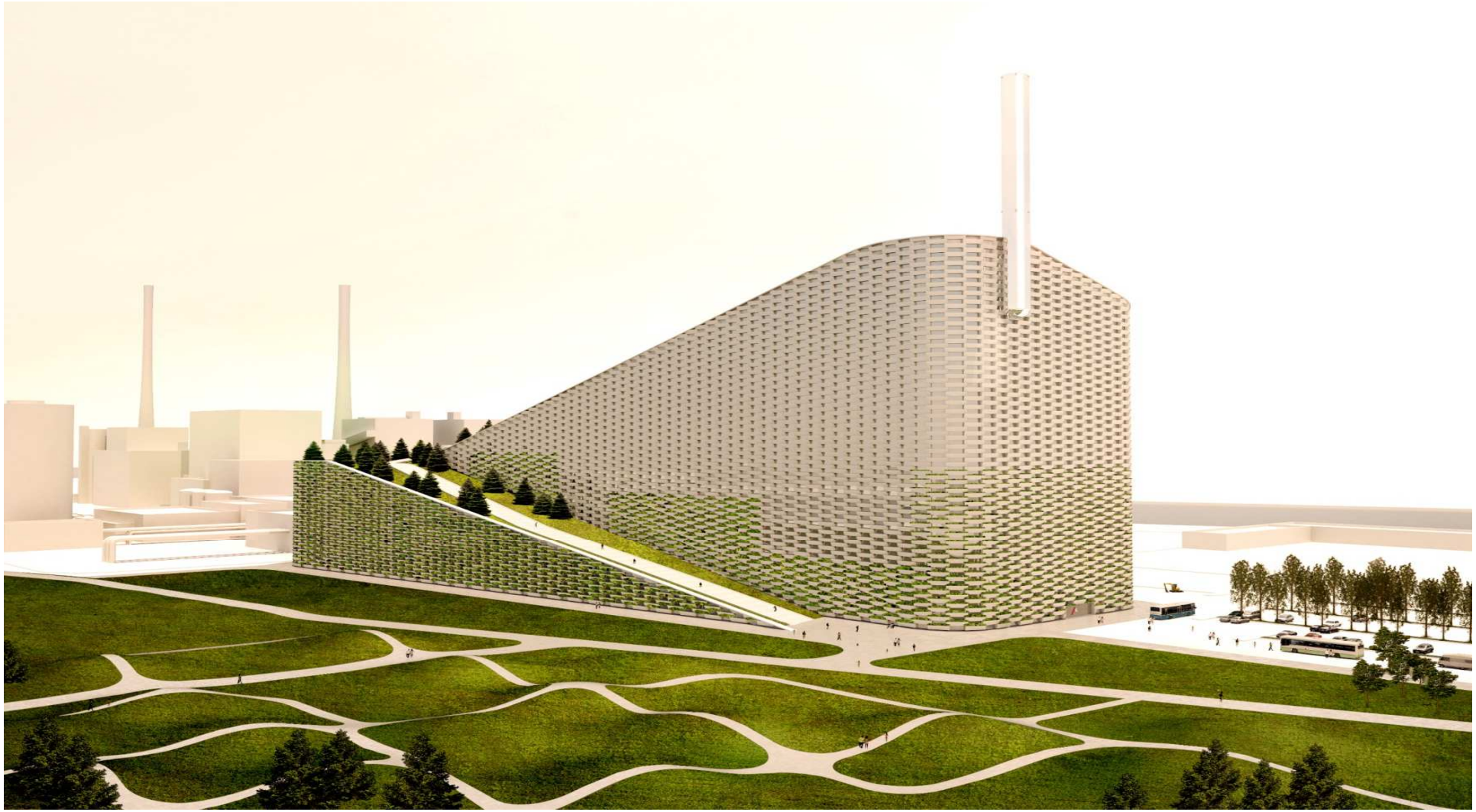
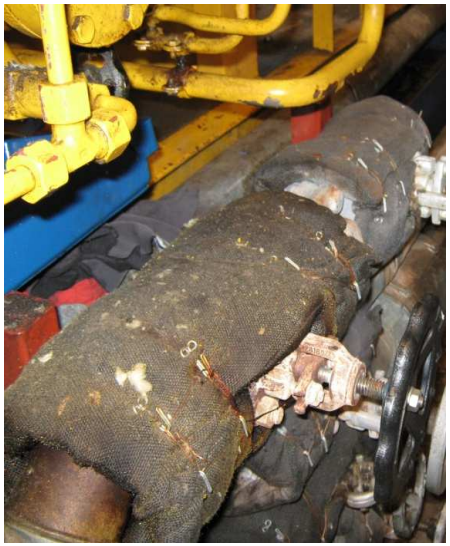
Amager Bakke



Why Amager Bakke?



