

The potential of Circular Economy in Construction in Southwest Finland

- The Regional Council of Southwest Finland as a development authority works to engage different actors in the region to take steps towards circular economy.
- In order to support the Council in its promotion work within construction sector, AFRY's consultants conducted a case-based investigation (7 cases in Finland and abroad) into the potential of circular economy within this domain
- The investigation covers the exploration of the characteristics of the built environment and construction in Southwest Finland and an analysis of the selected cases in terms of scalability and impact within the region.

CUSTOMER: REGIONAL COUNCIL OF SOUTHWEST FINLAND

PM: MINNA TONTTI

YEAR: 2020

REgenerate

Renewable energy and materials

VARSINAIS-SUOMEN LIITTO EGENTLIGA FINLANDS FÖRBUND

Share

Sharing economy, expanding life-

Optimise

Material and energy optimation, digitalisation

Loop

Circularity, re-manufacture, biological and technical loops

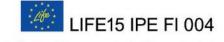
Virtualise

Dematerialization, sharing, renting, virtual services etc.

Exchange

Replace old with new developed materials, add new technologies







CLIMATE CHANGE

1/3 GHG emissions



ENERGY

40 % energy consumption





MATERIALS

50 % raw material consumption



WASTES

1/3 wastes



Conclusions and lessons learned

- Good examples in practice exist but more available information is needed
- Take into consideration location-based differences (population and building type demand, service-life) but core principles of reducing the environmental footprint apply
- Less is more, design flexible
- Co-operation between organizations along the life-cycle.
 Courage to move forward.















ZONING AND REGIONAL PLANNING

PLOT RELEASE

ORDERING AND PROCUREMENT

DESIGN

CONSTRUCTION

USE AND MAINTENENCE DEMOLITION AND RE-USE





