

## Outcome on KPIs and awards

New window DFD and acoustic absorptions integrated

Higher performance, less materials and reduced construction cost

New software in virtual acoustics simulation





Aarhus, Denmark

# Frederiksbjerg School













Combining the audio and visual human experience

# New Research in Light, Acoustics and Learning



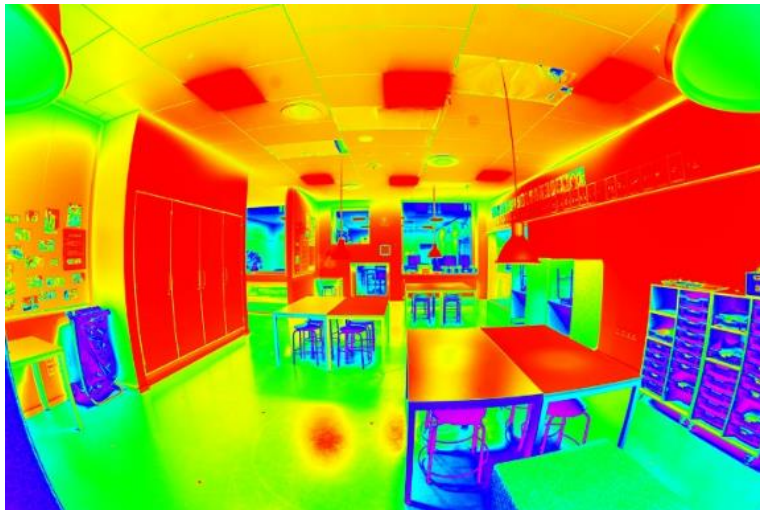




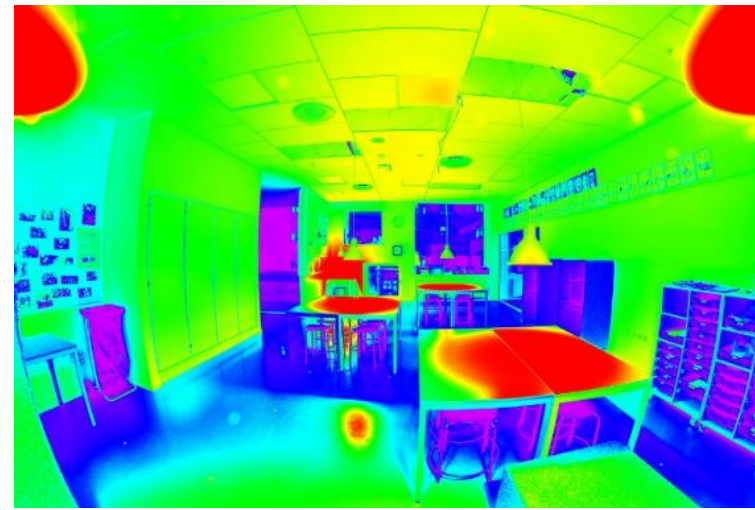