The current plant is 43 years old, technically outdated and worn out

Environmental approval expires in 2013

Unacceptable working environment

Unacceptable economy

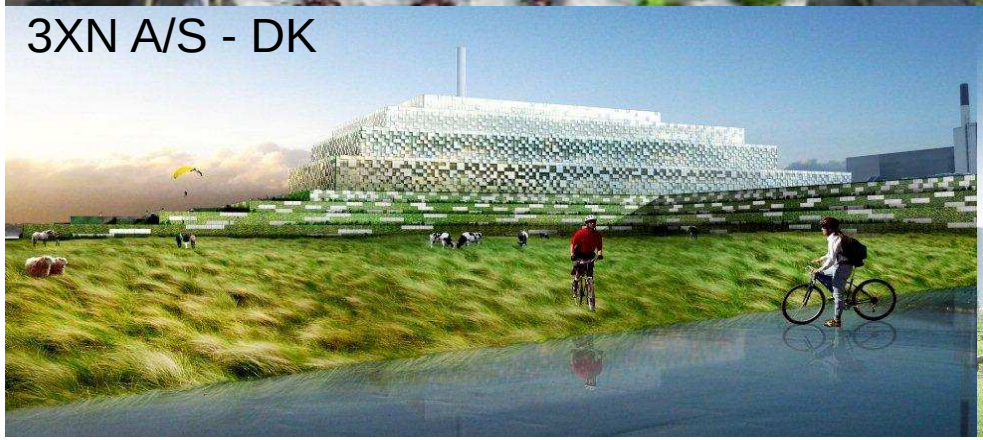
Gottlieb Paludan Arkitekter A/S - DK

Lundgaard & Tranberg Arkitekter A/S - DK

Wilkinson Eyre Architects - UK

Bjarke Ingels Group A/S - DK

3XN A/S - DK

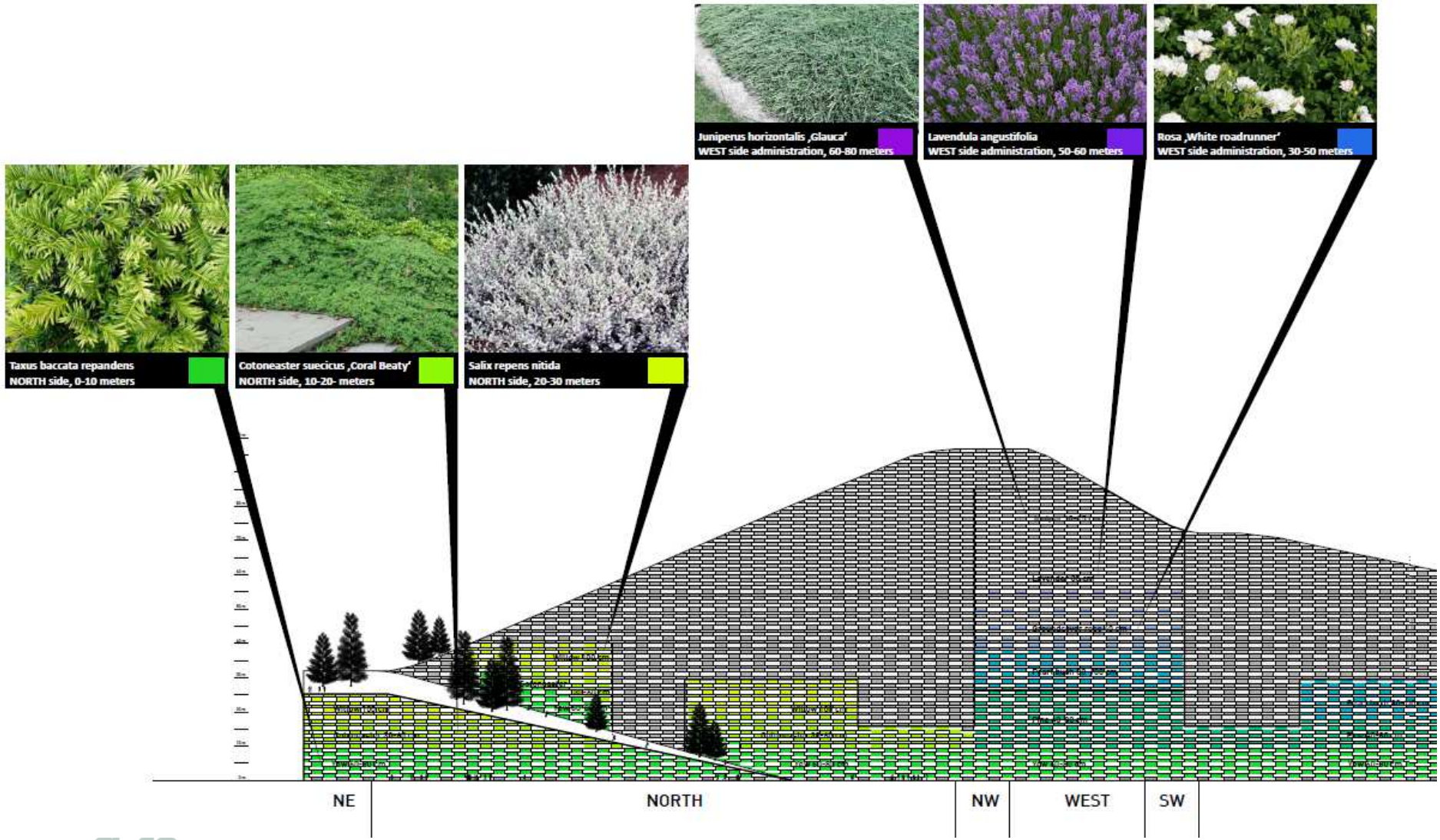


Dominique Perrault Architecture - FR

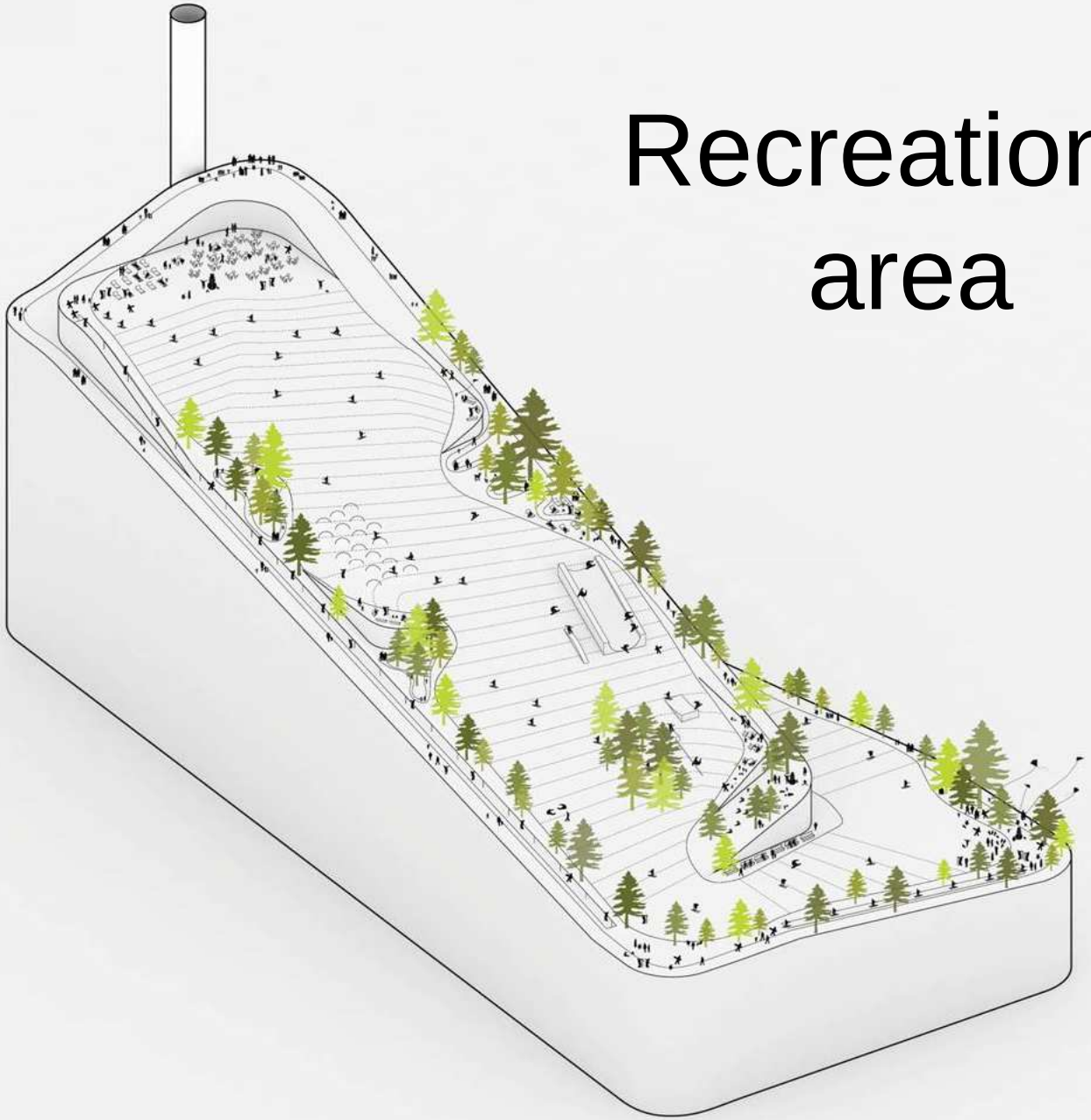
Amager Bakke architecture

Facade

Amager Bakke vegetation



Recreational area



Recreational area

Recreational area

Scenic viewpoint

