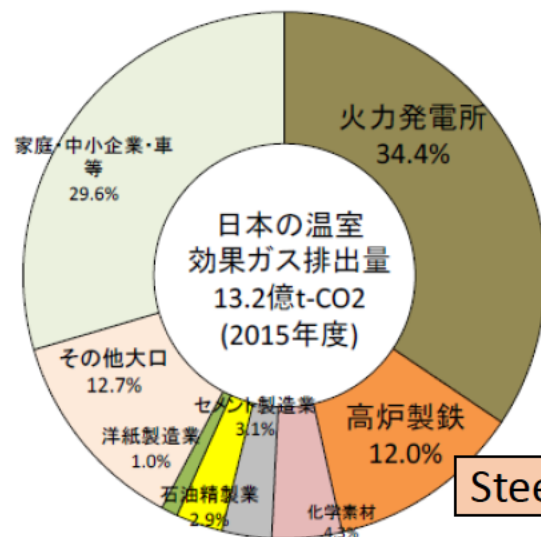
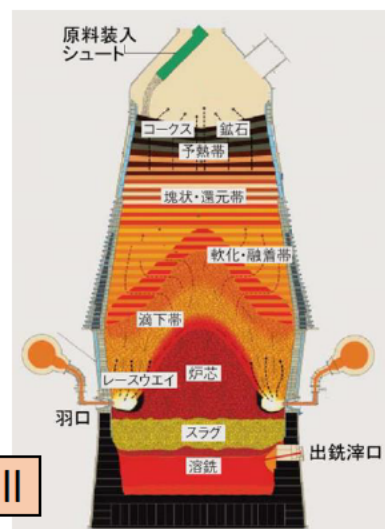


New ironmaking technology and decrease in CO₂ emission

The iron and steel industry occupies approximately 12% of CO₂ gas emissions of Japan. Therefore, its reduction is urgently required. However, it is essential to utilize fossil fuel energy, especially coal, in the conventional ironmaking processes, because carbon plays an important role in the heat generation, reduction of iron oxide and carburization. The utilization of the composite material which consists of carbon and iron ore powders is focused on as one of the effective method. You will study new ironmaking process using this raw material of carbon – iron ore composite by review of the previous paper and evaluation of properties of the composite experimentally. Then, we will discuss the possibility of this process.



Amount of CO₂ emission in Japan



Schematic drawing of
blast furnace



View of new ironmaking plant

Tsutsumi et al. KOBE STEEL ENG. REPORT, 60, 1 36.

Steel mill