

GOVERNMENT OF INDIA
MINISTRY OF STEEL
RAJYA SABHA
UNSTARRED QUESTION NO.640
FOR ANSWER ON 07/02/2022

RESEARCH AND DEVELOPMENT IN STEEL SECTOR

640. **DR. VIKAS MAHATME:**

Will the Minister of STEEL be pleased to state:

- (a) the amount disbursed by Government for research and development in the steel sector; and
- (b) what steps have been taken for low carbon production of steel in the country by the public sector steel companies and the details thereof?

ANSWER

THE MINISTER OF STEEL

(SHRI RAM CHANDRA PRASAD SINGH)

(a) Ministry of Steel is providing financial assistance for research and development in the steel sector, through the scheme "Promotion of Research & Development in Iron & Steel Sector". The amount disbursed under the scheme during the last five years are given below:-

Financial Year	Amount (in Rs. Lakhs)
2021-22 (till date)	87.97
2020-21	53.95
2019-20	1500.00
2018-19	1500.00
2017-18	1400.00

(b) Steel Authority of India Limited (SAIL) and Rashtriya Ispat Nigam Limited (RINL) have adopted the Best Available Technologies (BAT) available globally, in the modernisation & expansions projects and improved Techno-economic parameters such as reduction in coke rate, increase in Pulverised Coal Injection (PCI) rate, improvement in BF productivity etc. resulting in reduction of CO₂ emission intensity from a level of 3.1 t/tcs from 2005 to 2.55 t/tcs in 2021. List of Best Available Technologies deployed are **annexed**.

Annexure

Best Available Technologies (BATs) adopted by SAIL and RINL are given below:-

- Coke Dry Quenching Technology to recover sensible heat from coke from Coke Oven Batteries to produce electricity.
- Top Pressure Recovery Turbine in Blast Furnaces to recover waste Pressure energy of BF gas to electricity.
- Sinter Cooler Waste Heat Recovery System in Sinter Plant to produce steam or electricity.
- Blast Furnace Hot Stoves Waste Gas Recovery System to utilize the waste to preheat the air entering to stoves. Further, the waste gas at reduced temperature is used to pre heat BF gas & Combustion air.
- LD Gas recovery system in Steel Melting Shops to recover LD gas from converter blowing for usage as fuel in reheating furnaces.
- Evaporating cooling system in reheating furnaces of rolling mills to generate process steam.
- Recuperators/ Preheaters to recover sensible heat of waste gases from Rolling Mills Reheating Furnaces and Calcination plant kilns.