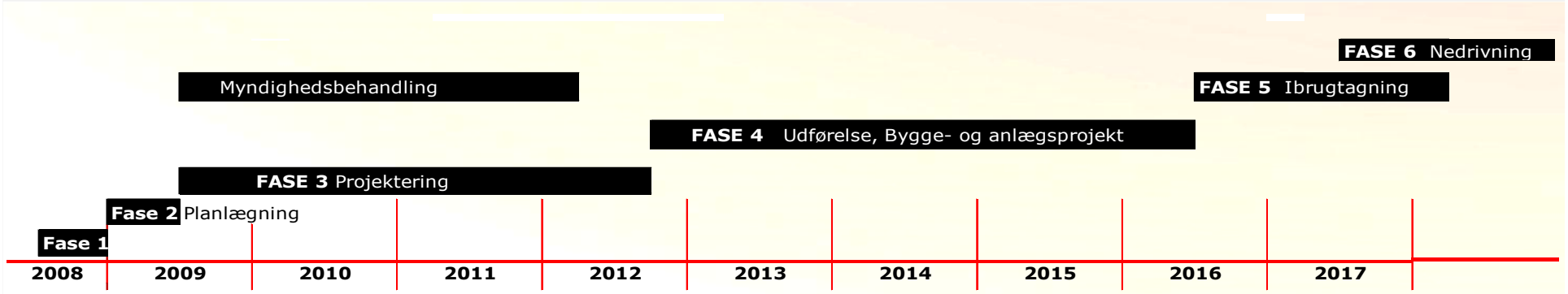
Meetings with panoramic view

Amager Bakke interior

Location

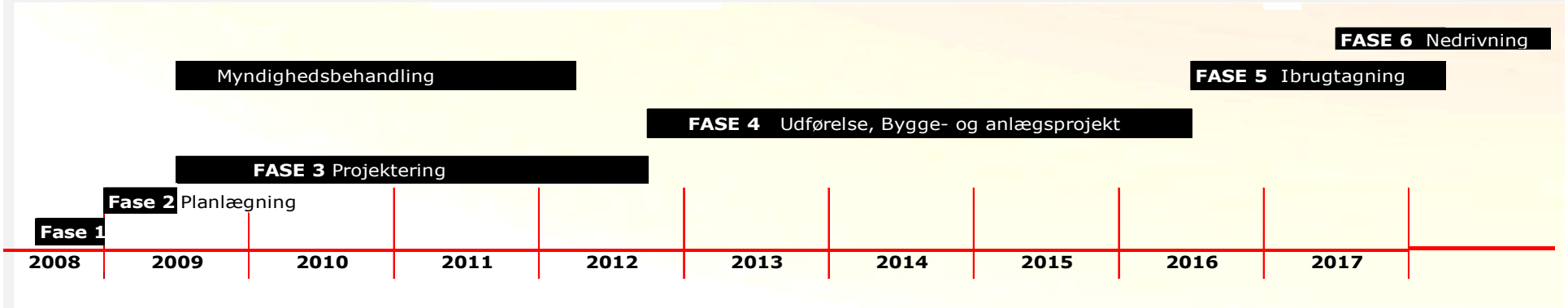
Location

Project plan

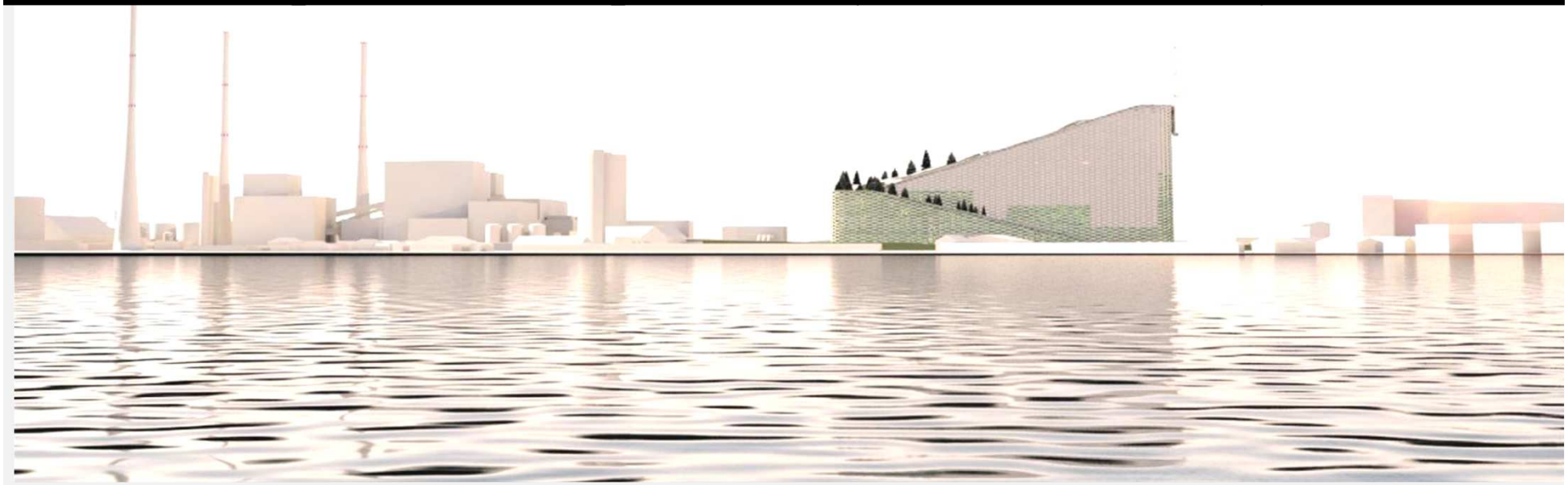


4. March 2013
Turning the first sod

Project plan



4. March 2013	February 2016	June 2016	December 2016	Spring 2017
Turning the first sod	Roof and facade completed	First waste incineration	Stable production of electricity and heat	Inauguration of Amager Bakke



Amager Bakke

New incineration plant

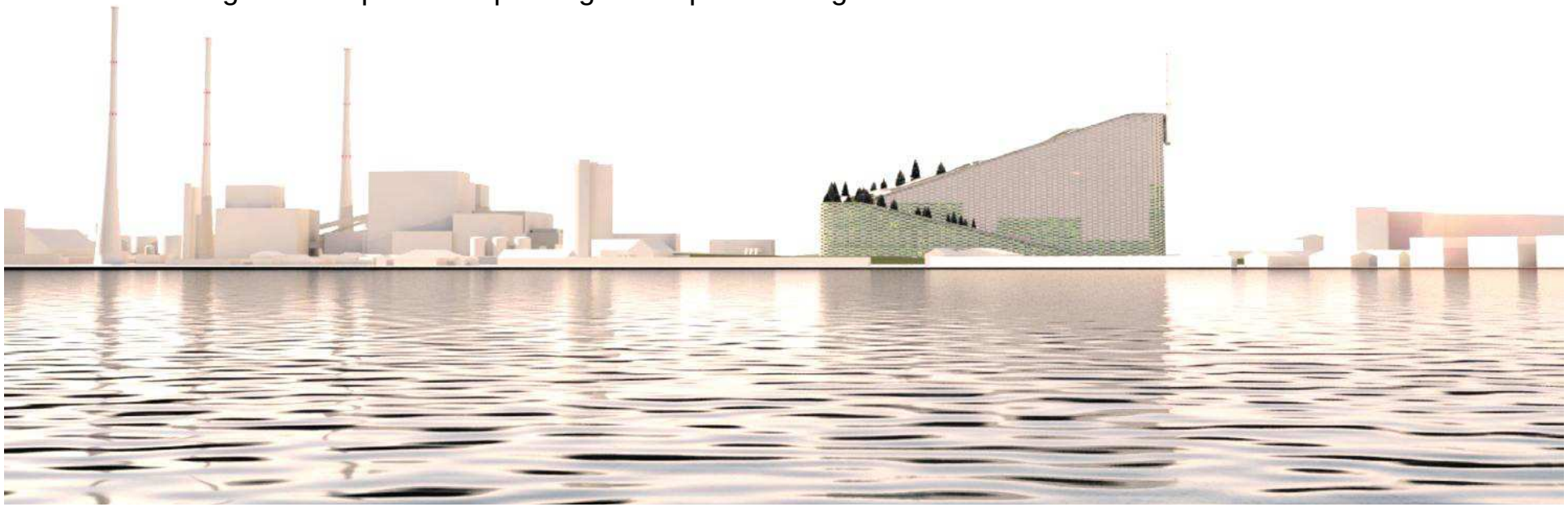
Significantly high environmental and energy profile

