

# Transforming societies with data centre heat



Mark Bjornsgaard, CEO Deep Green

A man with a beard and sunglasses, wearing a green superhero suit with a glowing green chest light and a green cape, stands in the center of a server room aisle. The room is filled with rows of server racks on both sides, and the lighting is a deep green. The man's hands are on his hips, and he is looking directly at the camera.

# Transforming societies with data centre heat

Mark Bjornsgaard, CEO Deep Green

A man with a mustache and short brown hair is wearing a green superhero costume. He has green goggles and a glowing green emblem on his chest. He is pulling open his green shirt to reveal the emblem. He is standing in a server room with rows of server racks and bright overhead lights.

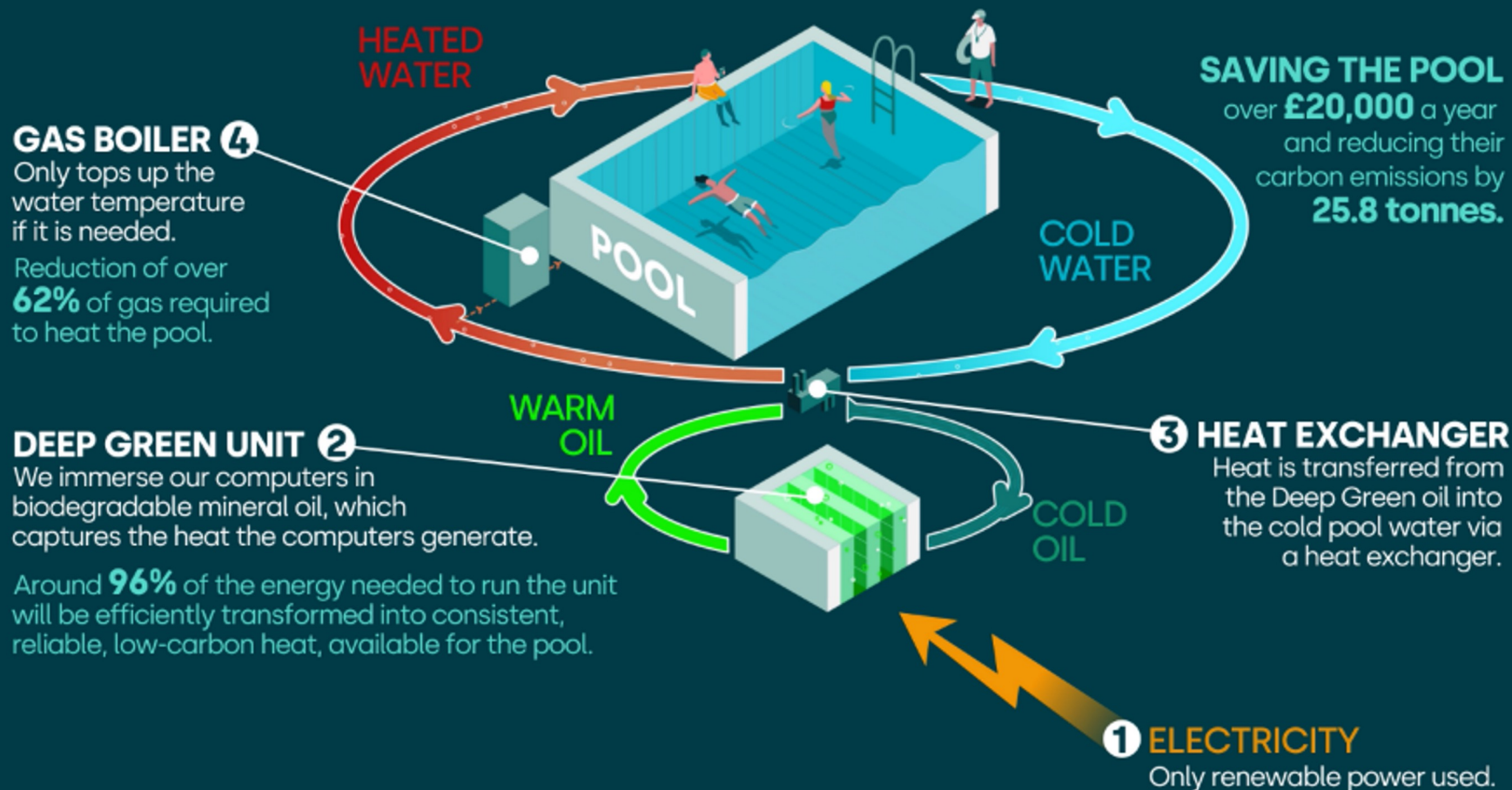
# Transforming societies with data centre heat

