



From Power Availability to First MW: Unlocking Faster Growth in the Nordics

PRESENTERS



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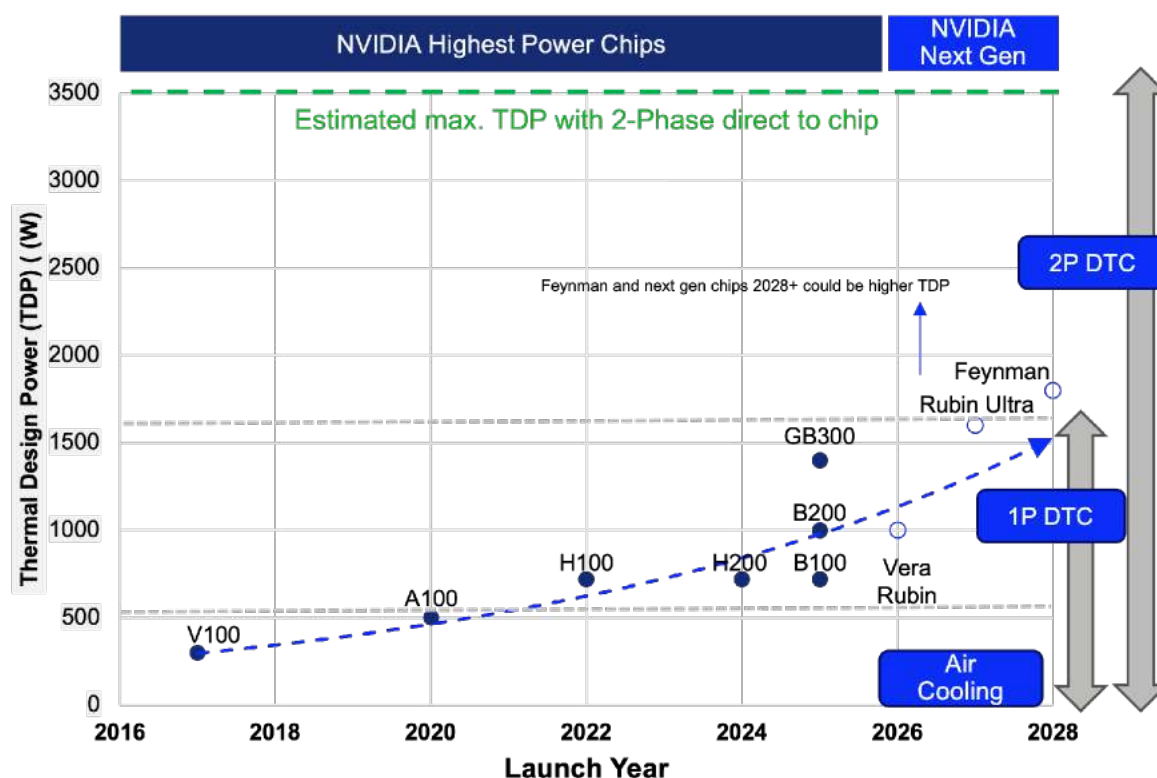
TOPICS

- Shift to Liquid Cooling
- Modular & Scalable Design
- Sustainability & Energy Efficiency
- AI-Driven Optimization
- Summary & Conclusions
- Q&A



