



CIRCULAR MODELS LEVERAGING INVESTMENTS
IN CULTURAL HERITAGE ADAPTIVE REUSE

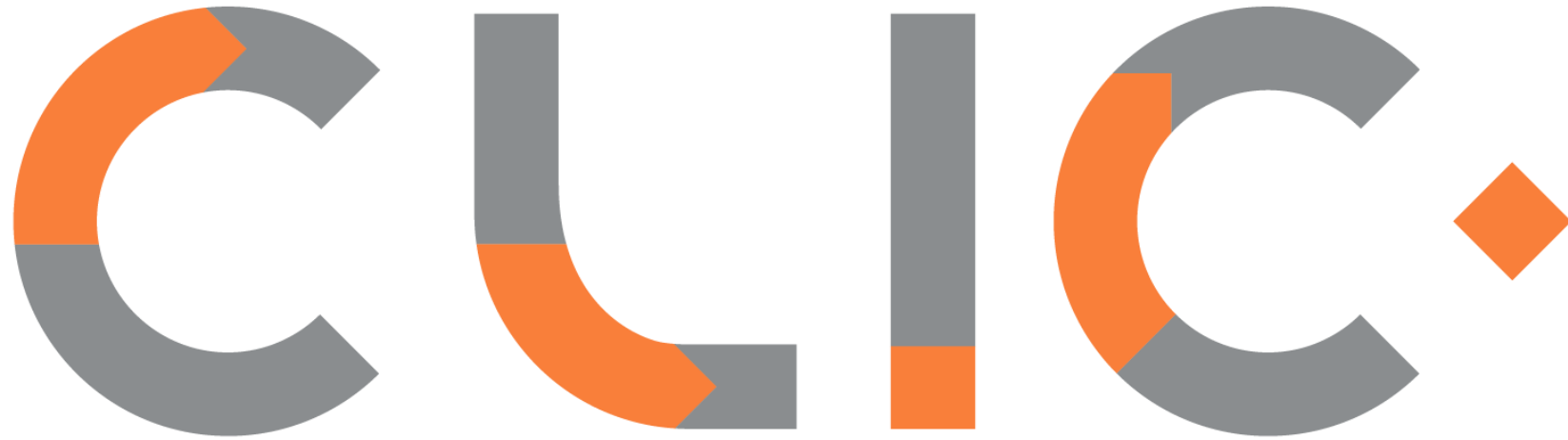
Thomas van de Sandt | *Pakhuis de Zwijger*
Virtual workshop on Circular Economy | 25 May 2020
#CityScienceEU
www.clicproject.eu



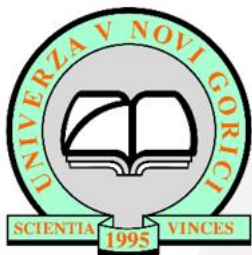
This project has received funding from
the European Union's Horizon 2020
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PAKHUIS DE ZWIJGER*



Circular models Leveraging Investments
in Cultural heritage adaptive reuse



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**# CULTURAL HERITAGE AS CITY
CONNECTIVE INFRASTRUCTURE**

CIRCULAR ECONOMY



SELF-REGENERATIVE

POLYCENTRIC

PRODUCTIVE

SELF-ORGANIZED

CIRCULAR CITY





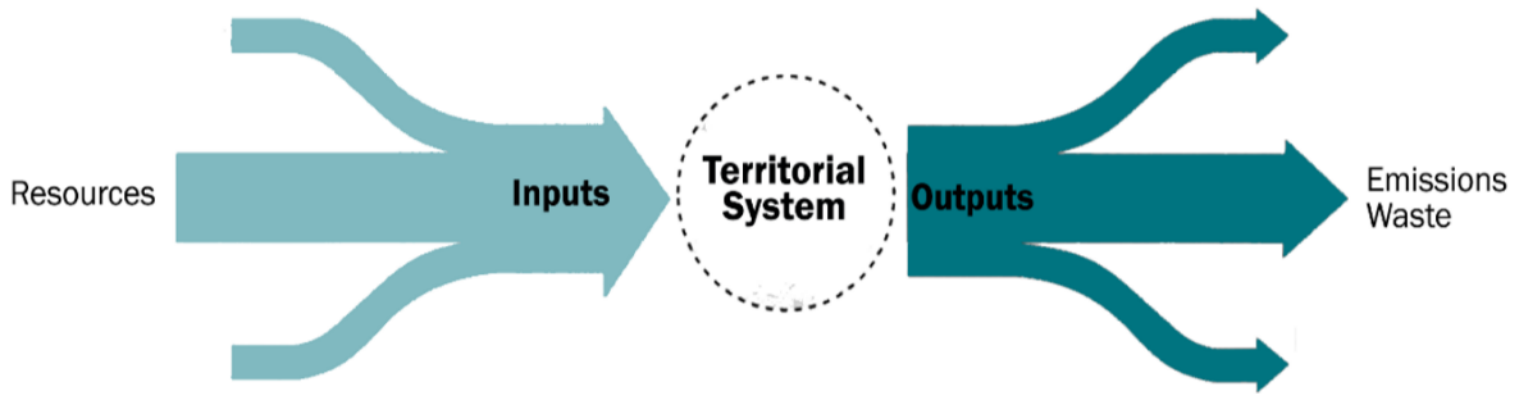
- **In Europe, it is expected that up to **80%** of buildings in use in 2050 already exist today**

