

## Accelerating Smart Power and Renewable Energy in India (ASPIRE)

### IE 01 – REJUVENTATION OF KNOWLEDGE EXCHANGE PLATFORM

### IE02 – INDUSTRIAL EE AND DECARBONISATION KNOWLEDGE AND TECHNOLOGY PARTNERSHIP

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# Programme Introduction & Architecture

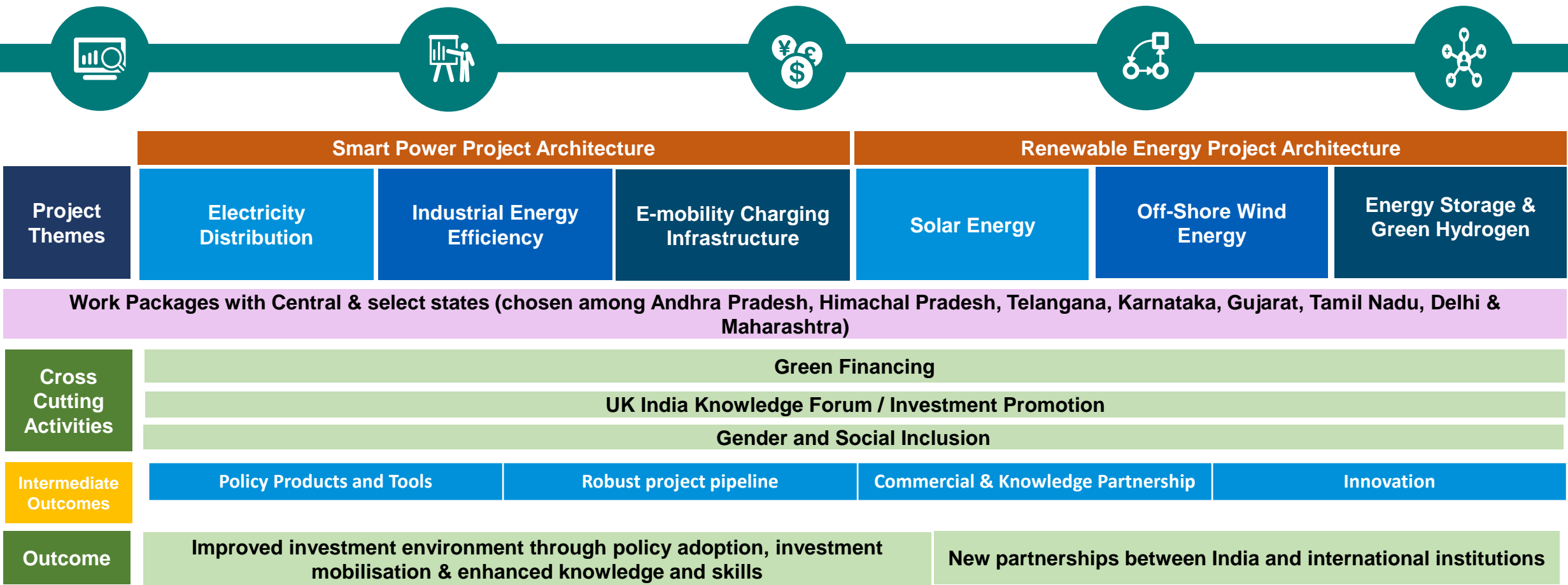
**2 Projects**  
*Smart Power & Renewable Energy*

**7 Themes**  
*Spread across two projects*

**£15.4 Mn**  
*including GoI contribution of £7.7 Mn in kind & capital*

**2-year project**  
*extension possibility of 1 year*

**Multiple Work Packages**  
*Initiatives focused on center & in select states*



**Impact** → **Increased investment to support energy security & economic growth that is inclusive, low carbon, supports poverty reduction & climate action**  
**Increased trade, investment & relationships between India and UK**