# Experimenting with mood lighting

Normal Ambient Lighting



Experiment Focused lighting



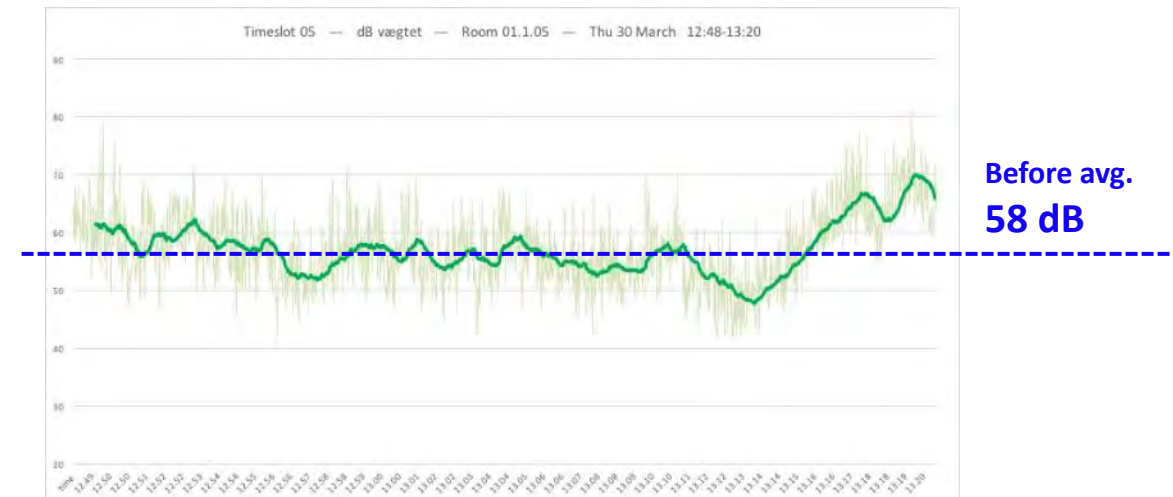
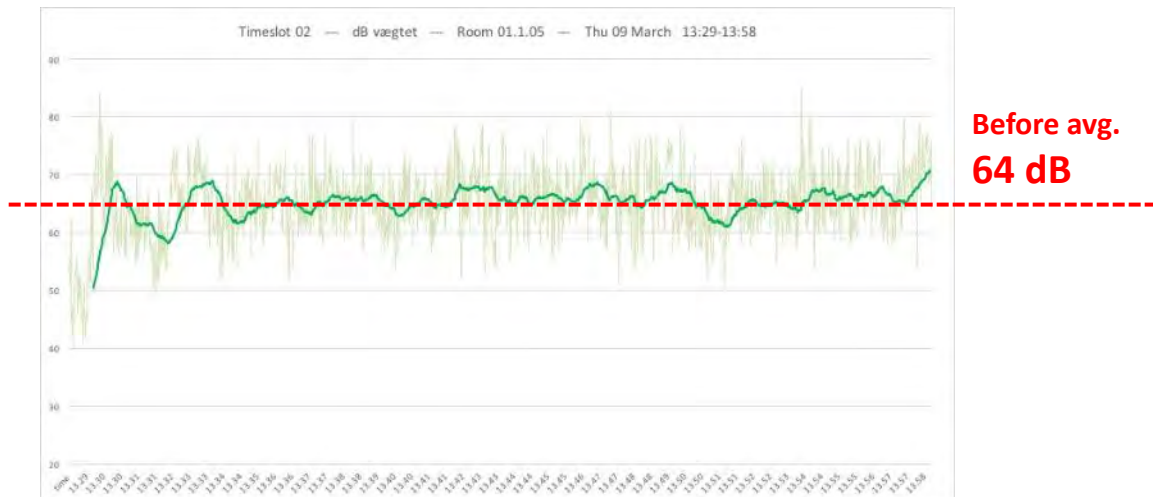


# Experimenting with mood lighting

Normal Ambient Lighting



Experiment Focused lighting





Aarhus, Denmark

## Outcome on KPIs and awards

Calm for students

More comfortable

Lowered electricity use (35%  
reduction)

Less noise, on average - 8 dB(A)





