



Healthcare of the **FUTURE**

Resolving the SMART Hospitals Paradox

Resilient • Care-centric • Efficient • Sustainable

Presented by: David Evans: Global Segment Director

Hospitals of the future in Denmark

- resolving the SMART Hospitals paradox



National strongholds ▾

Danish solutions

Healthcare in Numbers

News & Pub

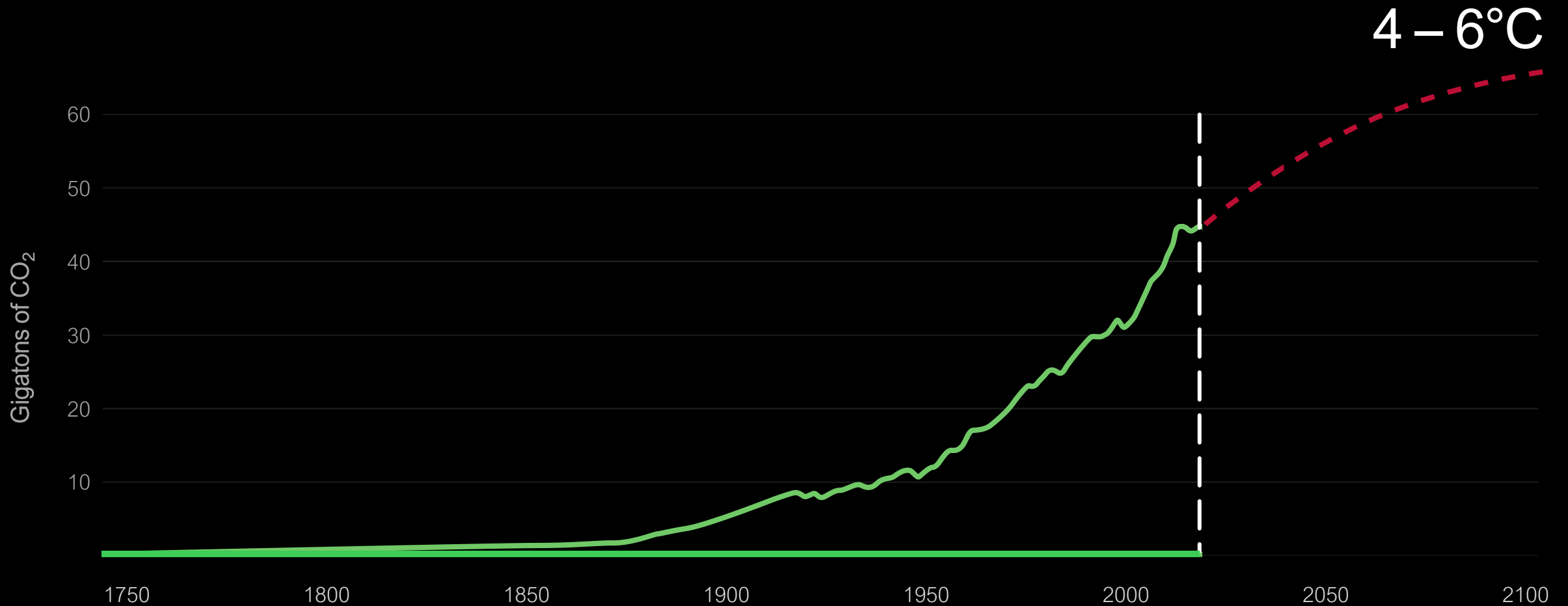
Sustainability

Denmark is dedicated to transitioning to a green and sustainable healthcare sector, where both public institutions and private companies take responsibility for cultivating innovative solutions and practices, while maintaining a resilient and high-quality healthcare sector.

Declaration on Climate and Health delivers a breakthrough moment

At COP28, 124 countries endorsed a new Declaration on Climate and Health⁶. The Declaration, presented at the first ever Health Day at a COP, marks the first time that the health impacts of climate change have taken centre stage in 28 years of UN climate talks. While the Declaration is not legally binding, the Declaration serves as a voluntary call to action to protect communities and prepare healthcare systems to cope with climate-related health impacts such as extreme heat, air pollution and infectious diseases.

