Carbon footprint for human activities on Antarctic: A review

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The Antarctic affects global climate change and environmental safety greatly. With the human activities increasing, the influence on ecological environment is proliferating and migrating between different levels. Carbon footprint (CF) is nowadays one of the most widely used environmental indicators. Given the uniqueness of Antarctic, this work defines the carbon footprint for human activities on Antarctic based on connotation presented by formers. The calculation methods of carbon footprint were discussed according to the principles of life cycle assessments. The mixed life cycle analyses (MLCA) were presented to calculate the carbon footprint accurately. The MLCA method combines the input-output analysis with bottom-up analysis and employs the advantage of each one. The driving factors were discussed influencing the formation of carbon footprint of human activities on Antarctic. The meta-analyses were used and nearly all studies about carbon footprint for Antarctic were investigated. Lastly, this study put some efforts to establish benign mankind activities in the Antarctic by the study of the behavior of mankind activities.

Biography

Li Wei is a Professor at School of Economics and Management at Taiyuan University of Technology; Director of China Natural Resources Society and Deputy Director of resource economy committee, Executive Director of energy law branch of China Double Law Research Association and Executive Director of energy resources system engineering branch of China Society of Systems Engineering. She is engaged in energy and environmental economics and management research. She makes a breakthrough for first introduction of the complexity theory and method into regional carbon emissions research. She published more than 40 papers and a monograph regional energy-saving potential theory and empirical research, by which she won the first prize of eighth outstanding social science research. She undertook several projects funded by the National Natural Science Foundation or Shanxi Science and Technology Bureau.

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