

**Minutes of the 3rd Project Steering Meeting of the Project "Promoting Market Transformation for Energy Efficiency in Micro, Small and Medium Enterprises" was held on 21st, February 2018 at Office of DC(MSME), Nirman Bhawan, New Delhi.**

3rd meeting of the Project "Promoting Market Transformation for Energy Efficiency in Micro, Small and Medium Enterprises" was held on 21st, February 2018 at Office of DC(MSME), Nirman Bhawan, New Delhi. Shri Ram Mohan Mishra, Additional Secretary & Development Commissioner, MSME chaired the meeting. Following members were present in the meeting:

- (i) Shri Ram Mohan Mishra, AS&DC (MSME), O/o DC (MSME)-Chairman
- (ii) Shri Sudhir Garg, Joint Secretary (MSME), O/o DC (MSME)
- (iii) Shri Sanjay Bisariya, Joint Development Commissioner, O/o DC (MSME)
- (iv) Shri Sanjay Goyal, Managing Director, SIDBI
- (vi) Shri Rakesh Kumar, Dy Director, O/o DC (MSME)
- (vii) Shri Rene Van Berkel, UNIDO representative in India
- (viii) Shri Sanjaya Shreshtha, UNIDO
- (ix) Shri Milind Deore, Director, BEE
- (x) Shri S. P. Gamaik, CGM(T), EESL
- (xi) Shri Debajit Das, NPC UNIDO
- (xii) Shri N. K. Jha, EESL,
- (xiii) Shri Bansi Shukla, EESL

1. Mr Sanjay Bisariya, JDC (MSME) welcomed the members present in the meeting and requested the National Project Coordinator (NPC), UNIDO to start the presentation. Committee confirmed the 2<sup>nd</sup> PSC minutes.
2. Mr Debajit Das, National Project Coordinator (NPC), UNIDO made the presentation and progress made so far. The project aims to reduce technology and financial risks of investment in sector specific energy efficiency technologies. He introduced 4 project components. He provided overall snapshot of the project and its reach to 10 MSME clusters
3. AS&DC (MSME) requested to carry out a macro study/assessment and SWOT analysis of the MSME energy scenario in regards of energy consumption and costs, productivity and impact on climate change of MSME sector in India by extracting suitable information from various available data sources. The present GEF-5 project can then be embedded to that macro picture on a top-down approach and would also highlight what further actions are required to accelerate and scale up energy efficiency in MSME sector.
4. Mr. Milind Deore, Director BEE explained that overall picture of industrial energy use has been prepared by BEE by virtue of its mandate to implement Energy

Efficiency Energy Conservation Act in all sectors including ULBs, industries and. BEE is already started energy use mapping which needs to be updated.

5. Mr. Rene Van Berkel, Country Representative, UNIDO India, explained that an energy efficiency assessment had already been prepared as part of the project preparation (during 2014-2015) which has guided the project design. To build the capacity of the MSME sector, UNIDO is in parallel to the present project, already working with BEE and Ministry of MSME to address the first level of energy efficiency which is related to the energy monitoring and auditing and which attempts to eliminate one of the prime bottleneck of for starting energy efficiency at factory level.. The present project though was specifically designed to address the second level of EE to facilitate investment in higher costs, yet cost-effective, energy efficient technologies. The project addresses both technical & financial risk related to such energy efficiency investments as reported by MSMEs.
6. AS&DC (MSME) explained that whatever steps are taken, the problem factors need to be proper understood as a basis for justifying solution. The Indian manufacturing sector is facing severe crisis, particularly where energy is large part of the overall production cost. He urged to assess the baseline through a comprehensive study so that entire landscape is captured by reflecting the energy consumption and cost scenario in the Indian Manufacturing sectors and all other sectors combined in India. Mr. Debajit Das, NPC UNIDO assured to submit a report reflecting the macro picture in a month time. AS&DC (MSME) said that after the submission of such report, the major stakeholders can again meet to decide on the action plan on this project as well as what further steps are required for remaining portion of the gap.
7. Mr. Das then elaborated on the major activities undertaken in the last one year and he also mentioned about the preliminary scoping studies and baseline video graphic documentaries completed in 6 previously approved clusters, namely: The project engaged competent professional agencies as well as industry representatives from respective clusters. AS&DC (MSME) suggested that in future no such local consultants would need to hire, by involving local DI MSME offices for data collection tasks, as appropriate.
8. He further suggesting/advised to design the policy that caters a larger agenda and start driving bigger prospect. Attempt should be made to reach not only the 6 clusters in MSME, but to the maximum number of clusters. Mr. Van Berkel explained that exchange of information has started happening in the energy efficiency links to the MSME to the SDC-TERI-BEE initiated knowledge platform SMEEKSHA and the recent National Energy Efficiency Summit for MSMEs. Mr. Garnaik for EESL highlighted that so far BEE has been mostly focusing on the bigger industry or designated consumers, who according to the Energy Efficiency Act 2011 are obliged to undertake regular energy efficiency audits. Yet smaller industries from MSME sector are not covered under this mandate. Awareness and pricing is playing an important factor.