# **IE01- Rejuvenation of Knowledge Exchange Platform**



# Background

- As per BEE's National Strategy Plan, India's energy savings and emissions reduction potential till 2031 is estimated to be **87** Mtoe and **438** MT of CO<sub>2</sub> (mtCO<sub>2</sub>) respectively.
- Industrial sector (including MSMEs) offers the highest potential i.e., ~ **55%** of the total energy savings and ~**42%** of total emissions reduction potential of the country.
- With seven PAT Cycles rolled out, energy intensive industries have already adopted various low hanging EE measures to achieve energy saving targets.
- Next set of opportunities for incremental Industrial Energy Efficiency and Decarbonization (IEED) require adoption of new and emerging low-carbon technologies and solutions.
- Consultations with various stakeholders highlighted lack of access/ information of various technologies and their providers as one of the key barriers to adoption of new IEED technologies/ solutions.
- In view of the above, **a knowledge sharing platform titled 'iDEEKSHA'** (Industrial Decarbonization and EE Knowledge Sharing Platform) **has been developed under the Accelerating Smart Power and Renewable Energy (ASPIRE)** Technical Assistance Program in joint collaboration with BEE.



# About IDEEKSHA

- IDEEKSHA will serve as one stop shop for all energy efficiency and decarbonization needs of Indian energy intensive industries.

