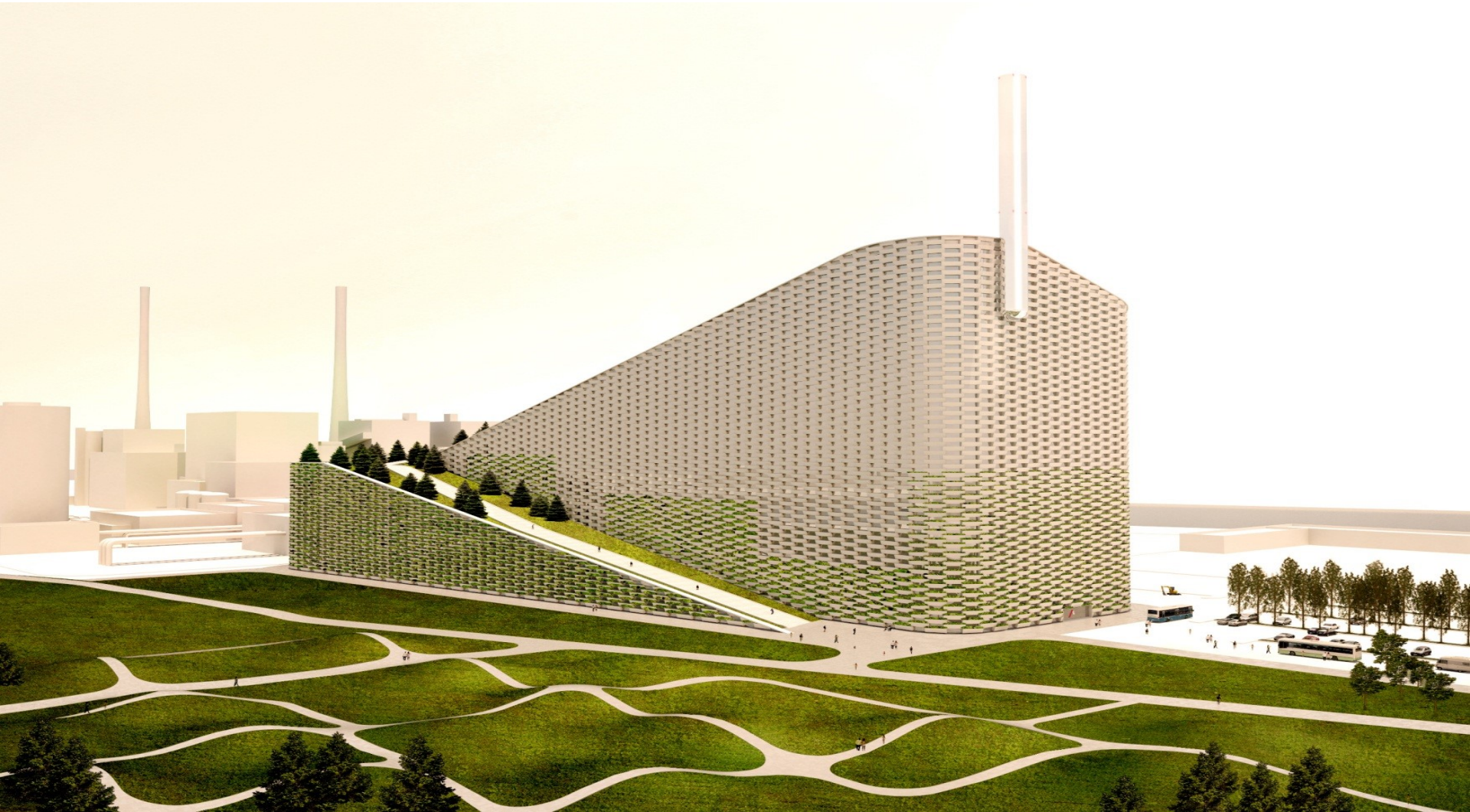


# Amager Bakke



# Why Amager Bakke?

## なぜアマーの丘か



The current plant is 43 years old, technically outdated and worn out

旧の施設は43年前の時代遅れの技術と償却期間が過ぎている

Environmental approval expires in 2013環境認証の期限切れ

Unacceptable working environment

容認できない作業環境

Unacceptable economy容認できない経済性



Gottlieb Paludan Arkitekter A/S - DK



Lundgaard & Tranberg Arkitekter A/S - DK



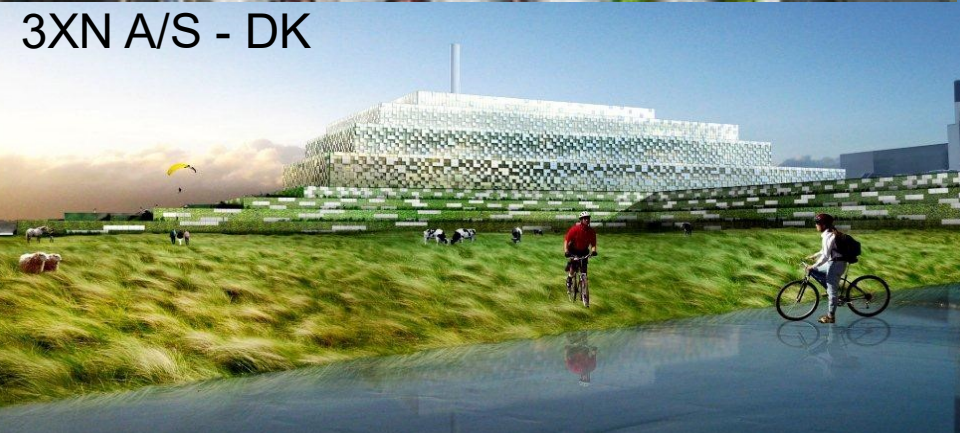
Wilkinson Eyre Architects - UK



Bjarke Ingels Group A/S - DK



