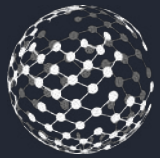


HYPERCO\_



# DATACENTER FORUM

**Building sustainable data center  
real estate portfolio**

ARI KURVI

19 MAY 2022



# Agenda

## Hyperco introduction

Nordic data center real estate portfolio

Sustainable data centers: Self-build vs. Build-to-suit

# Hyperco Nordic team has developed +200MW of hyperscale capacity and conducted transactions worth c. EUR 1bn

## Core team



**Timo Pohjanpalo**  
CEO

Team lead for NREP commercial transaction team

Executed **+400M€** RE transactions



**Aleksi Taipale**  
Partner

NREP Venture Capital fund lead, investment manager, technology lead

Executed **+200M€** RE & VC transactions



**Ville Vartiainen**  
Partner, site acquisition

NREP investment manager, lead in commercial, light industrial and sustainability

Executed **+300M€** RE transactions



**Ari Kurvi**  
Chief development officer, Sustainability

Site manager & developer of Google and Yandex hyperscale sites in the Nordic region

Developed and managed sites with **+200MW** of hyperscale capacity



[Start date Q3/22]  
**Chief Commercial Officer**

Former senior sales executive at major data center provider

Focus on large data center operators & tenants



[Start date Q4/22]  
**Vice President of Sales**

Former senior sales operation executive at major data center provider

Focus delivering projects on time according to customer spec

## Key advisors



**Timo Leino**

Investor, CoB  
Sr advisor Triton and Booz, MD JP Morgan

**Triton**



**Hadley Dean**

Advisor  
CEO of MDC2, ex-MD at Colliers



**Kari Kauniskangas**

Investor, MoB  
Ex-CEO of YIT construction



## Team experience



**We believe** that the future of data centers lies in a truly sustainable approach

**Our mission** is not only to enable best-in-class digital infrastructure solutions for our tenants, but also to make value creating investments into sustainability

**40%**

Global energy consumed by real estate

**50%**

Use of global raw materials for buildings

**2%**

Share of global electricity use by data centers

**56 TWh**

Annual waste heat from EU data centers

### Example initiatives

- Waste heat recovery
- Renewable sources of electricity
- Energy use efficiency improvement
- Renewable and upcycled materials
- Codification through sustainability certification
- ICA Founding Company







“The ICA represents an unprecedented collaboration between leading digital infrastructure companies **to accelerate our journey to carbon neutrality**. Today, we are combining forces to compound the efforts of these firms to make meaningful and sustained progress toward that goal.”



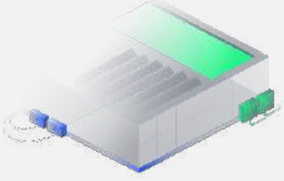
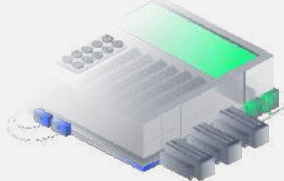
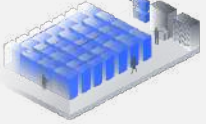
## ICA Founding Companies

Hyperscaler					Product				Finance
Colocation					Service				Power Utility

# Hyperco is a long-term development partner for large scale data center users

## Data center capacity solutions offered by Hyperco

Based on customer preference, Hyperco is able to offer various levels of data center solutions:

(i) Powered shell	(ii) Built-to-suit	(iii) Operated data center
		
<ul style="list-style-type: none"><li>▪ Plot</li><li>▪ Building (walls / roof)</li><li>▪ Electricity connection</li></ul>	<ul style="list-style-type: none"><li>▪ Plot</li><li>▪ Building (walls / roof)</li><li>▪ Electricity connection to grid</li><li>▪ UPS systems</li><li>▪ Ventilation and cooling systems</li><li>▪ Fire protection systems</li><li>▪ Heat recovery systems</li><li>▪ Security systems</li><li>▪ Back-up energy system</li></ul>	<ul style="list-style-type: none"><li>▪ Plot</li><li>▪ Building (walls / roof)</li><li>▪ Electricity connection to grid</li><li>▪ UPS systems</li><li>▪ Ventilation and cooling systems</li><li>▪ Fire protection systems</li><li>▪ Heat recovery systems</li><li>▪ Security systems</li><li>▪ Back-up energy system</li><li>▪ Data center operations (facility)</li></ul>