The Data Center Thermal Landscape is Shifting

Rapidly Increasing Energy Demand at The Chip and Rack Level



Driving Needs for New Thermal Architecture

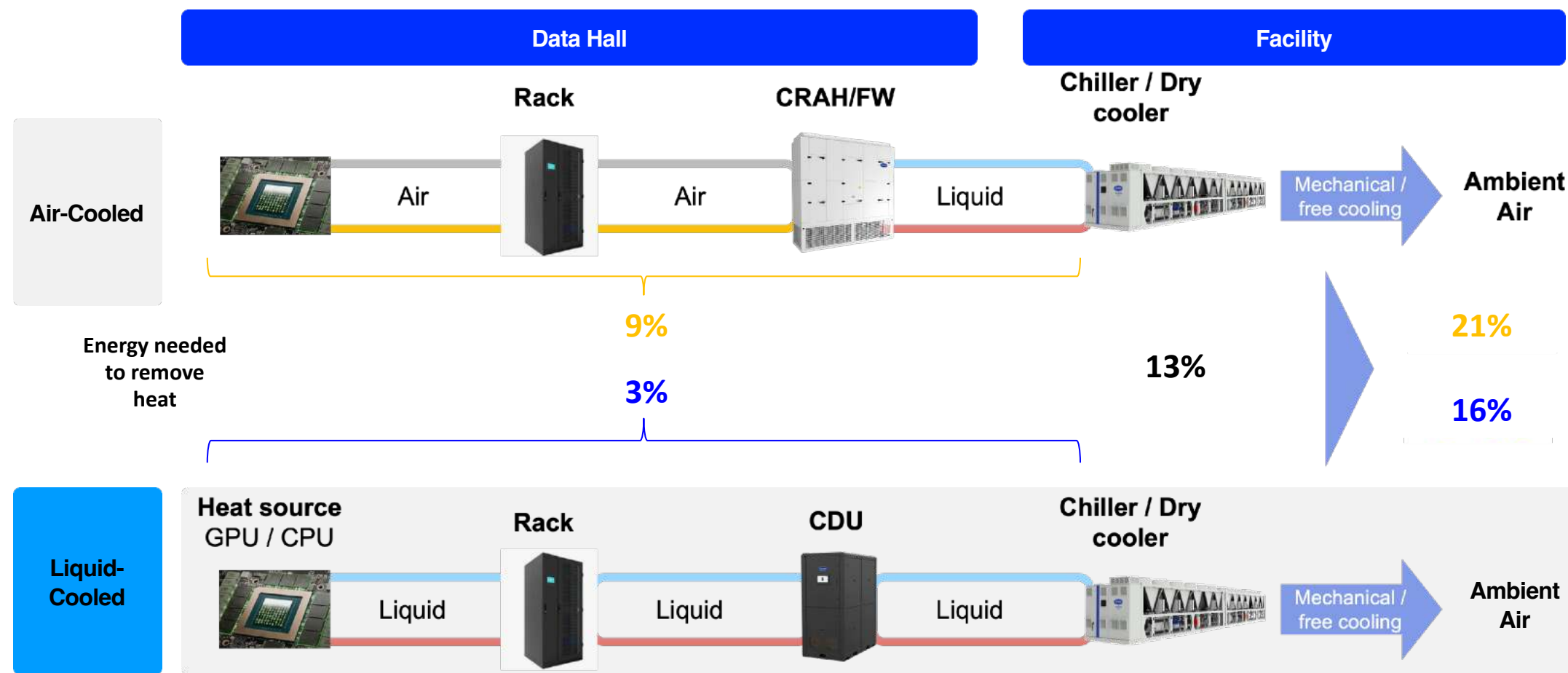
Liquid-Cooled vs Air-Cooled

~75% reduction in cost to move energy
(1kW -> 0.26kW per rack)

Modular Designs to address scale and deployment time challenges

AI Optimization to handle increasing complexity

Liquid-Cooling provides significant advantages compared to Air-Cooling



Solving the Scale Challenge through Integrated Modular Solutions

Challenge



Complexity



Energy Load



Deployment Time

Carrier Modular Solutions



Streamlined Installation

Modular, Pre-Integrated Solutions

Faster and Predictable Deployments

AI demand is accelerating – Infrastructure must keep pace

Why now ?



AI drives
Extreme power
density



Grid access
Is becoming a
bottleneck



Sustainability
Targets remain
non-negotiable

The answer

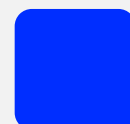
**Deploy capacity
faster**



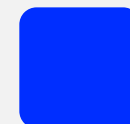
What modular delivers?



