



MICRO-CREDENTIAL

CIRCULAR ECONOMY FOR LAND AND WASTE MANAGEMENT

3.- Land as a Circular Resource

Urban vs rural land use in CE

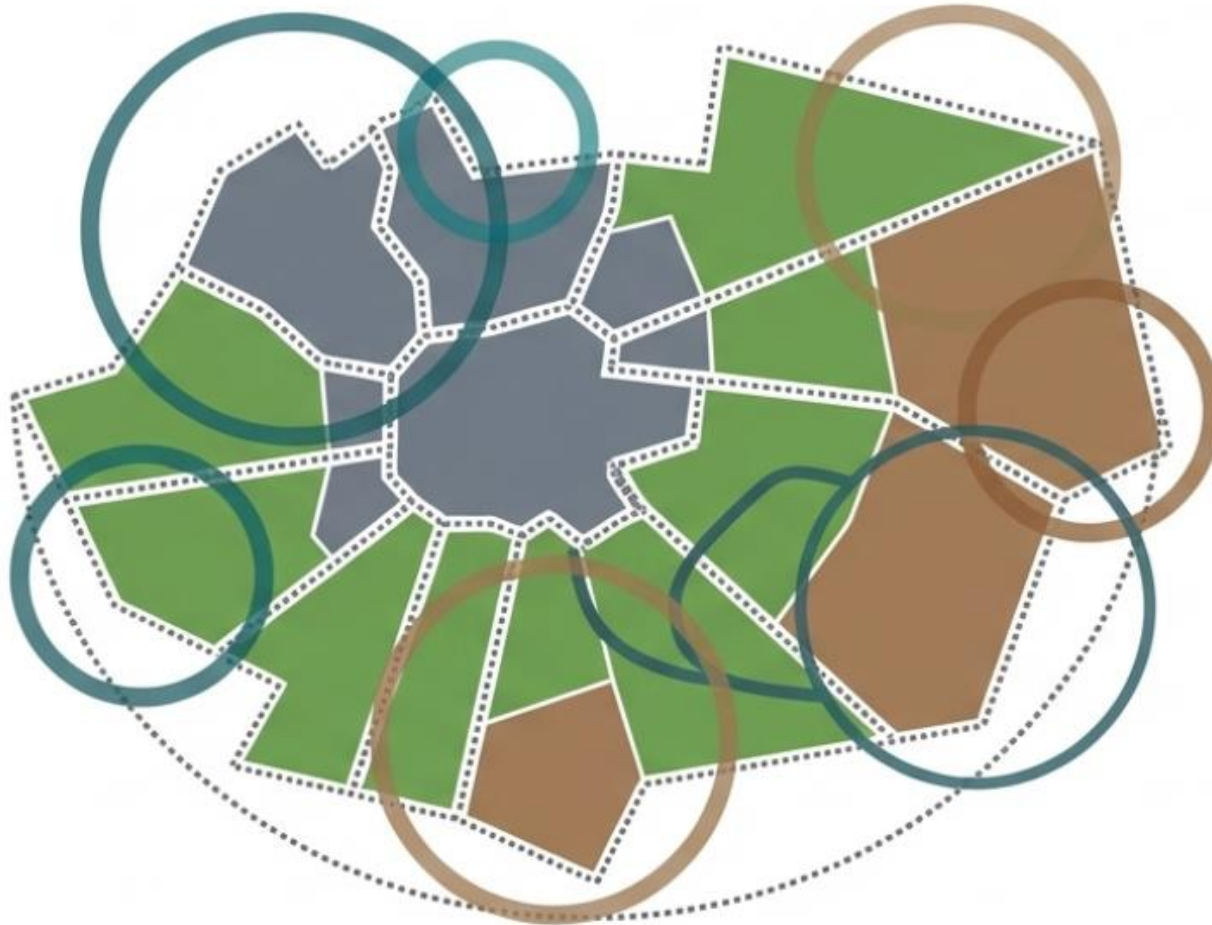
CELWS-W03-V04



Co-funded by
the European Union



Recap: The Planning Foundation