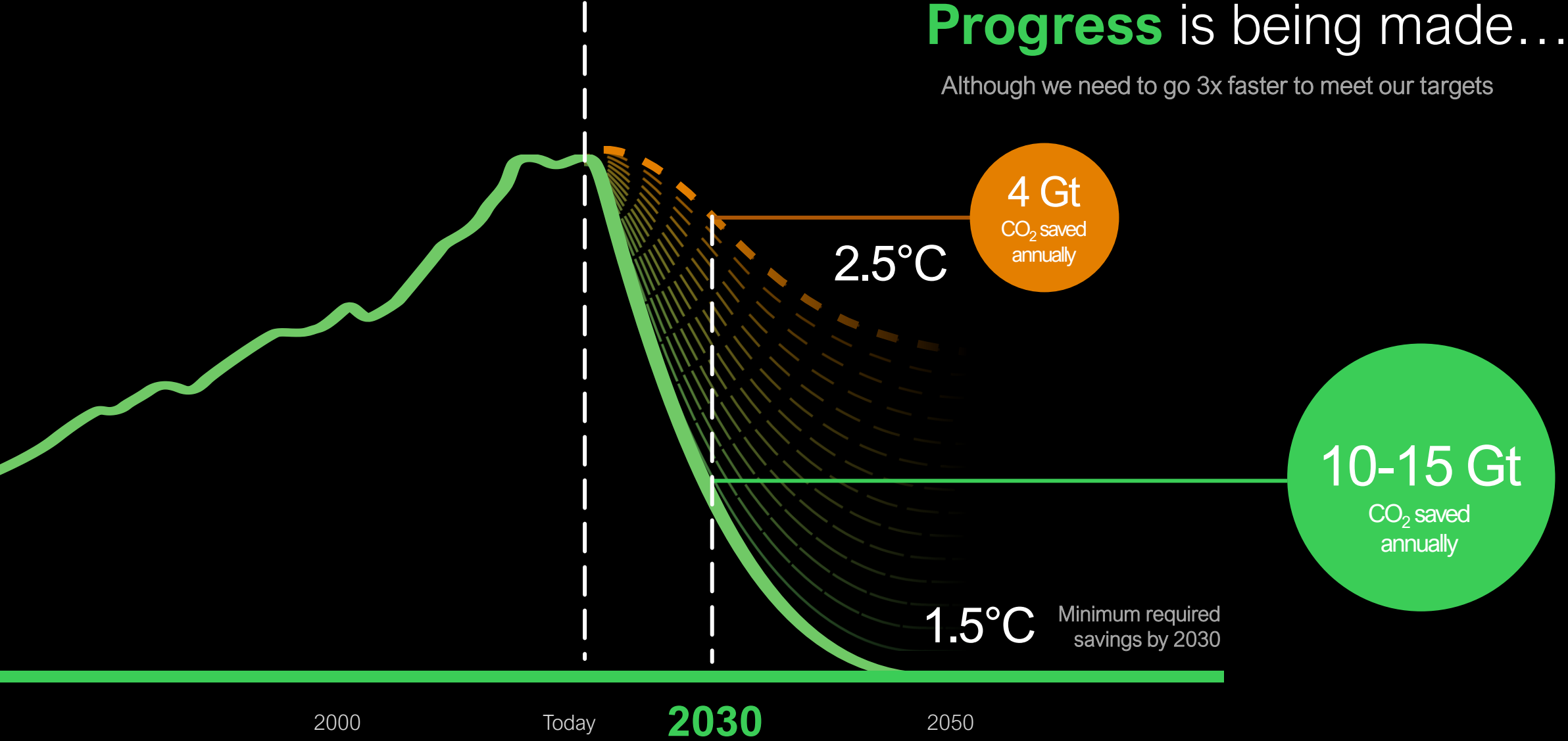
To tackle the climate crisis, we must **decarbonize**



Global Carbon Budget (2019); IPCC (2020), ETC, Making clean electrification possible (2021), Schneider Electric Research Institute
View includes industry process emissions, changes in land uses, such as deforestation

Progress is being made...