3XN A/S - DK



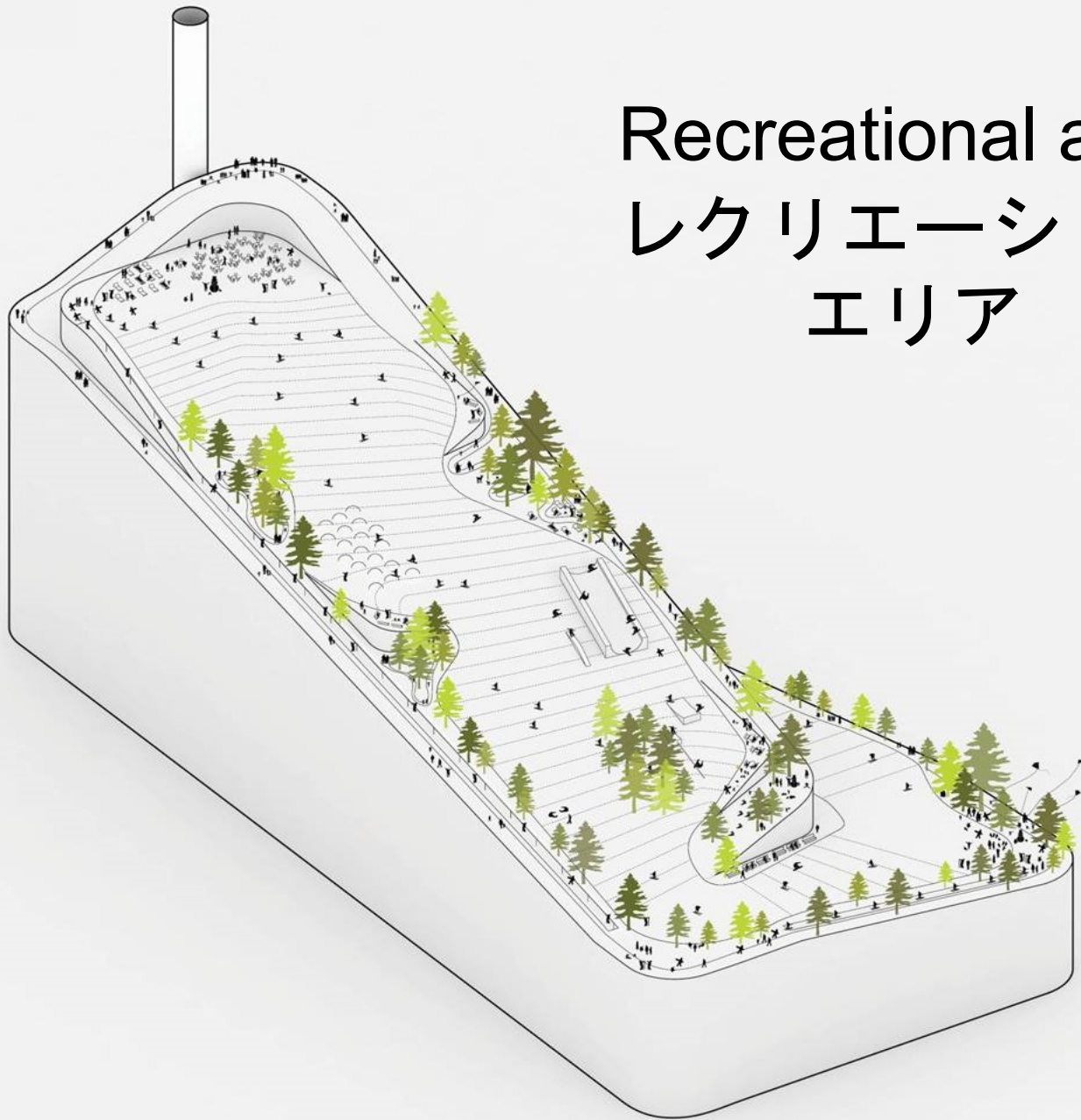
Dominique Perrault Architecture - FR



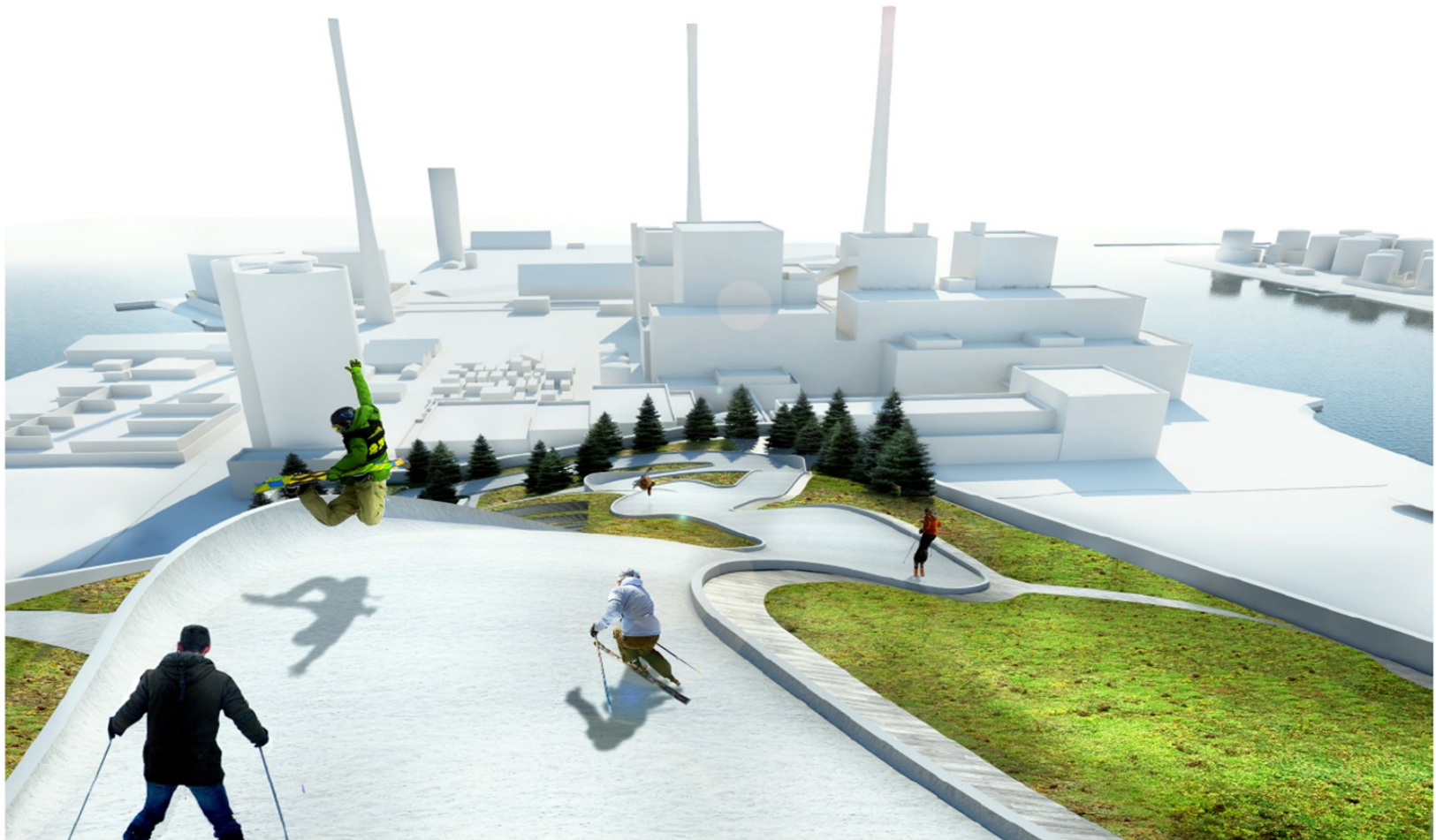
# Amager Bakke architecture アマーの丘の建築



# Recreational area レクリエーション エリア



# Recreational area



Oktober 1, 2011

AMF 53

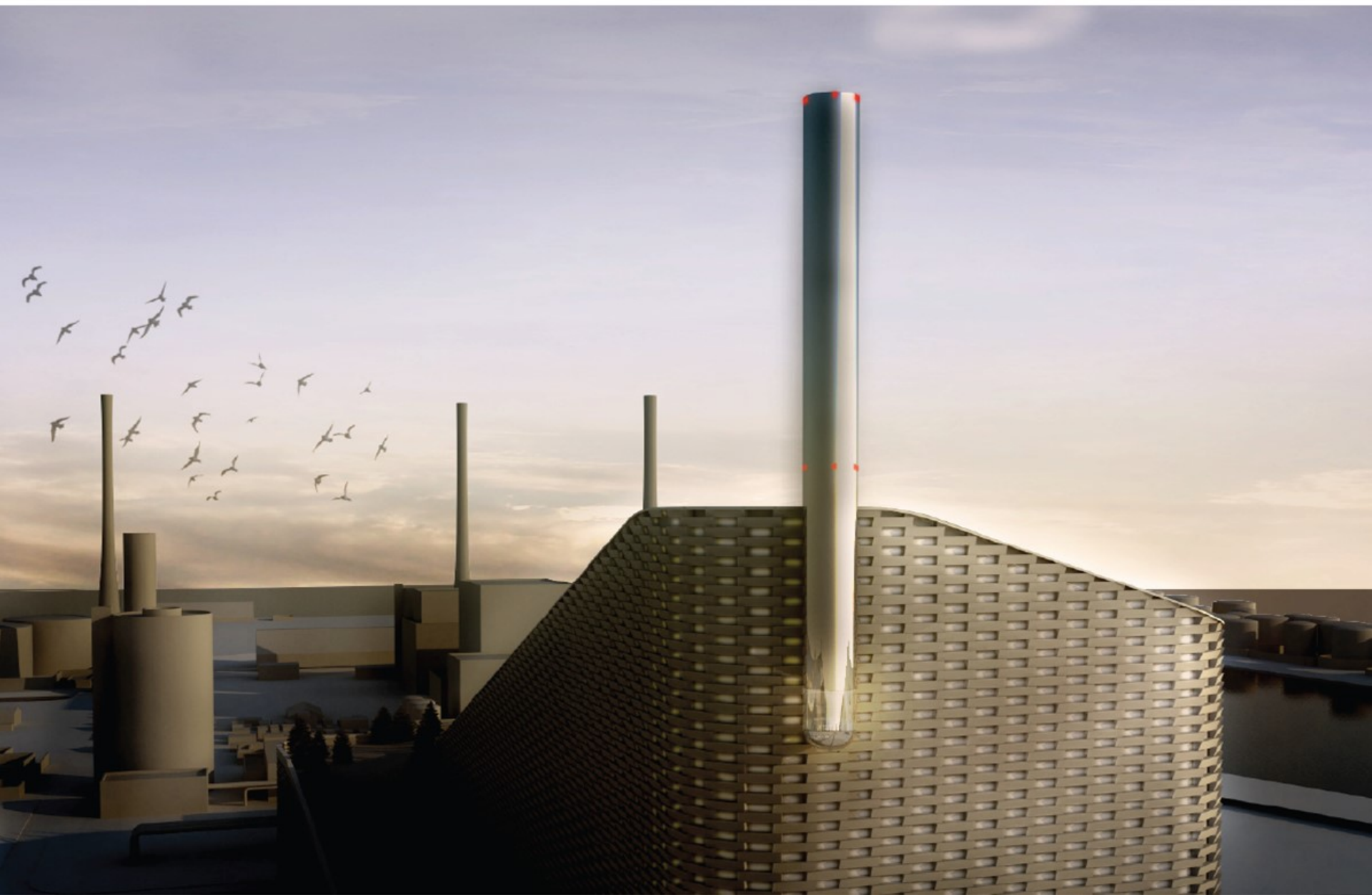
# Recreational area



# Scenic viewpointビューポイント







# Meetings with panoramic view パノラマビューを見ながらのミーティング



INTERIOR VIEW OF ATRIUM BETWEEN PLANT AND ADMINISTRATIVE BUILDING