WorldGBC World Green Building Council (2019), Bringing Embodied Carbon Upfront: Coordinated action for the building and construction sector to tackle embodied carbon, 35

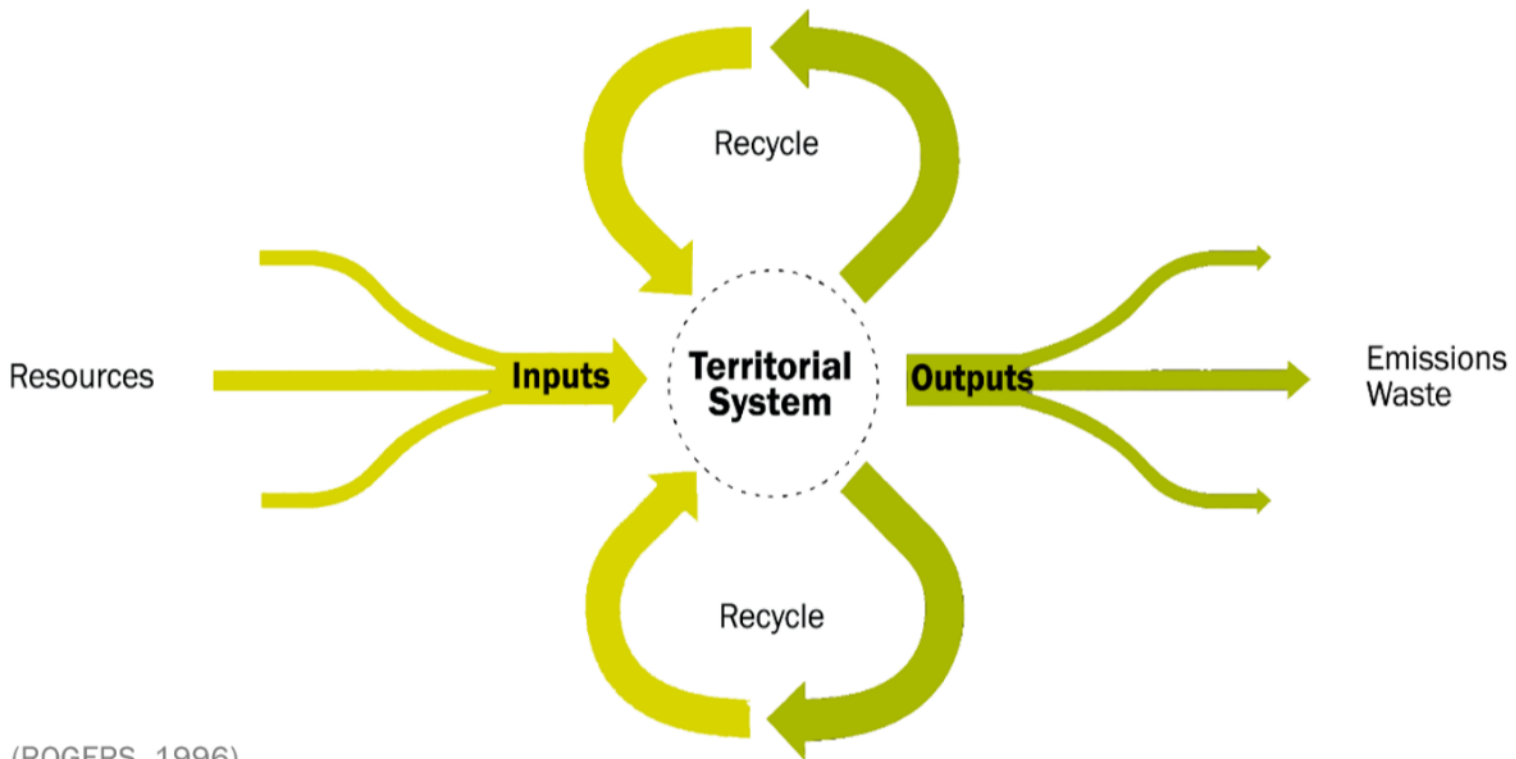


- Currently about **35%** of buildings in the EU are 50 years old or older
- **97%** of the building stock is not efficient enough to comply with future carbon reduction targets.

WorldGBC World Green Building Council (2019), Bringing Embodied Carbon Upfront: Coordinated action for the building and construction sector to tackle embodied carbon, 35



LINEAR METABOLISM



CIRCULAR METABOLISM



CIRCULAR ECONOMY IN CITIES AND REGIONS THROUGH CULTURAL HERITAGE ADAPTIVE REUSE

- Avoided **soil consumption**
- Avoided **demolition wastes and GHG emissions**
- **Embodied energy** preservation in a life-cycle perspective (CO₂ equivalent)
- **Renewable energy, water recovery, reduced materials extraction, waste to resources, nature-based solutions...** in cultural heritage
- **Urban regeneration and social impact:** from *derelict spaces* to *attractive «places»* !
- **Economic spillovers:** attractiveness for new economic activities, tourism, real estate, jobs, education, cultural activities...



**CULTURAL HERITAGE
ADAPTIVE REUSES
IN CLIC CITIES AND REGION**



PAKHUIS DE ZWIJGER, AMSTERDAM NETHERLANDS 

*PAKHUIS DE
ZWIJGER
before*





Urban area attractor

Renewables

City makers hub

Cultural platform

Social impact

Dialogue platform

PAKHUIS DE ZWIJGER, inside





CLIC

IT'S WORTH TO COOPERATE!