

WEBINAR

2023 GLOBAL DATA CENTER MARKET COMPARISON

This live event will begin shortly...



TODAY'S SPEAKERS



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GLOBAL MARKET COMPARISON REPORT OVERVIEW



Jacob Albers

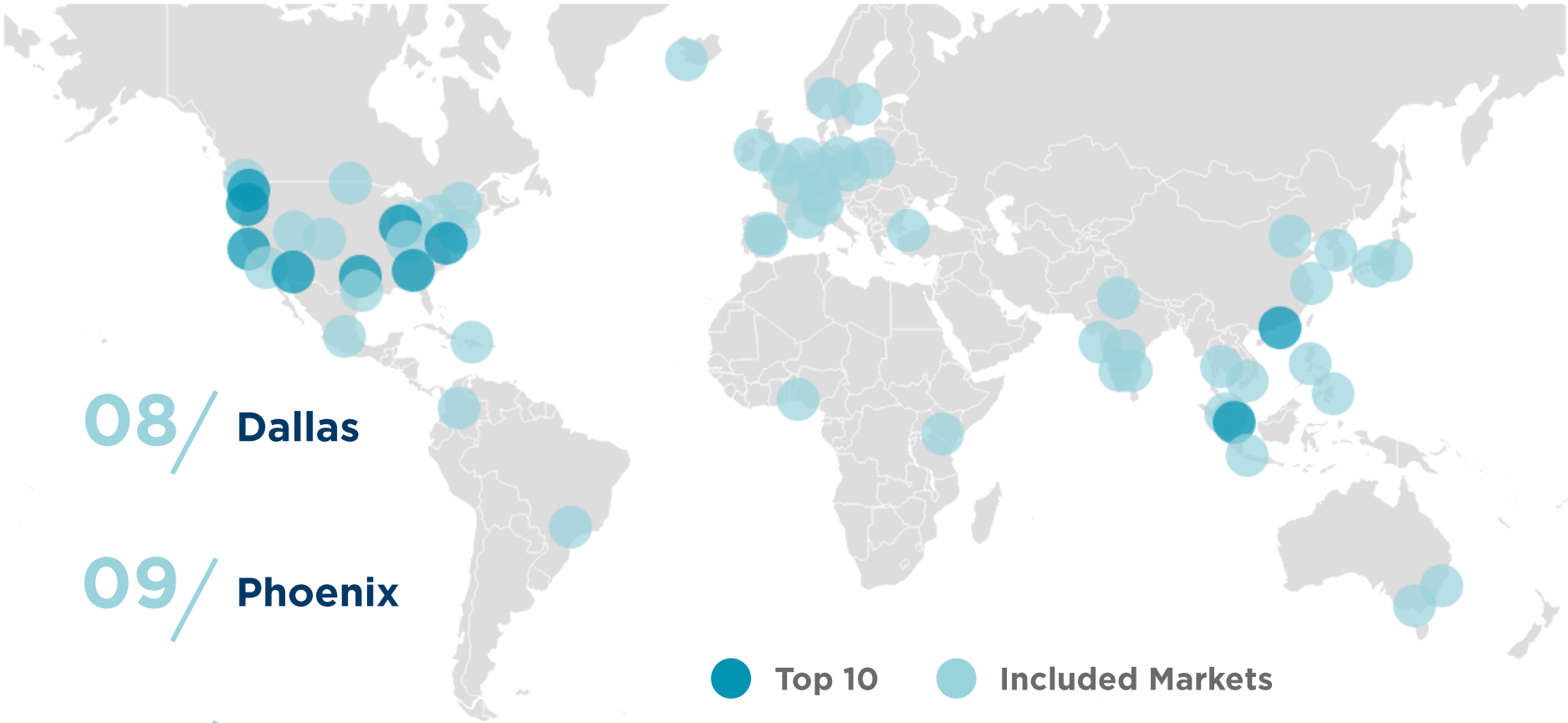
Research Manager,
Global Think Tank

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GLOBAL TOP 10

- 01/ Northern Virginia*
Portland*
- 03/ Singapore
- 04/ Hong Kong
- 05/ Atlanta*
Chicago*
Silicon Valley*

