Research on the Circular Economy in China: An institutionalist's perspective on waste management

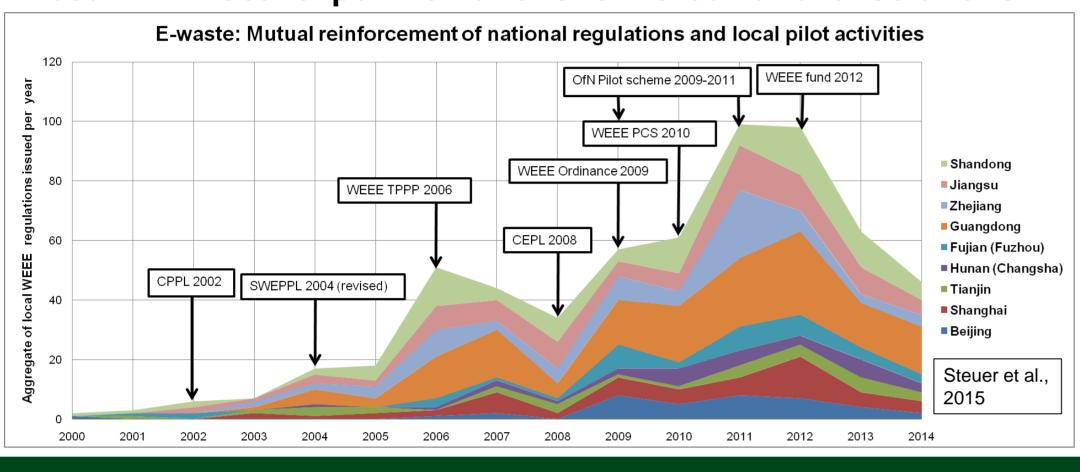
Research questions

- How does the institutional, i.e. rule-based, setting of the Circular Economy (CE) evolve in the PRC?
- What is the dynamic between formal and informal rule-systems?
- How can institutional effectiveness be measured in the CE context?
- Which predictions and suggestions can be derived?

Focal points: Methodology and topics

- Employing the Old Institutional Economics: Institutional change via trial-and-error search for and/ or imitation of rules adapted to an occurring problem or challenge
- Inheritance and variation of institutions indicate emerged path-dependencies, selection mechanisms (economic gain, power relations, embedded values,...) are key determinants for institutional effectiveness and thus maintenance
- Content focus A: Identifying actors and their respective interests
- Content focus B: (1) Formal legislation in the CE, especially WM; (2) state-initiated Eco-Industrial Parks; (3) formal and informal systems in waste management

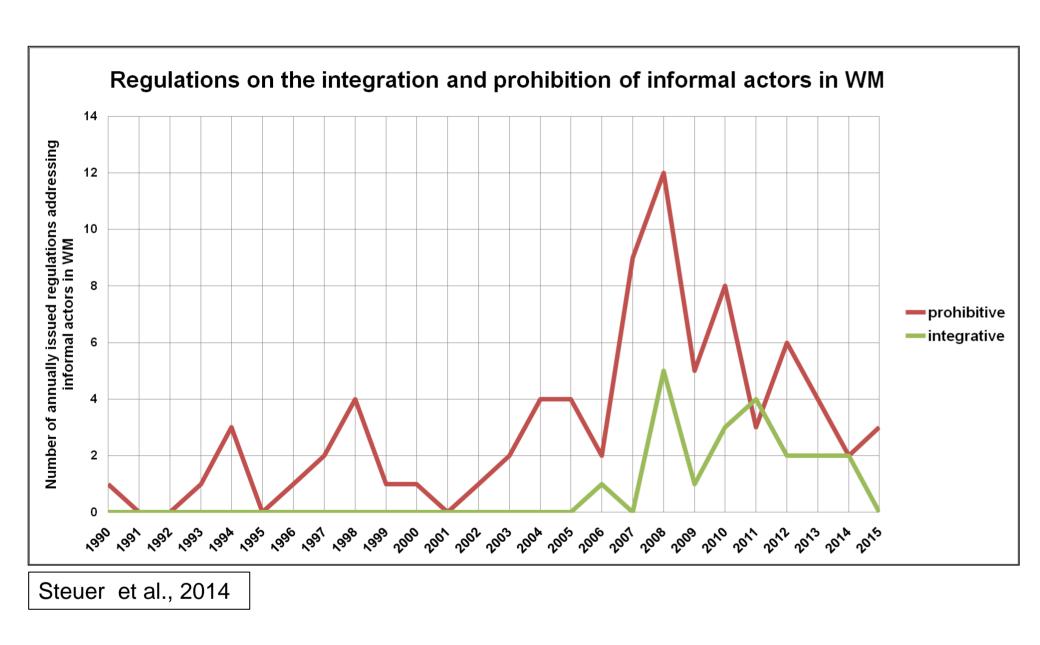
Result B1: Local experimentations reinforce national solutions

