

Monitoring the Circular Economy in Cities and Municipalities

ABOUT THE RESEARCH

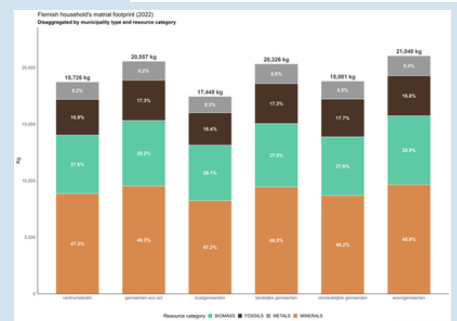
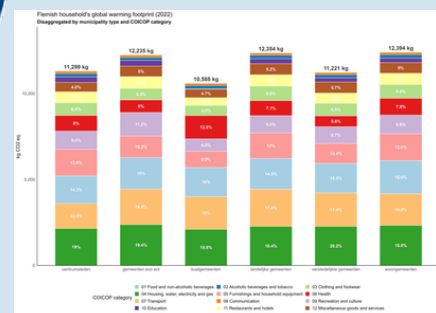
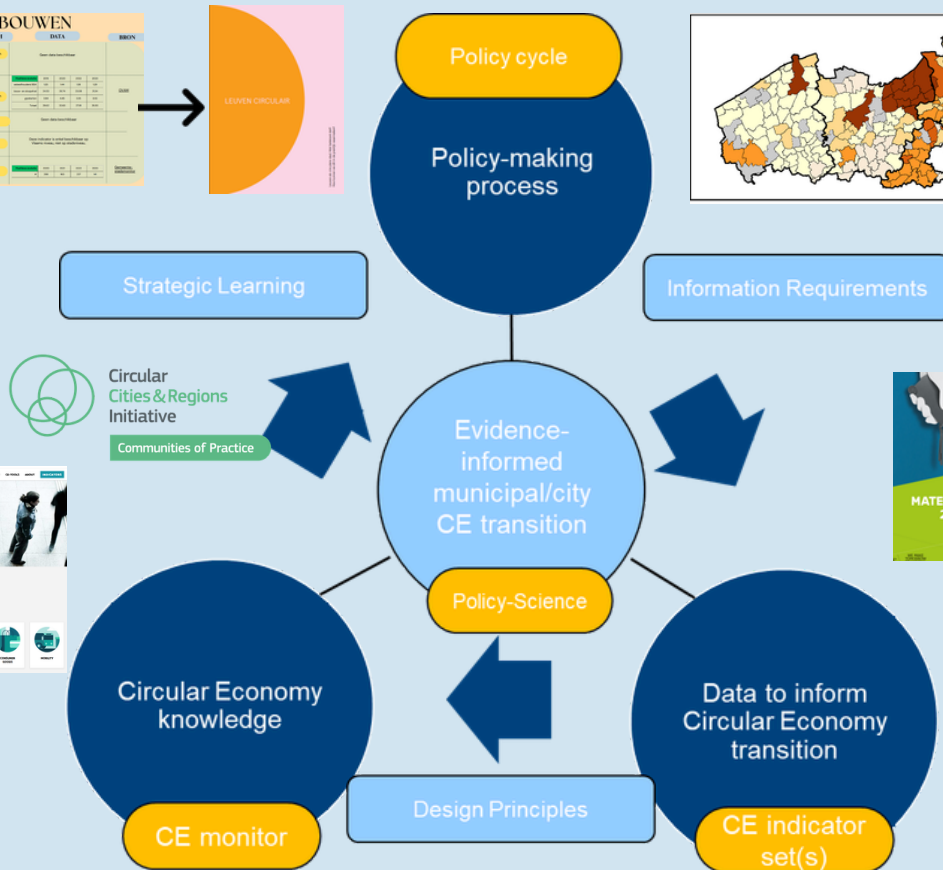
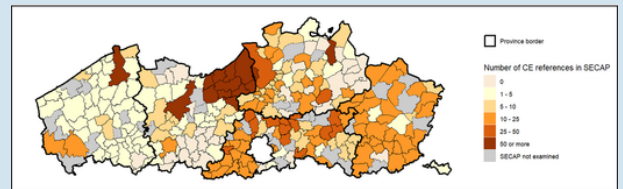
Local governments are increasingly positioned as **key actors** in the transition toward a **circular economy**, yet monitoring this transition remains a significant challenge. Because the CE is a relatively young policy domain that cuts across **multiple governance levels** and **value chains**, identifying **indicators** that meaningfully capture the **urban CE transition** is far from straightforward. By connecting **user-oriented information needs** with **CE evidence** and measurable indicators, the proposed **monitor**, in my PhD research, seeks to provide cities and municipalities with a practical tool to **assess, understand, and inform** their transition toward a CE.

RESEARCH QUESTIONS

- What are the **information needs** of **local government's** for the **circular economy** transition?
- Which **indicators** should be developed to **conceptualize** and **quantify** the **urban CE transition**? And how can we develop them?
- How should monitoring systems be designed to support **evidence-informed policymaking**?

HUISVESTING EN GEBOUWEN

INDICATOR	BEWERTING	RETOUR	DOEL	BRON
... (indicators) ...	... (ratings) ...	... (returns) ...	... (goals) ...	... (sources) ...



Policy cycle	Primary function of indicators	Indicator logic	Illustrative indicators
Agenda setting	Problem framing and priority identification based on scale of resource use and environmental pressures	Outcome	Material consumption (DMC/RMC); carbon footprint
Policy formulation	Translating objectives into measurable actions and policy design	Input	CE strategies; procurement criteria; spatial allocation; availability of circular infrastructure
Decision making	Prioritising interventions and allocating resources based on expected effectiveness	Input → outcome (ex-ante)	Estimated material savings; CO ₂ reduction potential;
Policy implementation	Executing interventions and coordinating action across actors	Output	Number of implemented initiatives; adoption of CE practices by firms; volumes of reused materials
Policy evaluation	Assessing structural change and progress toward CE objectives	Outcome (ex-post)	Reduction in material throughput; waste generation; recycling rates; circular employment