

Summary

This paper is the first trial to expand the scope of our low carbonization scenarios. In addition to energy efficiency improvements within household sector, and deployment of renewable energy, we are newly introducing the concept of recycling economy. Since this is our first trial, we have only evaluated more electric furnaces to be used to produce crude steel. It had the effect to reduce 3.4% of carbon dioxide emissions within iron and steel sector, but it only counts for 0.3% of entire emissions by Japan.

Together with energy efficiency improvement within household sector and more renewable deployment, it was estimated to reduce 30.5% of national CO₂ emissions under the assumption that household energy consumption will be reduced by 75% according to LCS estimate^[1], and two third of fossil fuel power will be replaced by solar and wind power.

We are now investigating to include other renewable sources and other recycling technologies to our estimate. It is also planned to hold scenario planning sessions to include various views by various types of people, and establish several future scenario with quantitative analysis.