Although we need to go 3x faster to meet our targets



The annual emissions equivalent of:

514

coal-fired power plants¹

(6% Danish emissions)



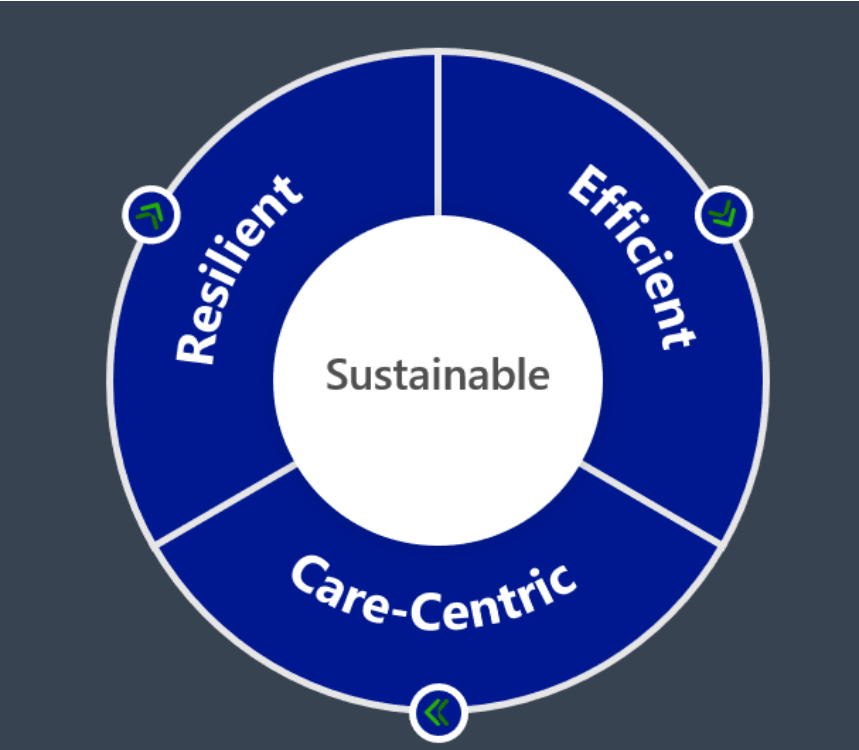
¹ Health Care without Harm and ARUP, 2019: "Health Care's Climate Footprint."