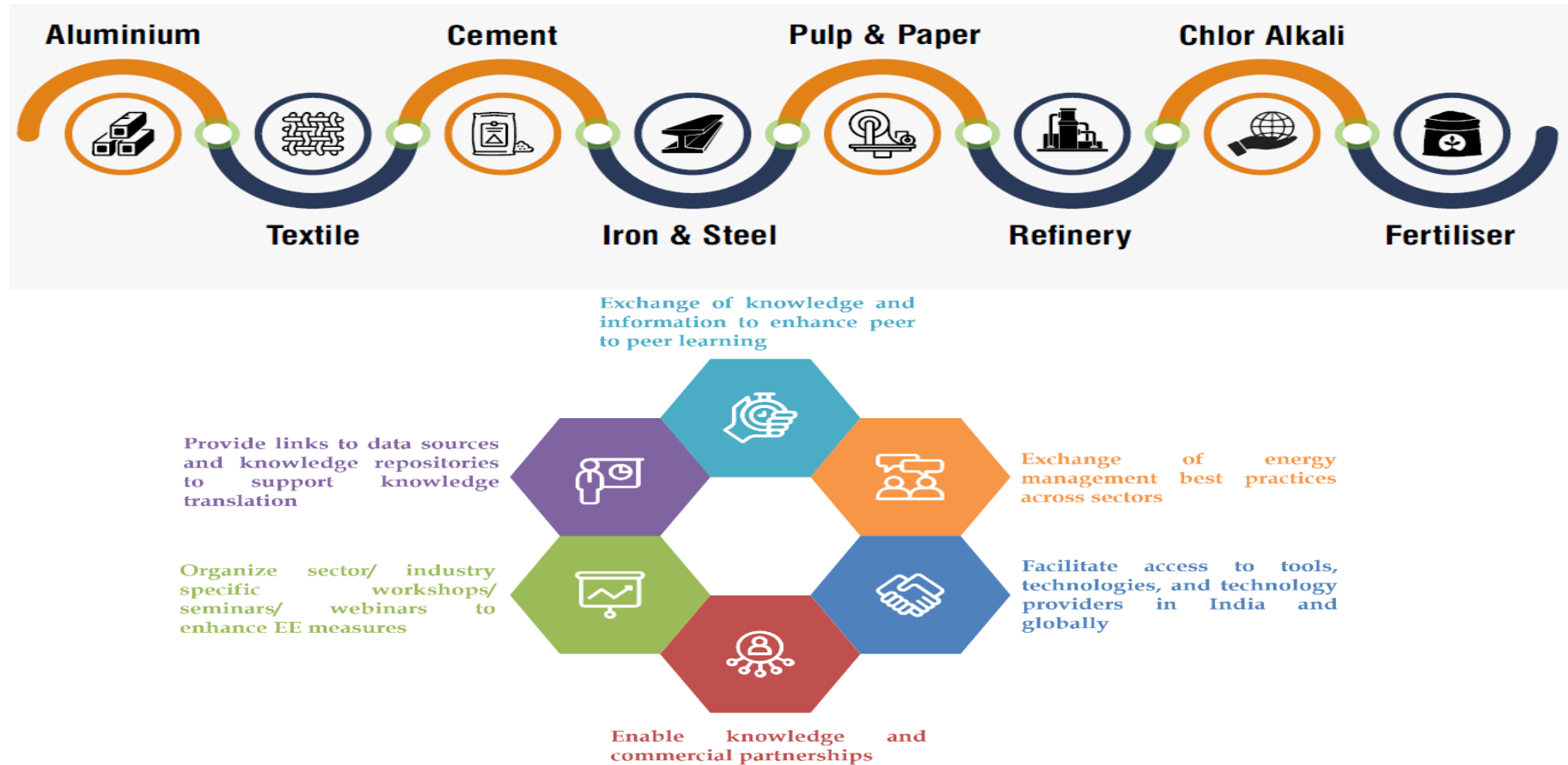
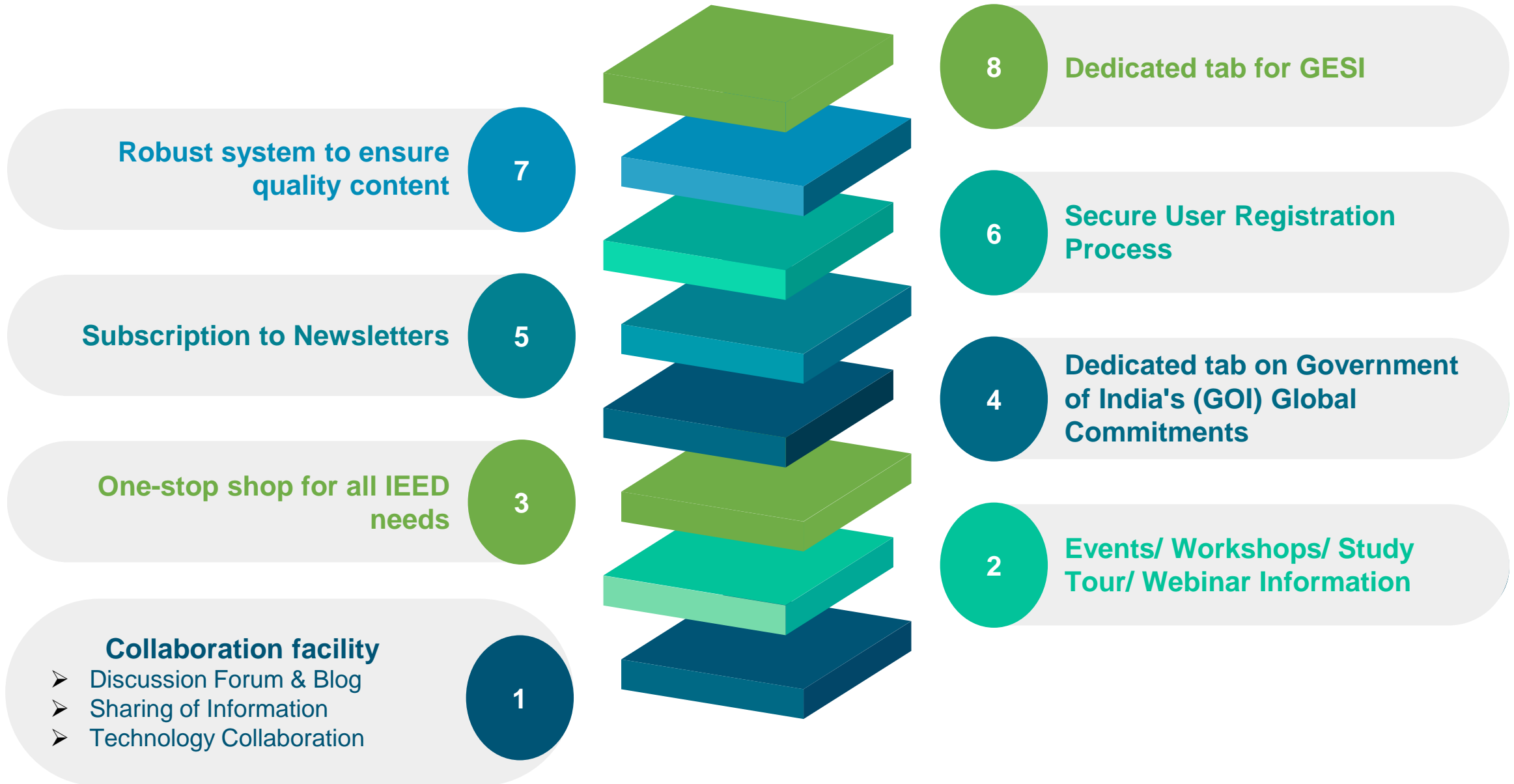