Supports the future of renewable energy

Showcase for green technology, including a visitor center

Creates jobs equivalent to 4,600 working years in the construction phase

Waste management is part of Copenhagen's export catalogue



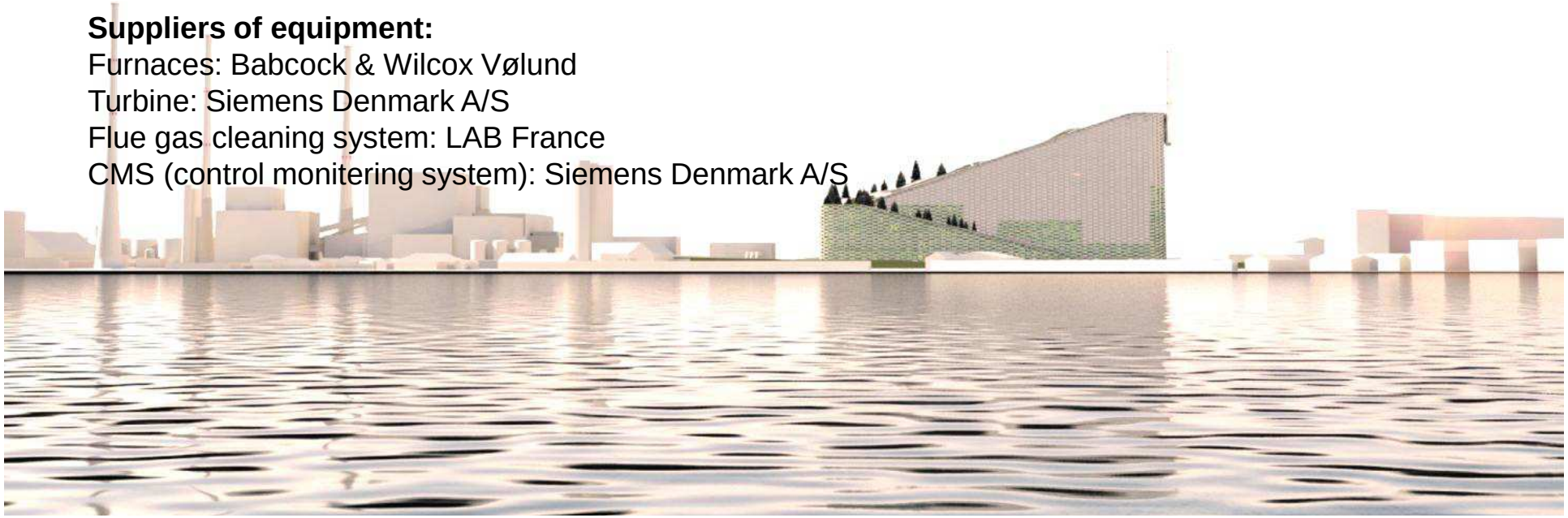
Who builds Amager Bakke?

Amager Resourcecenter is responsible for the construction of Amager Bakke

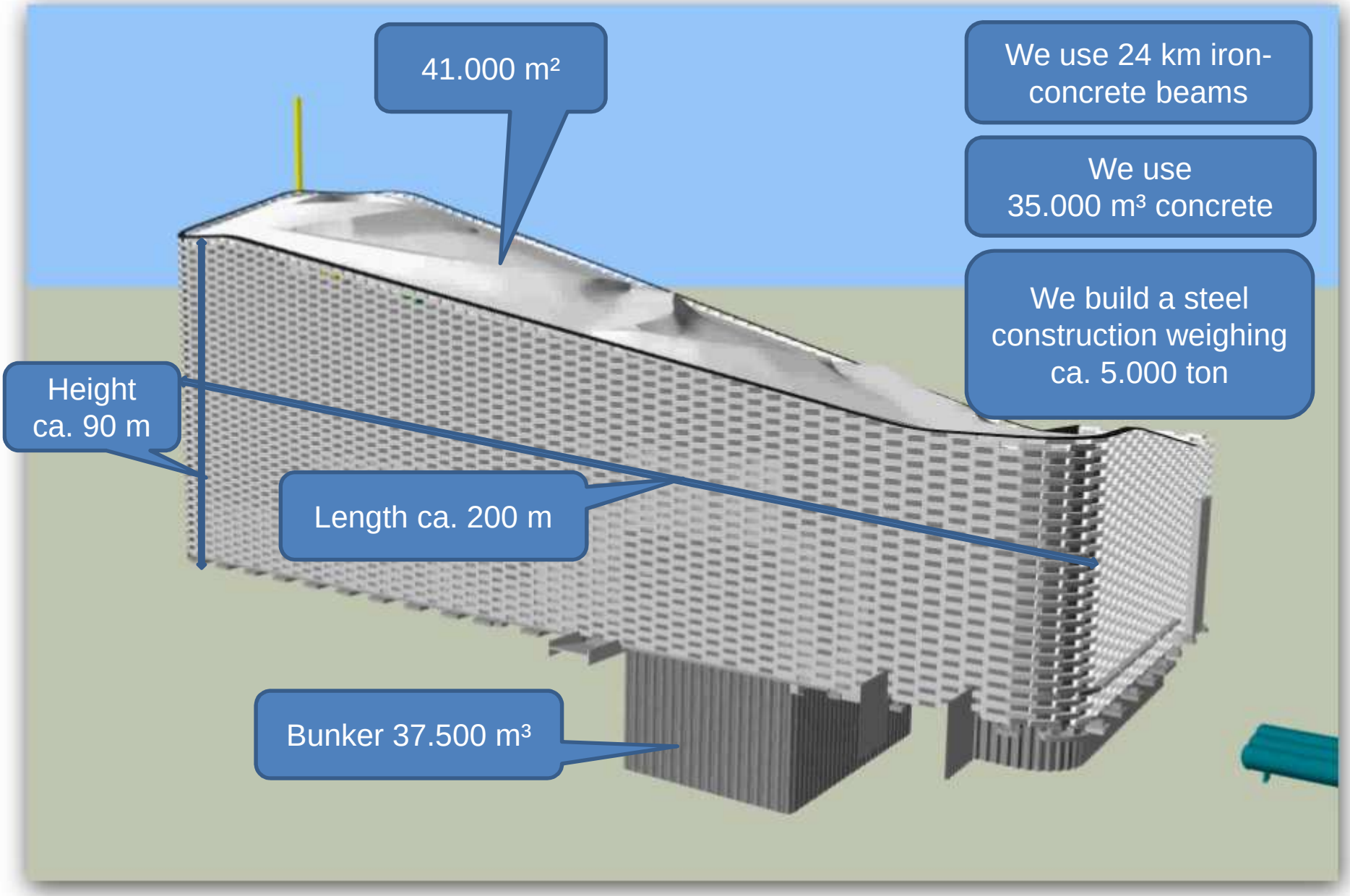
Main advisers:
Bascon A/S, BIG CPH
Moe og Brødsgaard A/S
Rambøll Energi

Contractors:
NCC
GEO Copenhagen
Tvilum Landinspektørfirma A/S

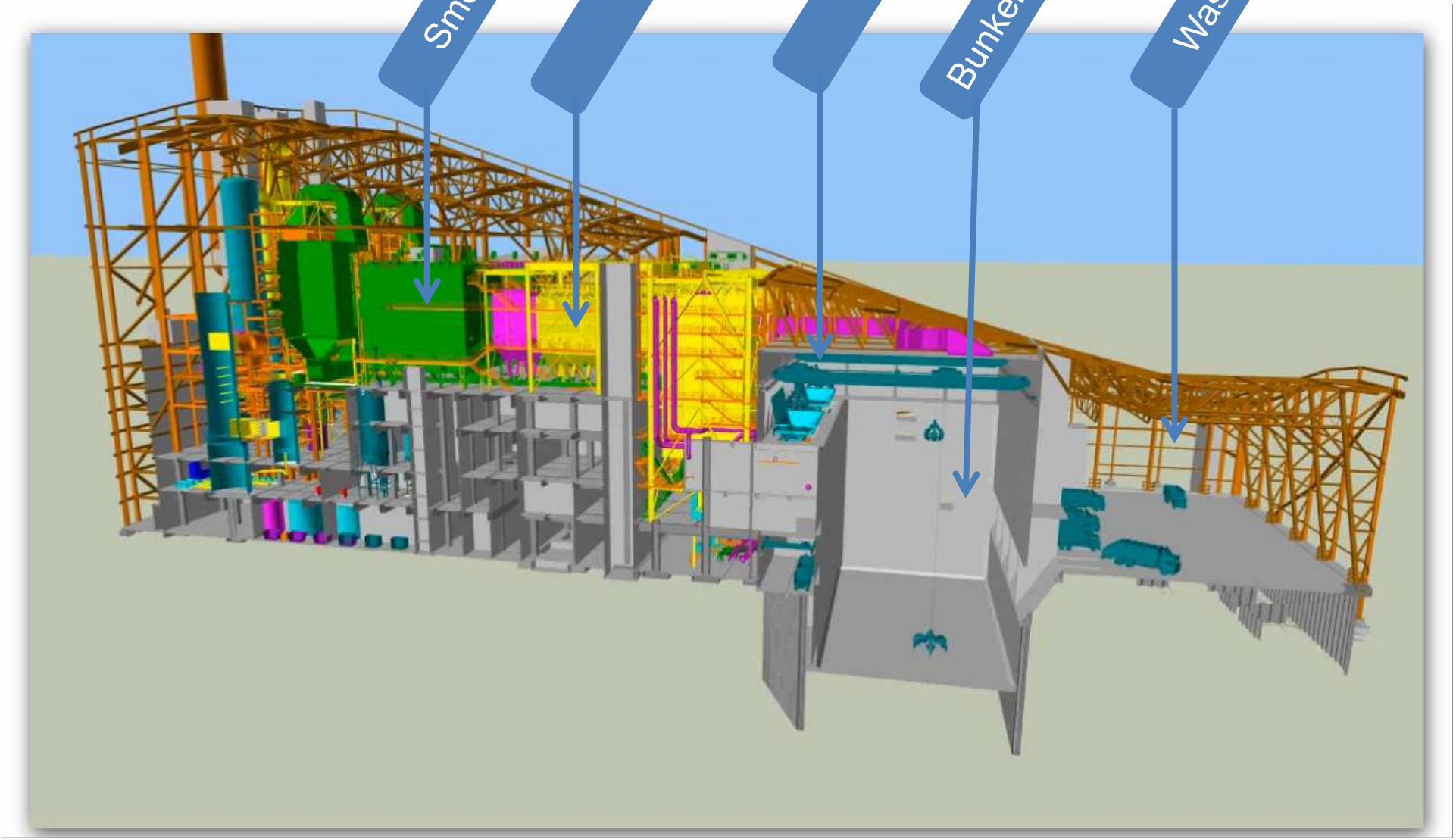
Suppliers of equipment:
Furnaces: Babcock & Wilcox Vølund
Turbine: Siemens Denmark A/S
Flue gas cleaning system: LAB France
CMS (control monitering system): Siemens Denmark A/S