Supporting your journey to

All-Electric

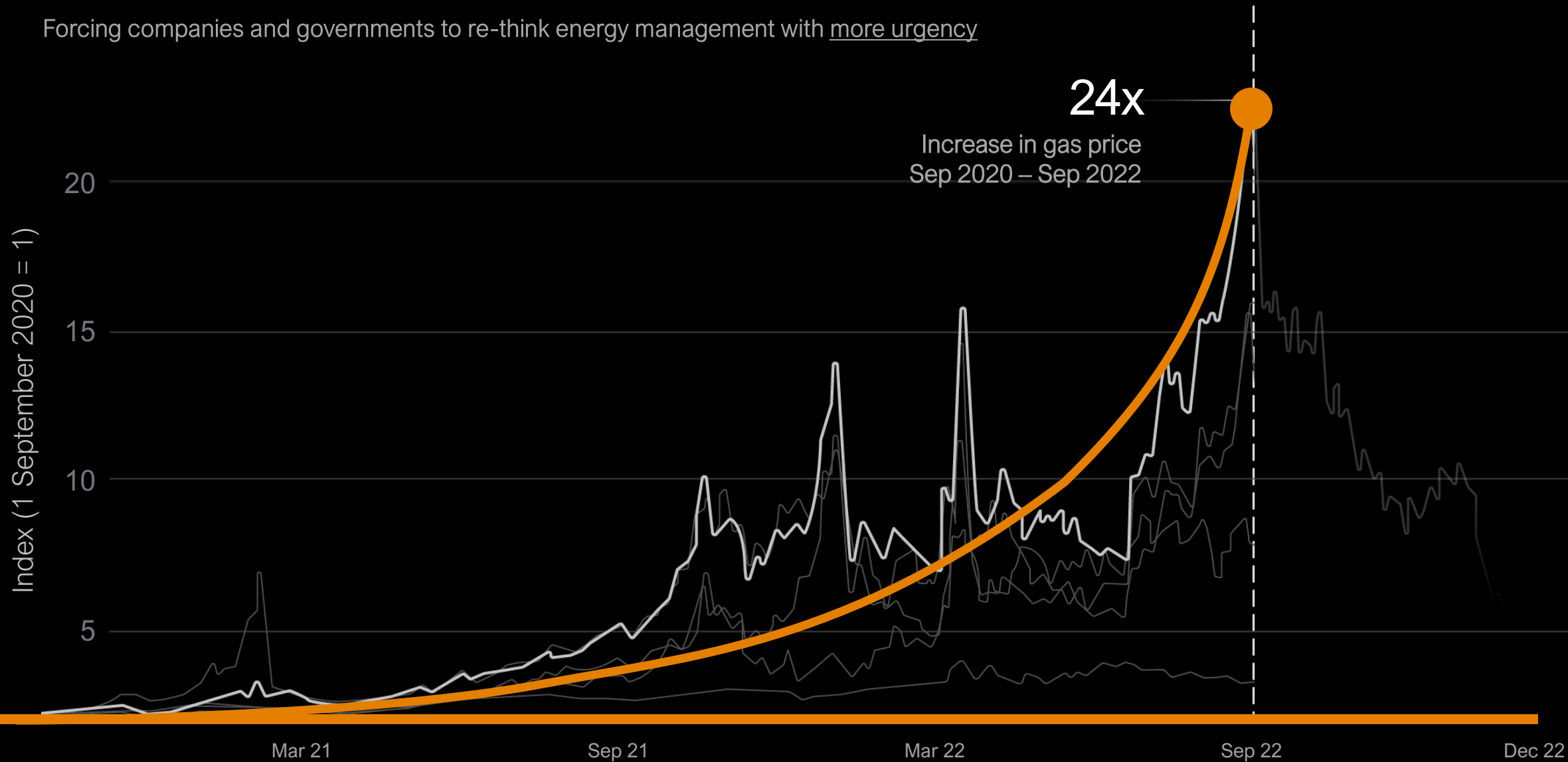
Healthcare Campus

From building a new hospital to a campus expansion or deep retrofit, Schneider Electric supports your electrification journey, throughout the building lifecycle.



We are also facing increasing **energy volatility**

Forcing companies and governments to re-think energy management with more urgency



European gas reached a multiple of almost 25 between Sept '20 and Sept '22

Key challenges for sustainable **transformation**



Electrified estates will need to **optimise** energy consumption and **maximise** onsite generation

4 Key questions:

Is there enough **power in the grid** or copper in the ground to cope with increased demand?

Who is going to **manage & maintain** these complex electrical estates?

Can we electrify without compromising **resilience**?

Can we achieve this whilst **enhancing patient & staff experience**?

Enabling the healthcare facility ahead of its time

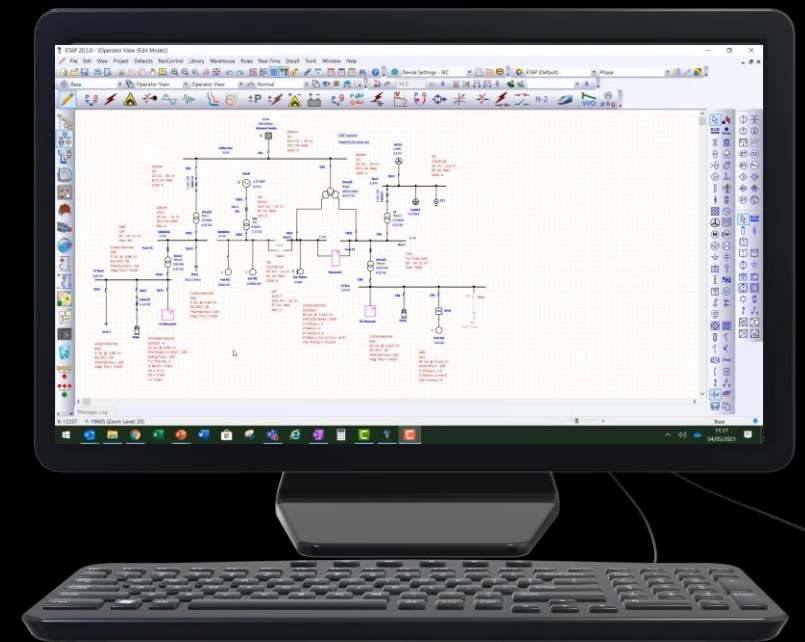


Is a complex reality



The Modernization Journey

1. Migrating to an electrified campus



Our partnership brings market leading technical and operational capabilities to support the building of Smart hospitals