Fig: iDEEKSHA - Knowledge Sharing Platform



# Key Features of IDEEKSHA





# IDEEKSHA Portal

Click here to know more about IDEEKSHA

Click here to know about India's Global Commitment

Click here to get information about upcoming and past events

Click on 'Collaborate' to read blogs, participate in discussion forums and submit EoI, etc.

Click here to get information about sector specific information

Click here to share information of technologies, financial products, R&D, best practices etc. with KEP Secretariat

Click here to know about the various initiatives taken by industries for promoting GESI

Click here to know about sectoral and cross-sectoral technology and solutions

Click here to know about sectoral and cross-sectoral technology and solutions

Click here to get database of Financing Institutions

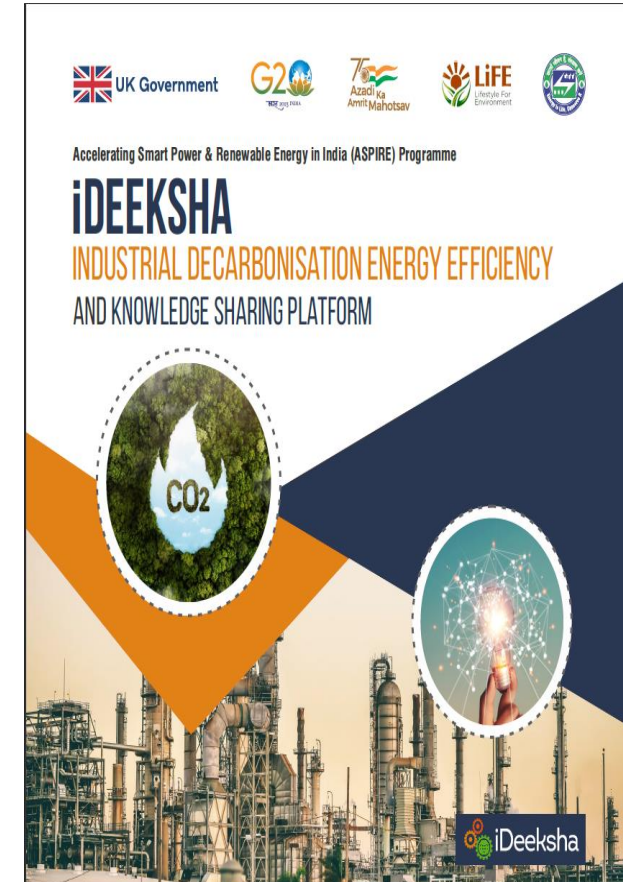
Video Gallery, Newsletters and other Industrial Deep Decarbonisation initiatives can be accessed from here