# Amager Bakke interior

## アマーの丘の内装







# Location



# Location      ロケーション



# Amager Bakke

## New incineration plant 新焼却プラント

Significantly high environmental and energy profile 非常に高い環境エネルギー形態

Supports the future of renewable energy 再生可能エネルギーの未来をサポートする

Showcase for green technology, including a visitor center ビジターセンターを含むグリーンテクノロジーの展示

Creates jobs equivalent to 4,600 working years in the construction phase 建設段階で4600人分に当たる作業を作りだした

Waste management is part of Copenhagen's export catalogue 廃棄物管理はコペンハーゲンの誇れる特徴の一つです。





# Who builds Amager Bakke?

## 誰が、アマーを建設したのか

**Amager Resourcecenter is responsible for the construction of Amager Bakke** アマーのリソースセンターが、建設にあたっての責任者です。

### **Main advisers: メインアドバイザー**

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

### **Contractors: 請負業者**

NCC  
GEO Copenhagen  
Tvilum Landinspektørfirma A/S

### **Suppliers of equipment: 装置の供給者**

Furnaces: Babcock & Wilcox Vølund 炉  
Turbine: Siemens Denmark A/S タービン  
Flue gas cleaning system: LAB France ガス洗浄  
CMS (control monitoring system): Siemens Denmark A/S コントロールモニタリングシステム