Decades
of research &
development

Breadth and
interoperability of
our technical stack

Market leading
hardware and
sensor capability

Build on the
ubiquity of a
Teams front end

Trusted by
AI leaders
like OpenAI



Combining IT & OT to drive operational efficiencies and enhanced user experiences

Illustrative Prioritised Capabilities

RESILIENT

Integrated Building Operation Platform

Security Management

Data Driven Asset Maintenance

Digital Standards

CARE CENTRIC

Integrated Patient Room Experience

Ambient Voice Recognition

Connection to virtual wards

Clinical Space Management

EFFICIENT

Digitization & Electrification

Project Master Planning & Delivery Optimization

Generative AI & Automation

Electrical & Mechanical Digital Twins

SUSTAINABLE

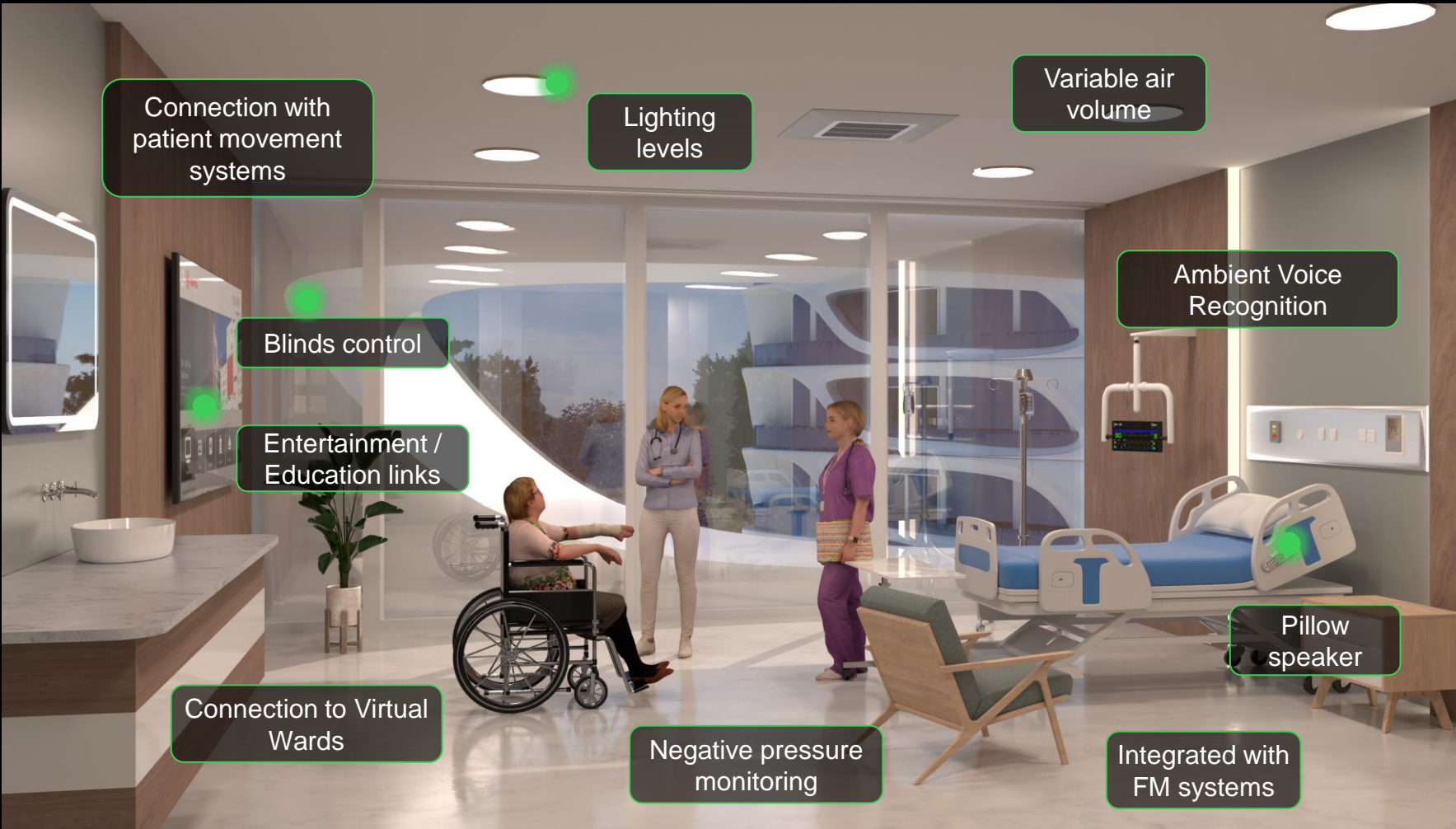
Sustainability & Decarbonization Strategies

