

OmrådeLCA, assessment of area development

**Case study of the Zero-Emission
Neighbourhood Ydalir**

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Introduction

OmrådeLCA

- Developed for Landbrukskvartalet
- Further developed in this study

Case study Ydalir

- A neighbourhood in Elverum



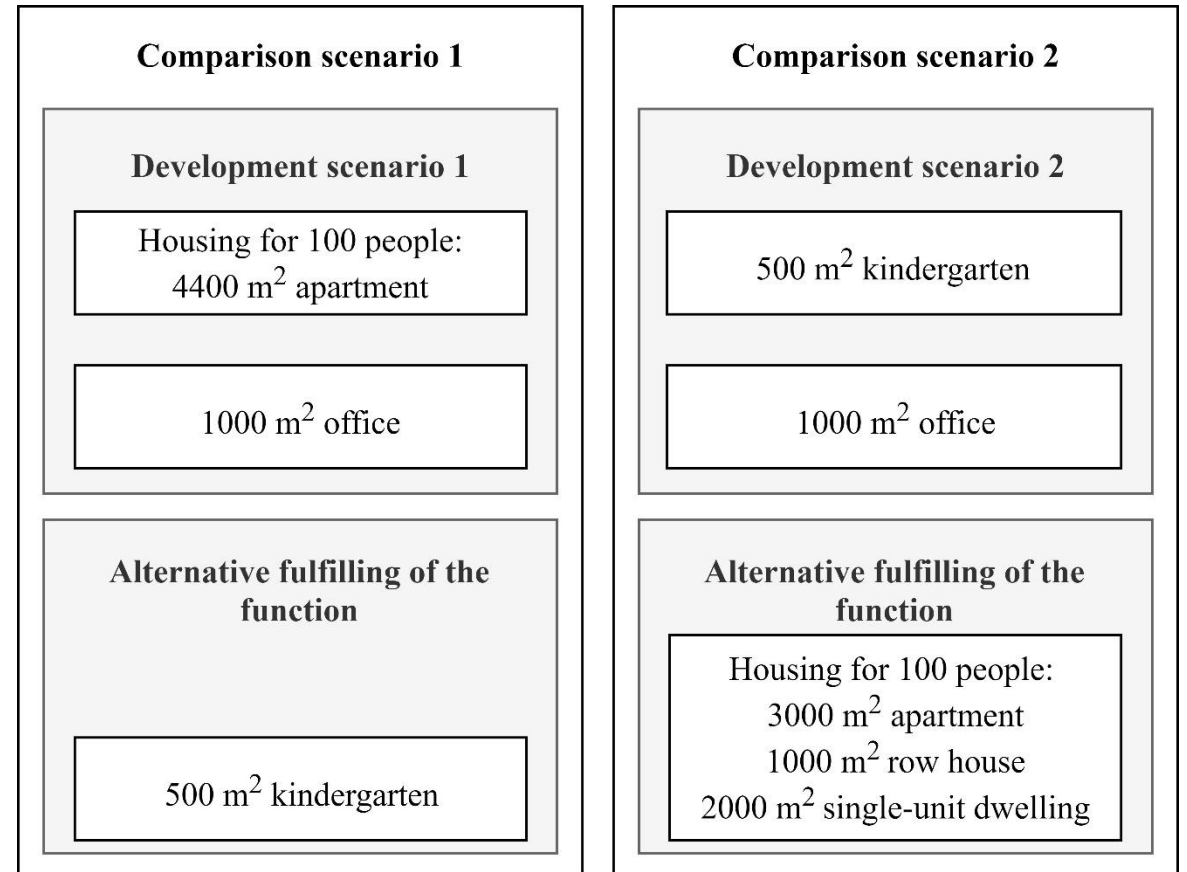
Methodology of OmrådeLCA

What is the best development path regarding GHG emissions for a given project?