Enter email ID to subscribe for Newsletter

<https://www.ideeksha.in/>



# Launch of IDEEKSHA Portal and Newsletter



## Launch of IDEEKSHA Portal, First Newsletter and Flyer

by Mr. R.K. Singh, Hon'ble Cabinet Minister (Power, New & Renewable Energy) on March 01, 2023



# Two Sectoral Workshops under IDEEKSHA

Best Practices in Energy Efficiency and Decarbonisation in Aluminium Sector – A Path for Decarbonisation	Best Practices in Energy Efficiency and Decarbonisation in Textile Sector – A Path for Decarbonisation
Aditya Aluminium, Lapanga, Odisha / November 21, 2022	Raymond Limited, Chhindwara, MP / December 08, 2022
<b>100+</b> participants from India and UK participated in the workshop	<b>70+</b> participants from India and UK participated in the workshop
<b>Three Technical Sessions covering 16 presentations (2 presentations from UK Technology &amp; Solutions Providers)</b>	<b>Three Technical Session covering 20 presentations (6 presentations from UK Technology &amp; Solutions Providers)</b>
<p>The workshop helped in identifying three priority areas for the abatement of aluminium sector emissions:</p> <ul style="list-style-type: none"> <li>• Decarbonisation of electricity consumption (60% emission)</li> <li>• Decarbonisation of direct emissions from aluminium processing (25% emissions)</li> <li>• Recycling of aluminium scrap through improved sorting methods and resource efficiency (together offer the potential to abate 15% of the sector's emissions)</li> </ul>	<p>Decarbonisation of the textile industry can be accelerated through adoption of the following measures/Technologies:</p> <ul style="list-style-type: none"> <li>• Adoption of renewable energy for majority of electricity consumption</li> <li>• AI-based water, energy, and steam management systems</li> <li>• Deploy waste heat recovery systems across different processes</li> <li>• Waterless/ chemical-free dyeing technologies</li> </ul>
<p>Indian corporate have shown interest in following IEED technologies:</p> <ul style="list-style-type: none"> <li>• Techniques and technologies for enhanced waste heat recovery, especially from Kilns</li> <li>• Future of power plants including hydrogen fuel based</li> <li>• Advanced energy management systems</li> </ul>	<p>Large Indian corporates have shown keen interest in implementation of following UK technologies:</p> <ul style="list-style-type: none"> <li>• <b>Alchemie Technology</b>, 'Endeavour' (waterless low-energy textile dyeing) and 'Novera' (energy saving non-contact finishing) that offer significant potential for reducing water and energy consumption</li> <li>• <b>Centrica, UK's</b> IoT 4.0 real-time machine-level energy management system (driven by wireless sensors &amp; advanced analytics) to improve operating margins and drive sustainability</li> </ul>






# IE02- Industrial Energy Efficiency and Decarbonization Knowledge and Technology Partnerships



# Background and Major Activities

- With multiple PAT Cycles, many low hanging EE opportunities have been exploited.
- The **next set of opportunities** require the **deployment of new technologies, through new approaches, investment and partnerships.**
- Over the past decade, experience from the UK has found that further progress on IEED requires targeted handholding and deployment-focused interventions supporting increased deployment of established and proven solutions.
- Under this work package, the activities will **catalyse the partnerships, investments and collaborations needed to accelerate this next phase of IEED solutions within key Indian industries**, which would improve new technology acceptance, build confidence, supply chain development and de-risk investment.



Report on key technology deployment opportunities and pathways for UK and international EE technology and solution providers

Deployment toolkit for UK/international technology providers

Preparation of customised industrial EE solution longlist of pre-screened providers

Development of pipelines of partnership opportunities and provide deployment support





**Thank You**