Mark Bjornsgaard, CEO Deep Green





# HOW DEEP GREEN HEATS A POOL



# Modelling a new mindset...

**Stranded  
power**

**Dark fibre**

**Fast  
deployments**

**Immersion**

**Modular**

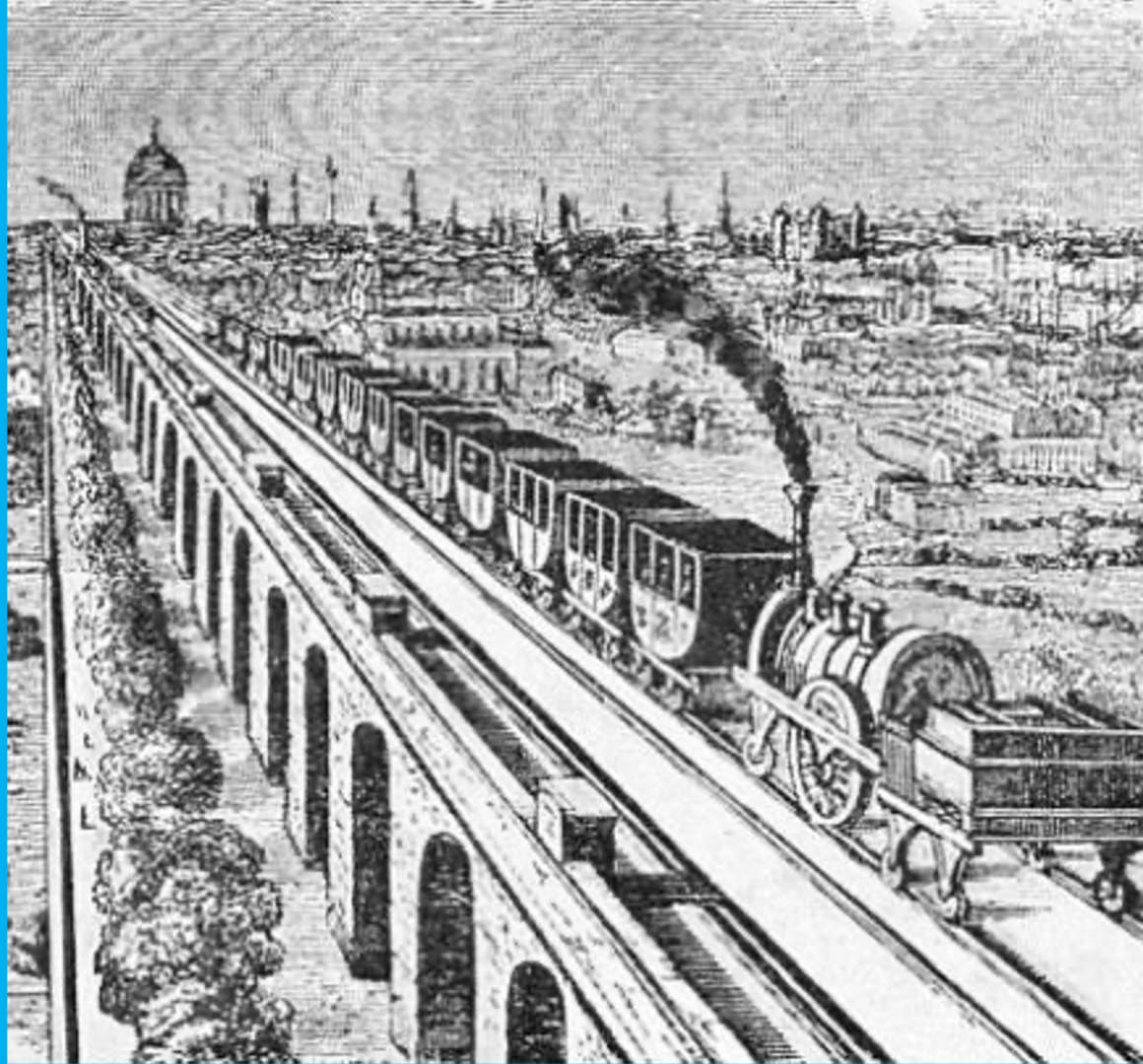


We imagine  
a time where  
data centres  
heat *all* of  
the homes of  
Europe...



**A mission as  
ambitious as  
the Victorian  
railway  
networks**

---



# Europe's Carbon Emissions

3%

Data centre

17%

Heating homes and spaces



Data centres  
**EVERYWHERE!**

“Excess heat in the EU alone amounts to 2,860 TWh/y, corresponding almost to the EU’s total energy demand for heat and hot water in residential and service sector buildings”.

---



# Most heat is in the wrong place....



Cement  
manufacturing



Steel  
production



Chemical  
manufacturing



Food  
production



Wastewater  
treatment  
plants

# The future is here...

It's just not evenly distributed...



