

A Study on Greenhouse Gas Emission Reduction Potential of Steel and Iron Industry in Korea

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A reduction potential of carbon dioxide emission in steel and iron industry in Korea was studied with carbon tax scenarios. For the assessment of carbon dioxide emission reduction potential with technology options, Korea-MARKAL model was adapted. Five scenarios such as base case, technology options only, carbon taxes of US\$ 30, 60 and 90 per carbon ton with technology options were established. And 62 kinds of existing technologies and 48 future technologies are considered as technology option. About 5.1% of carbon dioxide emission were reduced with technology option scenario without carbon tax and up to 36% of carbon dioxide emission could be reduced with US\$90 carbon tax in 2030.

Abstract for the International Energy Workshop
jointly organized by the
Energy Modeling Forum (EMF), International Energy Agency (IEA) and IIASA.
24-26 June 2003 at IIASA Conference Center, Laxenburg, Austria