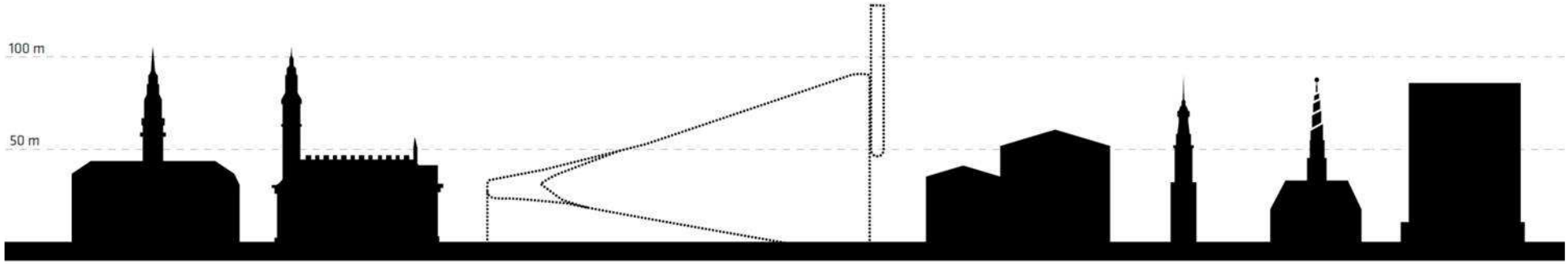


Dimensions

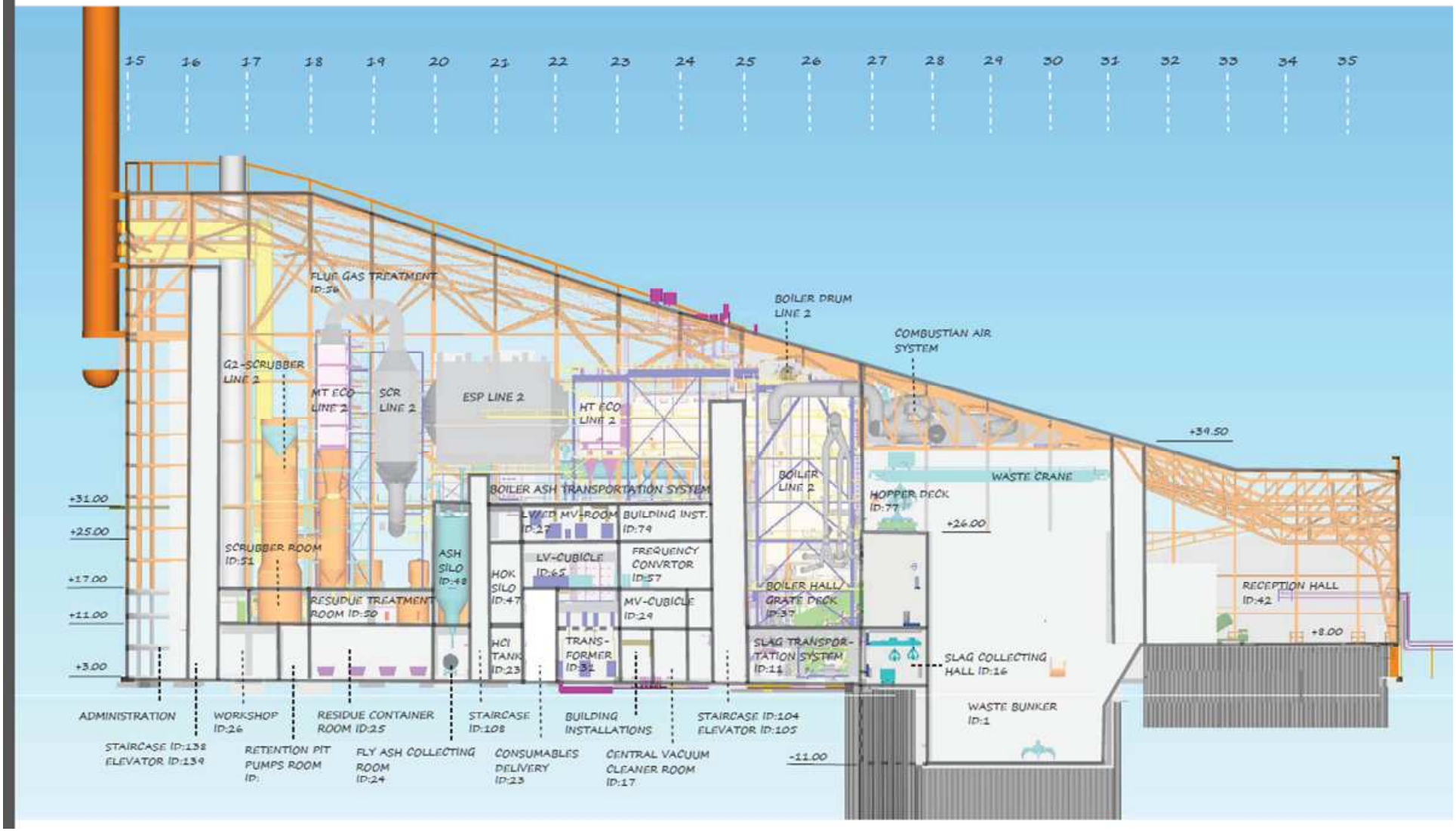

41.000 m²
We use 24 km iron-concrete beams
We use 35.000 m³ concrete
We build a steel construction weighing ca. 5.000 ton
Height ca. 90 m
Length ca. 200 m
Bunker 37.500 m³