# Data centres

**Portable assets**

**Easy to capture heat**

**Heat sinks improve the economics**

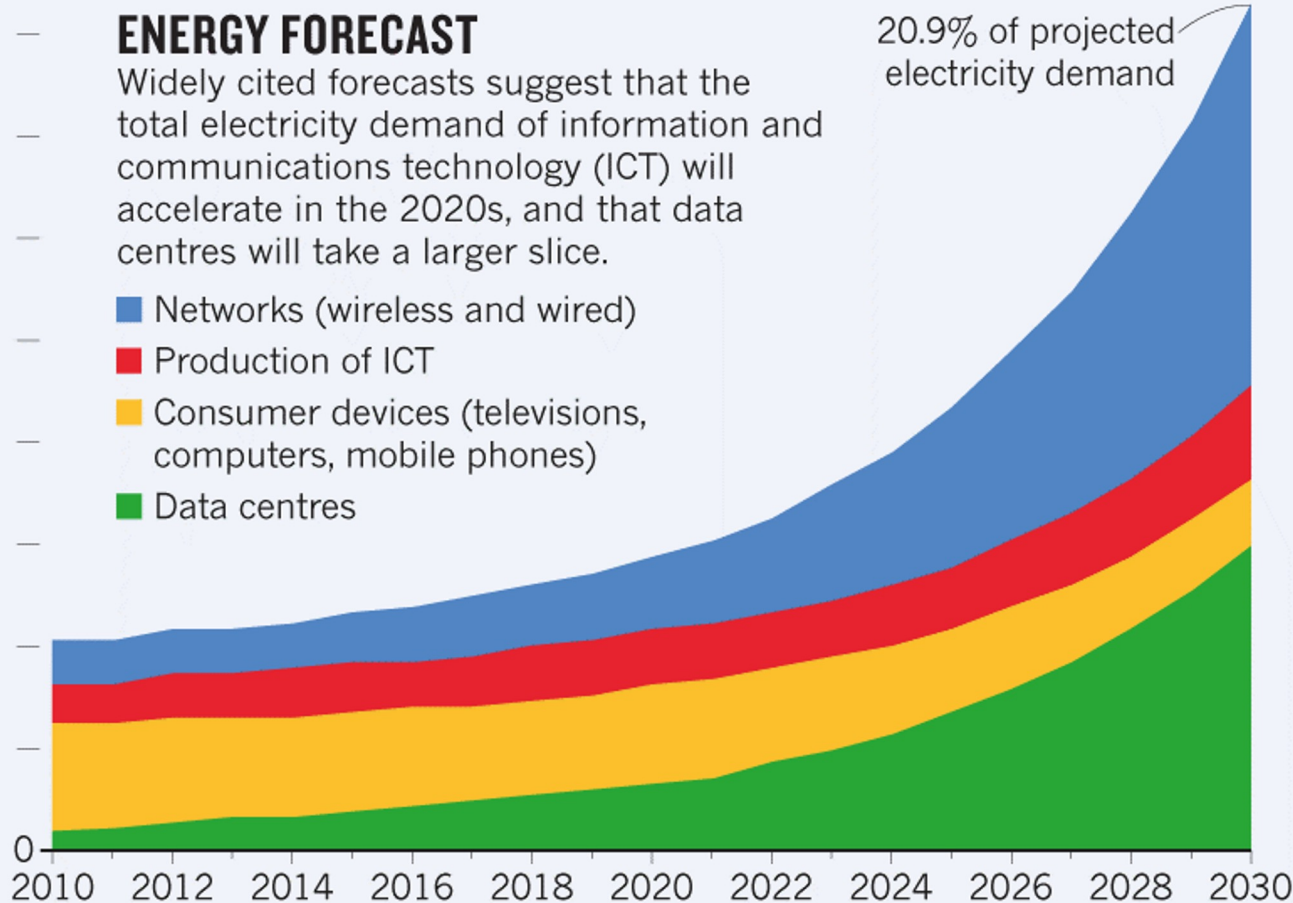
**Decentralising - edge migration**

## ENERGY FORECAST

Widely cited forecasts suggest that the total electricity demand of information and communications technology (ICT) will accelerate in the 2020s, and that data centres will take a larger slice.

- Networks (wireless and wired)
- Production of ICT
- Consumer devices (televisions, computers, mobile phones)
- Data centres

