



36<sup>th</sup> Euroheat & Power Congress  
27-28 May 2013, Vienna, Austria

# COPENHAGEN 2.0

Energy planning and the use of  
thermal Storages

Organised  
by

# AGENDA

INTRODUCTION

THE COPENHAGEN SYSTEM

2025 AMBITIONS AND TASKS

THE ROLE OF ENERGY PLANNING

HEAT ACCUMULATORS

# PRESENTATION AND BACKGROUND

- RAMBOLL

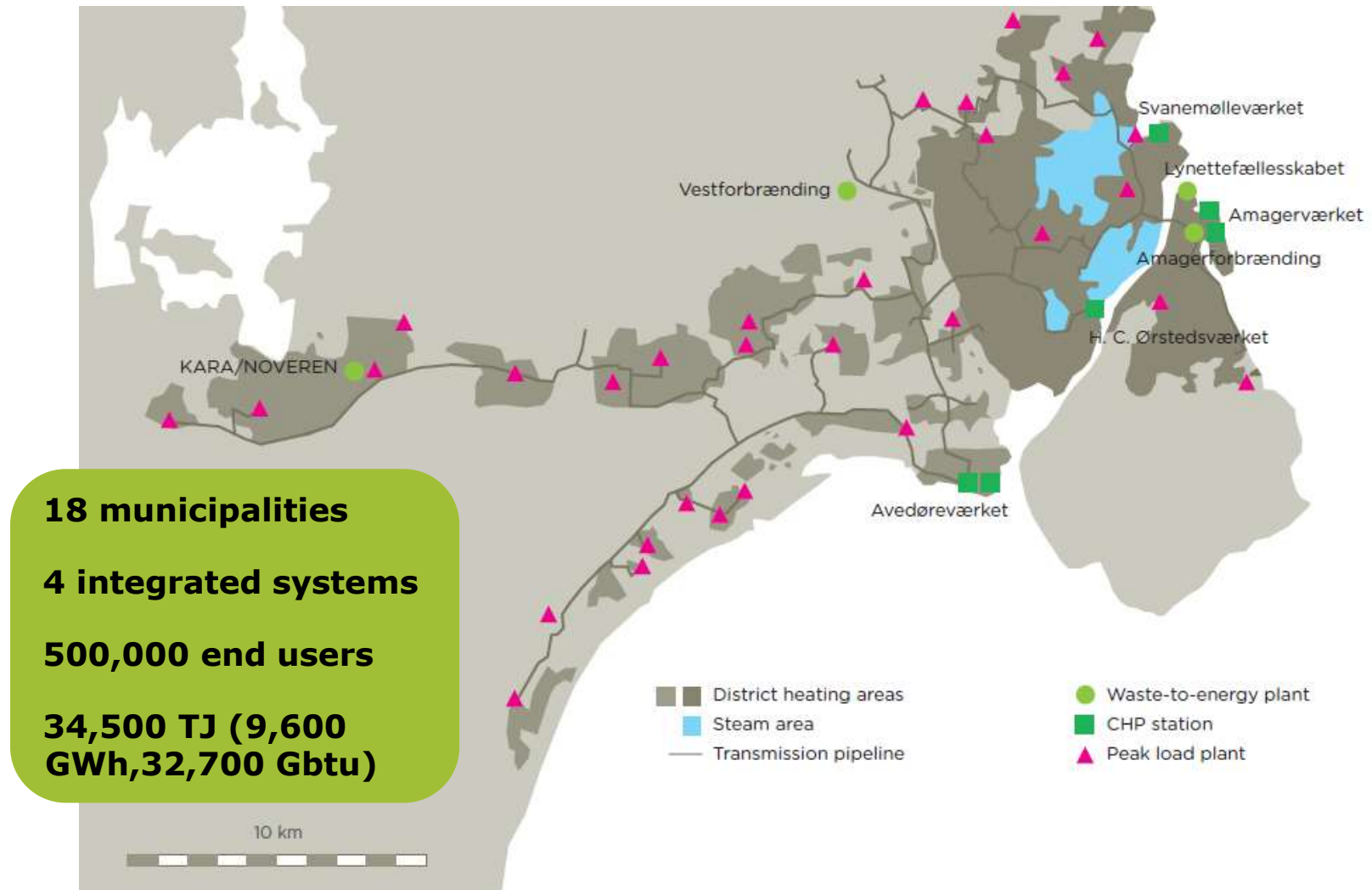
- Independent Multidisciplinary Consultant
- Owned by the Ramboll Foundation
- 10.000 Employees
- 200 offices in 25 countries
- World leading within several energy services