- 08/ Dallas
- 09/ Phoenix
- 10/ Seattle

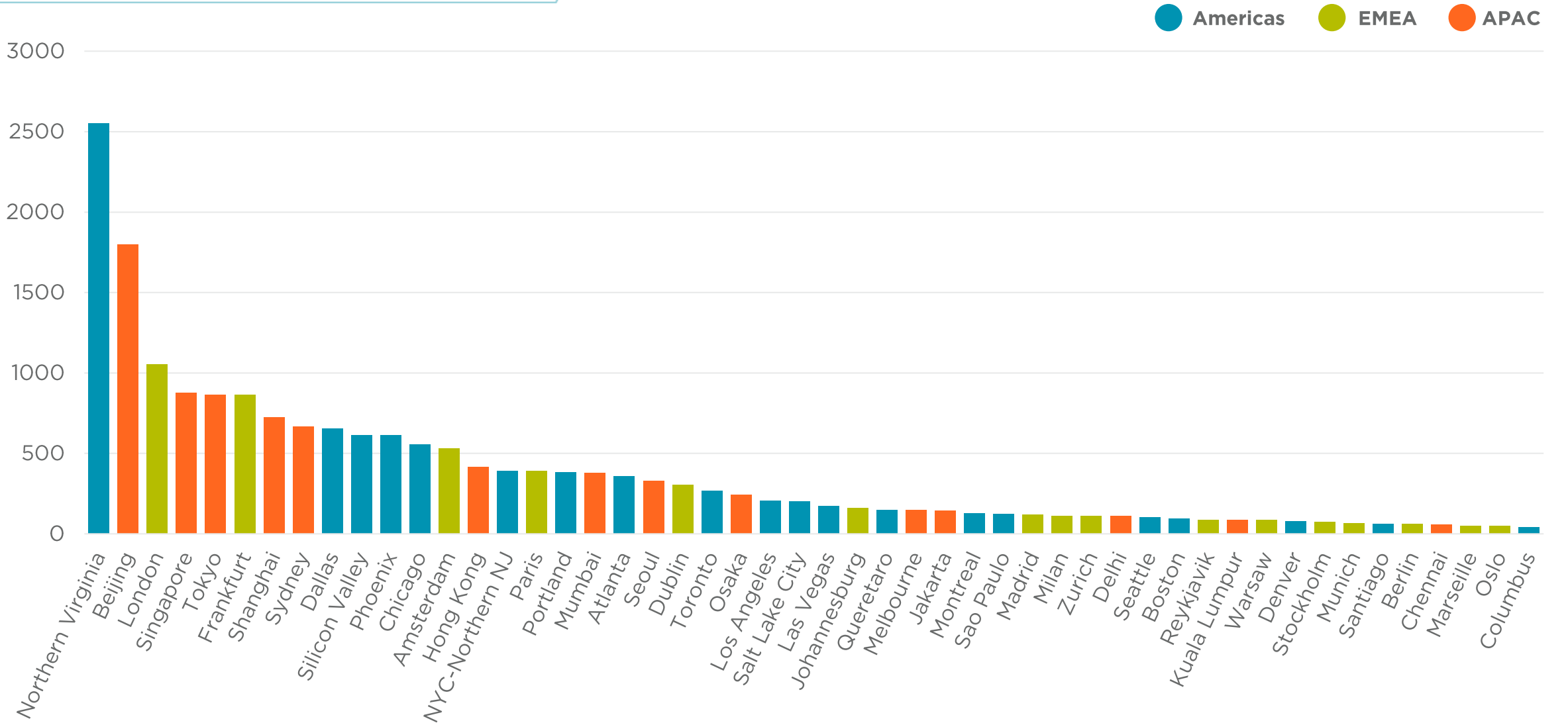


* Ranking tie

Criteria & Weighting

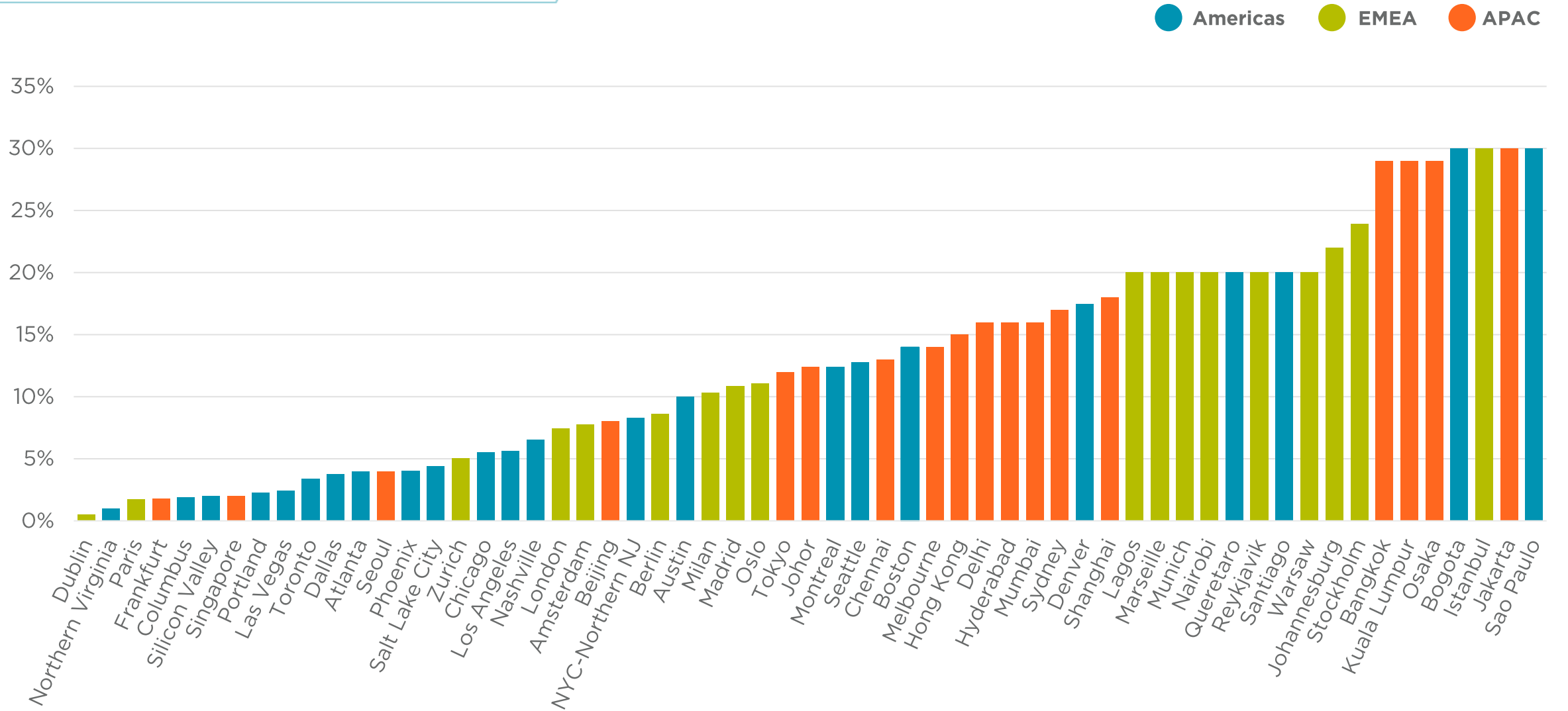
HIGH-WEIGHT	MID-WEIGHT	LOW-WEIGHT
Fiber Connectivity	Incentives	Power Cost
Market Size	Taxes	Land Price
Cloud Availability	Political Stability	Environmental Risk
	Vacancy	
	Development Pipeline	
	Sustainability	
	Smart Cities	