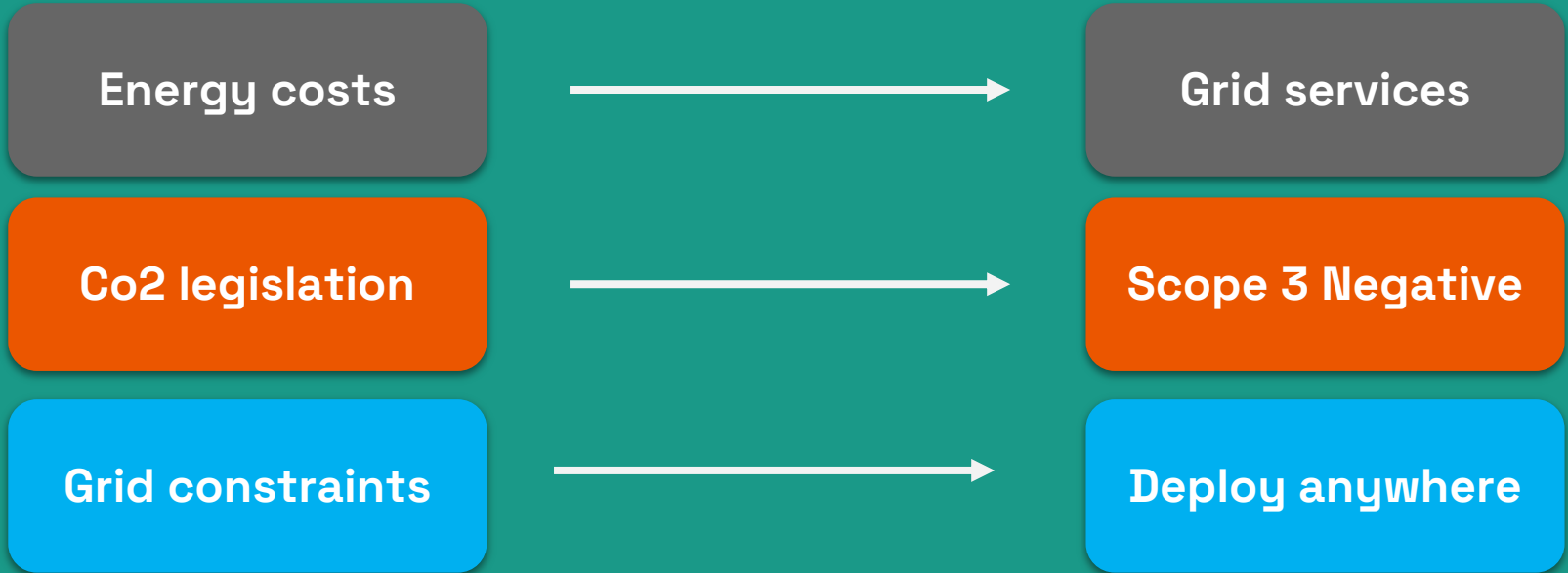
20.9% of projected electricity demand



The data centre industry is set to grow 10x by 2033...



# Heat recapture is a magic bullet...



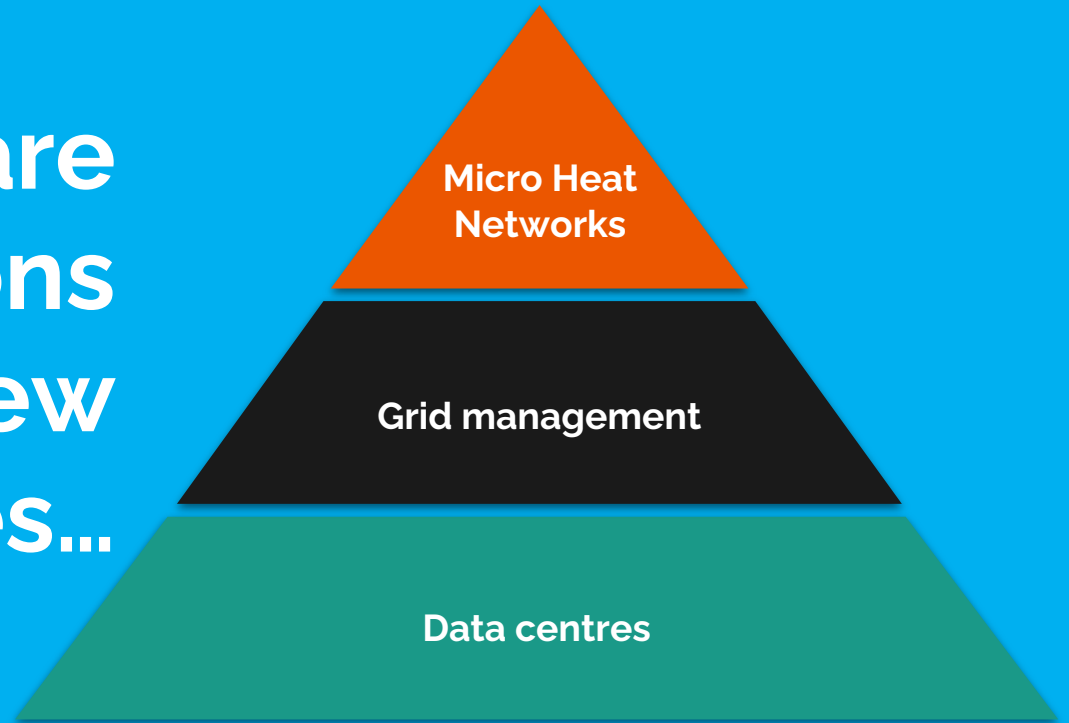
**The first steps  
on a journey  
which will span  
generations...**

---



**Data centres are  
the foundations  
of our new  
economies...**

---



# Thank you...

Web

[www.deepgreen.energy](http://www.deepgreen.energy)

Email

[mark@deepgreen.energy](mailto:mark@deepgreen.energy)

Discord

Deep Green Technologies