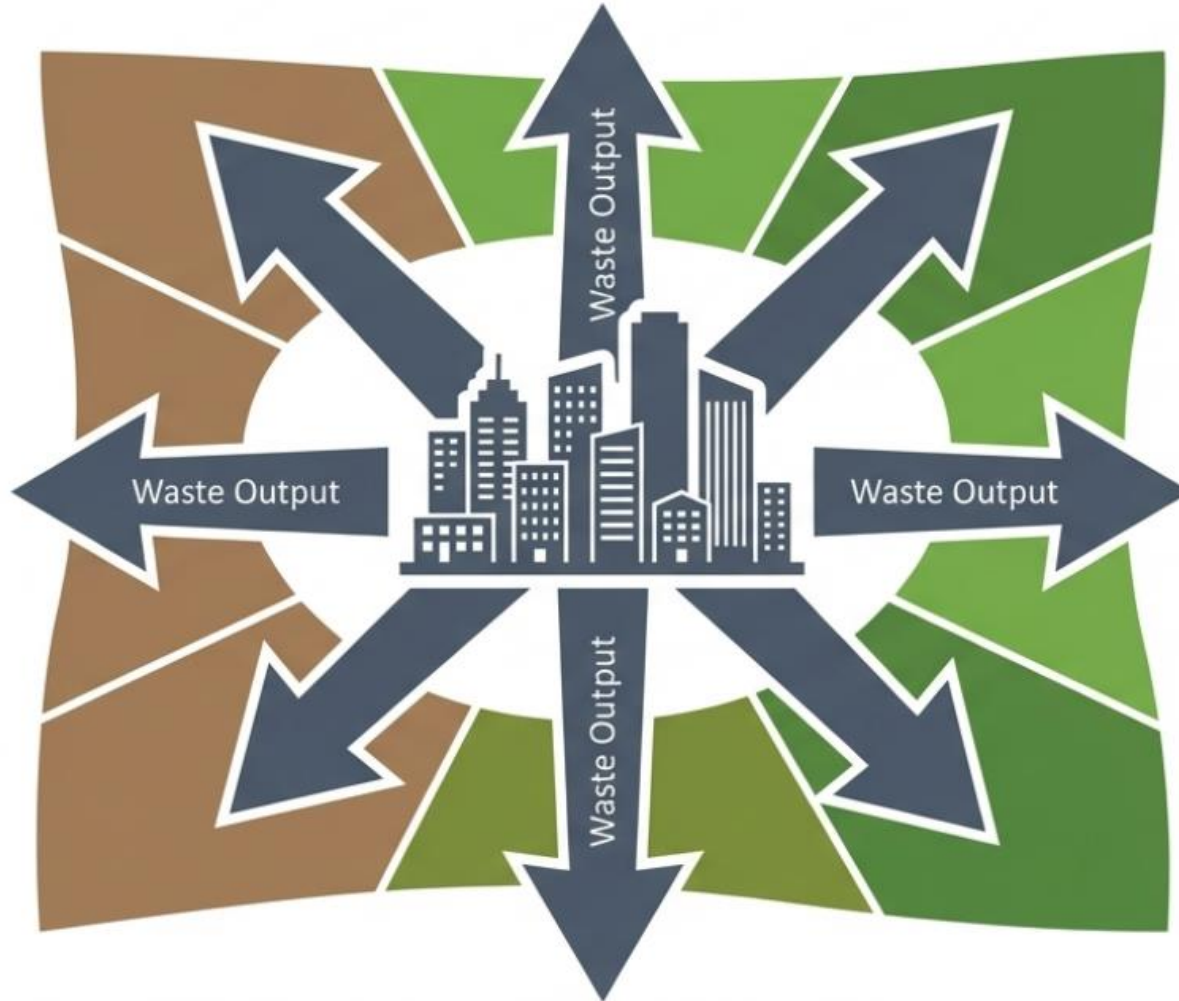


Land as a resource
base, a spatial
platform, and a sink.



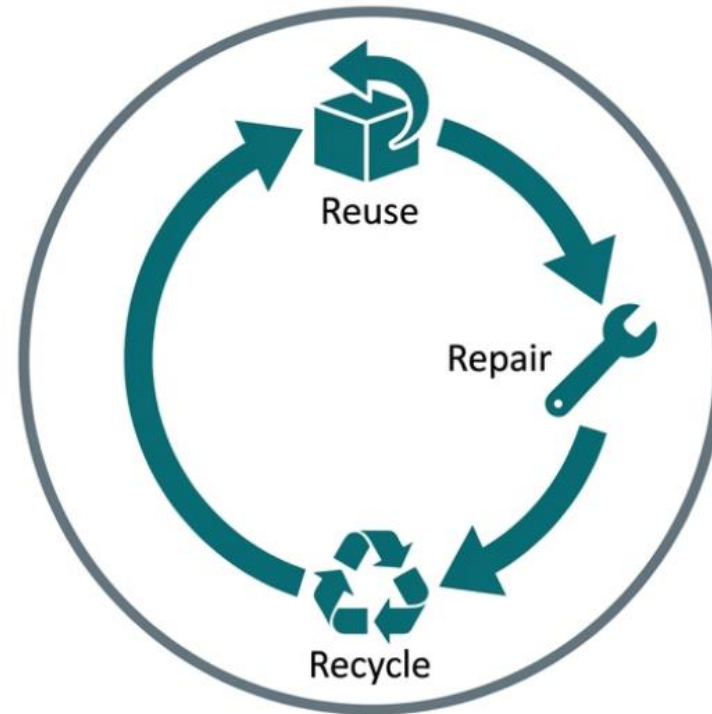
Take-Make-Dispose System

Urban Waste Generation and Land Pressure



Produces 50% of
global waste.

