

Minutes of the 1st Sector Learning Group Meeting of the Thermal Power Sector

27th October, 2015, Dahanu (Maharashtra)

The first Sector Learning Group (SLG) meeting of the Thermal Power Sector was organised on 27th October, 2015 at Dahanu Thermal Power Station, Dahanu (Maharashtra).

The Knowledge Exchange Platform (KEP) initiative was launched by Bureau of Energy Efficiency (BEE) in association with Institute for Industrial Productivity (IIP) on 26th February, 2015 for transfer of best practices in industries covered under the Perform Achieve and Trade (PAT) scheme. A joint Action plan of BEE and Institute for Industrial Productivity (IIP) detailing the roadmap for KEP was released at this launch event. In line with the commitments made in the Action Plan, the SLGs have been constituted for each of the PAT sector, which have representation from Industry Association, industry leaders and technical experts and will act as advisory group for development and implementation of sector specific strategies for KEP. The SLG members will also help in expanding the network of experts and developing strategy to promote peer to peer learning, outreach and rapid uptake of best practices and new technologies within each sector.

The list of the members of Thermal Power sector SLG is at [Annexure-1](#). The members of Thermal Power sector SLG and invitees who participated in the first SLG meeting is at [Annexure-2](#) and the detailed agenda of the meeting is at [Annexure 3](#).

The meeting started with the welcome note by Shri. K. K. Chakarvarti, Expert Consultant, BEE. On behalf of Bureau of Energy Efficiency and Institute for Industrial Productivity, he welcomed the chairman and members to the first SLG meet for the thermal power sector.

This was followed by a presentation (provided at [Annexure-4](#)) by Ms. Ritu Bharadwaj, Senior Program Manager, IIP, providing an overview of the KEP initiative detailing its objectives and key focus areas. She informed the members that Knowledge Exchange Platform (KEP) has made considerable progress towards achievement of its objectives, in particular getting active involvement of the industry sector. She also updated the SLG members on the progress made under KEP and the expectations from of SLG members to support KEP in achieving its desired objectives. To enhance the effectiveness of this platform, Ms. Bhardwaj requested industry to actively participate in meetings and round table discussions, willing to share knowledge and forward constant feedback and suggestions to KEP.

The SLG discussion was initiated with opening remarks by Shri Rajendra Nandi, Project Director, Sr. Vice president, Dahanu Thermal Power Station, Reliance Infrastructure Limited, who chaired the SLG meeting.

Shri Rajendra Nandi, in his opening remarks, mentioned that KEP is a Nobel initiative as it provides a common platform to share best practices, skills and expertise. He also mentioned that the essence of identifying and sharing of best practices is to learn from others and to re-use the knowledge in order to identify the best possible approach of doing a similar task in a more efficient manner. He also said that this platform will motivate industries to come out with new innovative models and also to develop strategies to discover the hidden knowledge in data and fact sheets.



SLG members and invitees at the SLG Meeting on 27th October 2015

The opening remarks by the Chairman were followed by agenda wise discussion between SLG members.

The key discussion points and decision taken by the SLG members under each agenda item is as follows:

Agenda no. 1: Future Strategies to be adopted by KEP to promote energy efficiency in Thermal Power Sector

1. It was discussed that, KEP website (www.knowledgeplatform.in) should have an interactive forum in order to facilitate two way communications. The members were informed that KEP website hosts sector-specific discussion forums where industries can post their questions and can also participate in the existing discussions. This forum will offer exchange of solutions and ideas on how to best address the issues/ problems and mitigate risks. Members were requested to visit the website and share their feedback in order to make it more responsive to the needs of the industry.

[Action to be taken: SLG]

Agenda No. 2: To advise on Sector themes and cross sectoral themes and areas where the sectoral knowledge can be of use to other sectors

1. 'Coal management' was identified as one of the key focus areas for cross-sectoral transfer of best practices. Importance of coal management in power plant is very much significant and also one of the most critical areas in view of plant operation as well as cost involvement. It deals with the management of commercial, operational and administrative functions pertaining to estimating coal requirements, selection of coal suppliers, coal quality check, transportation and coal handling, consumption and calculation of coal efficiency. It was agreed that KEP would facilitate sharing of best practices under this subject, with the thermal power sector and other PAT sectors having captive power plants.