# Dimensions規模

41.000 m<sup>2</sup>

We use 24 km iron-  
concrete beam 24kmの  
鉄筋コンクリートの梁

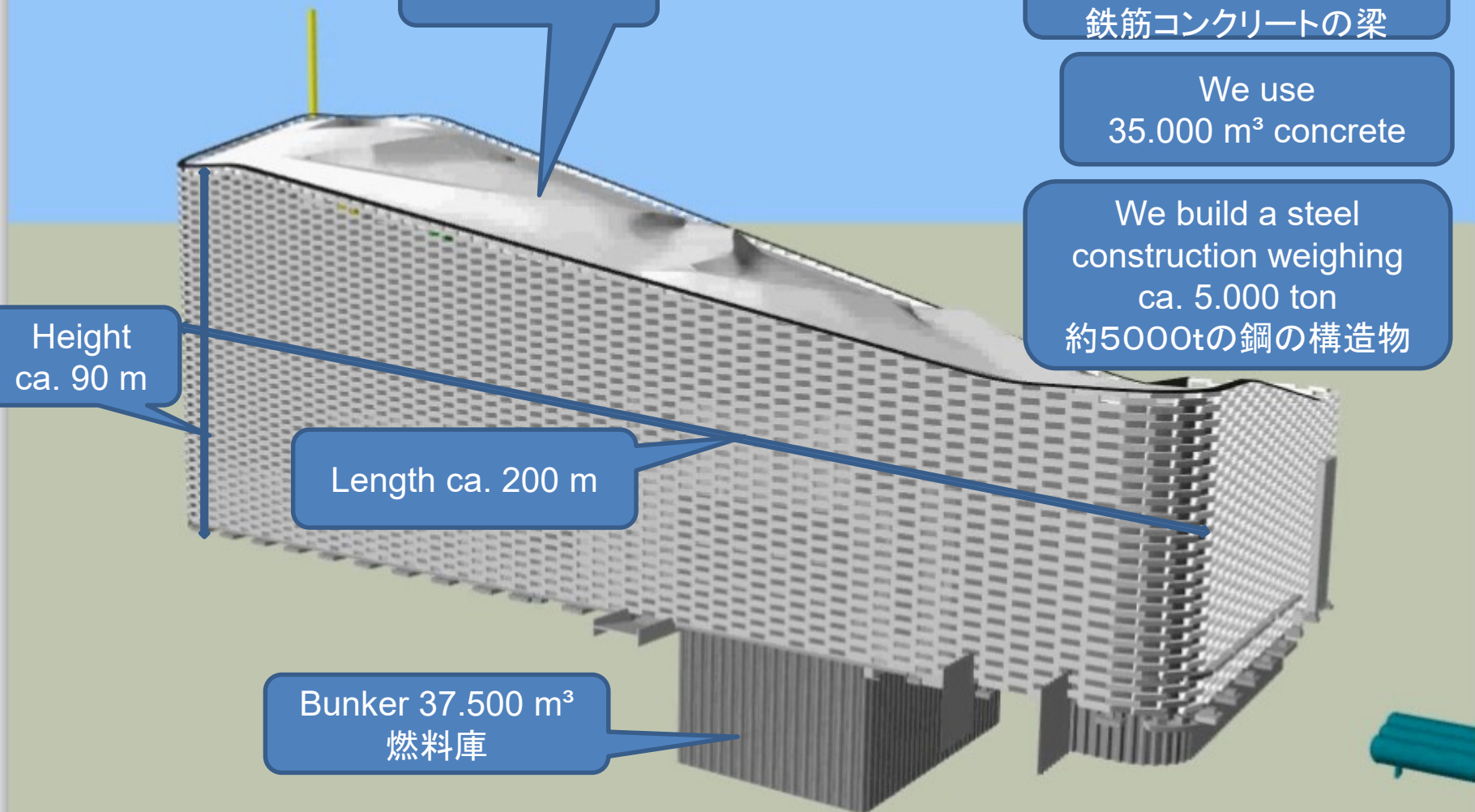
We use  
35.000 m<sup>3</sup> concrete

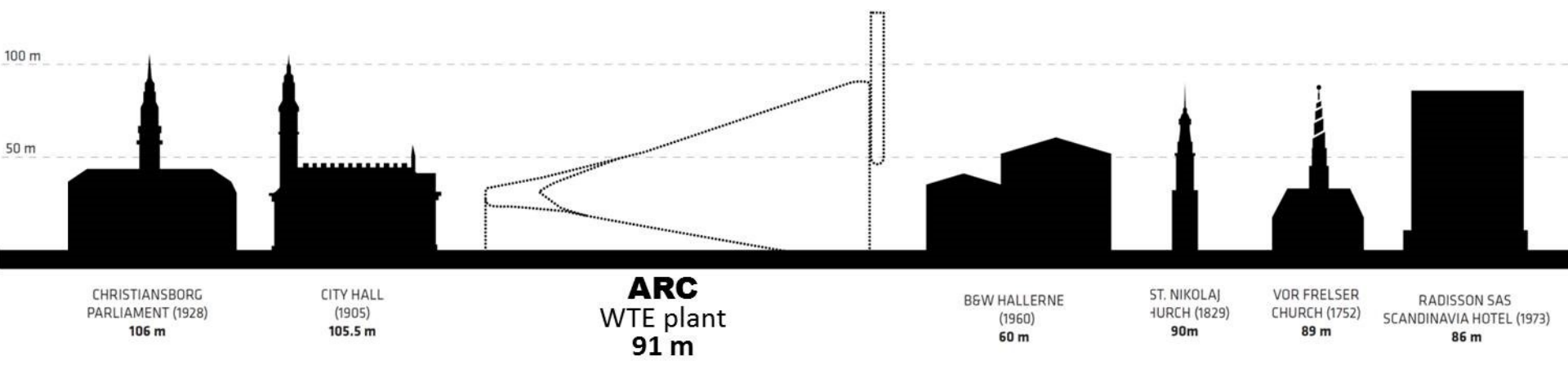
We build a steel  
construction weighing  
ca. 5.000 ton  
約5000tの鋼の構造物