Grid Management & Optimization

AI predictive energy consumption & tracking

Critical Power & Energy Management

Delivering an integrated patient experience with IT / OT Integration

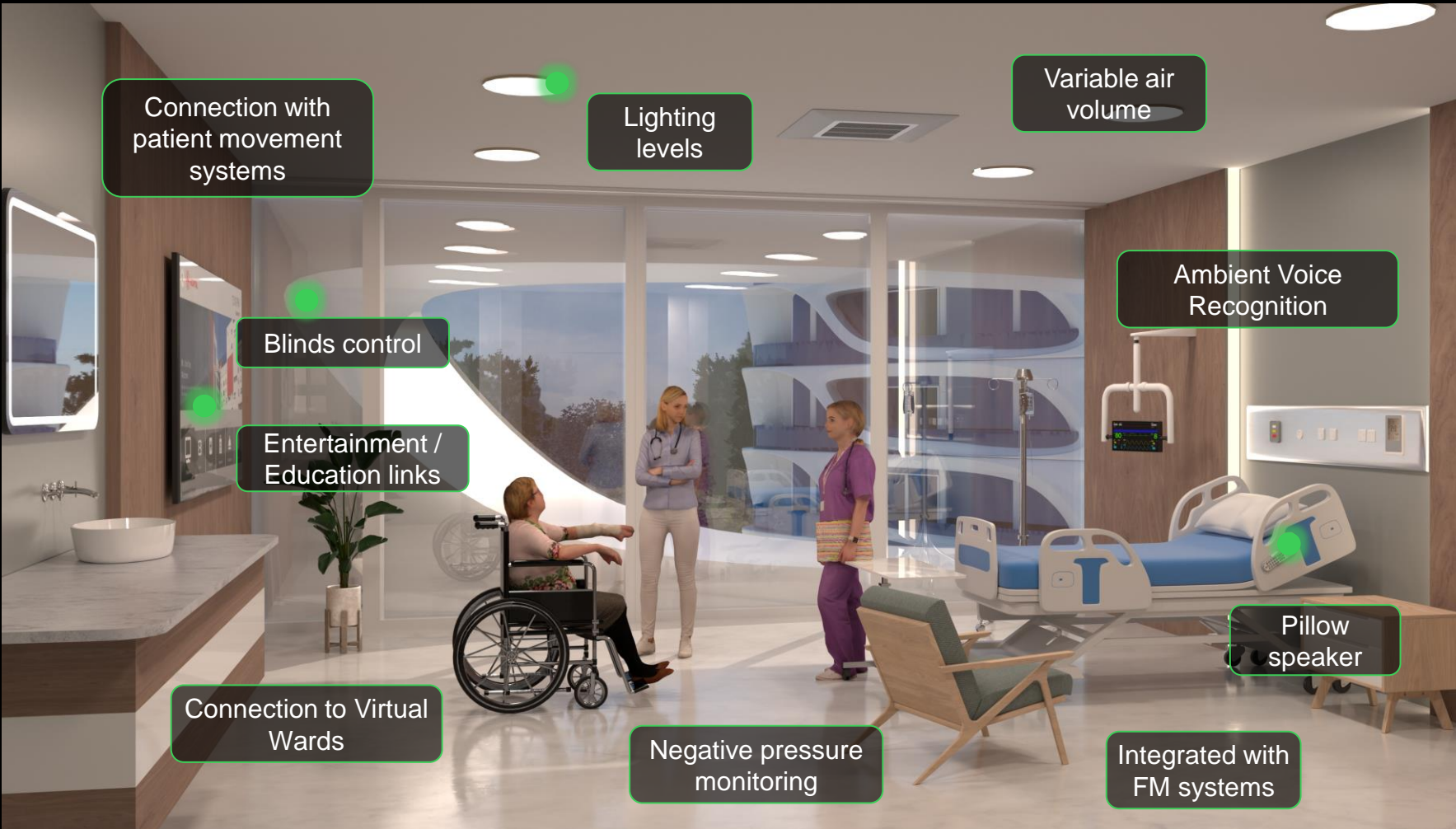


- Doctor / nurse displays
- Nurse call systems
- CAFM systems
- Bed Management
- Occupancy management
- Patient scheduling
- Staff rotas / supervision ratios
- Electronic Patient Records
- Patient / staff security