9. Mr. Debajit Das has mentioned as part of the preparation for the launching event of the GEF 5 project a dedicated web portal is being developed where all project related information's and resource papers will be stored for public access. A vision document is also being prepared, (draft of which is ready) to facilitate outreach to stakeholders in clusters and other interested parties. AS&DC (MSME) suggested that there is no need to have number of separate project to project website. Since there is already a national level MSME web-site, ways could be discussed to integrate on the same separately with the Joint Secretary, MSME.
10. UNIDO and EESL representatives jointly undertake fact finding to preselected clusters, which demonstrated good potential and strong industry interest in six clusters. However, five other initially proposed clusters, do not offer good prospects for success, due to different reasons: .
  - a. Vapi (chemical): industry interest was found lukewarm during various discussions and industries' voluntary participation seems doubtful.
  - b. Jodhpur (limekiln) cluster demonstrated low potential for energy conservation.
  - c. Morvi (ceramic) cluster already possesses advanced technologies and number of EE interventions are already happening

Originally listed Pali Textile and Varanashi Brick Kiln clusters were already dropped due to environmental issues in the last PSC meeting. Due to above-mentioned reasons PSC decides to drop above listed three clusters namely Vapi, Jodhpur and Morvi cluster. As per the earlier suggestion of DC MSME office Meghalaya and Uttarakhand States was analysed for identifying a potential cluster. AS&DC (MSME) suggested that while some clusters might not fit for the specific scope of the present project, and effort should still be made to support representative industries in energy efficiency (through e.g. information exchange, linking to other initiatives, etc.).
11. When enquired by AS&DC (MSME) on the SIDBI Energy Efficiency Scheme, Mr. Sanjay Goyal, MD SIDBI explained that SIDBI EE scheme is undertaken under the umbrella of World Bank GEF project by the name of 4E (End to End Energy Efficiency). The fund is Rs 128 Crore and is almost at completion stage.
12. AS&DC (MSME) suggested to do the simple exercise in mapping the energy efficiency scenario and proposed to meet again in the month of March to discuss the way forward in a detailed brainstorming discussion. The study should cover the Indian MSMEs from the Manufacturing sector and what is the energy consumption and how does look like in terms of efficiency. For the association stakeholder meetings or zonal conclave could be organized to check what challenges industries are facing. First, the crisis on ground would be mapped and then it would be put on table for discussion after one month. Second, meeting with associations will be called in MSME to provide them a very focus agenda. From the discussions, it would be possible to consolidate on the Indian manufacturing industries strength, weakness, opportunity and strategy required for bringing up significant energy

efficiency improvement. After this analysis is done focus can be made on the opportunities and on the investment possibilities from various windows – SIDBI, BEE, UNIDO, GEF 7 etc. (data needs to be acquired). Then overall demand could be assessed, and a check could be made as to how much the existing schemes are catering and how much additional effort or fund is required. The UNIDO project/ efforts would then be seen in the light of this situation and context.

13. Mr. Van Berkel informed to the forum that some of the work in this line has already been carried out and that this project is trying to solve only small part of the whole pictures to the extent that are practically possible to achieve with UNIDO's limitation resources. With regard to the delay on the execution timeline, he replied that most of the time was contributed by the reality checking process on the ground with the clusters and also the contractual processes.
14. AS&DC (MSME) delegated to the JS (MSME) the responsibility for taking decisions on the clusters, technologies and pilot units as well as on way forward. He also suggested that there needs to be two work plans, one specific only for GEF-5 project and the other for the rest of the national level MSME EE programme. He proposed that there would be a monthly review by the JS MSME and the steering committee meeting should be held every three months where around half an hour time would be devoted on the National MSME energy efficiency plan too. Mr. Van Berkel informed that the similar kind of road map strategy for energy efficiency is also of interest to the BEE DG with a specific focus on large energy consumers from the MSME sector.
15. For subsequent portion of the discussion, AS&DC (MSME) delegated the chair to JS MSME. A brief presentation was then made by Mr. S. P. Garnaik CGM Technical (EESL) about the cluster selection methodology. JS (MSME) suggested to follow the example of energy efficiency project for the railways, which was started with a small pilot project with limited number of LED and quickly it was scaled up around the whole country. Within one-year time, 8000 stations have achieved 100% implementation of LED and now everything (building and railway station) has been up-scaled to 100%.
16. Mr. Garnaik presented a cluster analysis representing 32 energy-intensive MSME clusters using various Energy efficient characteristics and proposed 10 most promising clusters among them. They are