In addition to searching best sites to meet customer requirements, Hyperco has pre-vetted inventory of sites with strong electricity, fiber and district heating connectivity and with modular expansion potential in Nordic countries:

- Edge (1-10 MW): Central locations in capital cities
- Cloud region (10-50 MW): Metropolitan areas of capital cities
- Centralized (50+MW): Various locations

## Geographies in scope



**Legend**

- Local offices
- Primary focus geographies
- Customer demand driven





Hyperco invests in standing assets, development projects as well as data center related infrastructure projects

### Hyperco target investment types

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#### Standing assets

- Direct data center asset purchase
- Sale & leaseback

#### Development projects

- Greenfield developments
- Extensions of current data center
- Modernization of current assets
- Sustainable materials (e.g., wood)

#### Infrastructure

- Waste heat recovery systems
- Connectivity investments (e.g. sea cables)
- Sustainable building projects

# Hyperco is funded by reputable and long-term institutional investors

## NREP at a glance

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- **Leading urban developer** in Nordic capital regions with **strong technology and sustainability focus**
- **+350 professionals** across the Nordic countries
- **Ca. EUR 6 bln AuM, 11 Funds raised** and +300 real estate investments
- NREP is a serial operating platform builder in the Nordics through its proprietary products:
  - Logicenters (Modern logistics)
  - Juli (Residential-to-let)
  - Noli Studios (Serviced living)
  - UMEUS (Student housing)
  - Plushusene (Senior co-living)
  - Altura (Care homes)



## Varma at a glance

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- **Significant Finnish pension company**, with ca. 900,000 individuals with active pension plans
- **+550 professionals** across the company
- **Ca. EUR 50 bln AuM**
  - Investments within direct real estate, joint ventures, funds, stocks, stock instruments and derivatives, debt facilities, and other loans
- Varma is built around strong values and is focused on sustainability and improving society
  - Visionary in sustainability, carbon neutrality in its investments by 2035
  - Signatory of UN's Principles for Responsible Investment
  - Main competitive strengths focused on responsible and societally beneficial investments