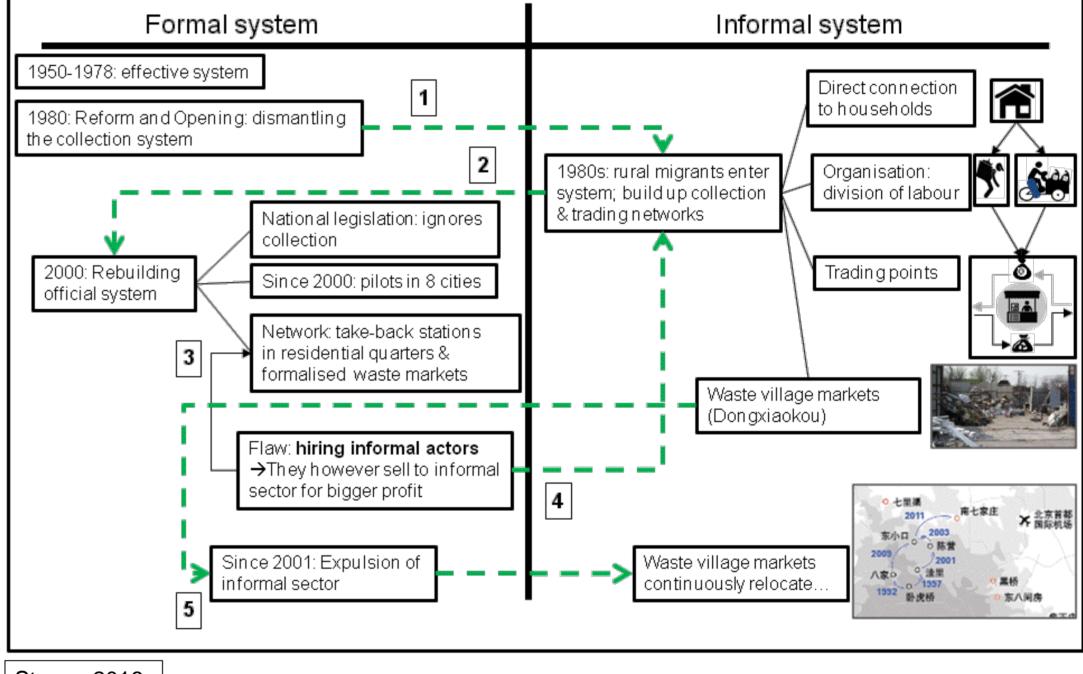


Result B2: Enforced formalisation via industrial up- grading and designated circulation of material flows



Result B3: Formal vs. informal rule systems in waste management – fierce competition over dominance





Steuer, 2016

4. Ongoing and completed research projects

- REWIN: Improving resource efficiency for the production and recycling of electronic products by adoption of waste tracking system **Duration:**13.12.2011-12.08.2017 [funded by the EU-China Sustainability Programme]
- CFL: China Fluorescent Lamps collection and treatment demonstration project Duration: 01.09.2013-31.08.2016, [funded by the EU-China Sustainability Programme]
- Ship rec: Sustainable Ship Recycling by Adopting Integrated Waste **Management Approaches in China Duration:** 01.08.2013 – 31.07.2016, [funded by the EU-China Sustainability Programme]
- Invisible hands? Informal employment in the service of resource efficiency in urban China [Anniversary Fund of the Austrian National Bank] **Duration**: 1.1.2013 – 31.12.2013
- Invisible Markets The role of households and waste collectors for resource management in urban China [Anniversary Fund of the Austrian National Bank] **Duration:** 1.1.2016 – 31.12.2016

5. Selected Publications

Steuer, B., Salhofer, S., Linzner R. 2015. The winner takes it all – why is informal waste collection in urban China successful? Proceedings Sardinia 2015.

Schulz, Y. and Steuer, B. 2015. Dealing with discarded e-devices. In: Sternfeld, E. [eds.] Routledge Handbook China's Environmental Policy (forthcoming).

Salhofer, S., Steuer, B., Beigl, P., Ramusch, R. 2015. WEEE management in **Europe and China - a comparison**. Waste Management.

Steuer, B. 2016. Why Does 'Informal' Waste Collection and Recycling Thrive in Mainland China? Paper presented at the 'Waste in Asia Conference', Leiden, the Netherlands, June 2016

Steuer, B. 2016. What Institutional Dynamics Guide Waste Electrical and Electronic Equipment Refurbishment and Reuse in Urban China? Recycling 2016.

Steuer, B., Ramusch, R., Part, F., Salhofer, S. 2016. Analysis of the value chain and network structure of informal waste recycling in Beijing, China. Resources, Conservation and Recycling (accepted).

Contact

Mag. Benjamin Steuer, Bakk. MA

E-Mail:

benjamin.steuer@boku.ac.at benjamin.steuer@univie.ac.at



Institute of Sinology

Department of East Asian Studies University of Vienna

Spitalgasse 2, Yard 2 A - 1090 Vienna

Telephone: +43-1- 4277-438-40/ 41

Institute of Waste Management

Department of Water-Atmosphere-Environment University of Natural Resources and Life Sciences

Muthgasse 107 A - 1190 Vienna

Telephone: +43-1-3189900-310