Market Size (MW)



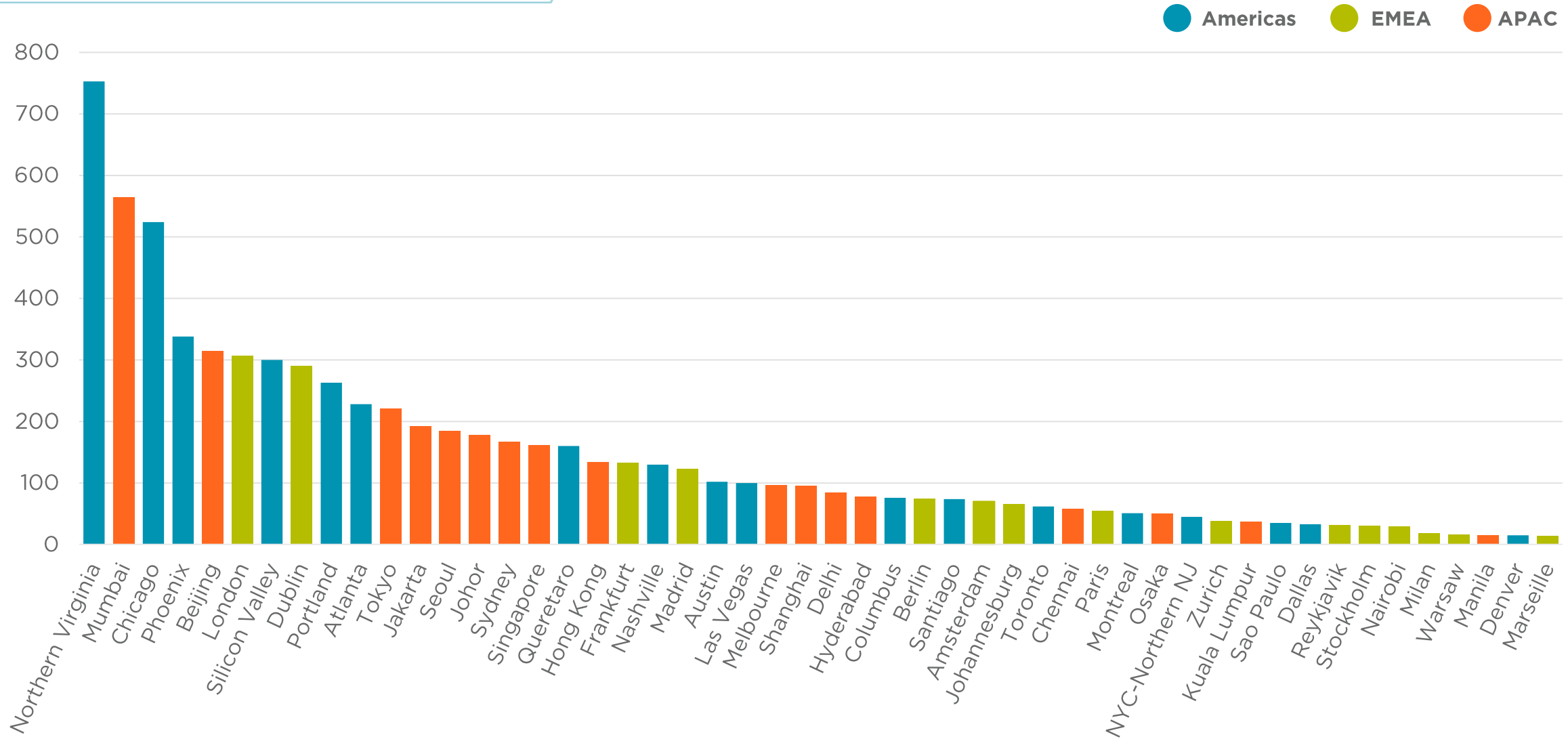
Source: datacenterHawk, DC Byte, Cushman & Wakefield Research