[Action to be taken: KEP]

Agenda 3: Guidance on Friendly Energy Efficiency Exchange visits within the sector

1. Members were requested to submit the consent forms of their plants on Friendly Energy Efficiency Exchange Visits to KEP, which have already been circulated to them. At the end of these friendly energy efficiency exchange visits, the DCs would be required to submit a simple form providing information of the new technology/best practices that was learned by the participating DCs. The SLG members suggested that BEE may write a letter to top management (CEO/CMD) on this subject, so as to expedite the entire process.

[Action to be taken: BEE and SLG]

Agenda 4: To help in mapping of innovative, new and cutting edge technologies for Thermal Power sector

1. The SLG members would help KEP in identifying innovative cross-cutting technologies available both at national as well as international level.

[Action to be taken: SLG and KEP]

Agenda 5: To help expand the network of experts within sector

1. It was proposed that, industries can nominate the sector-specific experts and forward their names to KEP for uploading this consolidated information. This will help in development of database of sector-specific experts that will be put up on the KEP website.

[Action to be taken: SLG and KEP]

Agenda 6: To help develop strategy to promote peer to peer learning, outreach and rapid uptake of best practices and new technologies

1. It was proposed that the plants having training centres may utilize the existing resources and invite other plants officials to share their best practices with them. This would help in developing a strategy to promote this agenda.

[Action to be taken: SLG]

Agenda 7: To act as a node for initiating policy discussion Forums on themes those are of interest to the sector

1. It was agreed that issues pertaining to policy discussions would be dealt at the level of SLG. It was proposed that, the second PAT cycle was one of the key areas that should be picked up by KEP for policy discussions. This was particularly important as new DCs are expected to join the next PAT cycle. It was discussed that more standardization needs to be brought in the 2nd cycle of PAT particularly in view of all the learnings that have been generated from the 1st cycle of PAT. KEP through policy discussion forums between BEE and industry can help in achieving this.

[Action to be taken: BEE and KEP]

Agenda 8: Help KEP Secretariat in identifying technological gaps where international best practices/ technology providers can be brought in for the benefit of the sector

1. It was proposed that SLG members would assist KEP in identifying innovative cross-cutting technologies available both at national as well as international level.

[Action to be taken: SLG and KEP]

Agenda 9: Advise on various revenue models to make KEP a self-supporting initiative beyond the initial incubation period

1. It was discussed that it is important to evolve KEP as a self-sustaining initiative for which SLG will work jointly with KEP to identify viable revenue model.

[Action to be taken: SLG and KEP]

The discussion on the agenda points was followed by concluding remarks from the Chairman. Shri Rajendra Nandi mentioned that KEP is a good initiative as this platform brings together all the important stakeholders viz. industries, industry associations, technology providers, researchers and communities to exchange ideas, evidence and expertise.

Members also appreciated the support provided by Dahanu Thermal Power Station to KEP in the organisation of the SLG Meeting and Workshop on Best Practices in Energy Efficiency in Thermal Power sector on 28th October, 2015 at Dahanu.

In the end, Shri K. K. Chakarvarti on behalf of BEE and IIP, thanked the Chairman and SLG Members for sharing their inputs and urged the industry to treat KEP as their own initiative.

Members of the Thermal Power Sector learning Group

S.No.	Name	Designation	Organization	
1	Shri C Kesava Rao	Head, Energy	Hindustan Zinc Limited	Member
2	Shri B K Mishra	Director- Operation	Lanco Power Limited- O&M	Member
3	Shri K K Chakarvarti	Expert Consultant	Bureau of Energy Efficiency	Member
4	Shri Robin Sebastian	Director & Plant- in-Charge	BSES Kerala Power Limited,	Member
5	Shri Govind Kumar Mishra	Superintending Engineer & Energy Manager	Anpara Thermal Power Station	Member
6	Shri Deepak Kumar	Superintending Engineer	2X500 MW,BTPS,Anpara UPRVUNL	Member
7	Shri Pandurang Jalkote	Asst. Vice President	Dahanu Thermal Power Station, Reliance Infrastructure Ltd.	Member
8	Shri Subodh Nigam	Executive Engineer (Generation)	M.P. POWER GENERATING CO. LTD	Member
9	Shri Punit B prajapati	Deputy Engineer	Sikka Thermal power plant	Member
10	Dr. Ashok Kumar	Energy Economist	Bureau of Energy Efficiency	Member
11	Shri Girja Shankar	Asst. Energy Economist	Bureau of Energy Efficiency	Member
12	Ms. Vinni	Program Associate	Knowledge Exchange Platform	Member