Spatial Limitation &
Environmental Degradation.



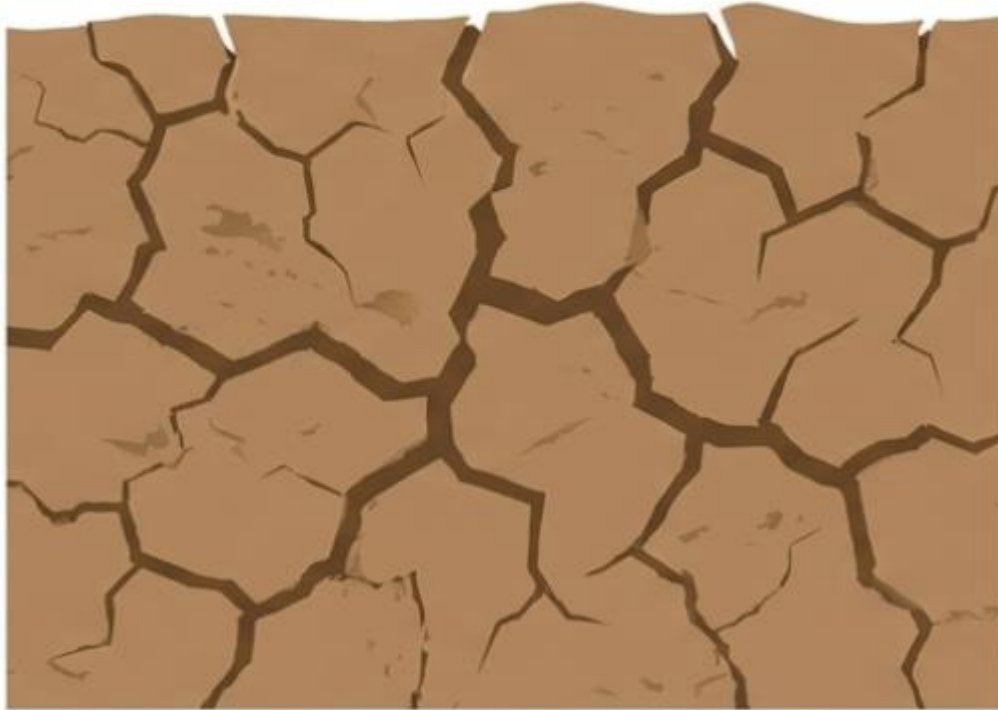
From Resource Sink to Resource Turntable.