Height  
ca. 90 m

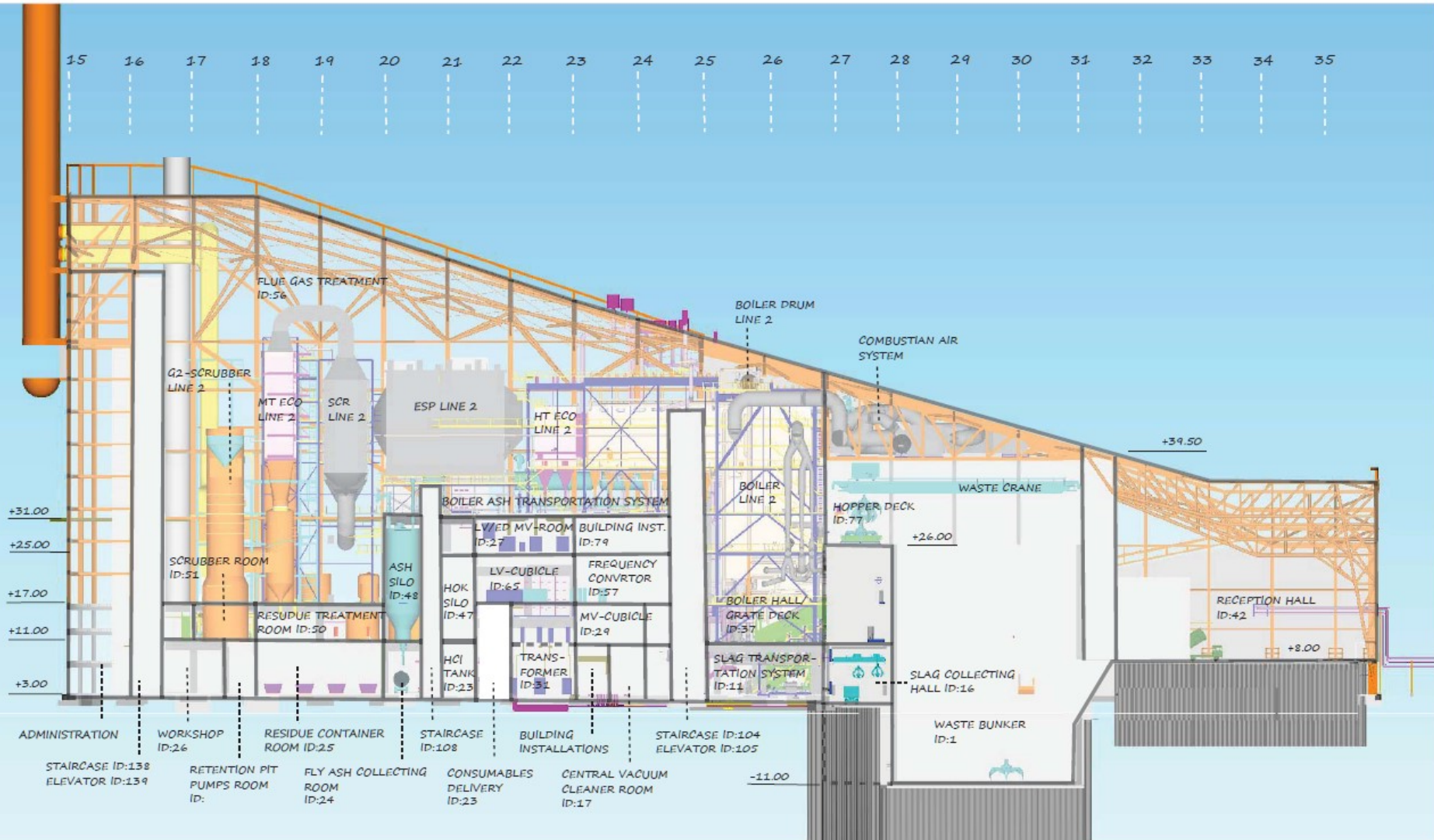
Length ca. 200 m

Bunker 37.500 m<sup>3</sup>  
燃料庫





LONGITUDINAL SECTION MODULES I-H (LINE 2)





