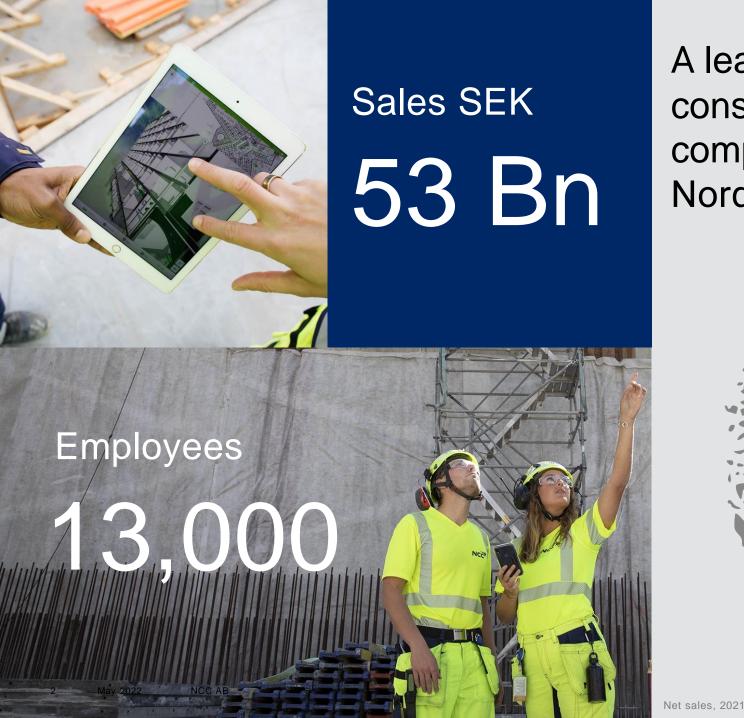
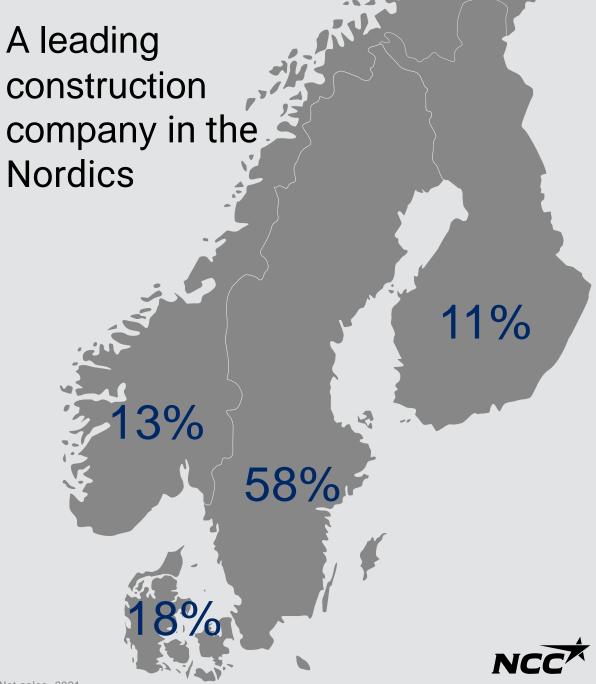


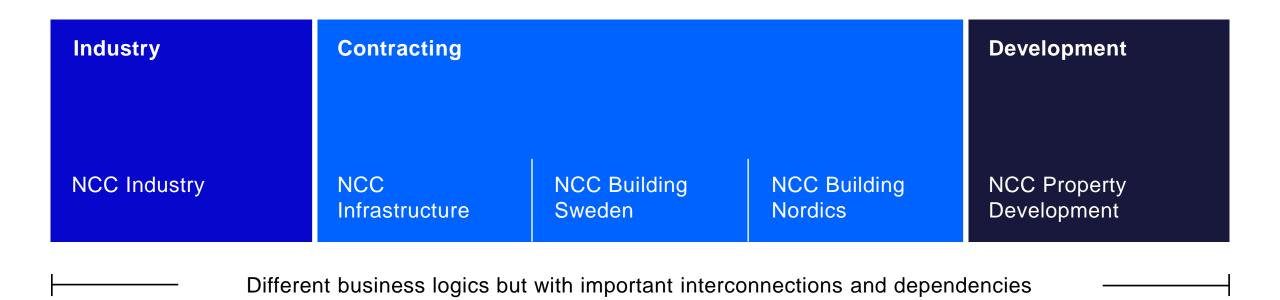
Rud Svømmehall IAKS Swimming Pool Conference

Petter J. Fossum & Mette H. Erbs Sep 8, 2022





Our construction scope covers all our three businesses





NCC Sustainability targets



Materials and Waste

Max amount of waste:

25 / 15 kg

per BTA before 2025 / 2030

Climate and Energy og energy Scope 3

50 %

CO₂-reduction from steel, concrete, asphalt, and transportation before 2030 # Klima & energi Scope 1 og 2