50% Faster
Deployment



Scale on demand
As capacity grows



AI-Ready design
Designed & tested

Modular design aligns infrastructure delivery with pace of AI demand

Nordics Datacenters @ Rural Areas



Greener Data Centers requires Greener Thinking



Energy Efficiency is No Longer Optional



Higher Electricity Consumption =
Higher CO2 emissions



Cooling Systems =
Up to 40% of Total Energy Use

iMasons 2026 Key Priority Areas

Embodied Carbon
across Data Center

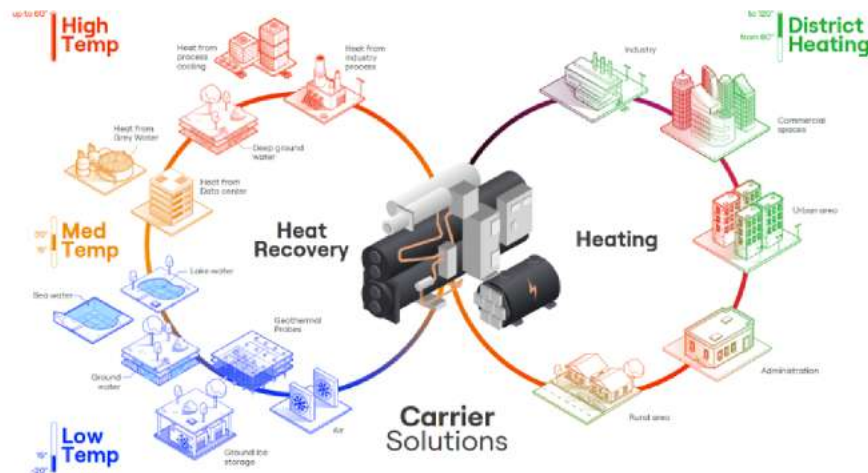
- Building materials
- Equipment materials
- Water

Carbon Intensity of Source Power

Heat Recovery — Essential to Future Data Centers

Data Centers Can

- Produce heat that can be Recovered, Recycled & Repurposed
- Benefit communities & neighborhoods enabled by smart urbanization



Carrier Data Center Heat Pump Solutions enabling Sustainability Goals across Europe