Cluster	Type	State
Surat	Textile	Gujarat
Sundargarh	Sponge Iron	Odisha
Jorhat	Tea	Assam
Vellore	Rice	Tamil Nadu
Batala/Jalandhar/Ludhiana	Forging & Casting	Punjab
Muzzafarnagar	Paper	Uttar Pradesh
Ankaleswar	Chemical	Gujarat

East & West Godavari	Ceramic	Andhra Pradesh
Howrah	Wire Drawing & Galvanizing	West Bengal
Varanasi	Textile	Uttar Pradesh

JS(MSME) requested that necessary information for Varanasi cluster may be collected at the earliest for further analysis. EESL may mention (or put on record) the justification of inclusion/exclusion of any cluster with respect to the clusters mentioned in initial project document.

17. Mr. Garnaik also presented list of criteria for selection of technologies. As per the project documents 35 technology needs to be selected for pilot demonstration. He mentioned that out of these 35 technologies, 20 to 25 technologies might be cross sectoral and that can be apply for most clusters. And the rest 10 or 15 that may be very specific to one or two clusters only.

18. JS (MSME) suggested that out of 10 we have selected 5 or 6 clusters and the rest are not qualifying for some reasons or others. If SIDBI is aware of these cluster from the industrial loaning experience can provide feedback on the high power consuming industries in terms of their merit for consideration. The project can then start from 10 highly potential clusters.

19. Mr. Garnaik mentioned that EESL have made analysis of 32 clusters through preparation of a matrix. In the matrix, weightage are assigned on following 8 parameters depending on the objective of this project.

- Absolute Energy Consumption (TOE)
- Energy Density (ToE/MSME unit)
- Specific Energy Consumption (SEC) Bandwidth (times)
- Contribution to Industrial GDP (%)
- Energy Cost (% of Manufacturing Cost)
- Potential Improvement Through GEF-5 (TOE)
- Investment Potential (mn \$)
- Energy cost as a % of Mfg. Cost

20. Mr. Milind Deore, Director BEE, mentioned that more than 50 cluster have been surveyed by BEE which are energy intensive in nature and cluster manual has been prepared for each cluster. This manual indicates what type of technology is existing, what are the technological gap and how much is the energy saving potential. Most importantly these also highlight whether energy efficiency intervention is possible in these specific clusters or not. These documents are however 6 years old and BEE is planning to update the same in next 6 months' time and request has been made to Ministry of Power for approving the budget for the same. BEE is also planning to do the energy mapping of the clusters which are energy incentive, but budget is yet to be approved. When enquired by JS (MSME),

Mr Deore told that the up-date/ mapping would require budget of approximately Rs. 10.00 crore. JS MSME mentioned that the budget for the aforesaid study could be considered under budget of Ministry of MSME and suggested Mr. Deore to put up the proposal to the DC MSME office, which Mr. Deore responded in affirmative.

21. Mr. Shrestha mentioned that after the last PSC meeting, UNIDO has carried out the scoping study of 5 clusters. This was done because the data that were part of the project document were 5-6 years old and preliminary scoping study in 5 clusters were undertaken to re-confirm the situation in the ground. This has given enough confidence to the project team to make a consolidated decision to go ahead with the specific clusters.
22. Mr. Garnaik also briefed on the criteria of the technology selection providing an example from a selective Cluster Specific Technologies from Surat Textile cluster. JS MSME enquired how the demand aggregation would be done for non-standard technology like the steam based co-gen systems, how the savings and cost reduction would be worked out. This should be a sort of specification which could be provided to the industries for floating the tender. Technology sources should not be specific to a particular industry and, where possible, preference should be given only to indigenous technology keeping in mind of the 'Make in India' thematic promotion of Govt. of India. In other words, the project would not want to promote a single industry specific technology.
23. JS (MSME) suggested to make a table that indicates the technologies with above specificities. He also said that before the demonstration, the specification of the technologies has to be developed. Project will procure it through competitive tender. Should be transparent process, with backup data. If the Indian technology available, why not promote them. For each technology, project will develop specification and bring out what is the expected in terms of its improvement and sources.
24. JS (MSME) expressed that it is very good that the project has already identified the technologies that are general in nature and is possible to be implemented across the industries to all the listed 40 lakh members that DC MSME has access to. A good campaign/ capacity building/ awareness initiative has to supplement this process to reach to the maximum number of industries in an expedited manner and EESL ESCO model can be started immediately. JS (MSME) proposed that EESL would prepare arrangements for LED lighting and IE3 motors which would be immediately circulated to SME members. Given their well proven and competitive nature and existing business/finance options through EESL, these two technologies should though not be considered under demonstration / grant component of this GEF-5 project EESL will submit details on their financing models for these two technologies to MoMSME by 2 weeks' time.