# Furnaces

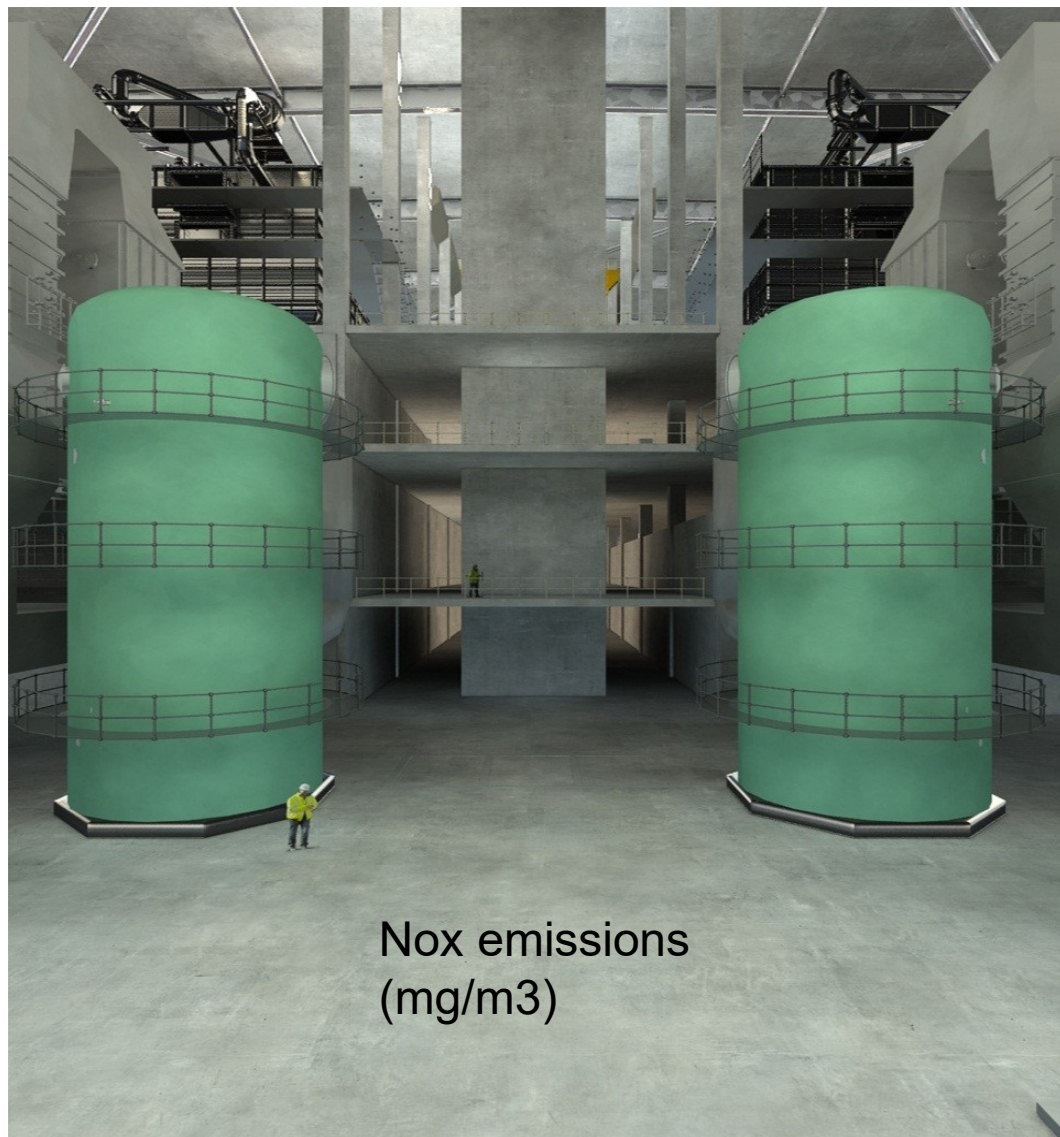


Goto Overview

CAM 04 - Level +31

# Amager Bakke spares the environment

環境に貢献



Wet smoke-cleaning system

煙の洗浄装置

85 % reduction of NOx gases

Nox ガスの85%消滅

99,5 % removal of sulfur

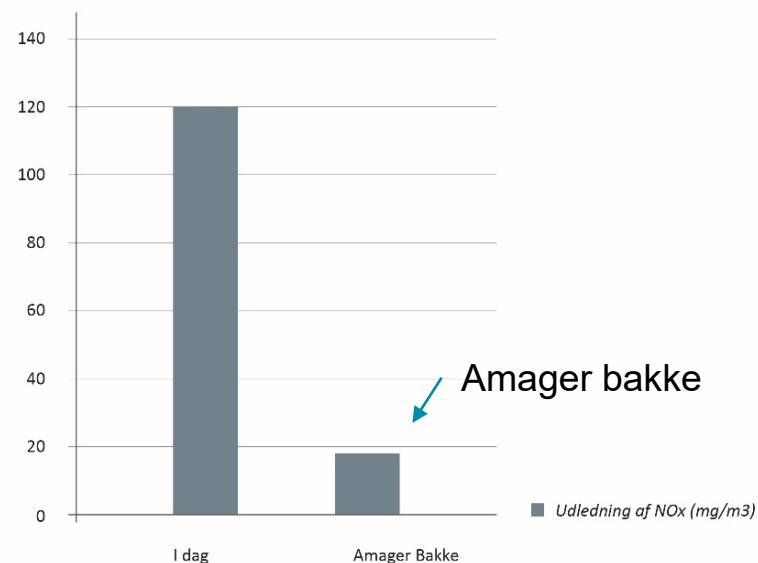
硫黄の除去

99,9 % removal of hydrochloric acid

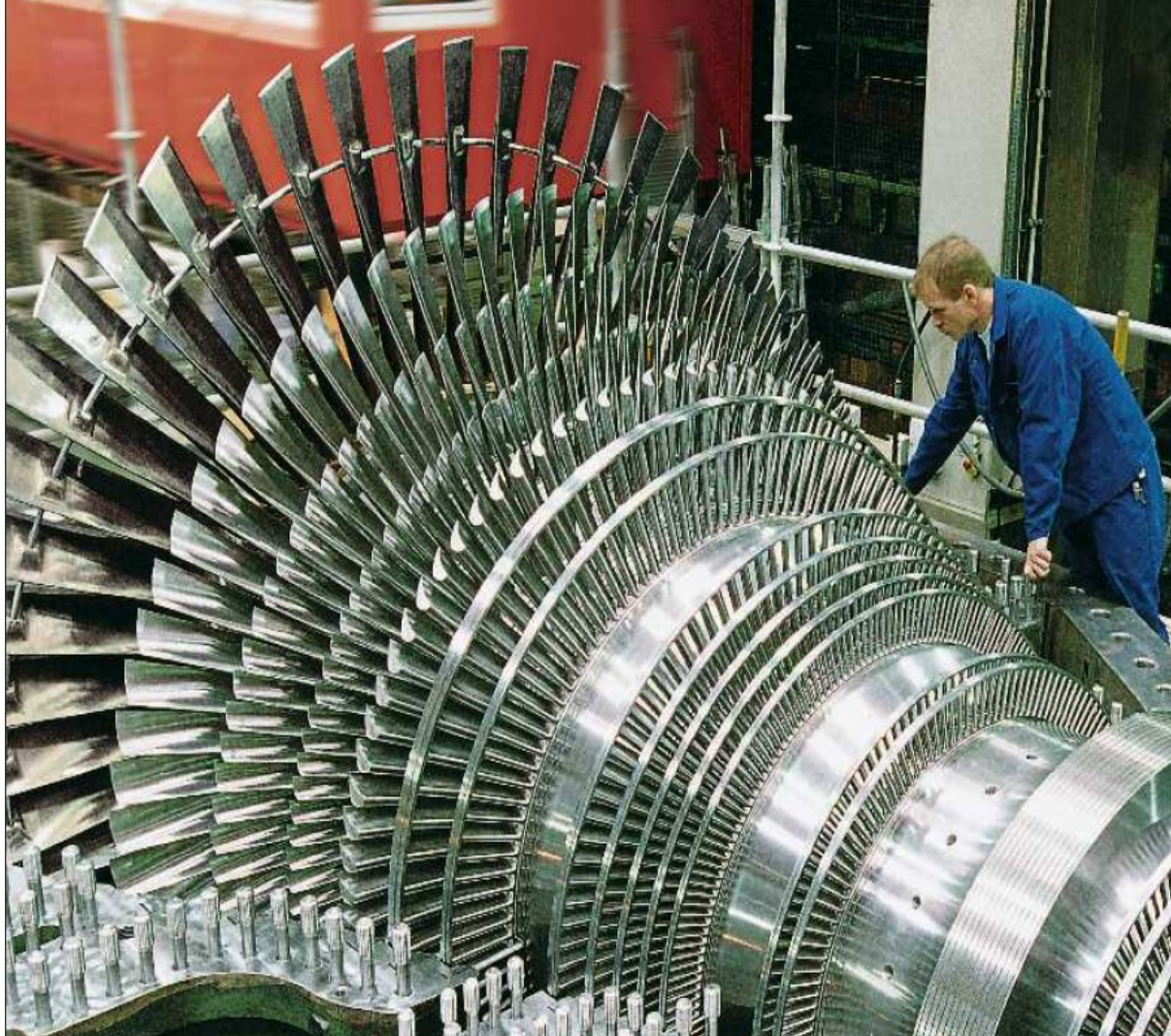
塩酸の除去

**Udledning af NOx  
(mg/m<sup>3</sup>)**

NOx の排出



# Energy production エネルギー生産



One steam turbine  
1基の蒸気タービン  
60MW

70 bar 440 °C  
70気圧440°C  
Preparation for low-  
pressure turbine  
低圧タービンの準備



99,9 %