Amager Bakke

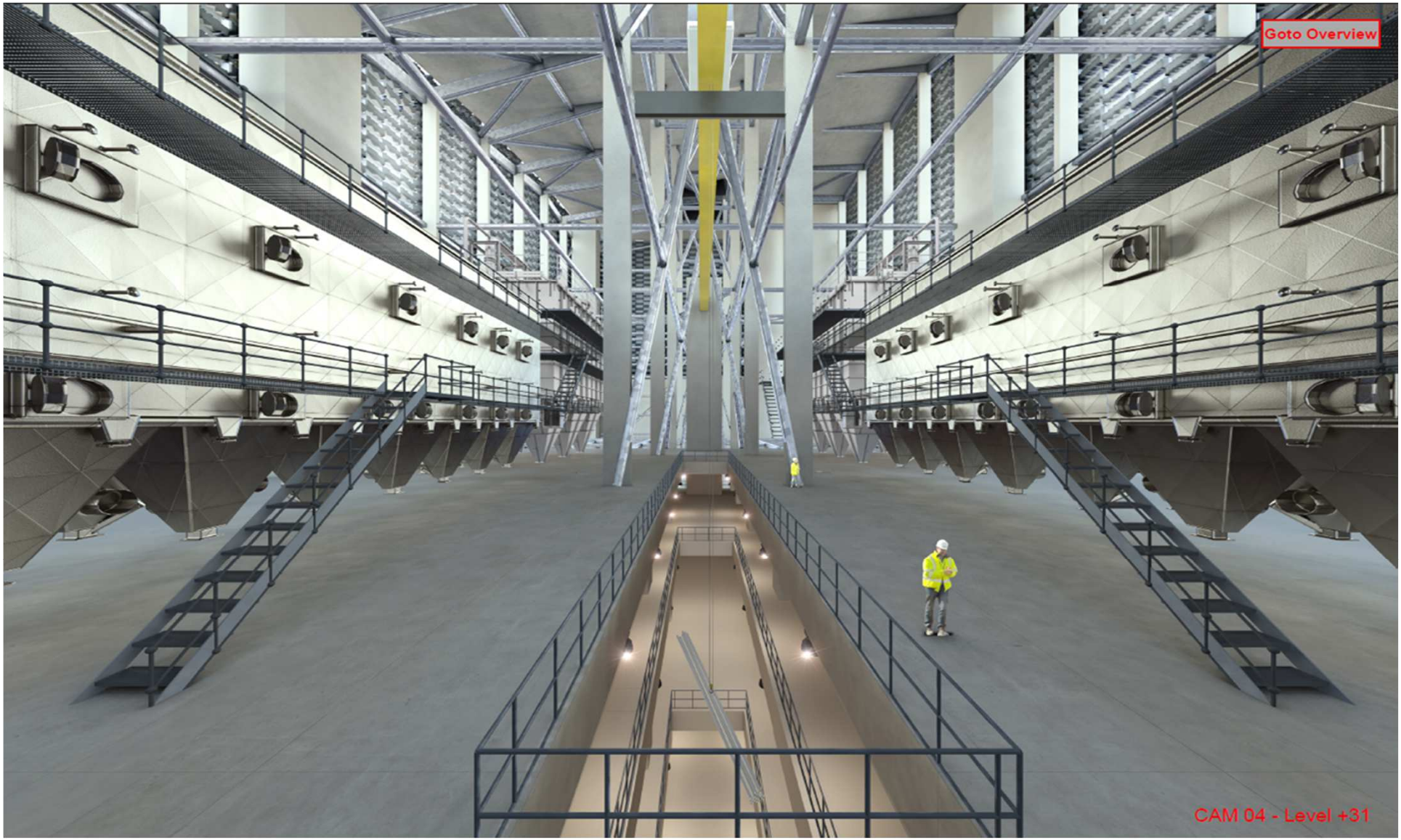



100 m
50 m
CHRISTIANSBORG PARLIAMENT (1928)
106 m
CITY HALL (1905)
105.5 m
ARC
WTE plant
91 m
B&W HALLERNE (1960)
60 m
ST. NIKOLAJ HURCH (1829)
90m
VOR FRELSER CHURCH (1752)
89 m
RADISSON SAS SCANDINAVIA HOTEL (1973)
86 m

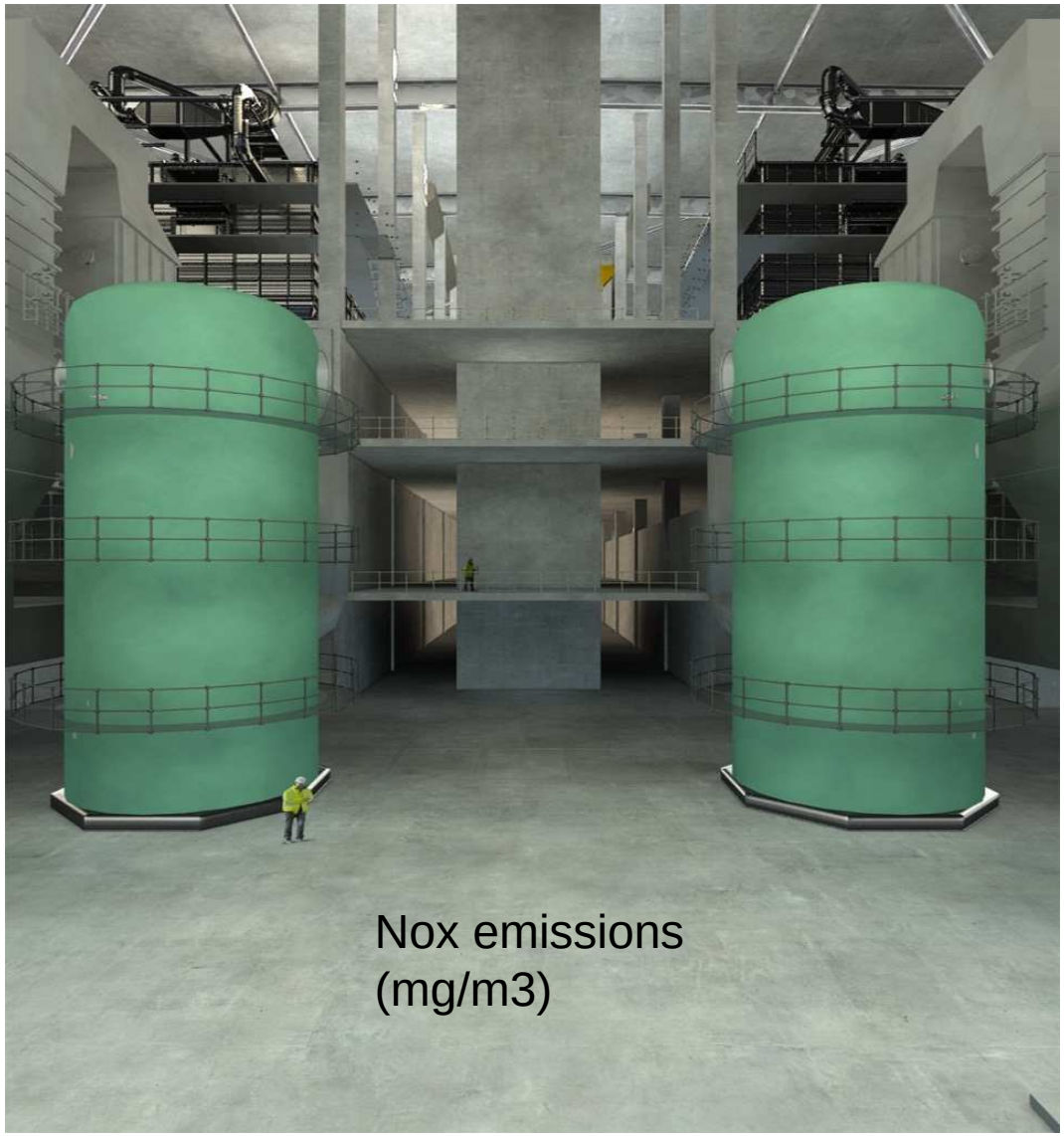
LONGITUDINAL SECTION MODULES I-H (LINE 2)