# From research to design to innovation

## Research in focused light



## Design of new lamp



## Co-creating with bio-tech startup

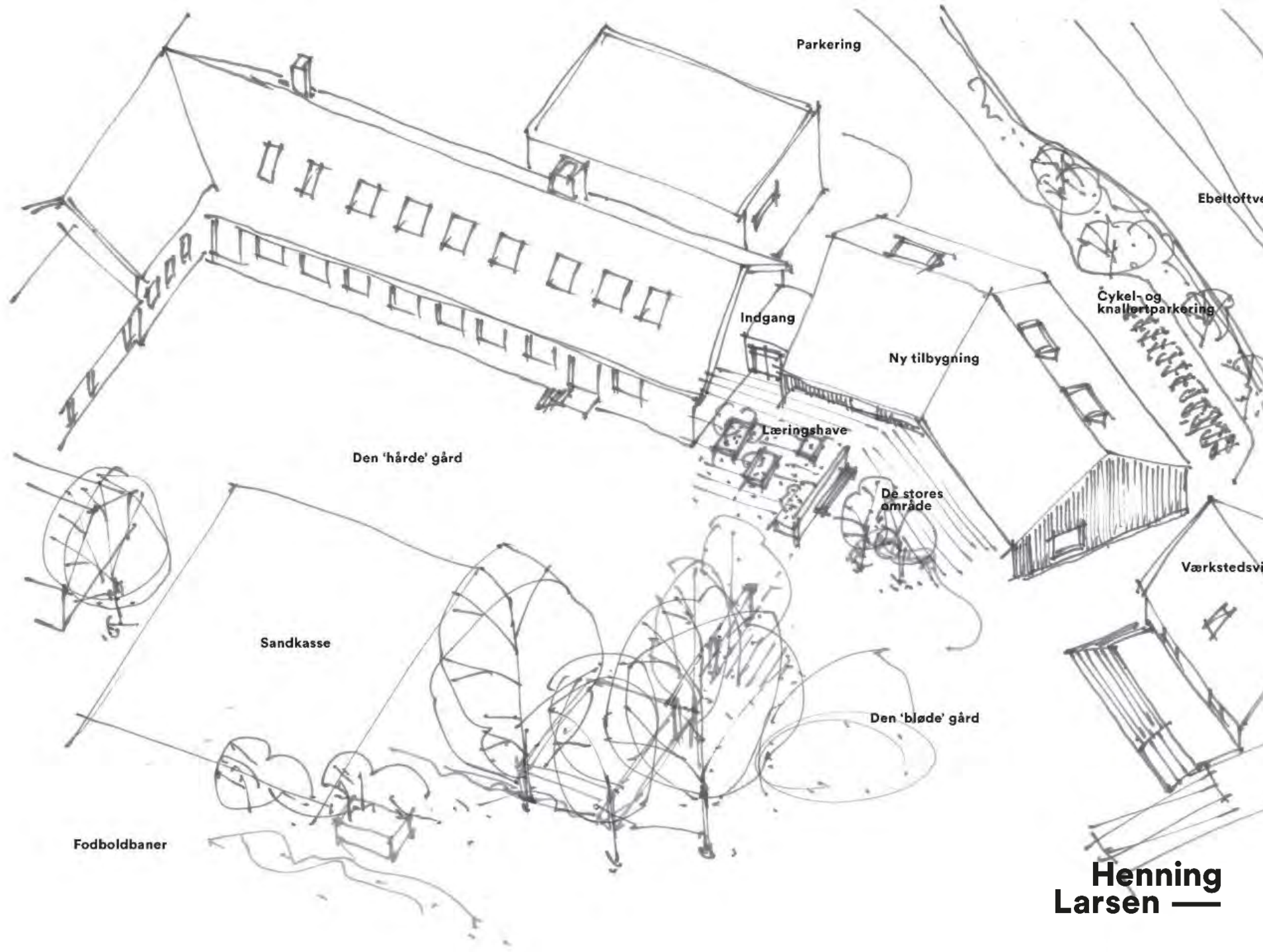


# Feldballe School

Location  
Djursland, DK

Gross floor area  
250 sqm

Status  
Under opførelse



**Henning  
Larsen** —



# You are what you eat

The Henning Larsen Material pyramid is a way to show the environmental impact associated with the production of materials



Pelle Munch-Petersen

PhD. Stud. Facade Design,  
Architects



Results are based on EPD (ISO 14025 / EN 15804) phase A1-A3 primarily from Ökobaudat, Institut Bauen und Umwelt (IBU), EPD-Norge or EPD-Danmark 2019.

\* Results are based on interpolation between different EPD's.

\*\* Results are based on LCA analysis at CINARK/KADK.

The unit is kg CO2 EQ / kg. material.