- JAKOB BJERREGAARD

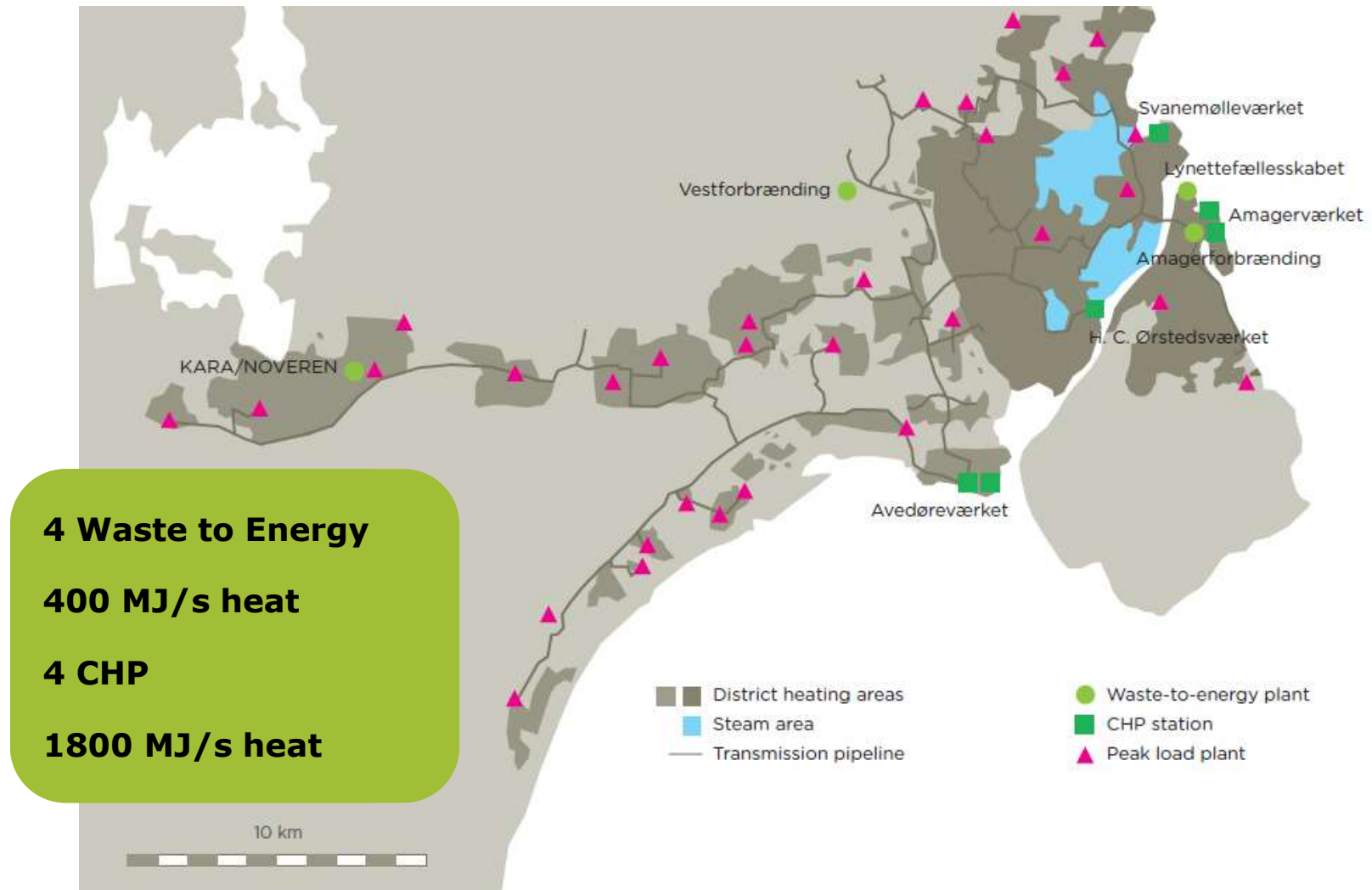
- M.Sc. Political Science, University of Aarhus, Denmark
- Analyst at Ramboll Energy