Furnaces



Amager Bakke spares the environment

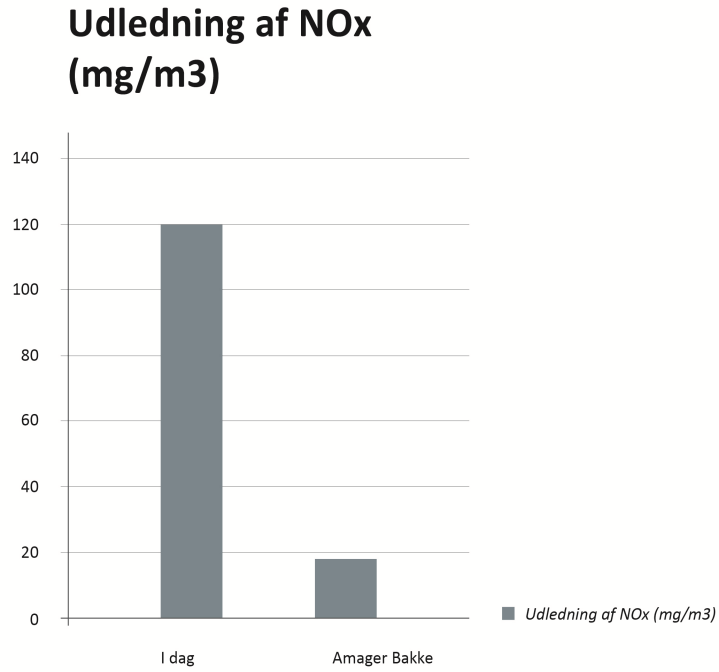


Wet smoke-cleaning system

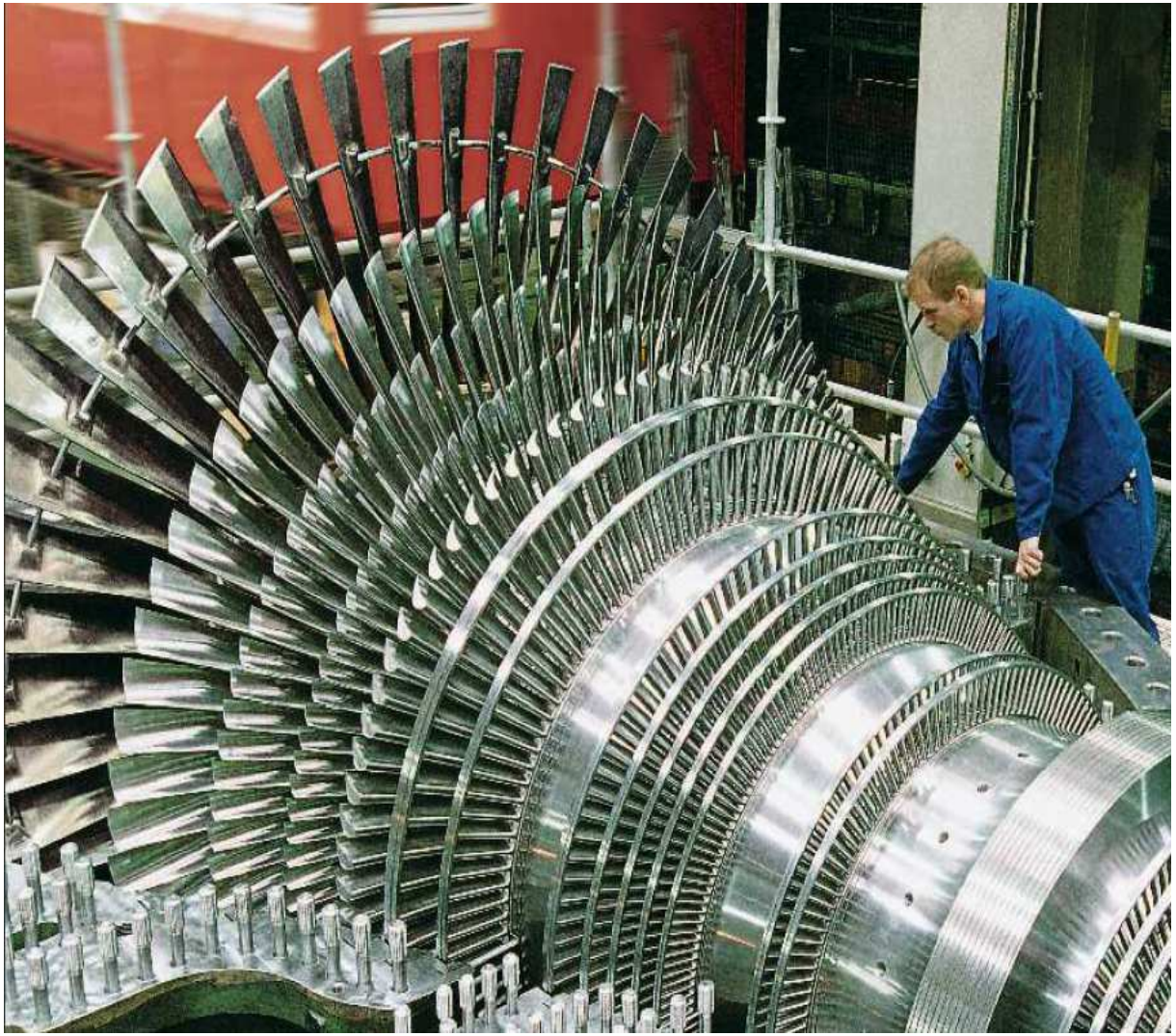
85 % reduction of NOx gases

99,5 % removal of sulfur

99,9 % removal of hydrochloric acid



Energy production



One steam turbine

60MW

70 bar 440 °C

Preparation for low-pressure turbine

99,9 %
reduction of Hydrochloric acid

Reduction in CO_2 emissions by more than 100,000 tons