99.9%塩酸の削減  
reduction of  
hydrochloric acid

Reduction in CO<sub>2</sub>  
emissions by more  
than 100,000 tons  
100,000 t 以上のCO<sub>2</sub>  
排出量削減

Nearly all  
Dioxin are  
removed  
ほぼ完全にダ  
イオキシンを  
削除

25%  
more energy  
from the  
waste

ゴミからさら  
に25%エネ  
ルギー回収

NO<sub>x</sub> emissions  
will be removed by  
96 %  
NO<sub>x</sub>の排出を96%  
削除

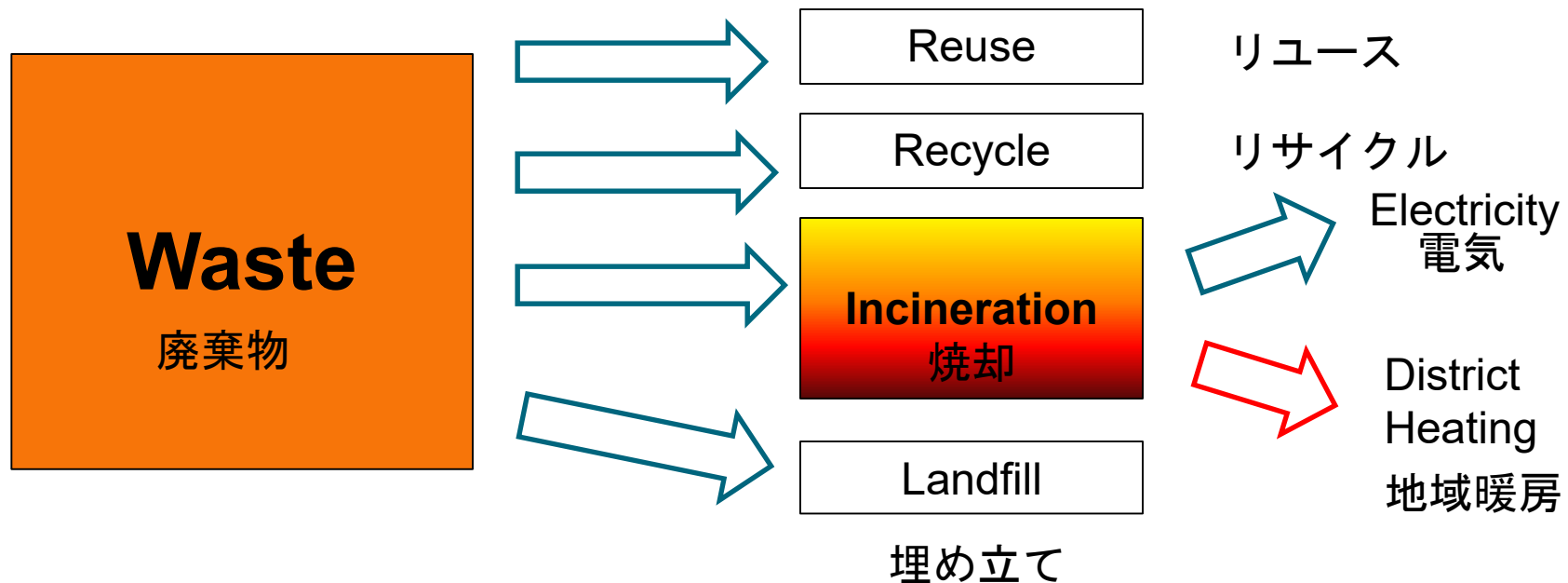
99,5 %  
Reduction of  
Sulphuric acid  
硫酸の99.5%の削減

**asc**

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

# Amager Bakke Energy Efficiency

アマーバツケのエネルギー効率



# Amager Bakke

