BOF is the steel production from raw material including coal, ore and limestone. In contrast, the EAF is the recycling technology of steel and irons to produce steel from recycled steels. The readily purified material source makes the EAF far more efficient in terms of production cost (300 USD/Ton) when compared with BOF (1100USD/Ton). Moreover, for US many BOF steel are imported from China. So it relies on Chinese economy, making the US policy making less independent. Given all the advantage of EAF and disadvantage of BOF, EAF seems to be a superior solution. However, it is limited by the amount of recycled material from the community. As a result, it cannot be a sole solution for steel production.