Vacancy (%)



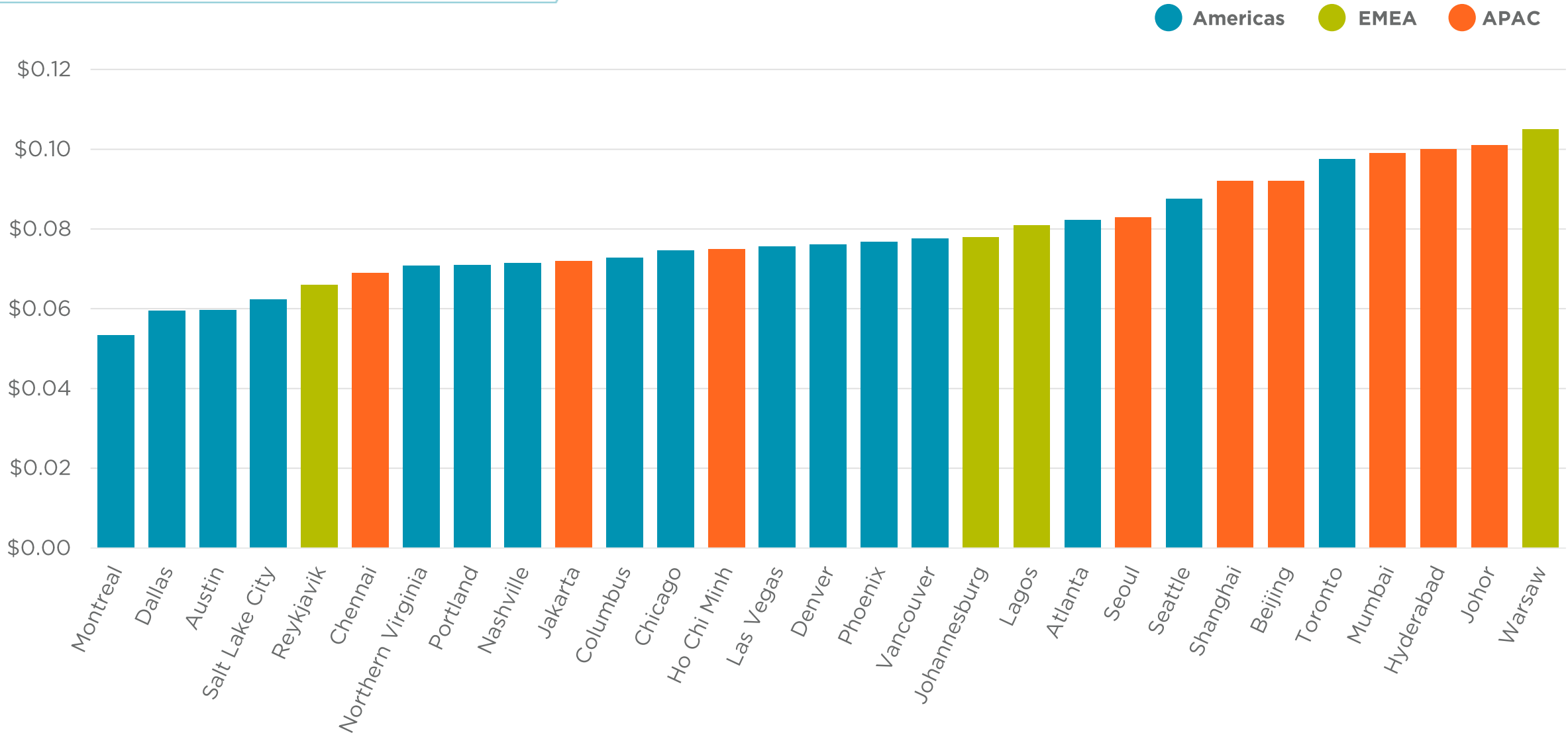
Source: datacenterHawk, DC Byte, Cushman & Wakefield Research

