



**National Productivity Council**

**Training Programme  
on**

**ENERGY CONSERVATION IN PROCESS BOILERS AND STEAM  
SYSTEMS**

**PROGRAMME CODE: TP/22-23/54**

**13-14 OCTOBER 2022  
(CHENNAI)**



## **1. ABOUT NPC**

National Productivity Council (NPC) is an autonomous organization under the Department of Promotion of Industry and Internal Trade, Ministry of Commerce & Industry, Government of India. The present expertise available in NPC has a resource base of professionals from fields such as Economics, Industrial Engineering, Human Resource Management, Energy, Environment, IT, Project Monitoring and Evaluation, Research Studies and Baseline Surveys. In addition, services of external professionals and subject matter specialists are also sought on need basis, depending upon the nature and scope of work. NPC extends services from its headquarter at New Delhi and 12 regional offices across the country manned by more than 100 full time professionals. NPC has professionals from diverse fields to provide Consultancy, Capacity Building and Project Monitoring Unit (PMU) services to various organisations including Central Government Ministries and State Governments.

## **2. PROGRAMME THEME**

In a production process, energy becomes important so that the industry has a high level of dependence on energy needs for its operations. So conservation efforts are needed to achieve efficiency goals. Energy conservation is implied as smart and efficient use of energy to confirm that a particular amount of maximum energy activity, productive work and profitability is achieved. Boiler is the principal thermal energy conversion equipment for production of power and process heating. There have been several initiatives in the Indian boiler industry particularly in the construction of boilers, its configuration, combustion control system and their specific adaptability to Indian coal and also biomass fuels. There are also developments in Oil and Gas fired package boilers with improved features. In addition to design and technology, considerable efforts are also required to be focused on efficient, safe and reliable operation of boilers. Steam systems are indispensable in delivering the energy needed for process heating, pressure control, mechanical drives, separation of components, and production of hot water for process reactions. It is a recognized fact that enhancing energy efficiency is a potential measure for carbon emission reduction and the same has been included as a key component under the National Action Plan on Climate Change (NAPCC).

## **3. LEARNING OBJECTIVES**

This training program prepares participants to:

- Update the knowledge and skill with hands on training
- Learn about various methods of assessing boiler efficiency
- Understand combustion control and draft systems
- Train on efficient steam utilisation
- Learn about steam trapping and condensate recovery

## **4. BROAD PROGRAMME COVERAGE**

The following topics shall be covered during the training

- Performance Evaluation
- Good practices in O&M of Industrial Boilers,
- Water Treatment Technologies & Systems
- Energy Conservation Opportunities
- Case Studies on Energy Conservation

- Steam System
- Efficient Steam Utilisation
- Steam Traps

## 5. METHODOLOGY

Lectures with practical demonstrations , case studies and exercises/discussions.

## 6. PARTICIPANTS' PROFILE

All those who are working in Energy field from Central / State Government Departments, Academic Institutions, Public / Private Sectors, those who are aspiring to learn on Energy Management & Conservation, Engineers, Managers etc.

## 7. FACULTY

The Faculty for the training programme will comprise of senior NPC Experts & other renowned and experienced Trainers from the respective field.

## 8. PROGRAMME FEE & VENUE

<b>Programme Code</b>	<b>TP/22-23/54</b>
<b>Program Venue</b>	Centre of Excellence for Training in Energy Efficiency, National Productivity Council, Dr. Ambedkar Institute of Productivity, Chennai.
<b>Programme Fee</b>	Non-Residential Participants ₹ 12200 /- + 18% GST
<b>For Residential Participants</b>	Accommodation can be provided (subject to availability) in a single A/c room in AIP at the rate of Rs.1500/- (Rupees One Thousand Five Hundred only) per day per participant (which includes room rent, breakfast and dinner) plus GST

## 9. PAYMENT DETAILS

Programme fee inclusive of GST to be paid in advance and proof of payment to be attached along with application form.
<ul style="list-style-type: none"> <li>• <b>ECS Payment Details:</b> Indian Overseas Bank, 70, Golf Link, New Delhi Branch; A/c No. 026501000009207, IFSC Code. IOBA0000265</li> <li>• DD/Cheque should be drawn in the name of NATIONAL PRODUCTIVITY COUNCIL payable at NEW DELHI</li> <li>• NPC'S PAN No: AAATN0402F, NPC'S GSTIN: 07AAATN0402F1Z8</li> </ul>