# Agenda

Hyperco introduction

**Nordic data center real estate portfolio**

Sustainable data centers: Self-build vs. Build-to-suit

# Data Center real estate in the Nordics: Fastest-growing segment & favorable location characteristics

## Data center segment

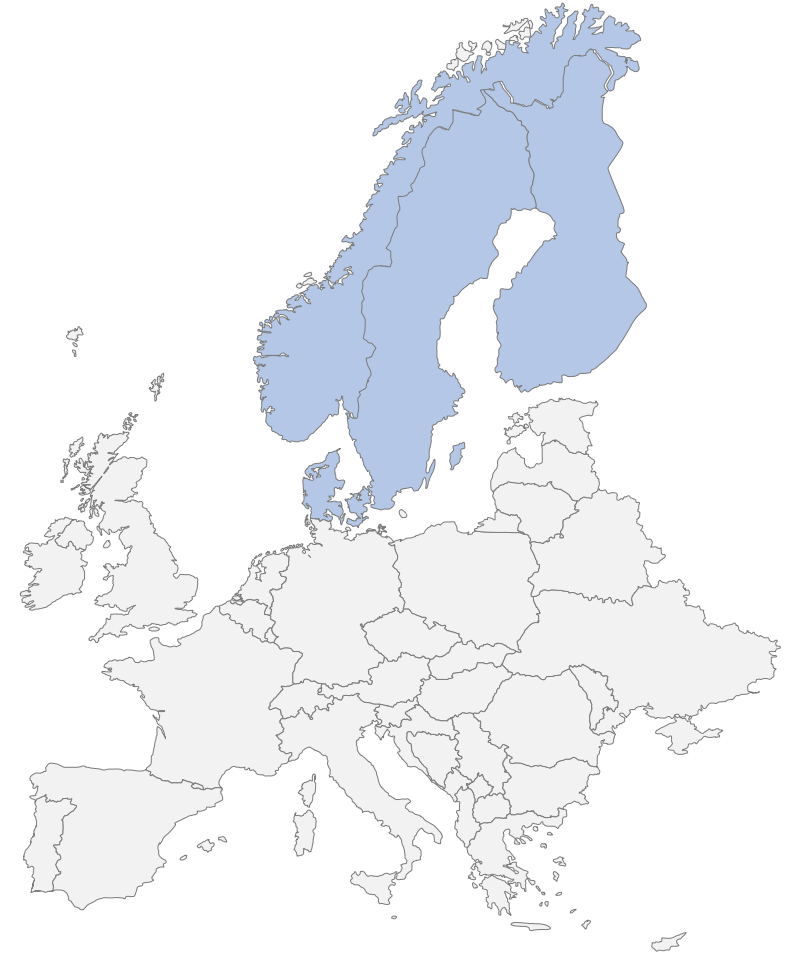
### Fastest-growing real estate segment – fulfills all key criteria

- Very defensive asset class with long leases and low correlation to GDP development
- Typically long leases and stable tenants
- Rapid growth in underlying data and network traffic – Nordics have favorable location characteristics that is driving data center investment volume
- Data centers have reacted positively to tech adoption during Covid-19 pandemic and are likely to perform well during the longer term

## Nordic market

### Nascent but attractive markets

- Finland and Nordics are an optimal location: cheap energy, politically and naturally stable economies, educated labor and strong data network infrastructure to connect to Central Europe and US
- Price and stability of electricity, combined with high share of renewable energy sources, makes the Nordics an optimal location to place data centers



# Agenda

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**Sustainable data centers: Self-build vs. Build-to-suit**



# Large data center users face multiple development challenges across the globe

## Current self-build challenges

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### Plot/zoning

- Where to find
- Correct for purpose
- Connection to DSO or TSO
- Water, wastewater, rainwater etc connections
- Heat reuse opportunities

### Time-to-market

- When approved
- Complaints
- DSO, TSO contracts
- Municipality connections and contracts
- Heat reuse negotiations

### Sustainability

- Not core competence
- Materials and local knowhow
- Legal requirements
- Time to explore all options





# Local data center development partner can address multiple challenges

## Real estate developer can

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### Plot/zoning

- ✓ Find available plot/area
- ✓ Local contacts to municipalities
- ✓ Local contact to DSO and TSO
- ✓ Contacts to local energy companies

### Time

- ✓ Local supply chain and management
- ✓ Local vendors and materials
- ✓ Contractor management locally
- ✓ Contract for heat sell
- ✓ TSO,DSO contracts

### Sustainability

- ✓ Excess heat recovery systems
- ✓ Connectivity investments (e.g. sea cables)
- ✓ Sustainable building design and projects
- ✓ Materials like wood



# Data Center Co2 emissions

## Data Center real estate emission categorization

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### Scope 1

- Emissions are **direct** GHG emissions from sources controlled or owned by an organization

### Scope 2

- Emissions are **indirect** GHG emissions associated with the purchase of electricity, steam, heat, or cooling