Development Pipeline (MW Under Construction)



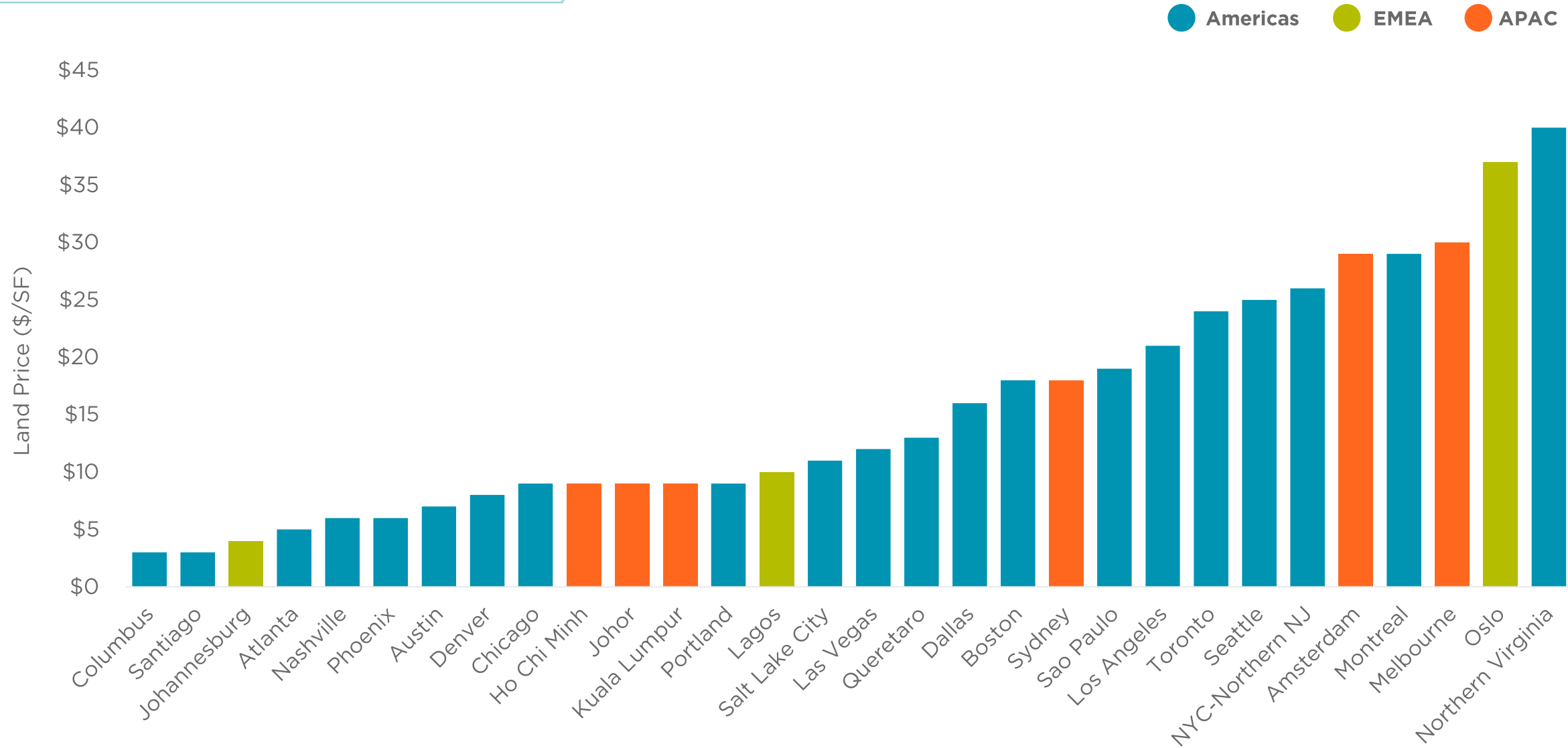
Source: datacenterHawk, DC Byte, Cushman & Wakefield Research