60 %

reduksjon av CO₂ utslipp innen 2030 sammenlignet med 2015



Materials and Waste

85 % / 90% of waste will be sorted and prepared for recycling before 2025 / 2030

Climate neutral by 2045

NCC Building Norway

Value-driven company based on honesty, trust and respect











NCC Badehus (NCC swimmingpools)

- NCC Badehus NO
 - Ringeriksbadet 2010 (Design and build)
 - Røykenbadet (Early contractor) involvement)
 - Rud svømmehall (Design (NCC) and build)
 - Manglerud bad (Early contractor) involvement)
 - Stovnerbadet (Early contractor) involvement)

LANGHUS SVØMMEHALL Nordre Follo kommune

Nybygg: 350 MNOK

MANGLERUD

Undervisningsbygg/Oslo kommune Nybygg: 385 MNOK

RØYKENBADET

Røyken Eiendom AS Nybygg: 245 MNOK

SÄFFLE SIMHALL

Nybygg: 220 MSEK Avsluttet desember 2019

TILBYGG DROTTNING SILVIAS BARN-OCH UNGDOMSSJUKHUS Västfastighete

Nybygg: 20 MSEK Overlevert høsten 2021

VARBERG SIMHALL Varbergs Fastigheters AB

Nybygg: 404 MSEK Avsluttet august 2021

RIVIERA STRAND Backahill AB

Nybygg: 20 MSEK Avsluttet 2014-2016

BURLÖV **Burlövs Kommun**

Nybygg: 282 MSEK Pågående overleveres januar 2022

ROSENGÅRDSBADET

Nybygg: 45 MSEK

RUD SVØMMEHALL Bærum kommune

Nybygg: 315 MNOK

STOVNERBADET

OBF / Oslo kommune Nybygg: XXX MNOK

Kineum, Gøteborg

Nybygg: Ca. 20 MSEK

Sjöbohem Nybygg: 136 MSEK

Avsluttet 2014-2016

Avsluttet 2013-2014

HYLLIEBADET Malmö Stad Stadsfastigheter Nybygg: 340 MSEK

SJÖBAD SIMANLÄGGNING

AQUARENA I SOLLEFTE À Leisure Jones AB

Nybygg: 135 MSEK Avsluttet 2010-2012

TIMRÅ BADHUS Timrá Kommun

Nybygg: 200 MSEK Pågående overleveres Juli 2022

LUGNET, FALUN Lufab

Nybygg: 343 MSEK Pågående overleveres høsten 202

> VÄSTERÅS, LÖGARÄNGSBADET Västerås stad

Nybygg: 350 MSEK Availuttet 2017-2019

JÄRFÄLLA SIMHALL Tagebad AB

Nybygg: 245 MSEK Avsluttet 2015-2018

TYRESÖ AQUARENA Tagebad AB

Nybygg: 145 MSEK Avsluttet 2010-2012

MUNKETELLBADET

Eskilstuna Kommun

LISEBERGS JUBILEUMSPROSJEKT