25. JS (MSME) advised that in the ESCO model of EESL the interest rate could be kept much lower (like 8.15%), not the 10% which is usually practiced by EESL, so that more number of industries are attracted for participation.
26. With regard to the selection of representative demonstration units, JS (MSME) advised that in order to avoid complexities, applications could be invited, and lottery could be done among the screened list of industries. Through the lottery processes most industries will be interested to apply and message would go to the large section of the industries for participation in the up-scaling process too. Mr. Sanjaya Shrestha, UNIDO highlighted that under the lottery scheme only risk that should be mitigated is that of the selected industries opting for only one measure out of the three/four measures proposed. JS (MSME) advised to bring out with proposal for various technologies what are investment sources and break-up thereof.
27. Mr. Shrestha informed that UNIDO wants strong ownership from the concerned enterprises and as such industries' contribution even in the demonstration phase should be made mandatory for varied kinds of technologies. He also expressed this was already discussed with EESL at the conceptualization stage. He also proposed that as per the suggestion in the second PSC meeting, benefits of the various MSME scheme should also be explored to give the benefits to the participating industries. Then it should be worked out how much subsidy could be provided from the grant component of GEF-5, generally it used to be 20% to 25%.
28. On enquiry from the JS (MSME), Mr. Garnaik informed that out of 3 million USD available through EESL grant component, 1.6 million USD is proposed for demonstration that would be made available for 70 technology demonstration. Mr. Van Berkel informed that the 1.6 million USD is actually part of the revolving fund. Even if the amount per industry is lesser than 20,000 USD, it needs to ensure co-investment from the company. The norms of the EE Project UNIDO is that for the high risk this is in the range of 40% to 50%, and for the low risk it used to be 10% to 20%.
29. Mr. Milind Deore, informed that with regard to the selection of EE technology for demonstration under BEE programmes, a matrix has been developed which encompasses innovativeness of the technology, risk involved, pay-back period and replication potential and on the basis of weightage assigned, grants are assigned. Normally grant issued is in the range 30% to 40% of the investment costs.
30. Mr. Garnaik informed that the total investment a grant component for the demo is 1.5 million, in the 70 technologies which are going to be demonstrated through ESCO model by EESL, that is upfront investment is being done by EESL. Suppose

that component coming around 2.5 million. 1.5 million grants component will be coming back to us, another 1 million which is remaining that can be tried through the energy saving model, that is reimbursable to EESL. Although, the industry not putting that money upfront. They are paying in a staggered way. Mr. Shrestha, UNIDO, informed that it was already discussed at the time of design the documents that there will industries share in the demonstration also.

31. JS (MSME) advised that then GEF-UNIDO grant money should not be used for zero risk technologies like LED, EE motor and VFD. EESL should focus on measures or technologies that are little challenging and unknown. He also urged that rather than focusing in only 400 odd industries, the effort could be leveraged to around 6000 industries implementation and initial demonstration efforts could also be expanded proportionately.
32. JS suggested that there must be co-financing component by the MSME unit even during the demonstration of technologies. However, there may not be direct upfront investment/contribution by the beneficiary for the demonstration project, however should be repaid back to EESL as per the scheme design. Typically, the repayment would be from the monetized shared saving accrued from the demonstration project. If there is a repayment default by the MSME unit, the "Grant" component of GEF-5 Project may be used as a risk guarantee for EESL. PSC opined that EESL may develop suitable business models for different technologies which would be reviewed and vetted by the Technical Working Group.
33. On the launch event of GEF-5 Project, PSC agreed that it may be decided at the later stage after some progress in the activities are made. UNIDO and EESL will consult JS, MSME in this regard. The launch event may be attended by around 100 to 200 units. EESL may exchange the MoU with Industry Associations.
34. Mr. Rakesh Kumar, Dy Director MSME urged EESL to provide the detail results of the pilot demonstration done in the Surat Cluster and requested EESL to elaborate on how the learning of the EE motor pilot demonstration done at Surat that were undertaken in a different project framework could be taken in the GEF-5 project.
35. JS (MSME) proposed that EESL would prepare the proposal to include technologies ranging from low-risk to high risk. The proposition would be made as offer to the prospective industries. He also suggested that the proposal should also include the risk involved. All DI MSME office will participate and the support the EESL. Every technology demonstration by EESL will have to demonstration business model also. He proposed that BEE will act as an auditor.
36. Mr. Das enquired on the nomination on the 'Technical Working Group' (TWG) from the DC MSME office. JS (MSME) suggested the name Mr. Rakesh Kumar, Dy Director (MSME) for the WTG. Following nominations for Technical Working Group is finally proposed
  - I. MoMSME: Mr. Rakesh Kumar

