LOK SABHA
UNSTARRED QUESTION NO.3037
FOR ANSWER ON 06/08/2018

R&D PROJECTS IN STEEL SECTOR

3037. DR. SHASHI THAROOR:

Will the Minister of STEEL be pleased to state:

(a) whether the Government is aware that there is an urgent need for Research and Development (R&D) in the Iron & Steel sector to increase steel production in order to sustain the target of 300 million tonne production capacity by 2030;

(b) if so, the details thereof along with the steps being taken by the Government to improve R&D in the aforesaid sector;

(c) the details of steel PSUs as well as private sector companies that are allocating at least 1% of their sales turnover towards Research and Development activities; and

(d) whether the Government proposes the formulation of a Special Steel Development Fund for R&D in Steel production to be used in highly specialised areas such as defence, space, atomic energy in order to increase quality and to boost domestic industry, if so, the details thereof and if not, the reasons therefor?

ANSWER
THE MINISTER OF STATE FOR STEEL (SHRI VISHNU DEO SAI)

(a)&(b): Yes, Madam. The National Steel Policy, 2017 has envisaged research as one of the interventions for long term growth & sustainability of the Indian steel sector. Ministry of Steel is supporting the R&D efforts of the research laboratories and academic institutions for carrying out steel & steel related research. List of R&D projects supported by Ministry of Steel during the last three years is **annexed**. Research & Development is also carried out by the steel companies.

(c) Research & Development expenditure of the steel companies ranges 0.05% to 0.5% of the sales turnover.

(d) No, Madam.

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Annexure

List of R&D projects supported by Ministry of Steel during the last three years

(in Rs lakhs)

Sl. No.	R&D Projects	Sanctioned Government Funding
1	Development of Pilot Scale Pelletization Technology for Indian Goethitic/ Hematite Ores with Varying Degrees of Fineness.	2206.27
2	Development of Automation System for Optimum Coal Blending at Coal Handling Plant of Coke Oven Batteries.	645.00
3	Economic production of iron through direct reduction of Mill Scale by low grade coal of Rajasthan.	166.00
4	Develop Procedure for Joining Next Generation High Temperature Material to be used for Supercritical/ Ultra Supercritical Power Plant by Friction Stir Welding.	558.26
5	Development of Cost Effective Refractory Lining Materials for Induction Melting Furnace suitable for production of Quality Steel.	165.00
6	Development of Dry Slag Granulation Technology and Energy Recovery System for Blast Furnace Slag for Producing Clinker Compatible Product.	84.37
7	Development of Infrared Camera Based Torpedo Ladle Car Condition Monitoring System.	154.00
8	Development of nickel free nitrogen austenitic stainless steel for biomedical applications.	284.45
9	Indigenous Development of Model based Breakout Prediction System (BOPS) for Continuous Casters.	260.00
10	Development of Fluidised Bed Reduction Roasting Process for slimes & low grade iron ores by utilizing thermal grade coal for their magnetic susceptibility properties and maximizing the iron recovery.	122.76
11	Production of low Carbon & low Phosphorus Ferromanganese by metallothermic treatment of high Manganese Slag using Silicomanganese.	150.00
12	Reduction Roasting and Microwave Heating of some difficult to treat Ores for the production of Pellet Feed Concentrate.	124.80
13	Modeling & Optimization of High Concentration Iron Ore fines /concentrate slurry Pipelines for Indian Iron Ore Processing Industries.	212.50
14	Production of highly metallised Directly Reduced Iron from mill scale & lean grade coal in Tunnel Kiln.	151.00
15	Development of a cost effective green technology for Pre Reduction of Chromite Ore in Tunnel Kiln and Production of High Carbon Ferro Chrome in SAF.	306.50
16	A Novel Approach of Making Green Belite Cement from Electric Arc Furnace Steel Making Slag.	139.20
17	Amorphous Electrical Steel (AES) for Energy Application submitted by NML Jamshedpur.	3634.00

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