# CASE COPENHAGEN DH NETWORK





# CASE COPENHAGEN DH NETWORK



# CHALLENGES / OPPORTUNITIES

## CO2 neutral in 2025

Security  
of  
supply

Urban  
development

Smart  
city

Sustain-  
ability

Socio-  
economy

Liberal  
Power  
Market

# ENERGY TRANSFORMATION

Biomass  
conversion

Geothermal

Fossil-free  
peak load

Thermal  
storages

Demand  
response

Waste handling

District  
Cooling

Low temp  
heat



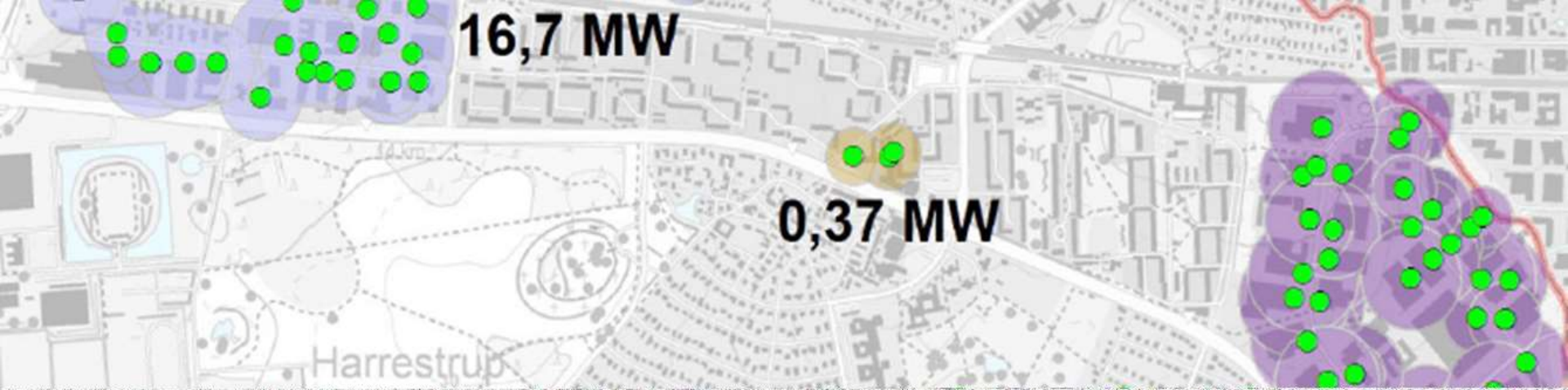
# THERMAL STORAGES

Smoothing production, lower peaks

Pit storages & heat accumulators

Centralised & decentralised





# ENERGY PLANNING

## MULTI-LEVEL

## SYNERGIES OF TECHNOLOGIES

## SUPPLY-DEMAND OPTIMUM

# PERSPECTIVES

Low to Zero  
emission

Tailor made  
solutions

Broader effort

# THANK YOU FOR YOUR TIME

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**RAMBOLL**

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2013/05/28