# MADPYRAMIDEN



SPIS MEST FRA BUNDEN - MINDST FRA TOPPEN  
DET ER GODT FOR BÅDE DIG OG KLIMAET

**coop**

madpyramiden.dk

# THE BUILDING MATERIAL PYRAMID



CONSIDER QUANTITIES

REFLECT ON LIFESPAN

THE DETAIL IS ESSENTIAL



Det Danske Byggeforskningsinstitut (DBI)  
for Arkitektur, Byggeri og Konstruktiv

**CINARK**  
center for industrial arkitektur















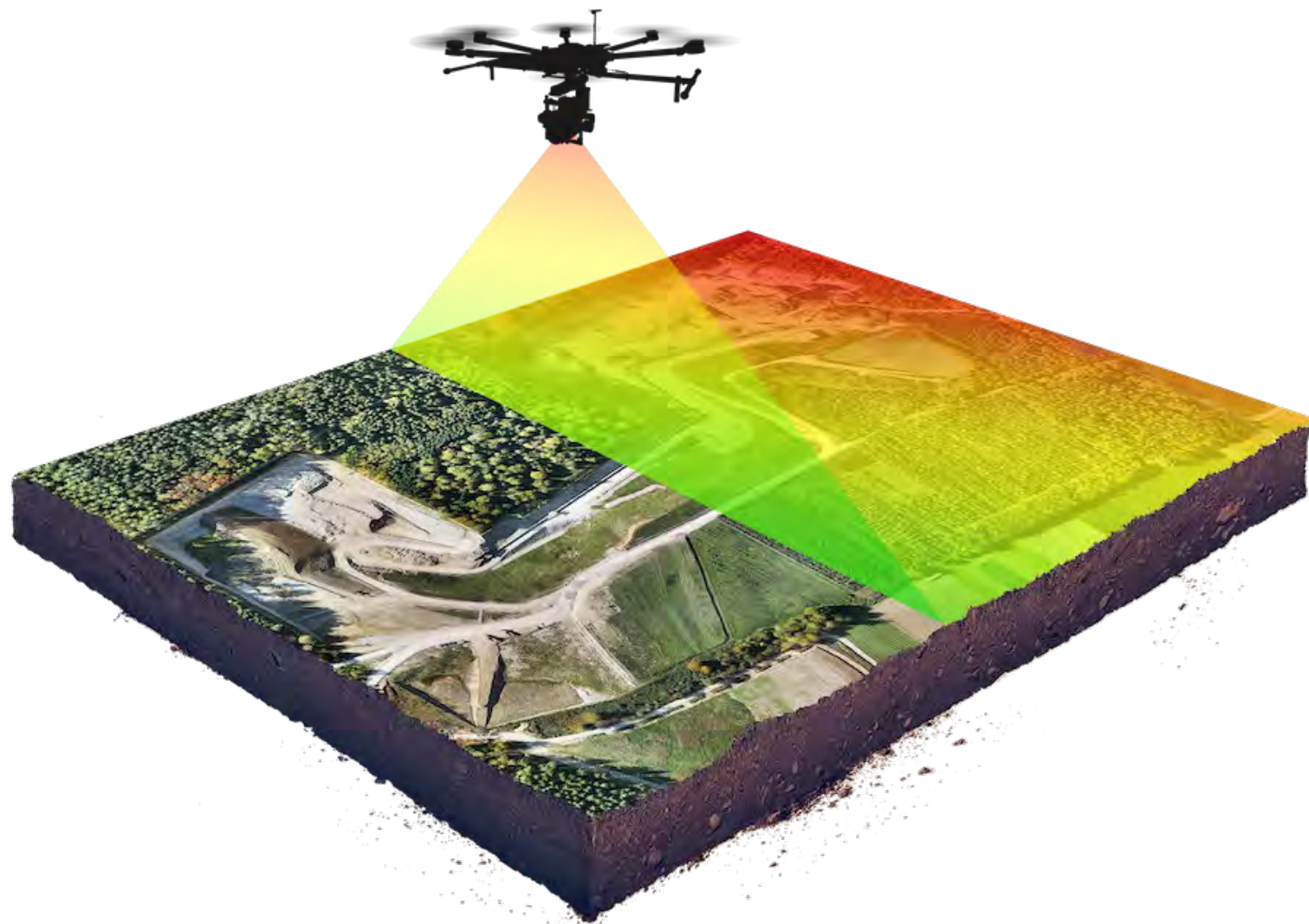




A large-scale mining operation is shown in a deep, terraced pit. In the foreground, a worker wearing a white hard hat and a blue and white plaid shirt stands with his back to the camera, looking out over the site. He is holding a walkie-talkie in his hands. The mining equipment is massive, featuring a large yellow crane-like structure on the left and a large circular cutterhead in the center. A long conveyor belt system runs across the bottom of the pit. The background shows the steep, layered walls of the mine and distant hills under a clear sky.

