efficiency projects and promote their uptake by working with different players across the finance and industry sectors. From a financial perspective, there are four



issues that need to be addressed. One is security challenges with on-balance sheet finance, for example with energy service companies (ESCOs). Another is lack of good, structured projects and the need for a standard template for energy efficiency projects in the market. This includes the need to collect baseline data and have standard, verified information on projects. Third, there is still a lot of resistance with financial institutions with energy efficiency because of these issues, and consequent pricing of loans creates disincentives for further project development. Lastly, small size is a problem, because of the time put into due diligence and project documentation. The government can support work to address these issues, as has been done in other countries, and lower risk perception. For example, a new proposed scheme (e.g. around USD 2 billion) is being designed to support energy efficiency (pending Ministry of Finance approval). Applying different interventions (e.g. an interest subsidy passed to energy efficiency projects once benefits can be shown) can help reduce payback periods and attract energy efficiency project developments that deliver energy savings. Another is a proposal to encourage lenders to finance energy efficiency projects through a federal guarantee, which will depend on the rating of the borrower, to help address issues with smaller players in the market.

The Indian Renewable Energy Development Agency (IREDA) is a financing institution dedicated to address issues with clean energy development. IREDA has been active in BEE training programmes and financing of energy efficiency projects. To scale up finance for energy efficiency projects in India, issues like length of payback period, lack of monitoring and use of standard protocols need to be addressed. Guarantees are an important way to address energy efficiency finance, but there also is need to create a network of players. Lenders typically want to see what assets they have financed, and what revenue they generate. Yet, with energy efficiency, this gets embedded in the asset, and savings are abstract. Capturing savings need innovative financing mechanisms, and IREDA is sharing its experiences with BEE and banks on use of different financing models. Progress is being made and IREDA has lent between INR 15-20 crore to energy efficiency projects.

The Small Industries Development Bank of India (SIDBI) is a development financial institution created in 1990 to promote and facilitate development of micro, small and medium enterprises (MSMEs) in India. This is an important sector with more than 63 million MSMEs employing 111 million people. There is high operational inefficiencies in MSMEs today, and they are resource intensive, with low profit margins and lack of awareness on energy efficiency opportunities. Savings could be as much as 30% or more in terms of energy costs. SIDBI has a number of programmes, initiatives and outreach to address this. For instance, it has lines of credit for energy efficiency with JICA/AFD/KFW. It took a credit-plus approach providing additional technical support and advice as needed. It developed revolving product with WB/GEF on end-to-end energy efficiency (4E) with technical and financial support to prepare project proposals and energy audits, etc. It also has a partial risk sharing facility (PRSF) as a guarantee mechanism. SIDBI is accredited with GCF and is working on leveraging these experiences to provide loans and project preparation support. Training is particularly important, and key learnings show that concessional finance with technical support is critical for MSMEs. An ecosystem is needed to create a pipeline of energy efficiency projects for financing, and multilateral/bilateral support can support this, alongside improved capital availability.

The International Finance Corporation (IFC) is working to develop energy efficiency finance in India and is supporting training and capacity building as well. The joint venture Tata Cleantech green bank is an example of financing facilities with IFC, who has also been supporting BEE. Lessons from projects is that support is needed early in the pipeline, for instance to conduct energy audits. Handholding of both financial partners and MSMEs is very important, and can be addressed through advisory support,



training and capacity building, and risk-sharing mechanisms. These will help private finance to gain experience with energy efficiency projects and assess their risks. Support mechanisms like first loss facilities (e.g. work done in China and the Philippines) are a good trigger to engage financial institutions in this experience. Blended finance through dedicated agencies focusing on energy efficiency finance can also facilitate this handholding process. Overall, these efforts can make the financial market more comfortable with energy efficiency projects and help create demand in the market.

## Conclusions

Having a standard group of experts, like the EFIG Working Group, is critical in developing the tools and activities that support energy efficiency finance. Constancy and continued engagement with these actors will help build consensus on energy efficiency finance. Engagement with financial regulators is also critical in accelerating the keenness of financial institutions for energy efficiency.

Data collection and best practice examples are very important in de-risking energy efficiency finance for project developers and financial institutions. Sector specific technology catalogues can also help certain industries to know what the opportunities are, and insurance and guarantee instruments such as those discussed are another important element to making energy efficiency finance work. Together these can build confidence, highlighting that energy efficiency projects do deliver and that they are an attract risk-reward proposition.

Lastly, standardisation in project development is critical in building confidence in energy efficiency projects. Having a documented, structured approach like the ICP Protocols can lower project risks, reduce transaction costs and make energy efficiency more attractive.