Life Is On

Schneider
Electric

Delivering an integrated patient experience with IT / OT Integration



Life Is On

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Electric

EcoStruxure™
Innovation At Every Level

Hospitals of the future in Denmark – Squaring the Circle - resolving the SMART Hospitals paradox

Digital

For Efficiency

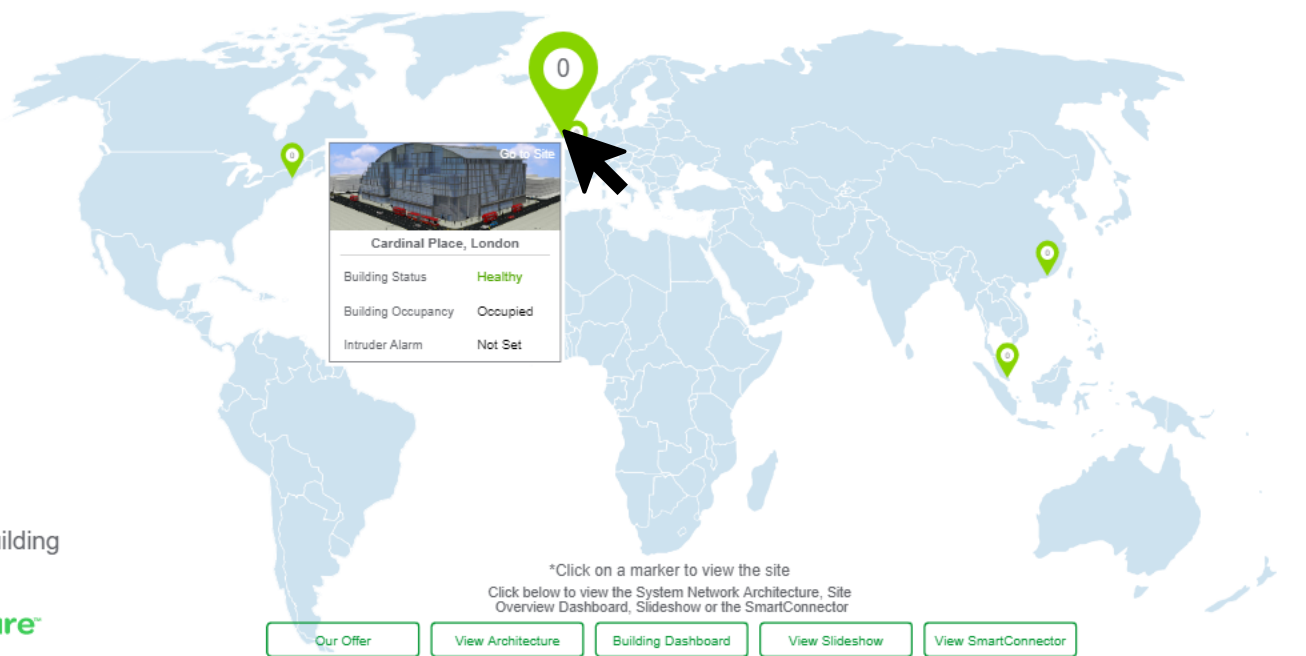


Electric

For Decarbonization

Adopt non negotiable digital design standards –
and **NEVER EVER** compromise

 *View the Demo script here



EcoXpert™
*Register your lead here

Key:
● Healthy
● In Fault
0 Number of Alarms

*Click here to view Segment Dashboards

[Education Dashboard](#)

[Retail Dashboard](#)

Welcome to the EcoStruxure™ Building Global Demo



Standard 5 15  

Showing 21 / 39 

53 BU	AHU VSD Reset	Source	System alarm ID	Acknowledged by
	Hong Kong - AHU VSD Trip	/Server 1/.../AHU VSD Trip	Timestamp	Category
71	Meeting Room Fire Alarm Smoke Sensor Reset	Source	System alarm ID	Acknowledged by
	Meeting Room Fire Alarm Fire Detector	/Serv.../Meeting Room Fire Alarm Fire Dete...	Timestamp	Category
55	AHU Critical Alarm Reset	Source	System alarm ID	Acknowledged by
	Paris - AHU Critical Alarm	/Server 1/.../AHU Critical Alarm	Timestamp	Category