Rural Land Use: The Linear Extractive System

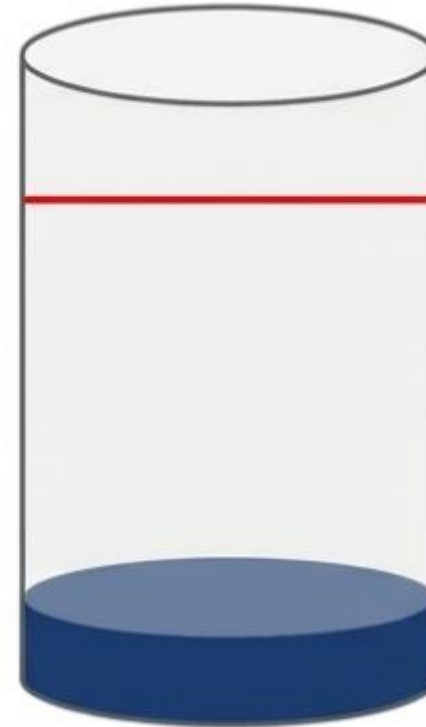


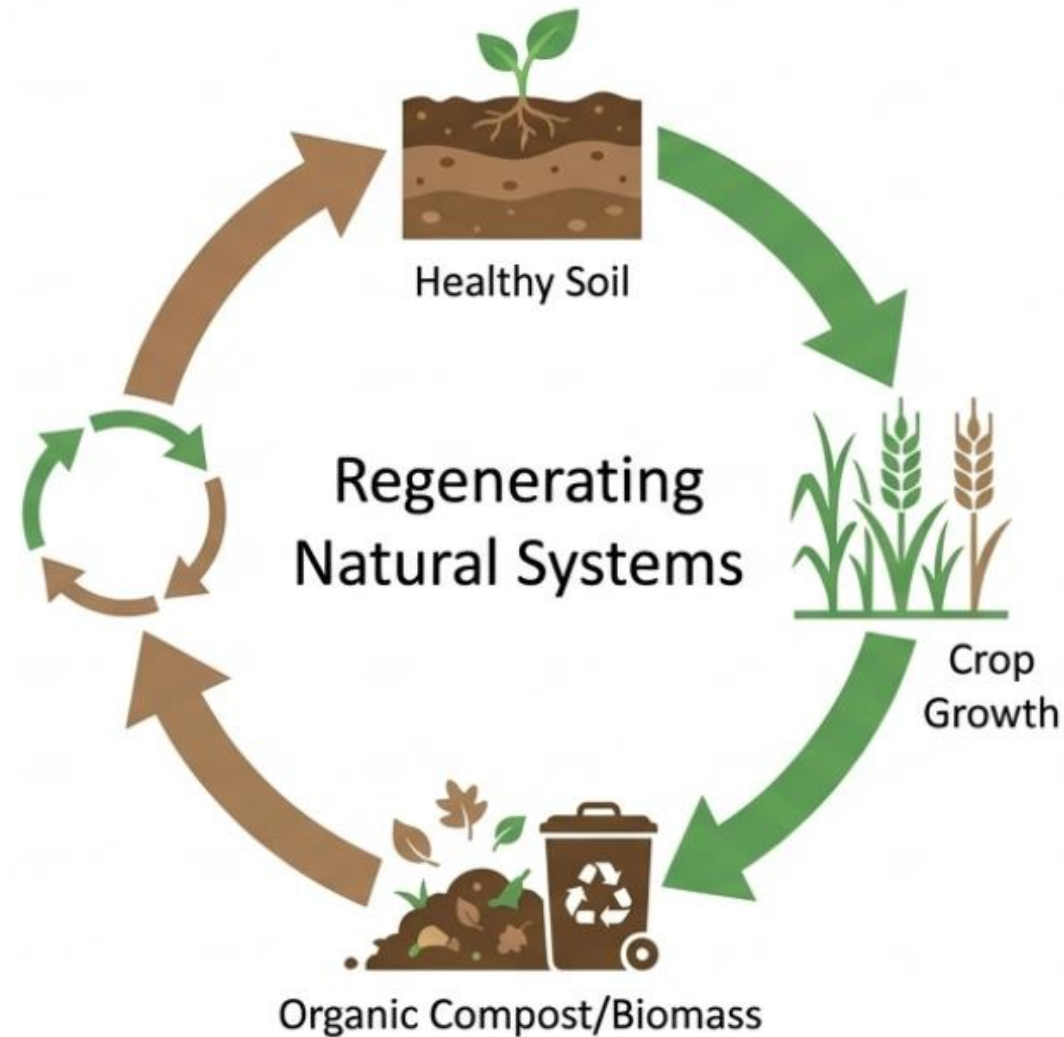
Consequences: Soil Depletion and Water Scarcity