European City A

16°C -> 85°C
5.5 MW of heating



4x AquaForce 61XWHZE
Carrier Smart Algorithms

European City B

19°C -> 81°C
1.85 MW of heating



2x 61XWH-ZE10

European City C

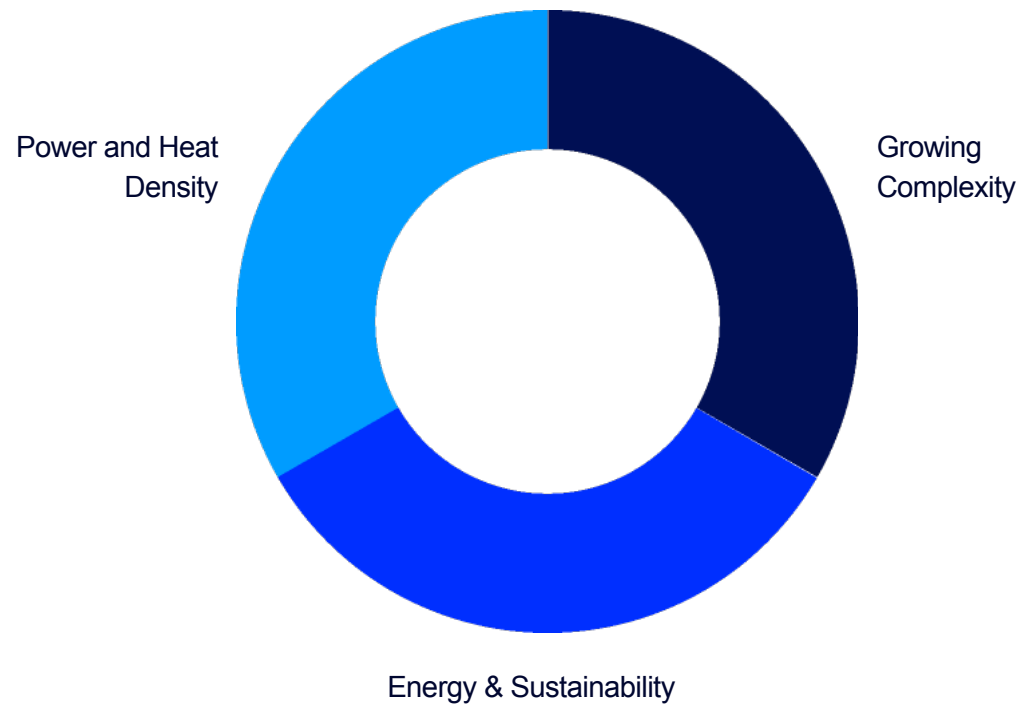
Up to 80°C
12 MW of heating



8x AquaForce 61XWHZE
Carrier Smart Algorithms

Why AI for Cooling Optimization?

x of Modern Data Centers



Opportunity



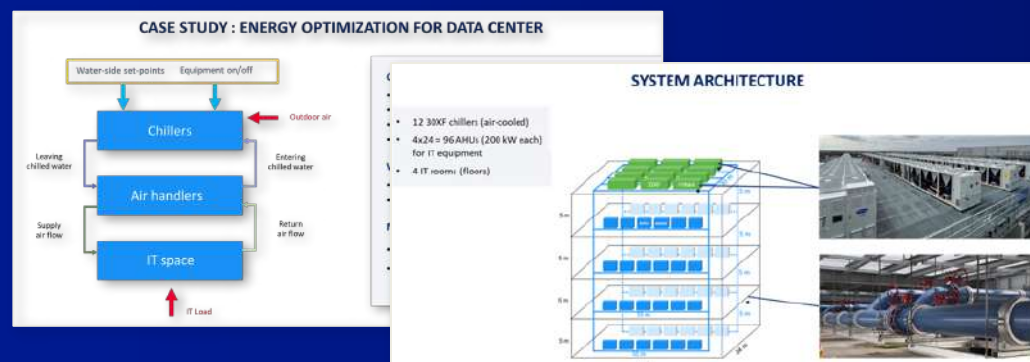
Provides unprecedented opportunities for optimization



Requires both Physics-Based and AI-Driven

Improved Design and Operation through AI-Driven Optimization

Physics-Based Models



System Architecture

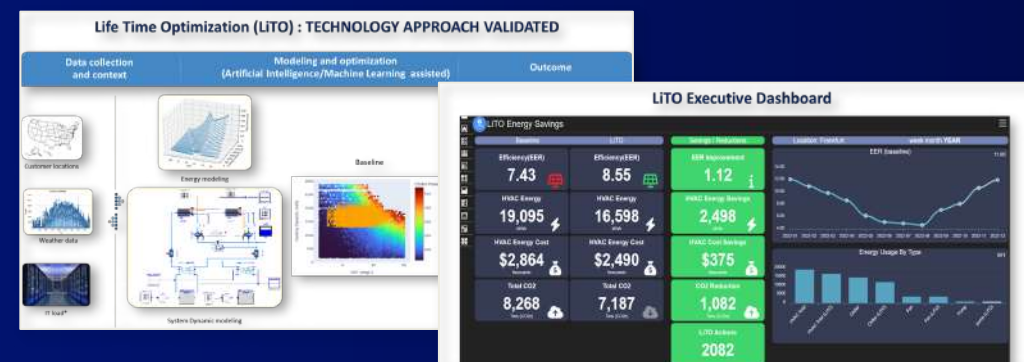
- Chiller On/Off Choices and Capacity Set Points
- Water Temperature / Flow Rates

Support IT Load Requirement

Predict Energy Saving

Power Failure scenario

AI Assisted



Real-Time Optimization

- Customer Locations, Weather Data, IT Load
- Energy and System Dynamic Modeling

Verified and Consistent Energy Saving (~10%)

Summary & Conclusions

01

Heat loads are driving the need for reimagining of data centers

02

Optimizing the future of data centers through QuantumLeap

03

Scaling data centers through rapid and predictable modular solutions

04

Enabling heat recovery to ensure long-term viability of data centers

Visit Carrier in our booth to learn more!

Q&A

Thank You

