

# Innovative use of LCA in the development of sustainable building and refurbishment strategies

NORNET LCA 2<sup>nd</sup> workshop

Oslo November 11<sup>th</sup>

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# OBJECTIVES

- To establish a Nordic network for innovative use of LCA in the building industry
- To compare LCA approaches across the Nordic countries and learn from experience
- To reinforce the status of the Nordic research on LCA and sustainable buildings in the international research community
- To increase understanding of the significance of methodological choices in LCA
- To support Nordic industry in finding innovative and useful applications of LCA, LCA tools and LCA data

# Partners

- The research group consists of four research organisation in Nordic countries:
  - VTT Finland / Project owner
  - SINTEF Norway, SP Sweden, SBI in Denmark
- Network members:
  - Boverket
  - H-vinduet Magnor AS, Hunton Fiber
  - Saint Gobin Nordic A/S, GBC DK, Henning Larsen Architects A/S
  - ECIA Green Build Oy, Kimmo Lylykangas Architects ltd, Ruukki Construction Oy, Rakennustietosäätiö, RTS, Uponor Corporation, Lassila & Tikanoja, Skanska Oy, GBC FI



# Work packages

- **WP1 – Establishment of the network**
- The network will have 2 annual common workshops, one in each country during the project time. The aims of these workshops are to exchange experiences and results of the work in the different national groups, review yearly progress in the network as a whole, and to update yearly strategies and agenda.

- **WP 2 - LCA methodological choices**
- WP2 asks industrial partners to propose research questions.
- The project partners will use case studies and information in WP3 to create knowledge on importance of the methodological choices.

- **WP 3 - New information**
- WP3 develops new information about the environmental significance of different decisions of building projects such as
  - Heating systems
  - Production of local renewable energy
  - Significance of environmental saving because of recycling
  - Comparison of the impacts of refurbishment project/rebuild project –the
  - effect of future scenarios on energy mixes.

- **WP 4 - Use processes**

- WP 4 develops the use of LCA approach especially in early phases of building projects by developing recommendations and by searching and introducing available tools and data that well fit for the use in these project phases.

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- Streamlining the process with custom made tools and understanding important factors
- The main objective of the workshop is to give the participants a set of clear examples of whole-building LCA together with a discussion of the most important challenges that the different stakeholders meet when facing these type of analysis. In addition, we will discuss the help and support that can be provided by relevant tools.