Liseberg Skår AB

Nybygg: 700 MSEK

YSTAD BAD

Ystad Kommun

Nybygg: 237 MSEK

Avsluttet 2012-2014

Pågående 2018-2023

Nybygg: 330 MSEK Avsluttet 2013-2016

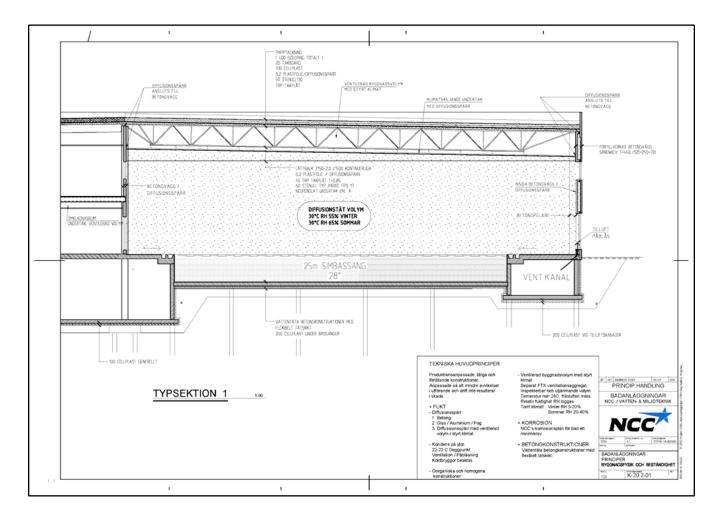
MARIESTAD BADHUS Mariestads Kommur

Nybygg: 35 MSEK



NCC Badehus - Concept

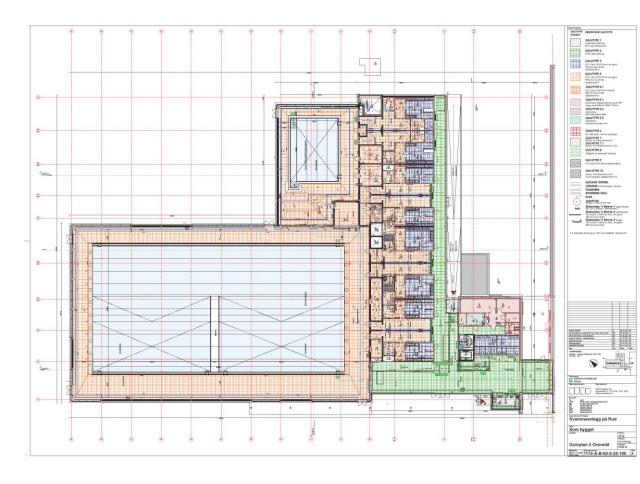
- Focus on air leaks, climate separation and ventilation principle.
- Proven processes and checklists for development, detailed planning and execution.
- Selected consultants and architects from previous projects.





Rud svømmehall - Sustainability

- Fossil-free building site
- Passivehouse Energyclass A
- Heat recovery from wastewater
- Condenser heat from ice rink
- District heating
- Reutilize Ventilation & dehumidification aggr.
- BREEAM-NOR sertified





BREEAM-NOR certification

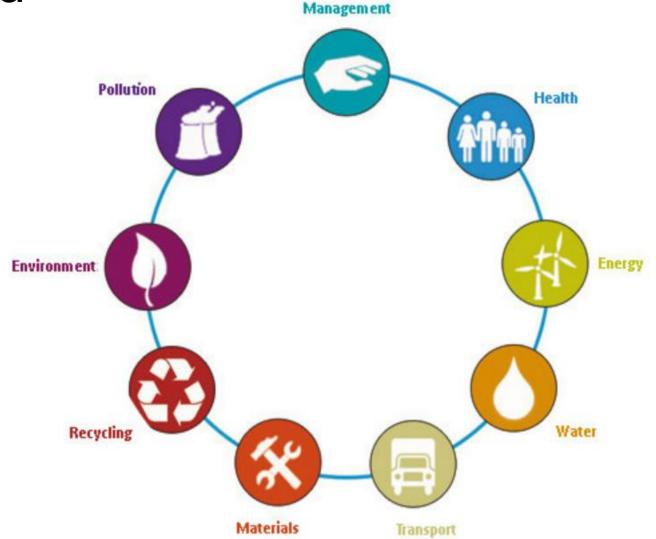
- Rud Svømmehall is the first indoor pool facility in Norway to be certified according to BREEAM-NOR
- BREEAM-NOR is leading certification scheme in Norway
- Rud Svømmehall achieved level: Very good
- A international certification scheme costumized for the Norwegian marked





BREEAM-NOR on Rud

- 9 categories with different focus
- Very good level requires 55% and Rud achived 61,5%
- Main BREEAM-NOR focus areas
 - Indoor air quality
 - Energy efficiency
 - Stormwater management
 - Waste management
 - Materials + LCA



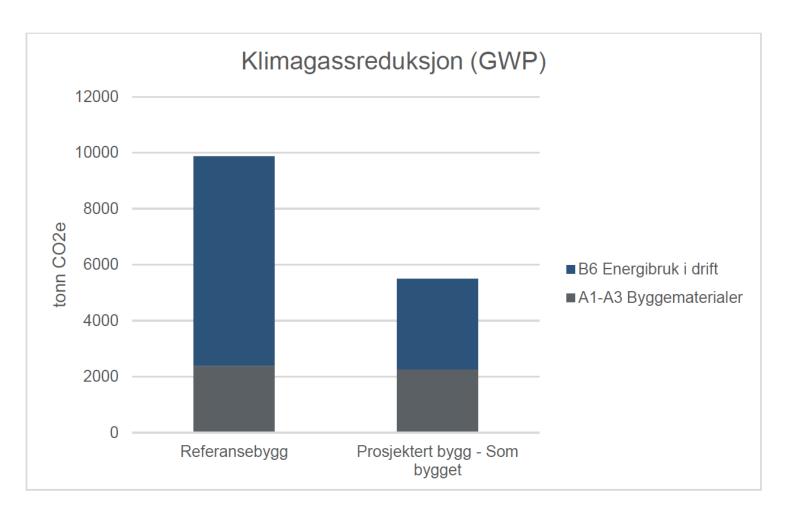


Rud Svømmehall LCA

44% CO2 reduction compared to reference bygg

A1-A3 reductions mainly due to low-carbon concrete

B6 reduction mainly due to use of condenser heat from neighbour building and 50% of heating demand for hot water covered by greywater heat recovery





Lessons learned and innovative potential

- Local energy production
- Systems for reuse of greywater
- A20 breach. Markets needs to further develop epoxy and other products with the same properties, but with less harmful chemicals