ANNEXURE 2**List of members who attended the Thermal Power SLG meeting on 27th October, 2015**

S. No.	Name	Designation	Organization
1	Shri Rajendra Nandi	Project Director, Sr. Vice President	Dahanu Thermal Power Station, Reliance Infrastructure Ltd.
2	Shri C Kesava Rao	Head- Energy	Hindustan Zinc Limited.
3	Shri K K Chakarvarti	Expert Consultant	Bureau of Energy Efficiency
4	Shri Pandurang Jalkote	Asst. Vice President	Dahanu Thermal Power Station, Reliance Infrastructure Ltd.
5	Shri Subodh Nigam	Executive Engineer (Generation)	M.P. POWER GENERATING CO. LTD
6	Shri Girja Shankar	Asst. Energy Economist	Bureau of Energy Efficiency
7	Ms. Vinni	Program Associate	Knowledge Exchange Platform
8	Shri I. M. Patel	Chief Engineer	Gujarat State Electricity Corporation Limited, Thermal Power Station, Gandhinagar.
9	Shri M. K. Bhavsar	Executive Engineer	Gujarat State Electricity Corporation Limited, Thermal Power Station, Gandhinagar.
10	Shri R. C. Jain	Deputy Engineer	Gujarat State Electricity Corporation Limited, Thermal Power Station, Gandhinagar.
11	Shri DM Kadale	Exe Engineer	MSBGCL, Bhusawal Thermal Power Station, Deepnagar
12	Shri P N Bute	Asst. Engineer	MSBGCL, Bhusawal Thermal Power Station, Deepnagar
13	Shri Y. D. Brahmhatt	ACE	Gujarat State Electricity Corporation Ltd, Thermal power station, Ukai
14	Shri G. S. Shah	SE	Gujarat State Electricity Corporation Ltd, Thermal power station, Ukai

15	Shri S. R. Mistry	EE	Gujarat State Electricity Corporation Ltd, Thermal power station, Ukai
16	Shri A. A. Patel	DE	Gujarat State Electricity Corporation Ltd, Thermal power station, Ukai
17	Shri J. D. Savaliya	JE	Gujarat State Electricity Corporation Ltd, Thermal power station, Ukai
18	Ms. Ritu Bharadwaj	Sr. Program Manager	Institute for Industrial Productivity
19	Shri A. K. Asthana	Sr. Technical Expert	GIZ
20	Shri S Vikash Ranjan	Technical Expert	GIZ

SECTOR LEARNING GROUP (SLG) MEET FOR THERMAL POWER SECTOR

**27th October, 2015(Tuesday)
at Dahanu Thermal Power Station, Dahanu**

PROGRAM AGENDA

06.00pm - 06.05pm	<ul style="list-style-type: none">• Welcome address by Ms. Ritu Bharadwaj, Senior Program Manager, IIP
06.05pm - 06.10 pm	<ul style="list-style-type: none">• Opening Remarks by Chairman of SLG
06.10am-07.15 pm	<p>Agenda for Discussions:</p> <ol style="list-style-type: none">1. Future Strategies to be adopted by KEP to promote energy efficiency in Thermal Power Sector2. To advise on Sector themes and cross sectoral themes and areas where the sectoral knowledge can be of use to other sectors3. Guidance on Friendly Energy Efficiency Exchange visits within the sector4. To help in mapping of innovative, new and cutting edge technologies for Thermal Power sector5. To help expand the network of experts within sector6. To help develop strategy to promote peer to peer learning, outreach and rapid uptake of best practices and new technologies7. To act as a node for initiating policy discussion Forums on themes those are of interest to the sector8. Help KEP Secretariat in identifying technological gaps where international best practices/technology providers can be brought in for the benefit of the sector9. Advise on various revenue models to make KEP a self-supporting initiative beyond the initial incubation period10. Any other Agenda with the permission of Joint Chairs <p>Concluding Remarks by Chairman</p>
07.30pm	DINNER