*As per GOI notification No. 9/2017-Integrated Tax (Rate) dated 28.06.17, Sr. No. 75, Heading 9992 (at page no. 19 of the notification) No GST is applicable where Services provided to the Central Government, State Government, UT Administration under any training programme for which total expenditure is borne by the Central Government, State Government, UT Administration.*

- **NPC shall offer 10% discount on programme fee to organizations sponsoring 3-5 participants and 15% discount of programme fee to organizations sponsoring more than 5 participants.**

## 10. HOW TO APPLY

- Please apply in prescribed application format enclosed with this brochure. Nominations may be sent to the following address:

**The Training Coordinator**  
**National Productivity Council**  
**5-6 Institutional Area**  
**Lodhi Road**  
**New Delhi – 110003**  
**Email Id: npctraining@npcindia.gov.in**  
**Tel: 011-24607319**

- **Last date for Receiving of nominations: 30<sup>th</sup> September 2022**

## 11. GENERAL INSTRUCTIONS

- ❖ Due to limited number of seats, it is recommended to send the nominations as per attached format at the earliest, for ensuring the availability. Acceptance of the nominations is subject to the seat availability and receipt of programme fee latest by the last date for nominations.
- ❖ The Residential programme fee covers the professional fees towards training, board & lodge of the Participant(s). The fee once deposited is non-refundable, however, substitutions are allowed.
- ❖ Each participant should carry their ID cards and necessary letters / orders issued by their department for attending the training program.
- ❖ The Non Residential programme fee covers the professional fee towards training, lunch and refreshments during the training program. The fee once deposited is non-refundable, however, substitutions are allowed.
- ❖ NPC shall not bear any charges towards participants' to & fro travel from their residence / place of stay and the training program venue. All participants shall make their own arrangement to reach the venue on time as per the programme schedule.
- ❖ Participants are requested to assure their health and safety during the training period and NPC will not be liable for medical expenses incurred by the participants during the program.
- ❖ NPC will not provide boarding and lodging before and after the dates of programme. Participants planning to stay longer than the scheduled duration should arrange the same at their own cost.
- ❖ Settlement of additional bills: The hotel will be instructed to open separate folio for each participant. Participants may directly settle their additional dues regarding family member, laundry, telephone, mini bar, room service, overstay etc. with the hotel before checkout.
- ❖ The participants shall be awarded Certificate of Participation on successful completion of programme.
- ❖ Any other terms and conditions apply as may be notified by NPC at any point of time.
- ❖ Referring to GST guidelines, you are requested to confirm the applicability of GST payment for your department.
- ❖ Participants are required to follow the necessary COVID protocols during training.





**NATIONAL PRODUCTIVITY COUNCIL**  
**5-6 Institutional Area, Lodhi Road, New Delhi – 110003**  
**[npctraining@npcindia.gov.in](mailto:npctraining@npcindia.gov.in)**

**APPLICATION FORM FOR NOMINATIONS**

Title of Programme: **Energy Conservation in Process Boilers and Steam Systems**

Programme Code: TP/22-23/54

Programme Duration: 2 days

Location: NPC, Chennai

**Details of Nominated Participants:**

S. No	Name of Delegate	Designation	Mobile No.	Email ID	Official Address for correspondence
1					
2					
3					
4					
5					

**Details of Nominating Authority:**

Name:

Designation:

Organization:

Address

Contact Number:

Email ID:

Signature

Details of Proof of payment of Programme fee (*RTGS / NEFT Details; Cheque, DD*):

**Payment Particulars**

- **ECS Payment Details:** Indian Overseas Bank, 70, Golf Link, New Delhi Branch; A/c No. 026501000009207, IFSC Code. IOBA0000265
- In case of ECS Payment, the payment details should be intimated accordingly along with UTR number
- DD/Cheque should be drawn in the name of NATIONAL PRODUCTIVITY COUNCIL payable at NEW DELHI
- Programme Fees per Participant plus GST to be paid in advance
- PAN No: AAATN0402F, GSTIN: 07AAATN0402F1Z8

## ENERGY CONSERVATION IN PROCESS BOILERS AND STEAM SYSTEMS



**National Productivity Council**  
(Under Department for Promotion of Industry and Internal Trade)  
Ministry of Commerce and Industry  
Government of India  
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