

**Output-Outcome Framework for Schemes  
2018-19  
Demand No.44: Department of Heavy  
Industry**

(Rupees in crore)				
S. No.	Name of the Scheme/Sub-Scheme	Financial Outlay 2018-19	Output/ Deliverables against the Outlay 2018-19	Projected Medium Term Outcome
1.	Enhancement of competitiveness in the Indian Capital Goods Sector	120	<ul style="list-style-type: none"> <li>• 8 projects of setting up Centres of Excellence (CoE) at CMTI Bangalore, IIT Madras, PSG College of Technology Coimbatore, IIT Delhi, IIT Kharagpur, HEC Ranchi and IISC Bangalore for Technology development are expected to achieve average 90% completion, of which 3 projects are targeted for 100% completion.</li> <li>• 9 Common Engineering Facility Centres (CEFC) at ARAI Chakan/ Pune, HEC Ranchi, Bardloi, Surat, IIT Delhi, IISC Bangalore, CMTI Bangalore and by Kirloskar and Korus industries to provide value added services to manufacturers are expected to be substantially completed.</li> <li>• 5 projects under Technological Acquisition Fund Programme are expected to be substantially completed.</li> </ul>	Creation of common physical infrastructure will enhance the technology absorption, modernization and competitiveness of Indian Capital Goods Sector.
2.	Faster Adoption and Manufacturing of Electric (& Hybrid) Vehicles	260	<ul style="list-style-type: none"> <li>• Support market development for hybrid/ electric vehicles and manufacturing eco-system through provision of subsidy for purchase of e-vehicles, charging infrastructure and supporting R&amp;D for indigenous development of key components of e-vehicles</li> <li>• To provide subsidy for introduction of over 1000 e-vehicles with Charging Infrastructure in the public transport (buses, taxis, 3-wheelers) in 11 cities</li> </ul>	Faster adoption and development of manufacturing/ market ecosystem of hybrid/electric vehicle would lead to adoption of environment friendly technology and also reduce dependence of the country on fossil fuels
3.	National Automotive Testing and R&D Infrastructure Project (NATRIP)	378.88	<ul style="list-style-type: none"> <li>• With the completion of Noise, Vibration, and Harshness (NVH) Laboratory and Test Tracks at International Centre for Automotive Technology (ICAT) Manesar, the ICAT will be fully functional.</li> <li>• Completion of the Power Train, Passive Safety and Electromagnetic compatibility (EMC) Labs at Global Automotive Research Centre (GARC) Chennai</li> <li>• Partial completion of Test Tracks at NATRAX- Indore.</li> </ul>	• On completion of all facilities, the certification needs of Indian automotive industry will be met with enhanced support for developmental testing for the automotive industry, OEMs and components for their product development needs.

4.	R&D project for development of Advanced Ultra Supercritical (AUSC) Technology for thermal power plants	100	<ul style="list-style-type: none"> <li>• The project involves design and testing of an 800 MW AUSC thermal power plant and manufacturing technology of associated boilers and piping.</li> <li>• The targets for the year include finalisation of turbine design, Completion of detailed design for boiler and valves, and commissioning of the Turbine Rotor test rig facility</li> </ul>	Successful completion of this project would improve power plant efficiency and hence reduce the carbon footprint of the plant.
	<b>Total</b>	<b>858.88</b>		