### Scope 3

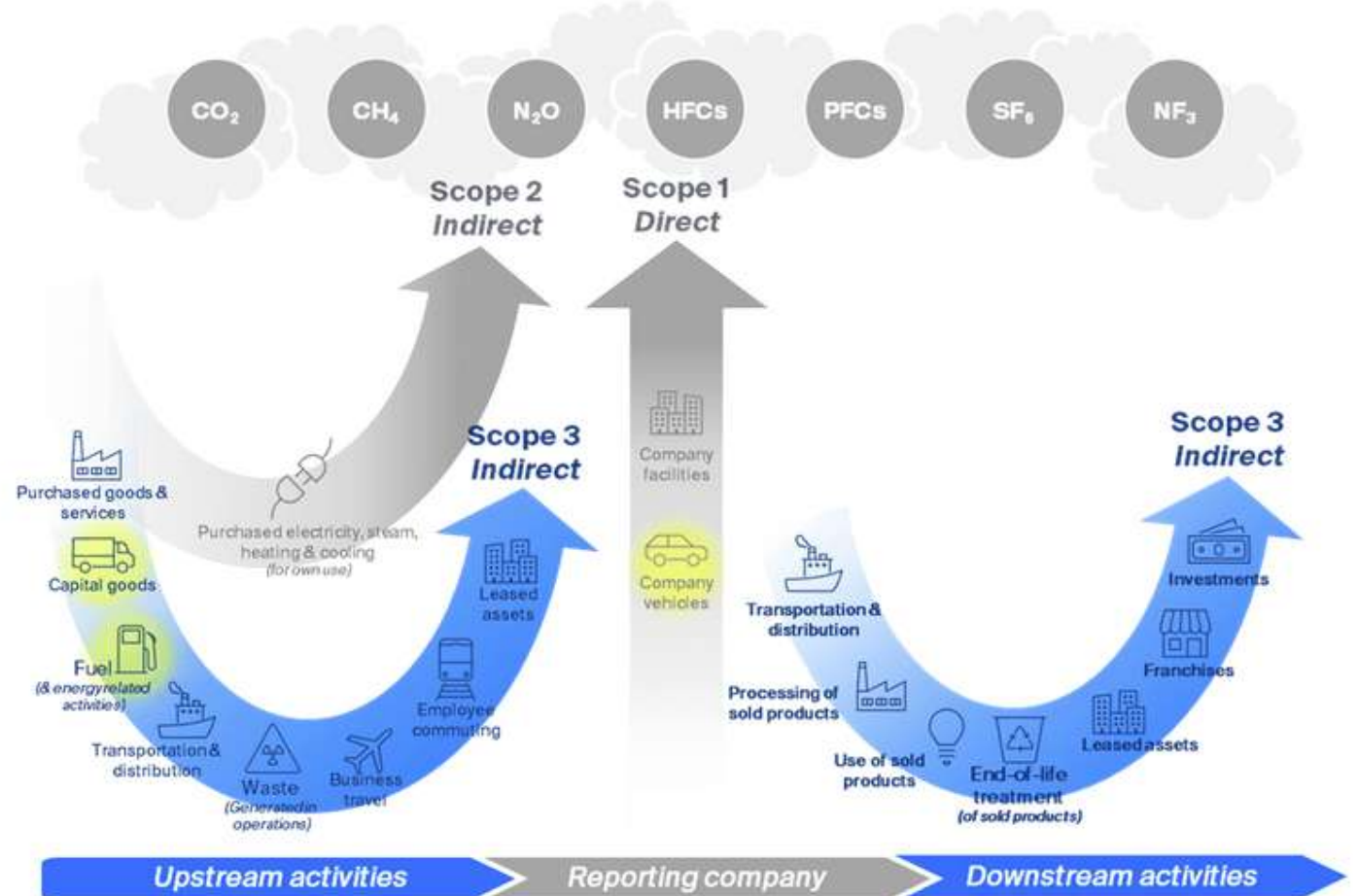
- Emissions result from assets **not owned or controlled by the reporting organization** but are part of the organizations value chain





