

City-level multi-regional input-output accounting using the IELab tool

Topic: Environment-Extended IO Analysis at City Level

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The field of city-level carbon accounting is developing fast with several standards and many recent publications. Carbon accounting for cities is important and relevant for urban planning and policies related to energy, environment and trade, but so far no such a systematic tool for quantifying these relationships has been provided. This study provides a systematic and holistic tool i.e., city-level multi-regional input-output tables using Industrial Ecology Virtual Laboratory (IELab). First, a multi-regional input-output framework for cities is presented; Second, as much as possible city-level official input-output tables, census data, and macro-aggregates are collected and integrated into the city-level MRIOs; Finally, a typical MRIO table for Chinese capital cities are constructed to illustrate the carbon accounting at city level. This illustrates how mitigation is implemented in the real economic world through the appropriate city MRIO table.