Ecosystem Service Loss

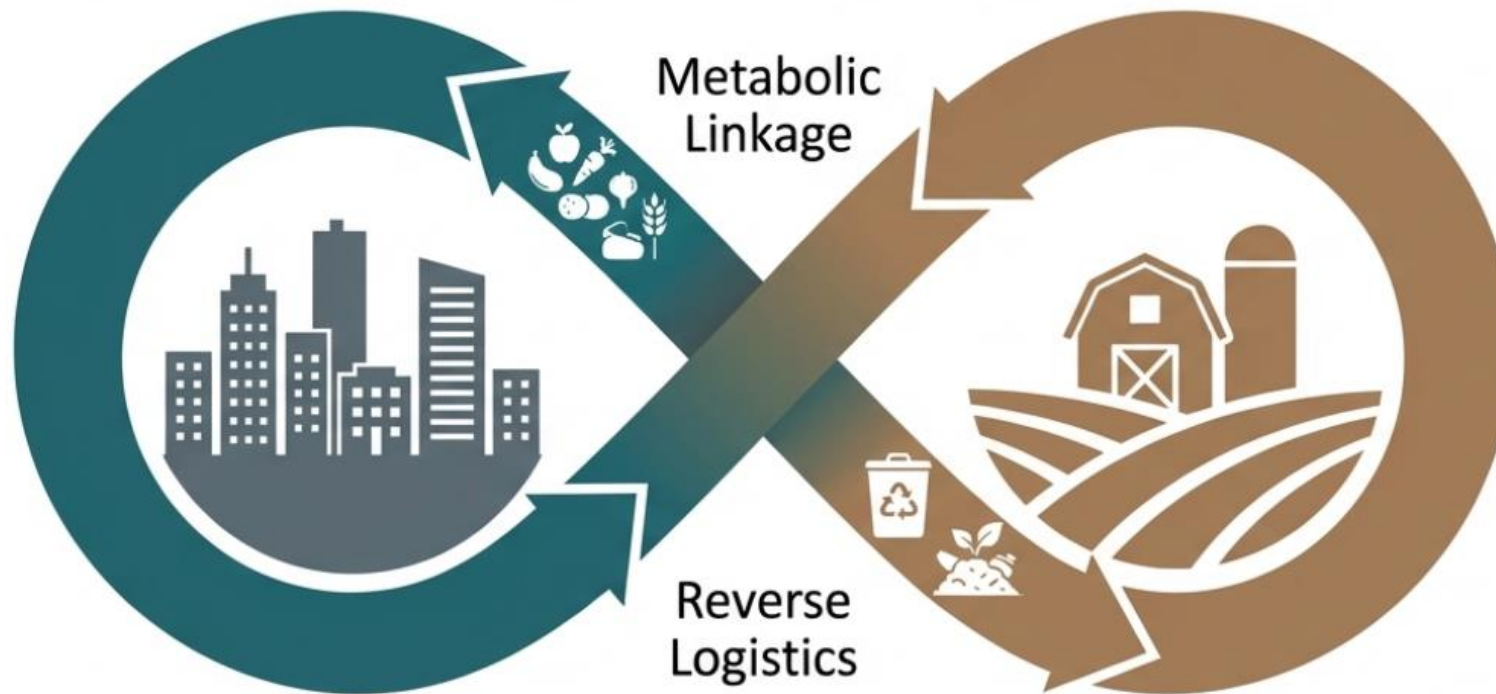


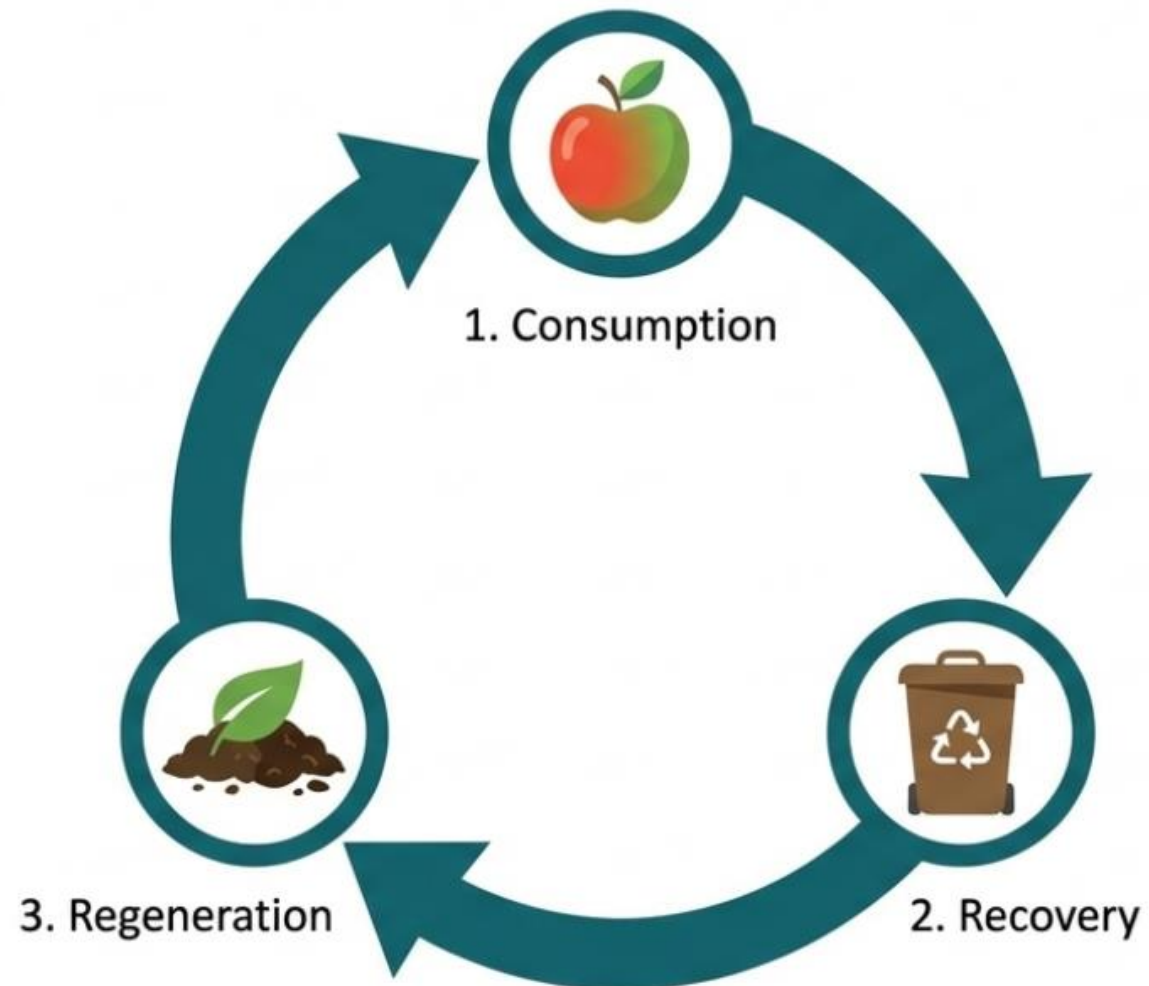
Overshoot of
