Frame Work of Data Envelopment Analysis—A Model to Evaluate the Environmental Efficiency of China’s Industrial Sectors

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**Objective** To evaluate the environmental and technical efficiencies of China’s industrial sectors and provide appropriate advice for policy makers in the context of rapid economic growth and concurrent serious environmental damages caused by industrial pollutants.

**Methods** A data of envelopment analysis (DEA) framework crediting both reduction of pollution outputs and expansion of good outputs was designed as a model to compute environmental efficiency of China’s regional industrial systems.

**Results** As shown by the geometric mean of environmental efficiency, if other inputs were made constant and good outputs were not to be improved, the air pollution outputs would have the potential to be decreased by about 60% in the whole China.

**Conclusion** Both environmental and technical efficiencies have the potential to be greatly improved in China, which may provide some advice for policy-makers.

**Key words:** Technical efficiency; Environmental efficiency; Directional distance function; Technical-environmental efficiency; Data of envelopment analysis; China

**REFERENCES**


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