- Building Occupancy: Occupied
- Building Mode: Normal
- Intruder Alarm: Not Set
- AHU: Running
- Power Mode: Medium
- Power: 269 kW
- Critical Alarms: 0

Weather: FORECAST Night
 OUTSIDE TEMP: 12.51 °C
 WIND: 48 KM/H
 HUMIDITY: 80%



Standard 5 15 Showing 21 / 39

53	BU AHU VSD Reset Hong Kong - AHU VSD Trip (1) 4 days ago	Source /Server 1/.../AHU VSD Trip	System alarm ID	Acknowledged by
71	Meeting Room Fire Alarm Smoke Sensor Reset Meeting Room Fire Alarm Fire Detector (1) 5 days ago	Source /Serv.../Meeting Room Fire Alarm Fire Dete...	Timestamp 03/27/2020 8:54:23 AM	Category HVAC Alarms
55	AHU Critical Alarm Reset Paris - AHU Critical Alarm	Source /Server 1/.../AHU Critical Alarm	Timestamp 03/26/2020 7:58:44 AM	Category Fire Alarm

- HVAC Menu
- Floor Plan
 - AHU
 - Plant Equipment
 - VAV
 - Meeting Room
 - Schedules
 - Trends
 - Building Advisor
 - Building Advisor Report



Standard Showing 21 / 39

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HVAC Menu

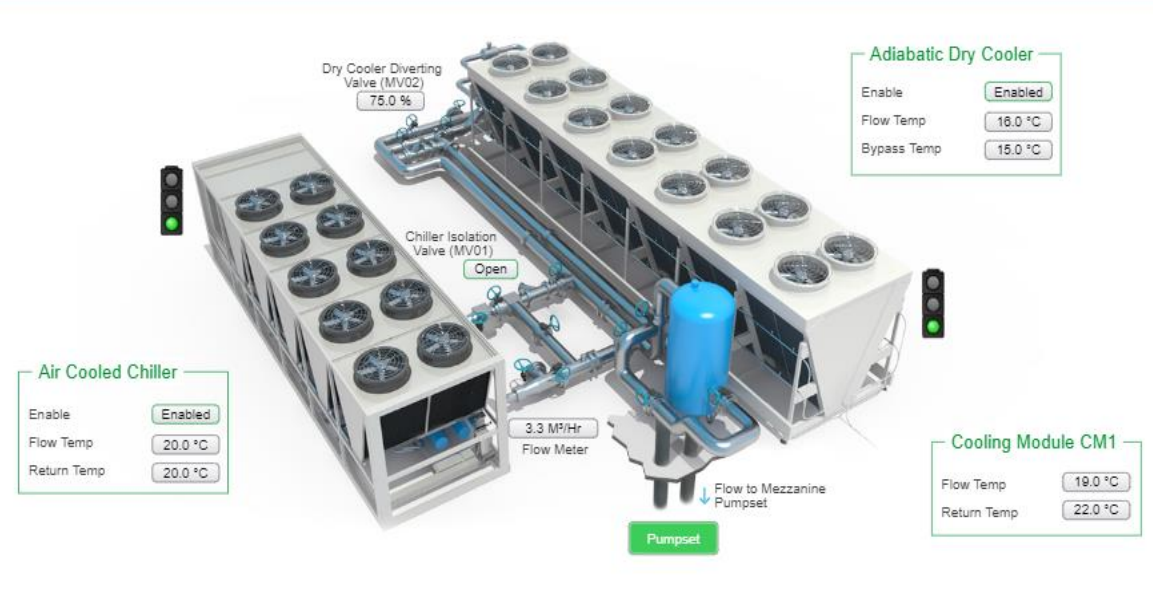
- Floor Plan
- AHU
- Plant Equipment
 - Boiler System
 - Chiller System** >
 - Plate Heat Exchanger
 - CRAH Unit
- VAV
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- Building Advisor Report

Documents

- Notes
- Trend

critical 0

- Air Cooled Chiller
- Adiabatic Dry Cooler
- Pumpset



Standard 5 15 Showing 21 / 39

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