Functional unit

System expansion approach

Comparing with a reference



Methodology of OmrådeLCA

Based on generic data

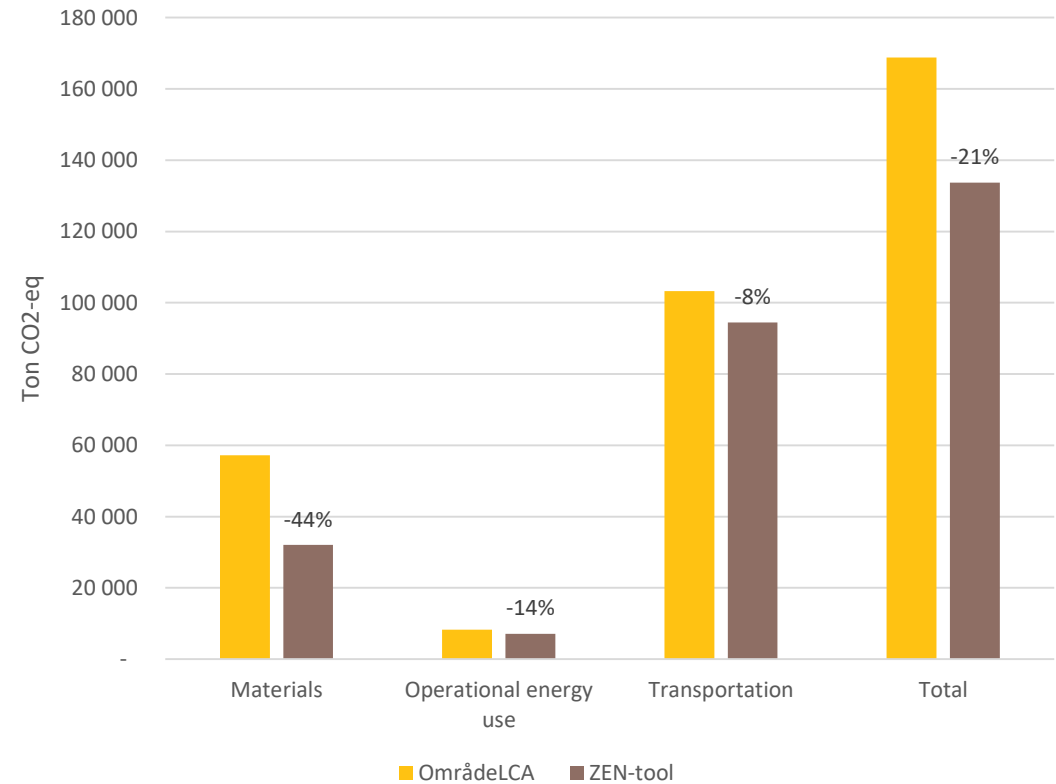
Options, from a general area to a case specific area

	Product stage			Construction process		Use stage								End of life stage					
	A1: Raw material supply	A2: Transport	A3: Manufacturing	A4: Transport	A5: Construction-installation process	B1: Use	B2: Maintenance	B3: Repair	B4: Refurbishment	B5: Replacement	B6: Operational energy use, materials	B6: Operational energy use, directe	B7: Operational water use	B8: Transport in use, materials	B8: Transport in use, directe	C1: Deconstruction/demolition	C2: Transport	C3: Waste processing	C4: Disposal
Buildings																			
Transport																			
Energy use																			
Change of land use																			

Results – Comparing with the ZEN-tool

Same overall assumptions

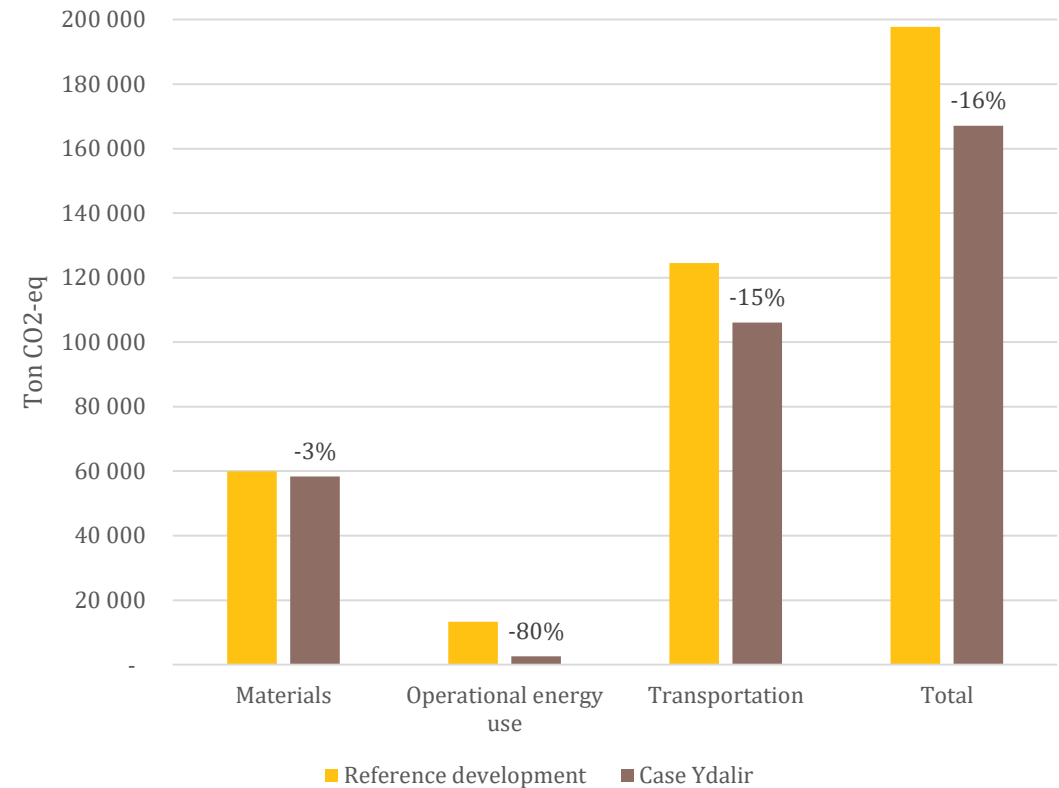
Intended used in different stages of the development process



Results – Comparing with a reference development

Small reduction compared to a “normal” development, why?

- **Materials**
- **Operational energy use**
- **Transportation**



Conclusions

Does OmrådeLCA give reliable results?



Conclusions

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Further development is needed



Conclusions

Does OmrådeLCA give reliable results?

Further development is needed

Transportation should be the main focus area for emissions reduction