Power Cost (\$/kW/month)



Source: Find Energy, Electricity Local, Cushman & Wakefield Research

Land Price (\$/SF)



Source: RCA Analytics, Cushman & Wakefield Research

AMERICAS OVERVIEW



Anne Rosenau

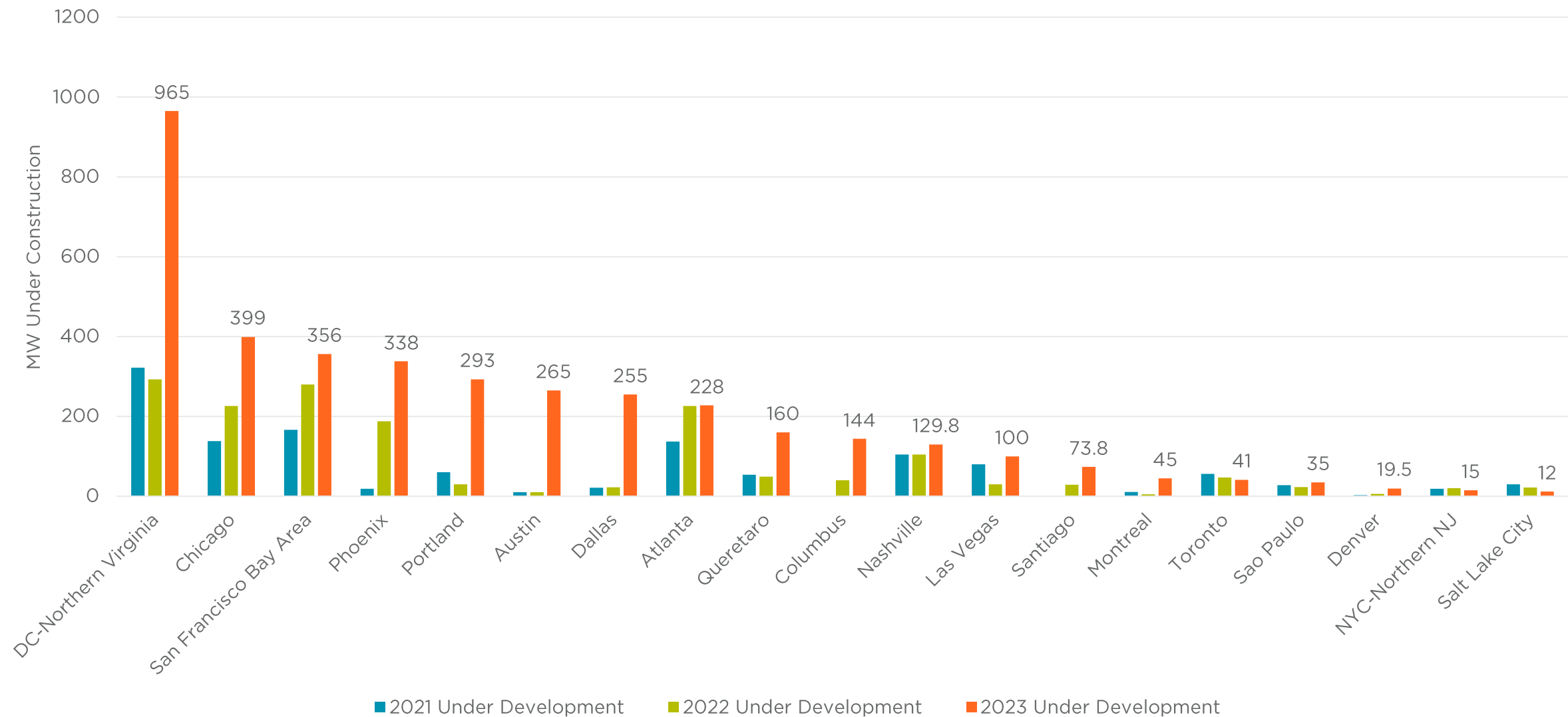
Managing Director, Data Center
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anne.rosenau@cushwake.com