- II. UNIDO: Mr. Debajit Das  
 III. BEE: Mr. Milind Deore  
 IV. EESL: Mr. S. P. Garnaik

Mr. Goyal, MD SIDBI submitted that nomination from SIDBI for the TWG would be informed soon to the PMU. PMU may explore other external members for the committee.

37. JDC (MSME) expressed that the DC MSME office requires two project support personnel's (1-executive level and 1- project assistant level) for supporting in various GEF-5 project related activities. After discussion, it was suggested by JS (MSME) that EESL will provide the two personnel's for supporting the project and would be based at the DC MSME office.

38. Following are the major action points that emerged from the PSC meeting-

1.	EESL presented on the mapping analysis through selective techno-economical parameters for selecting 10-clusters. Following clusters for GEF-5 are approved by PSC.		
	<b>Cluster</b>	<b>Type</b>	<b>State</b>
	Surat	Textile	Gujarat
	Sundargarh	Sponge Iron	Odisha
	Jorhat	Tea	Assam
	Vellore	Rice	Tamilnadu
	Bhatal/Jalandhar/Ludhiana	Forging & Casting	Punjab
	Muzzafarnagar	Paper	UP
	Ankaleswar	Chemical	Gujarat
	East & West Godavari	Ceramic	AP
	Howrah	Wire Drawing & Galvanizing	WB
	Varanasi	Textile	UP
2.	Necessary information for Varanasi cluster may be collected at the earliest for further analysis. EESL would mention (or put on record) the justification of inclusion/exclusion of any cluster with respect to the clusters mentioned in initial project document.		
3.	EESL would submit schemes for LED lighting and IE3 motors in 2 weeks time, which would be immediately circulated to SME members. These two schemes would not be considered under demonstration / grant component of GEF-5 as these are highly proven technologies and established business plan by EESL.		
4.	EESL would develop broad technical specifications of such technologies in each cluster. BEE may support with necessary data as and where required.		
5.	NPC will submit a report of Indian manufacturing, strength, weakness, opportunity and crisis on ground within one month time to DC-MSME. The report would reflect a macro study/ SWOT analysis, following the submission of which the forum would again meet to discuss the way forward.		
6.	PSC suggested that there must be co-financing component by the MSME unit even during the demonstration of technologies. If there is a repayment default by the MSME unit, the "Grant" component of GEF-5 may be used as a risk guarantee for EESL.		

7.	PSC opined that EESL would develop suitable business models for different technologies which would be reviewed and vetted by the Technical Working Group.
8.	<p>The following nominations for Technical Working Group was proposed by UNIDO/NPC</p> <ul style="list-style-type: none"> <li>• MoMSME: Mr. Rakesh Kumar</li> <li>• UNIDO: Mr. D.Das</li> <li>• BEE: Mr. M. Deore</li> <li>• EESL: Mr. S.P.Garnaik</li> <li>• SIDBI: TBD</li> </ul> <p>NPC would explore other members to the committee.</p>
9.	On the launch event of GEF-5, PSC suggested that it may be decided at the later stage after some progress in the activities are made. UNIDO and EESL will consult JS, MoMSME in this regard.
10.	NPC will submit the detailed study of Indian manufacturing, strength, weakness, opportunity and crisis on ground within one month time to DC-MSME.
11.	DC-MSME will take the review meeting of GEF-5 Project after one month i.e. in the month of March 2018. DC-MSME has directed that this PSC meeting will be held on every three months.
12.	NPC will give the monthly report to JS,MSME.
13.	Project team will submit the scoping study report of Varanasi Textile cluster to the JS, MSME.
14.	EESL will share the pilot study report of Surat Textile Cluster with Mr. Rakesh Kumar.
15.	For the pilot study, EESL will develop the business model for each technologies.
16.	UNIDO will communicate to SIDBI regarding the co-financing provision in this project.
17.	EESL will provide two project personnel to sit in the DC MSME office

The meeting ended with a vote of thanks to the Chair.

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