Nearly all Dioxin are removed

25%
more energy from the waste

NOx emissions will be removed by 96 %

99,5 %
Reduction of Sulphuric acid

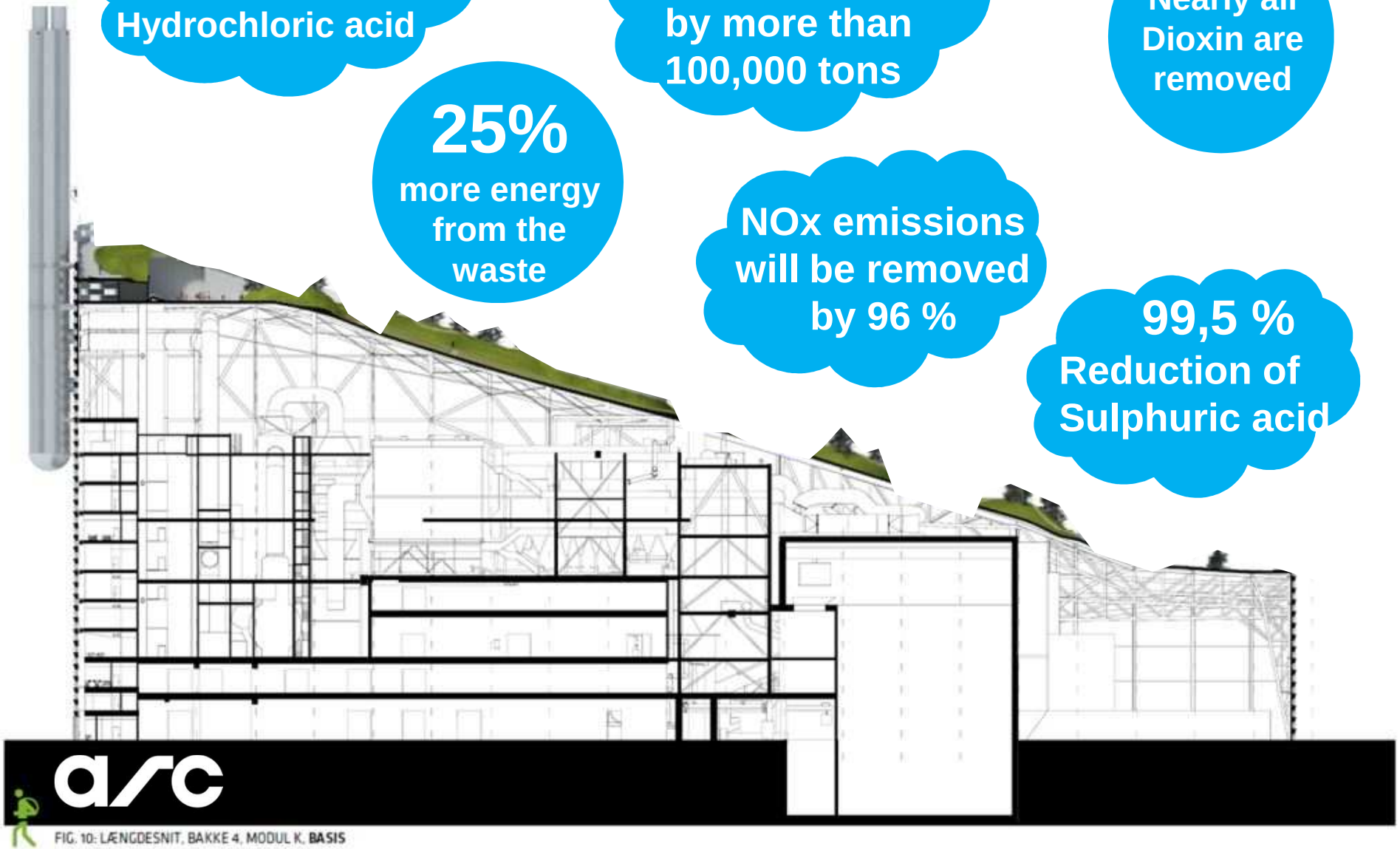
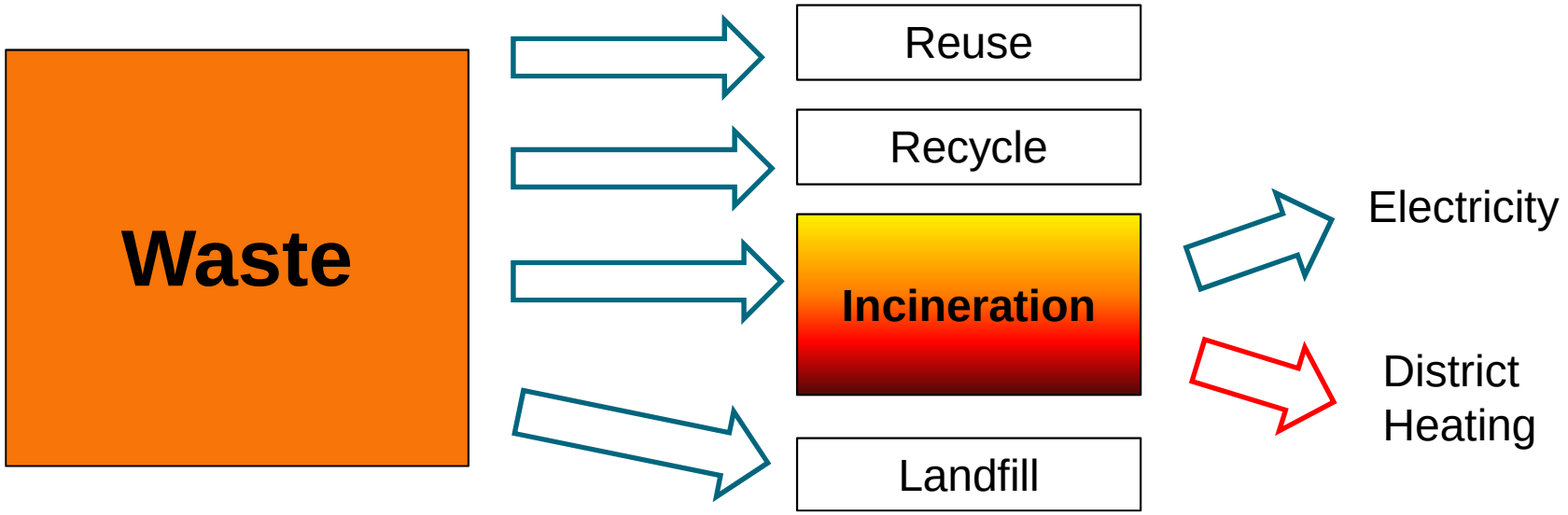
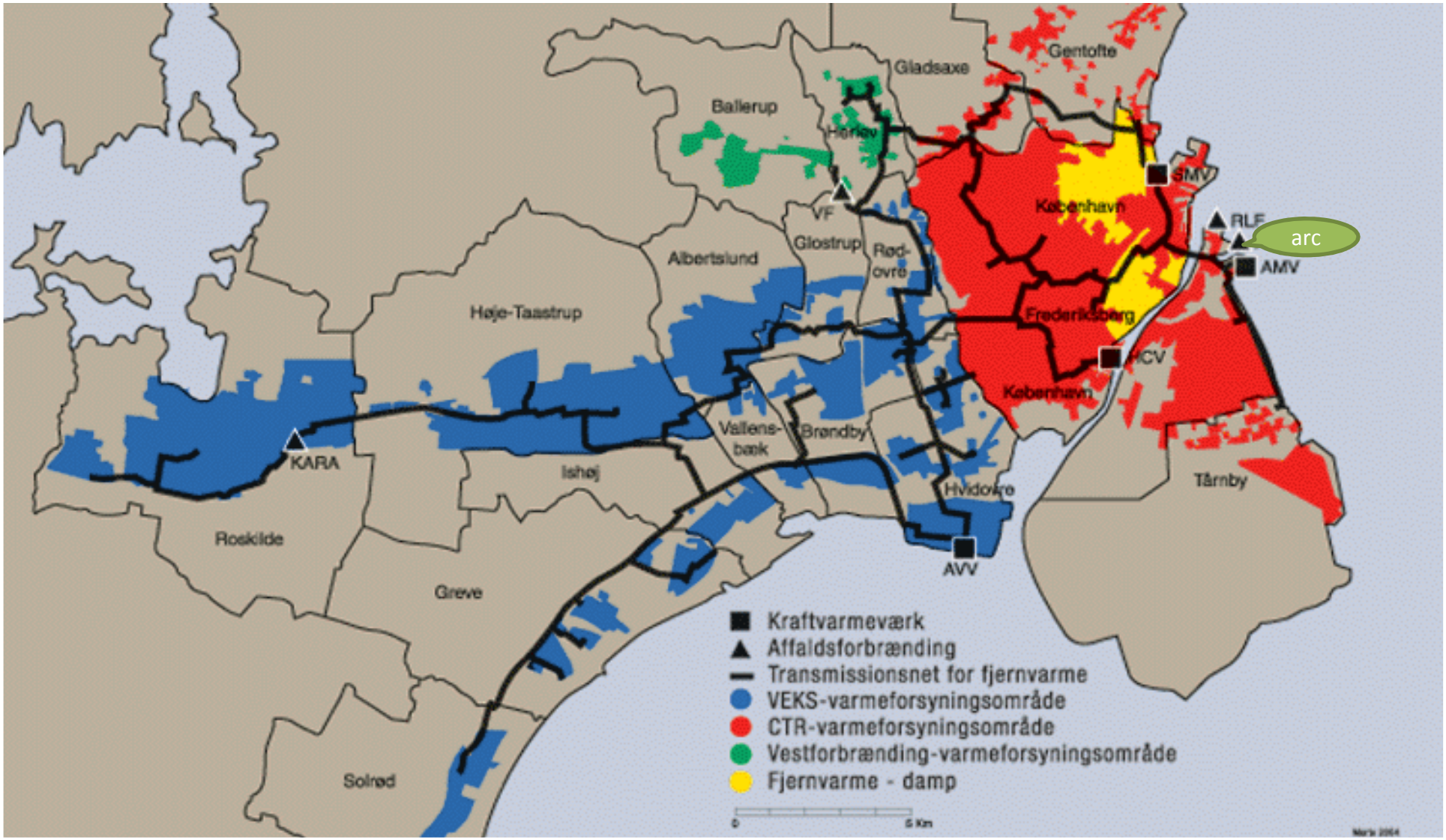


FIG. 10: LÆNGDESNIT, BAKKE 4, MODUL K, **BASIS**

Amager Bakke Energy Efficiency



District heating network in the capital area



Amager Bakke