R&D Holds Key to India becoming A Global Player

- Sanjay Singh, Associate Editor

India can become one of the global player in the steel industry if it invest more in its Research and Development (R&D), said Birendra Chaudhry, Minister of Steel at the 25th meeting of the Steel Consumers' Council held in Mumbai.

The minister said that steel can contribute to GDP and his ministry is trying all its best to push this sector in forefront.

"We are speaking to the Railways and all the stakeholders to make this industry competitive in the global arena," he noted.

Dr. Aruna Sharma, Secretary of Steel in the ministry predicted that by 2018, India will become the second largest producer. Now the country is placed third after China and Japan.

"Per capita consumption of steel in India is 61 kg against world average of 208 kg, where as in China it is 489 kg. The finished steel production stands at 82 mtpy and by we intend to reach 250 mtpy by 2031.

"Technological upgradation holds key to more competitiveness in the steel sector," remarked Sharma.

She commented that India has huge potential for consumption and the biggest driver of consumption will be the infrastructure sector.

The steel ministry recently laid a road map by releasing draft of National Steel Policy 2017. The policy aims for self sufficiency in steel production by providing policy support and guidance to private manufacturers, MSME steel producers, CSSES and encourage adequate capacity additions.

The objective of the policy is to a build a globally competitive industry with a crude steel capacity of 300 MT by 2031, increase per capita steel consumption to 160 kgs,.and to domestically meet entire demand of high grade automotive steel, electrical steel, special steels and alloys for strategic applications by 2031

The other salient point of the draft is to increase domestic availability of washed coking coal so as to reduce import dependence on coking coal to 50% by 2030-31 and to be net exporter of steel by 2025-26.

The policy said currently, the steel industry faces challenging external conditions manifest in slow economic growth and idle steel capacity globally. With weak global economic prospects, the Indian steel industry will have to strongly depend on the growth of domestic consumption for its future.

Currently around 40% of the steel consumption is from construction and infrastructure sectors, which is expected to increase to 59% by 2030-31. To drive steel demand, the ministry has indentified construction and manufacturing sectors like rural development, urban infrastructure, roads and highways, railways etc to be the key focus areas.

The government has chalked out an extremely ambitious plan for housing for all by 2022 as well as schemes such as Pradhan Mantri Awas Yojna, Saansad Adarsh Gram Yogna, which will provide a huge opportunity for use of steel intensive structures and designs, usage of pre-fabricated and precast steel structures.

The Make in India initiative is expected to witness significant investments in construction, infrastructure, automobile, shipbuilding and power sectors, which will stimulate steel demand. Hence, efforts will be made to pass on such benefit to the domestic steel producers. Use of cost efficient and competitive –Indian made steel- will pave the way for infrastructure development and construction activities in the country.

The draft pointed out that creation of additional capacity for fulfilling the anticipated demand will require significant capital investment of about Rs. 10 lakh crore by 2030-31, and will also generate significant employment in the range of 36 lakh by 2030-31, from the current level of 25 lakh depending on degree of automation resulting from adoption of different technologies.

Establishment of steel plants along the coast under the aegis of Sagarmala project will be undertaken. Such plants would be based on the idea of importing scarce raw

materials and exporting steel products. The ministry will also promote cluster based approach particularly in MSME steel sector with common infrastructure on consortium approach for optimum land use, easy availability of raw materials and economies of scale.

The draft policy states that availability of raw material at competitive rates is imperative for the growth of the steel industry. Transportation of iron ore fines to pelletisation units will be targeted through slurry pipelines and conveyors as it will reduce pollution and de-congest transportation infrastructure in mining areas. To encourage this environment friendly transportation, the ministry will pursue timely completion of ongoing slurry pipeline projects and their future expansion in the coming years.

To ensure long term supply of iron ore, intensive and deeper exploration would be promoted to augment resource base. In order to develop a strategic footprint in the global natural resource industry, acquisition of mineral assets overseas will also be facilitated through bilateral talks with the prospective nations.

On coking coal which has seen a rise in price, about 70% of the coking coal requirement of the domestic steel industry is presently being met through imports. Ministry of Steel will coordinate with Ministry of Coal to increase availability of coking coal through overseas asset acquisition and will also ensure that sufficient number of modern coking coal washeries get established.

National Steel Policy document says that India was a net exporter of steel in 2013-14. However, due to global downturn in steel demand and excess capacities in major steelmaking countries such as China and Japan, India witnessed a significant surge in imports in 2014-15, which continued in 2015-16 as well.

Given the current overcapacity and volatility in the global steel industry, appropriate measures in form of MIP mechanisms, Anti-Dumping Duty, Safeguard Duty and Quality Control Order has been taken. Given the cyclical nature of steel industry, there would be situations of trade and financial stress in the sector. Hence, Government will take suitable trade remedial measures in line with WTO guidelines and/or India's Foreign Trade Policy, if need so arise in future.

On India's R&D in steel sector, the document says that it is limited not only in absolute terms but also as percentage of turnover which is 0.05 – 0.5% as against 1% in leading steel companies abroad. The Indian steel companies need to evolve a time bound action plan to enhance their R&D expenditure to at least 1% of the turnover.

In order to boost innovation in the steel sector (future technologies), a time bound action plan will be evolved under the aegis of Steel Research and Technology Mission of India (SRTMI) to enhance the R&D expenditure of Indian steel CPSEs. The Ministry through SRTMI will also encourage corporates in steel sector, private and public sector alike, to direct certain sums from their profits towards continuous industry collaborative research.

Apart, they would also be encouraged to set up their own steel technology centres and steel sector oriented research and education wings at universities in order to focus on technology based solutions for development of high quality, low cost steel products and to build greater interface between academia, R&D institutions and industry.