

# Business models for nZEB renovation of small wooden dwellings

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# Why is business model innovation important?

Foto: Tom Auger  
Feisteinveien 24, Stavanger, Arkitekt: Rever & Drage Arkitekter

# About the research project OPPTRE

OPPTRE's goal is to propose a nearly Zero Energy Building (nZEB) level for the renovation of wooden dwellings, enabling upgraded energy performance with low costs and a low carbon footprint.

## User partners

- Mesterhus (*part of Mestergruppen Bolig AS*)
- Systemhus (*part of Mestergruppen Bolig AS*)
- Hunton Fiber AS
- Isola AS
- Flexit AS
- VELUX Norge AS
- RATIO arkitekter AS
- Enova SF
- *Funded by ENERGIX, Research Council of Norway*

## Research partners

- SINTEF Community
- NTNU



Photo: Jiri Havran. Architect: RATIO arkitekter AS (SEOPP project)

## Approach

How can business opportunities be created when transforming wooden dwellings to nZEB level?

## Subgoals

- Study how the partners in OPPTRE work to develop their business model(s)
- Create ideas for business model innovation

*The 60ies*



*The 70ies*



*The 80ies*

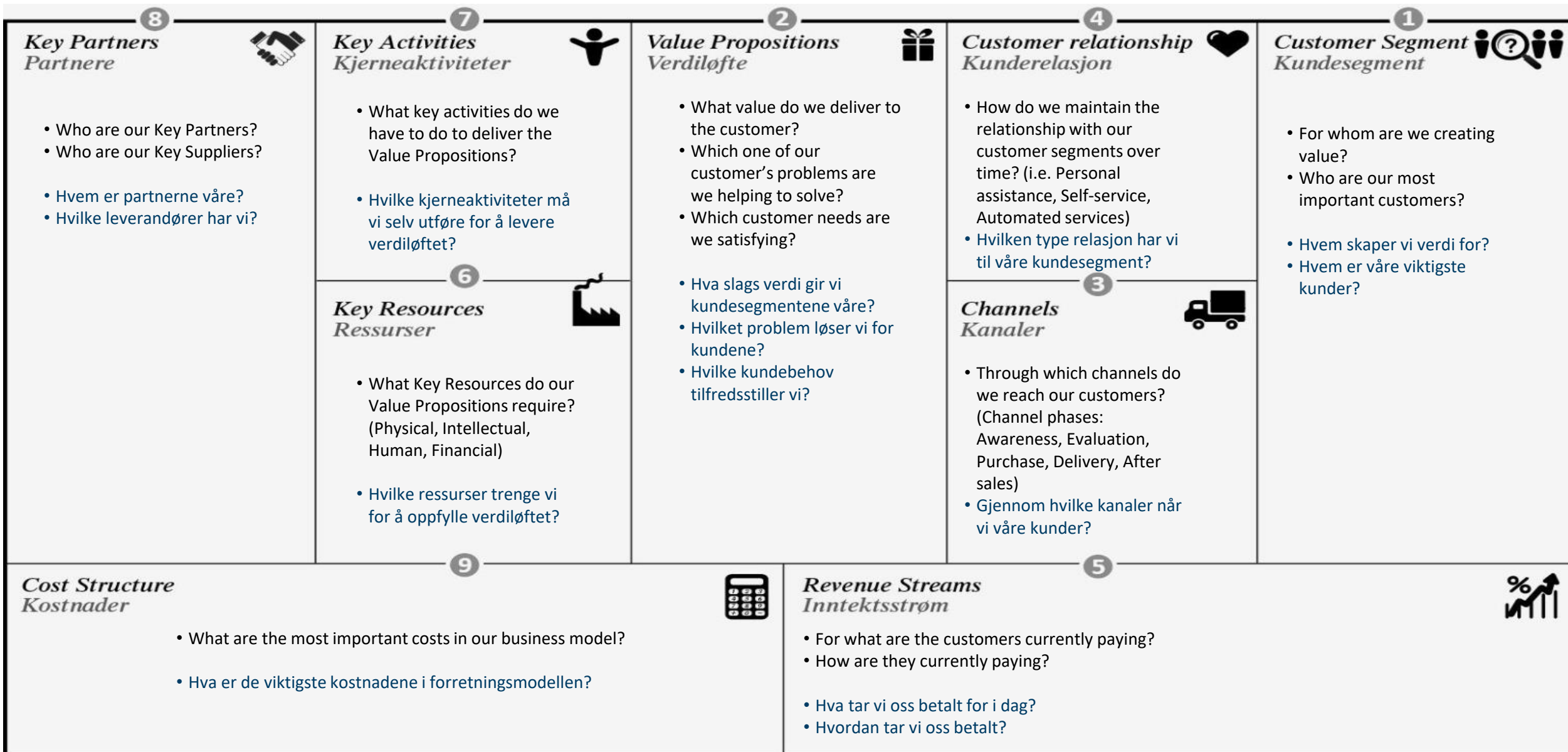


# What are business models, really?

*"..simplified representations of the value proposition, value creation and delivery, and value capture elements and the interaction between these elements within an organizational unit."*      *Geissdoerfer, 2018*

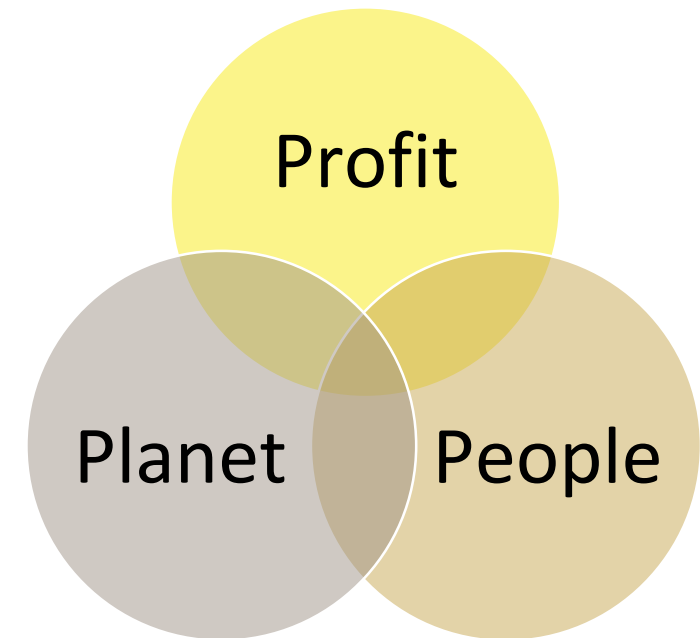
Foto: Tom Auger  
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# "The business model canvas" av Osterwalder og Pigneur



# A triple layered business model

- Economy (profit)
- Environmental life cycle (planet)
- Social stakeholder (people)



# Mapping of business models

	Economic aspects	Environmental aspects	Social aspects
The architect	Customer is the end user. Provides plan and design, as well as holistic cost control. Often in cooperation with builders. Sees renovation projects as a small but stable source of income.	Provides functionality and aesthetic solutions. Promotes environmental and energy-friendly solutions on website. Eco-Lighthouse Certified.	Develops solutions in line with the client's budget.

• **Table 1.** Key aspects in a triple layered business model canvas related to the OPPTRE partners.



# Ideas for business model innovation

- One Stop Shop
- Neighbourhood approach
- Strategic partnerships and diversification
- New technological possibilities
- Bottlenecks in the market
- ...and more



Picture 1: Example from SEOPP, before (1) and after (2 and 3) upgrading. Photo: Jyri Havran.

# Thanks for listening!

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