Presentation on KEP Initiative



**KNOWLEDGE EXCHANGE PLATFORM-
1st Sector Learning Group Meet for
Thermal Power Sector
27th October, 2015**



Knowledge Exchange Platform
Transmitting Knowledge through Best Practices

Rationale behind KEP

- Industry is energy intensive and offers good scope for energy savings and GHG mitigation through rational use of energy
- High bandwidth of specific energy consumption across units within a sector
- Better performing units desperately seeking information on innovative approaches and new opportunities to take them to next level
- Significant opportunities of learning across industry sectors
- Sectors covered under PAT Scheme needs to be supported with knowledge Exchange and capacity building

KEP is designed to provide a vibrant platform, anchored at BEE, to promote knowledge transfer with PAT industry participation.

KEP Objectives and Vision

- To encourage peer to peer learning by facilitating knowledge and information transfer within a particular sector
- Facilitate exchange of information and best practices across industry sectors in areas that have high replication potential
- Sharing of knowledge and capacity building on new and innovative approaches through international best practices
- Facilitate Policy Discussion Forums on Trading, Financing and other cross cutting issues

KEP: Major progress achieved so far

- KEP Secretariat established at BEE
- Formal launch of KEP on 26th February 2015 (attended by 400 participants)
- MoU signed between BEE and IIP on 26th February, 2015
- KEP Action plan released by Secretary, MoP
- The inaugural issue of KEP newsletter released by Secretary, MoP

KEP LAUNCH



KEP: Major progress achieved so far

First Best Practices Workshop for Aluminium Sector held at Jharsuguda on 24th April, 2015 and attended by around 190 participants



KEP: Major progress achieved so far

First Best Practices Workshop for Cement Sector held at Jodhpur on 23rd June, 2015 and attended by around 150 participants



KEP: Major progress achieved so far

First Best Practices Workshop for exchange of Best Practices in Pulp & Paper Sector organised on 21st August, 2015,



Participants at the Pulp & Paper Workshop

**Policy Roundtable on “Efficient Market for ESCerts in India”
on 6th August 2015 at Bureau of Energy Efficiency, New
Delhi**



Participants at the Roundtable on Efficient Market for ESCerts in India

**Policy Roundtable on “Promoting Use of Spent Pot
Liners(SPL) in Cement Co-processing” on 22nd September,
2015 at BHABHA Chamber, SCOPE Convention Centre,
New Delhi**



*Participants at the Roundtable on Promoting Use of SPL in Cement
Co-processing*

KEP website Launch (www.knowledgeplatform.in)



- **KEP website Launch** (www.knowledgeplatform.in) was launched officially at the Pulp & paper sector workshop.
- The website is designed to simultaneously serve as a knowledge resource bank and a platform to host multiple discussion forums.
- The resource bank is classified for individual sectors where in best practices and technology case studies on energy efficiency are uploaded.
- The discussion forums enable participants/visitors to access, discuss and suggest on various topics.

KEP: Major progress achieved so far (Summary)

- 8 Sector Learning Groups (SLG) for all PAT Sectors established
- First SLG meet of Aluminium Sector held on 20th June, 2015 at Bhubaneswar
- First SLG meet of Cement held on 22nd June, 2015 at Jodhpur
- First SLG meet of Paper Sector held on 20th August, 2015 at New Delhi
- 60 industries have agreed for Friendly Energy Efficiency Exchange Visits
- First Best Practices Workshop for Aluminium, Cement and Pulp & Paper organised.
- Thermal Power and Textile Sector workshops planned for 28th October (Dahanu) and 28th November (Thane) respectively.
- KEP Website launched

Role of SLG

To ensure ownership of the industry and to act as a sounding board in matters relating to the sector

- Future Strategies to be adopted by KEP to promote EE in TPS
- To advise on the theme/contents and timing of the sectoral workshops
- To facilitate contribution from the sector in newsletters, roundtables etc.
- To advise on cross sectoral themes and areas where the sectoral knowledge can be of use to other sectors
- To act as a node for initiating policy discussion Forums on themes that are of interest to the sector
- Help KEP Secretariat identify international best practices/technology providers for the benefit of the sector
- Advise on field visits/exposure visits within and across the sectors for dissemination of success stories
- To advise on developing resources for the website that would be of interest to the sector
- Advise on various revenue models to make KEP a self supporting initiative beyond the initial incubation period

