**SECTORAL REVIEW**

**SNAPSHOT OF THE SECTOR**

**What is Ferro Alloy**

Ferro Alloys are used in the steel making process as raw materials. It is a vital additive for steel making. The principal function of Ferro alloys is to increases the resistance of steel to corrosion as well as oxidation, improves its harden-ability, tensile strength at high temperatures etc.

**Key Metrics**

The ferro alloy industry during the 90s after the liberalization had a robust growth of more than 15 – 20% aided by a growth in steel capacity by private sector and also huge export potential especially to countries like South East Asia and China. Export potential has been further aided by subsidized power tariff from NTPC and various incentive schemes offered by the State governments. However, the growth rate has plummeted after the 2007-08 meltdown which continued for 4 – 5 years. In fact many of the major ferro alloy plants closed down during this period. However, the growth of the ferro alloy industry is in tandem with the growth of steel sector.

The fortune of Ferro Alloys industry is linked with the Steel Industry. Indian economy is expected to grow parallel to steel production. The per capita consumption of steel in India is quite below the world average, i .e. around 63 kg against 223 kg of the worlds consumption. The future of Ferro Alloys industry largely depends on the demand and supply of steel in the market, which in turn depends upon improvement of global economy. The present estimated production of Ferro Alloys in India is around 3.7 MnT and domestic consumption around 2.5 MnT and the rest is (around 1.2 MnT) exported to China, Japan, Europe and Australia for earning a foreign exchange of around 9200 corers. India's production of around 3.7 MnT of Ferro Alloy consists of 1.3 MnT Ferro chrome (FeCr) and 2.4 MnT of manganese alloys, expecting an increase in the domestic demand of Ferro Alloys as per National Steel Policy-2017 and many units are expected to add capacity to their existing capacity by adding new furnace.

**Power and Labour Intensive Industry**

Ferro Alloys is a power intensive industry, about 45-50% of total production cost is spent in power depending upon different alloy product, and the balance is attributable to the cost of ore and other ingredients. India is presently positioned as the sixth largest (Globally) producer of energy, representing 3.4% of the overall energy output per annum, where as falling with fifth largest consumer in global scenario comprising 3.6% over all energy consumption, so power demand is still remaining by 0.20-0.25%. Coal based power generation remain major contributors for meeting the energy demand in the country. It will continue to play a dominant role in Indian Power sector owing to the increasing demand for thermal coal in the country. Presently most of the Ferro Alloys manufacturers are also engaged in generation of power for captive use and sell additional power in short term market through merchant sale with a view to optimize revenue and profitability. In light of continued Y-o-Y increase in peak power deficit, the government is aggressively targeting capacity commissioning with focus on large- scale thermal power plants. There still remain regulatory complexities at the state level that is delaying generation of additional power plants. Progress in terms of sector reforms remain slow. As power tariff in the country is high compared to other Ferro Alloy producing countries. Non captive producers are at a disadvantage due to cross subsidy in power.

**Most of the ferro alloy plants are located in the rural and tribal areas due to availability of cheap labour,** both skilled and unskilled and also some incentives from the Government. Setting up of the ferro alloy industry in these areas brought major changes in the socio economic conditions by increase employment in both skilled and unskilled category. At the moment the contribution of steel industry is 2% of GDP and being a part of the same industry, contribution of ferro alloy could not be quantified.

**Raw materials**

The availability of major raw material for Ferro Alloys industry such as manganese ore for manganese alloys, Chrome ore for Ferro chrome, along with coke, coal, quartz and fluxes etc is not satisfactory in the country, due to the huge demand of ore and scarcity of good quality raw material in the country, ore prices have been increasing every day since industry has a huge demand for ore. In India, manganese ore is available with MOIL; a government owned enterprise, which is the largest ore producer and other manganese ore producers such as Odisha Mining Development Corporation (OMDC), TATA Steel, Sandur Manganese, Rungta Mines etc. Also some small private mine owners in Madhya Pradesh, Odisha and Karnataka are producing very little quantity of ore. The industry requirement for manganese ore is not being fully met by the domestic supply as captive manganese ore are not up to the mark on basis of grade quality(inferior grade),only 50% of the total demand is being met by the domestic mining industry and rest of the ore is imported, hence the industry is quite depended on imports, specially on Manganese ore.