# Data Center Co2 emissions

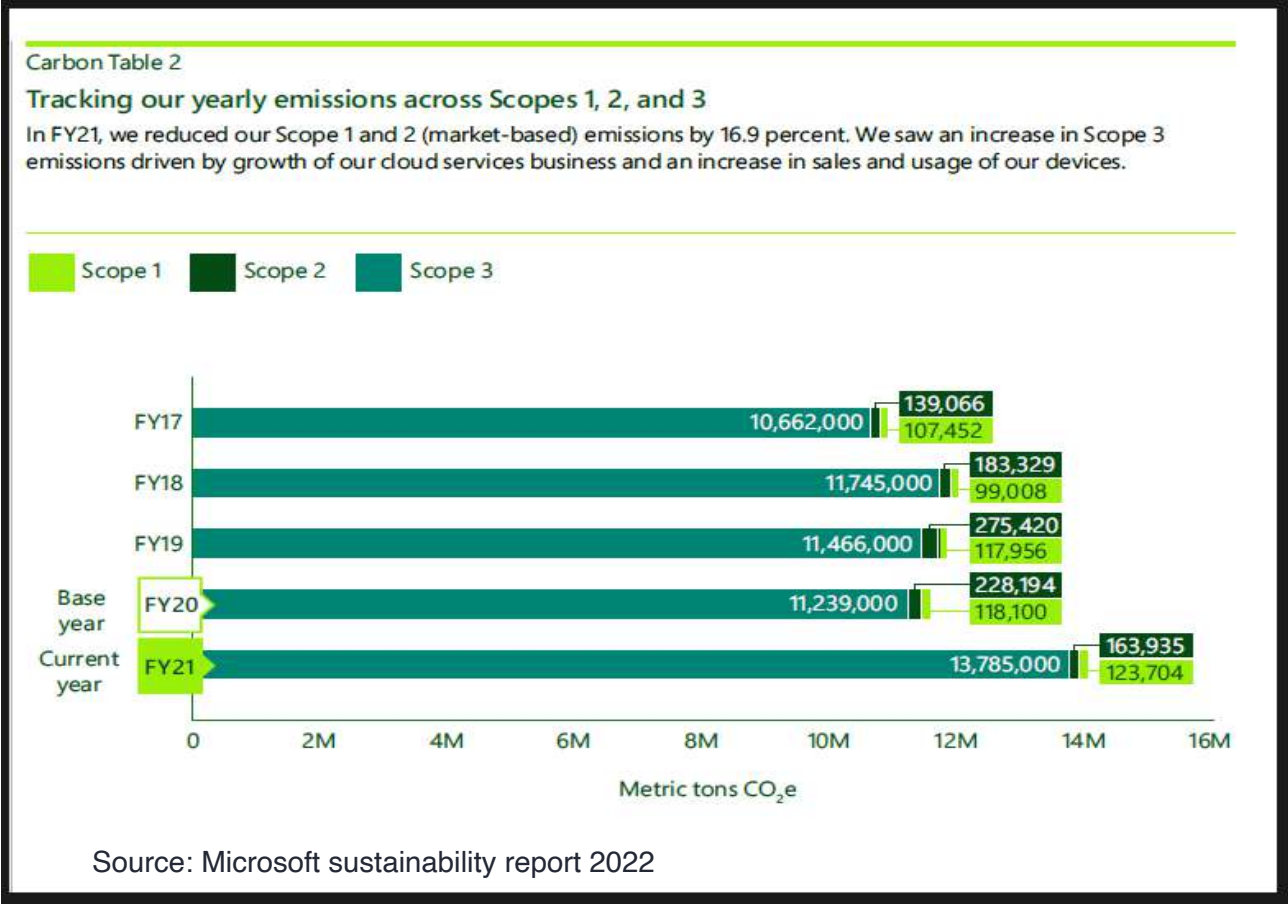
## Data Center real estate emission categorization