Planetary Boundaries





Urban–Rural Linkages: Closing the Loop





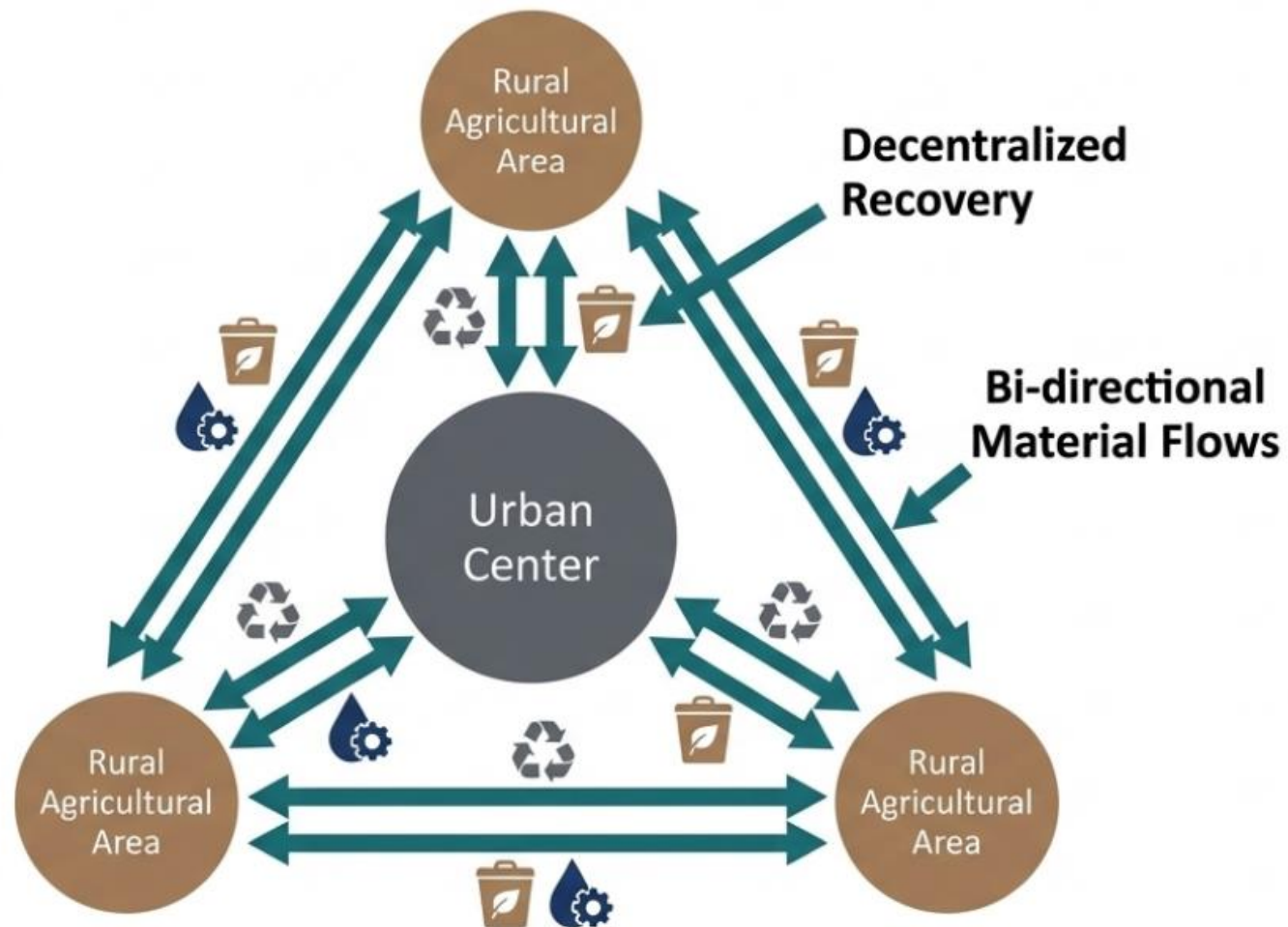


Urban Metabolism in Action:

