

## **Constructing a multi-regional waste input-output framework using Australian waste data**

Topic: Waste Input-Output Analysis

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This research paper describes a method for constructing a multi-regional waste input-output (MRWIO) framework. This research utilises Australian waste data as a case study, however the construction method can be equally applied to data from other regions. This framework maps waste flows from generation by entity, region and waste type, to treatment method and region of treatment. The structure of the framework complies with the System of Environmental-Economic Accounting (SEEA) to allow the physical waste flows (in tonnes) to be aligned with other socio-economic data. The framework is constructed within a virtual laboratory environment that provides a number of benefits, including reduced construction time and cost. The collaborative nature of the virtual laboratory provides access to a range of other economic and environmental data, which allows the waste framework to align with these other indicators. The framework will be useful for testing a range of scenarios which target waste reduction and material efficiency.