# Designed for the mining industry











# How smart mobility will shape urban form?

A joint Henning Larsen/Rambøll innovation project

Sofia Lundeholm



Jukka-Pekka Pitkänen



Supported by the Rambøll Foundation





DATO

14. sep 2020

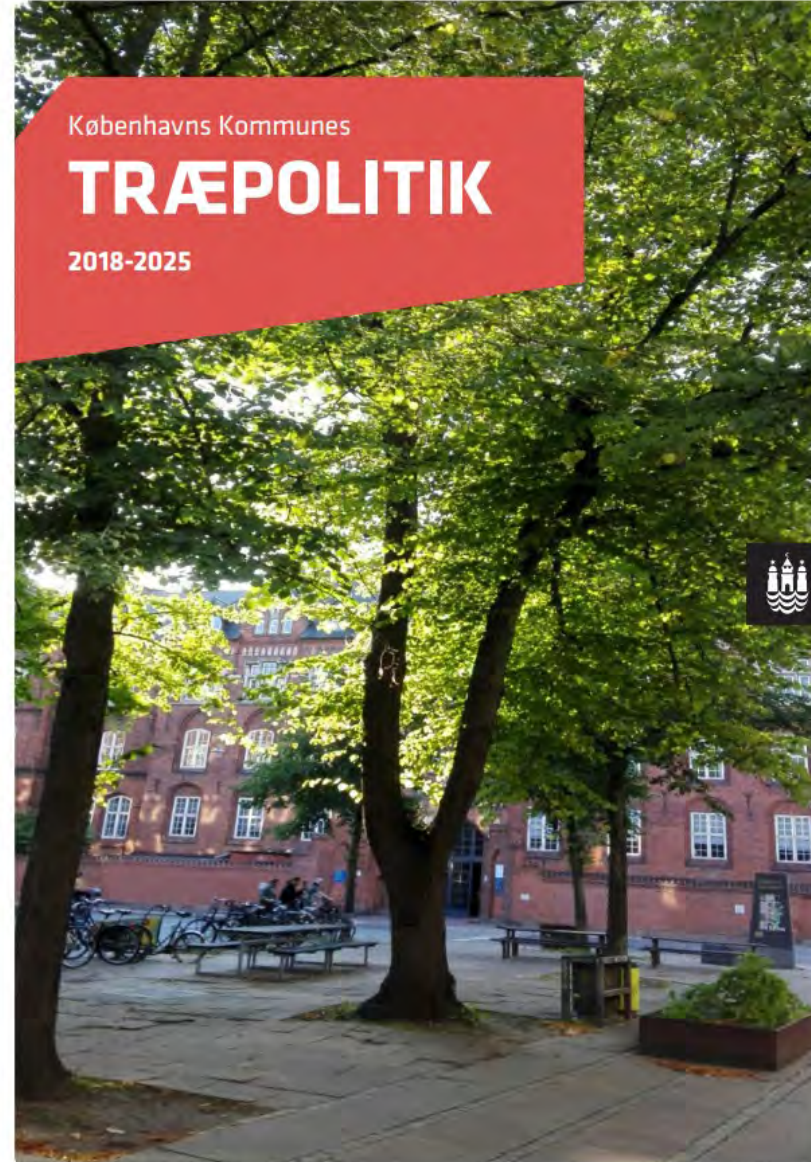
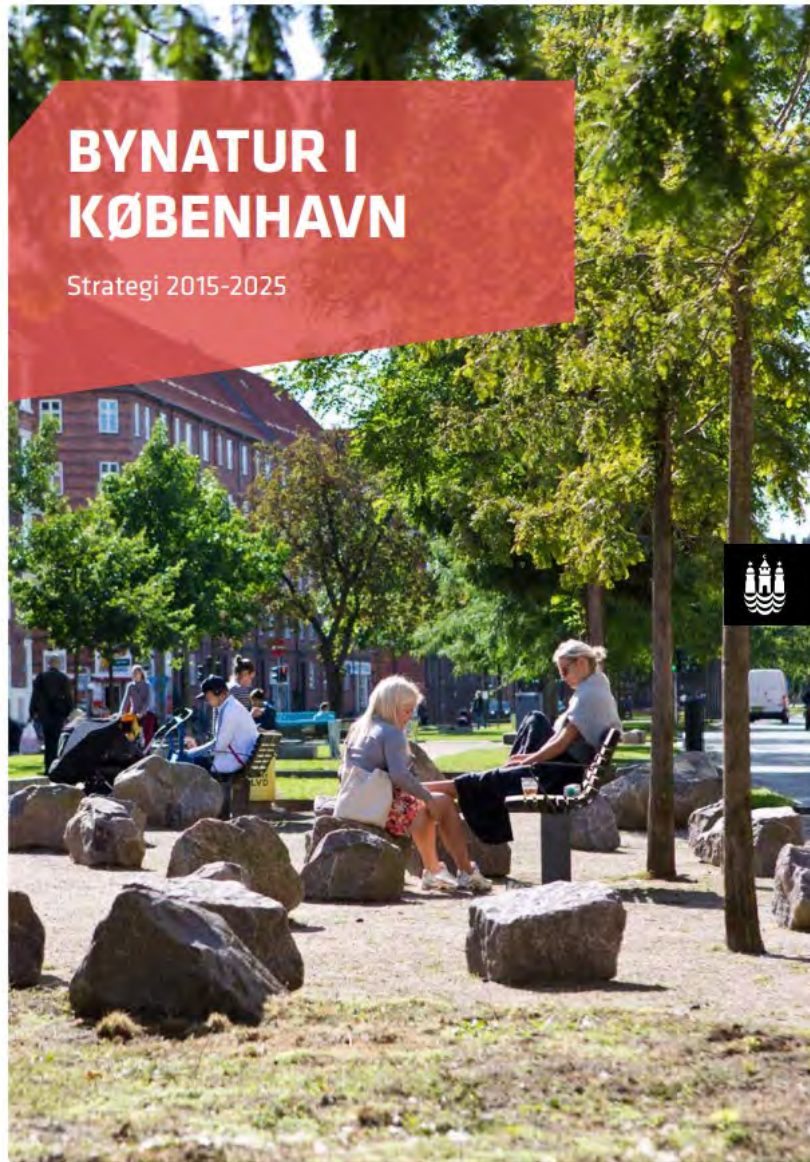
# PFA skyder nybyggeri i gang med nyt navn – Nordø erstatter navnet Redmolen