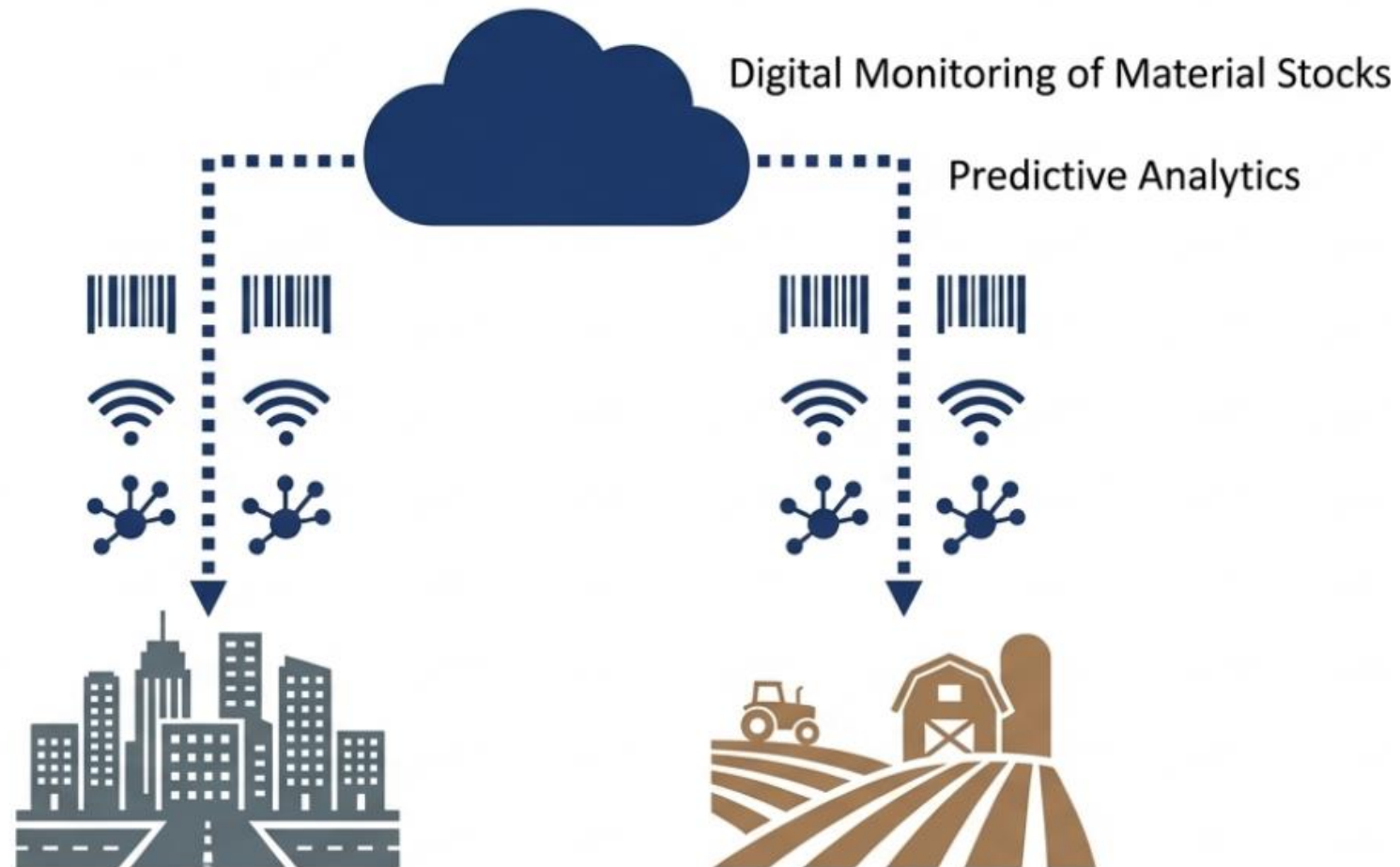
The city acts as a turntable, looping resources as efficiently as possible before returning excess upstream.