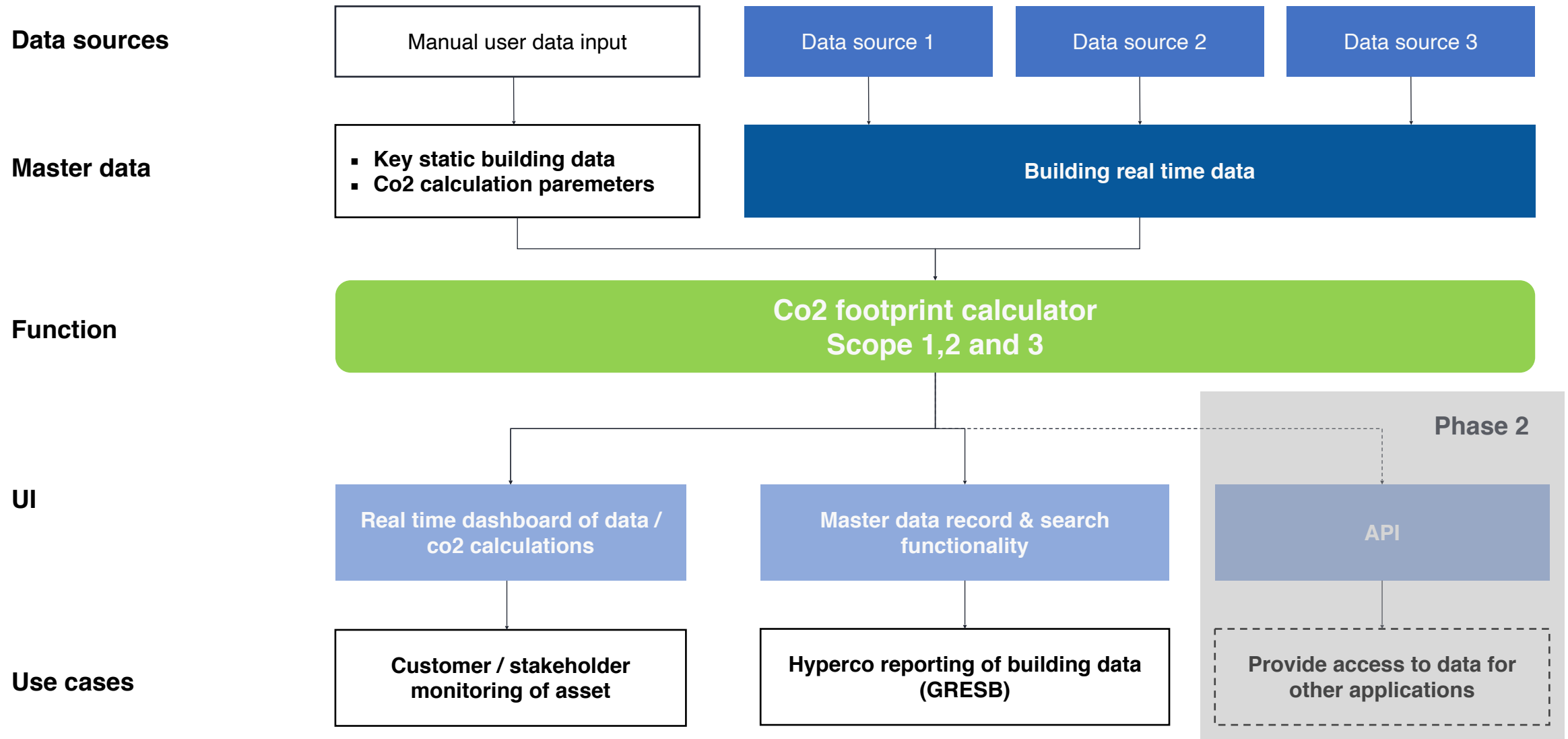
# Data Center Co2 emissions

## Emission carbon table example (Microsoft)





# Overview of Hyperco approach to sustainability tracking





# Summary

## End user point of view

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### TIME

- Developed for need
- Flexible (modular)

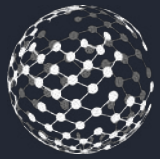
### EASY

- Single point of contact
- Local partner
- Local contracts handling

### COST EFFICIENT

- Local supply chain
- Institutional investors
- Dedicated only to DC segment
- Build by spec
- Development experience

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# DATACENTER FORUM

# THANK YOU

not leaving before end of presentation

ARI KURVI

19 MAY 2022

