

GOVERNMENT OF INDIA
MINISTRY OF STEEL

LOK SABHA
UNSTARRED QUESTION NO.5682
FOR ANSWER ON 06/04/2022

GREEN HYDROGEN METHOD FOR STEEL PRODUCTION

5682. SHRI GAUTAM GAMBHIR:

Will the Minister of STEEL be pleased to state:

- (a) whether the Government is considering any proposal to use green hydrogen method for production of steel in furtherance of decarbonising its production; and
- (b) if so, the details thereof?

ANSWER

THE MINISTER OF STEEL

(SHRI RAM CHANDRA PRASAD SINGH)

(a)&(b): Ministry of New and Renewable Energy (MNRE) has proposed setting up of National Hydrogen Energy Mission with an aim to develop and scale up green hydrogen production technology, make it affordable and widely accessible. The steel sector has also been made a stakeholder in the Mission. Under this initiative, it has been proposed to set up pilot plants with part funding from Government to explore the feasibility of using green H₂ in Direct Reduced Iron (DRI) production, by partly replacing natural gas with H₂ in gas based DRI plants. Based on the success of the pilot projects, the gas based DRI units shall be encouraged for large scale adoption of the process.

Green H₂ is produced through electrolysis of water using electricity produced from renewable energy. Green H₂ is not commercially viable at present. However, with declining costs of renewable power generation and electrolyzers, production of green hydrogen is likely to become cost competitive in future.