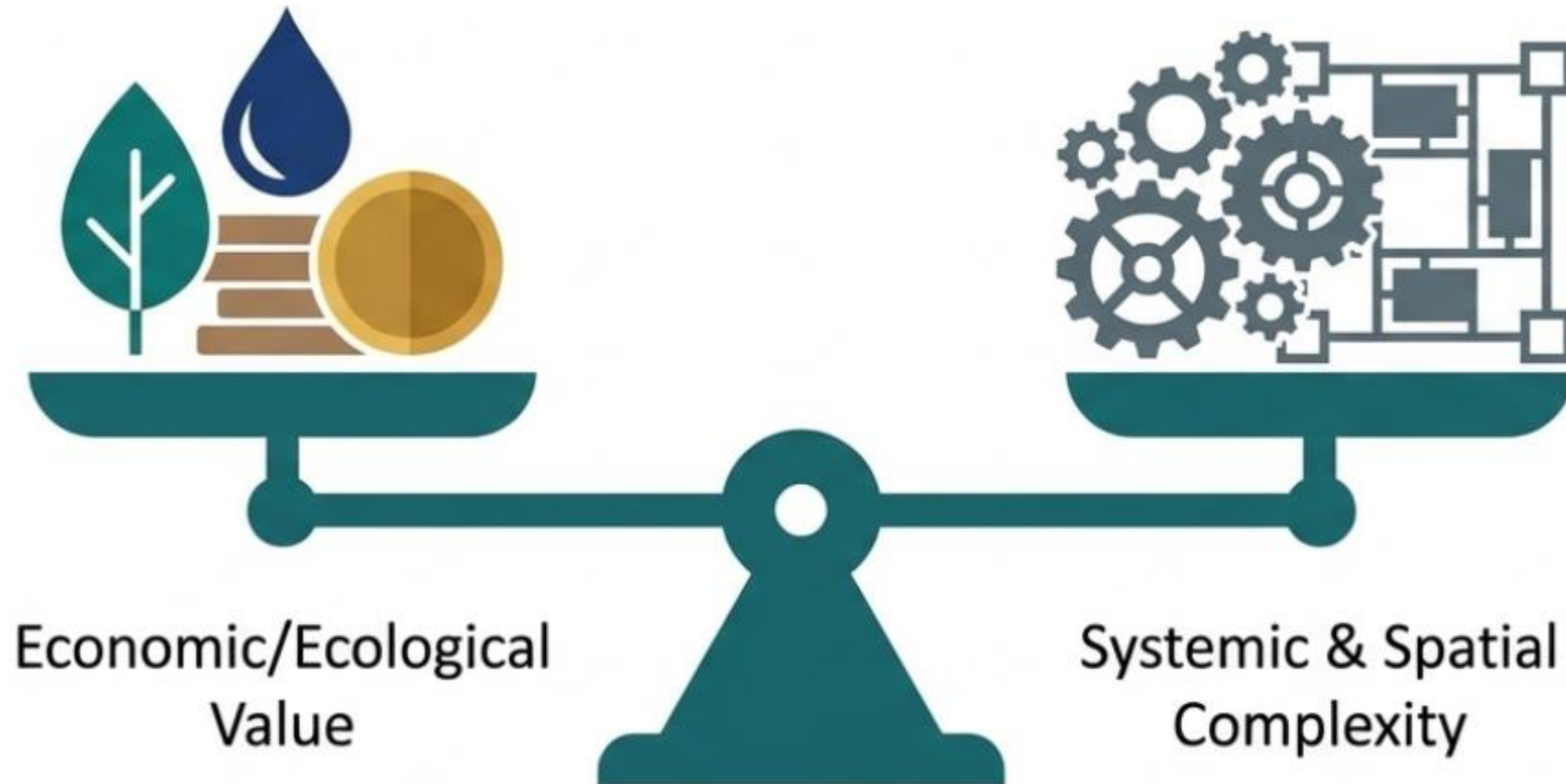
City-Level Traits:

- Products are accessed as services, used and shared rather than privately owned.
- Buildings and infrastructure are modular, designed to last, and easy to repurpose.
- Reduces cities' dependence on external and non-renewable inputs.



Infrastructure and Digitalization for Circular Flows







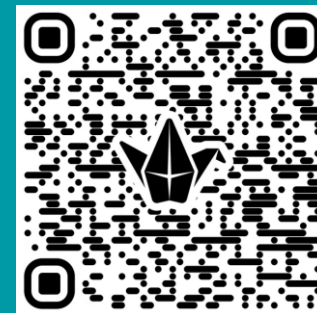
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[Link to
discussion
prompt](#)