*Illustration:  
Dimension Design*

# PFA

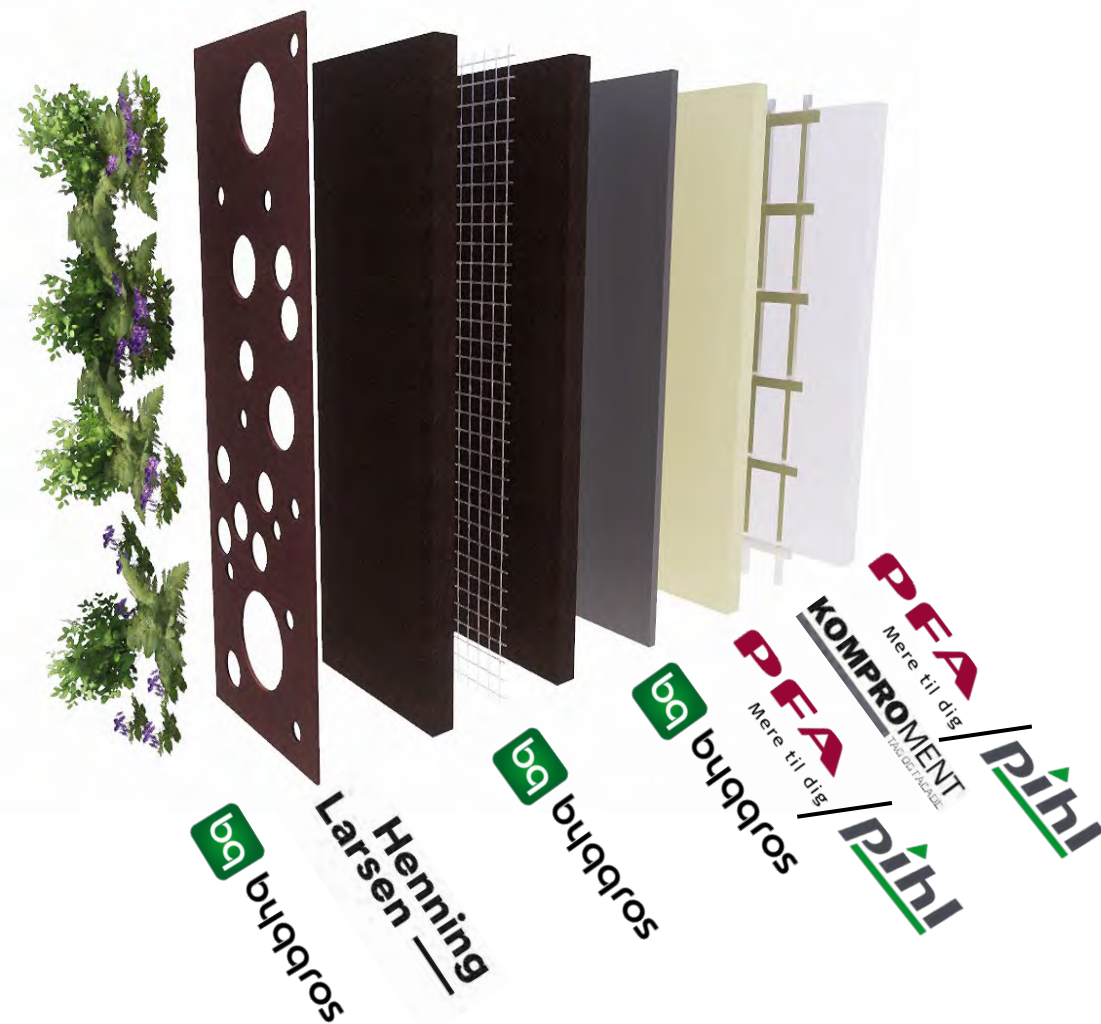
Mere til dig







**Miljøministeriet**  
Ecoinnovation - MUDP







Home Feed

 Inbox **11**

## Favorites



Improve your Yammer experience by creating a list of your favorite communities.

## My communities

R&amp;D (Research ...

All Company 4

Copenhagen... 10

Great news from HL R&D!

Yesterday we received the news that we got funding (4.8 mio. dkk) for a 1:1 scale research project in a new type of green facade.

Traditional green facades is something you hang up on the facades. Basically you have two systems; one for the building and one for the green facade. We want to develop a new type that integrate building envelope and green facade in one system. The goal is to minimize the use of materials (carbon footprint) and at the same time keep the bene... see more





## Research & Insight Projects

A selection of research and Insight projects that expand the realm of architecture through new knowledge and groundbreaking insight.



REBUS



Green Facades



Feldballe School



**N3XTCON**  
The Possibilities of 3D Printing Concrete



**Humanizing the Urban Experience**  
A Future Thinking Study on New Mobility



**Data Driven Architectural Design**  
Designing for social interactions



...It all begins with curiosity