TOP 10 MARKETS

- | | | | |
|-----|-------------------------|-----|----------|
| 01/ | Northern Virginia* | 07/ | Phoenix |
| | Portland* | 08/ | Seattle |
| 03/ | Atlanta* | 09/ | Toronto |
| | Chicago* | 10/ | Montreal |
| | San Francisco Bay Area* | | |
| 06/ | Dallas | | |

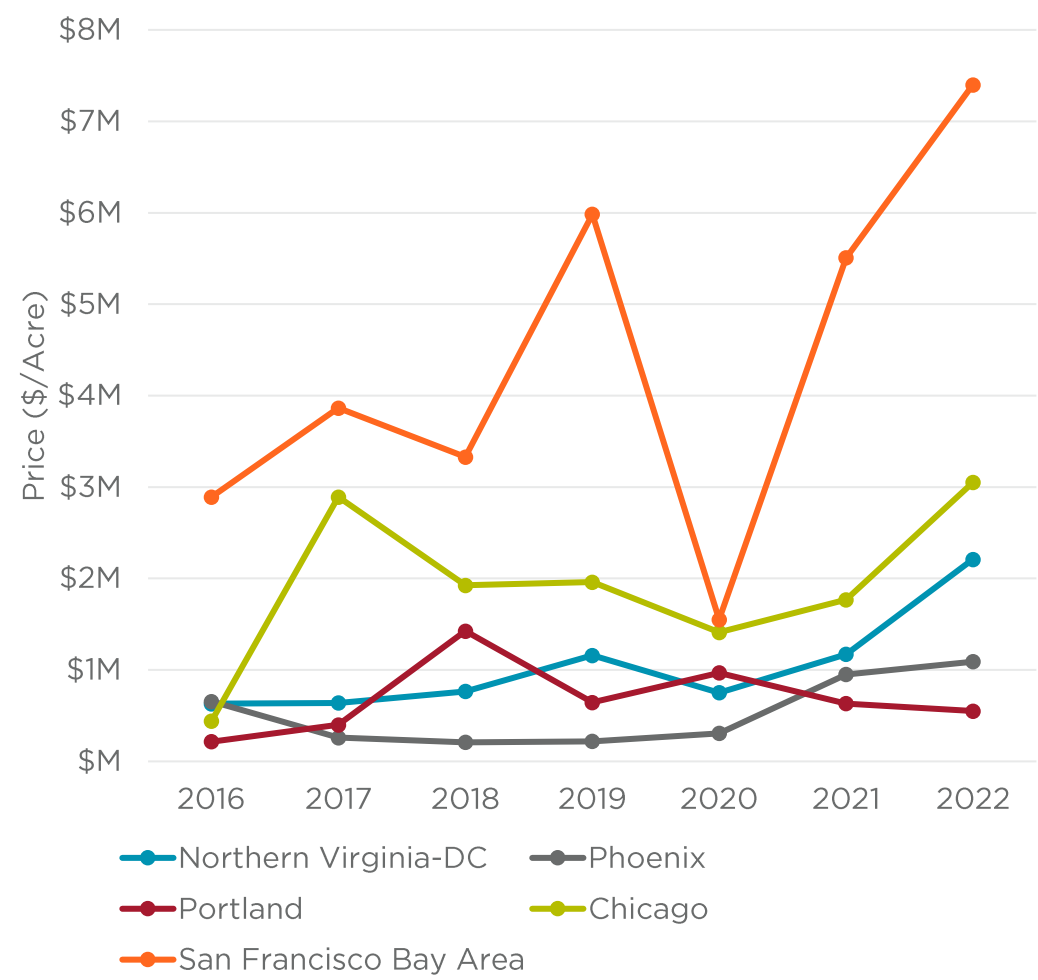
* Ranking tie

North America Development Growth

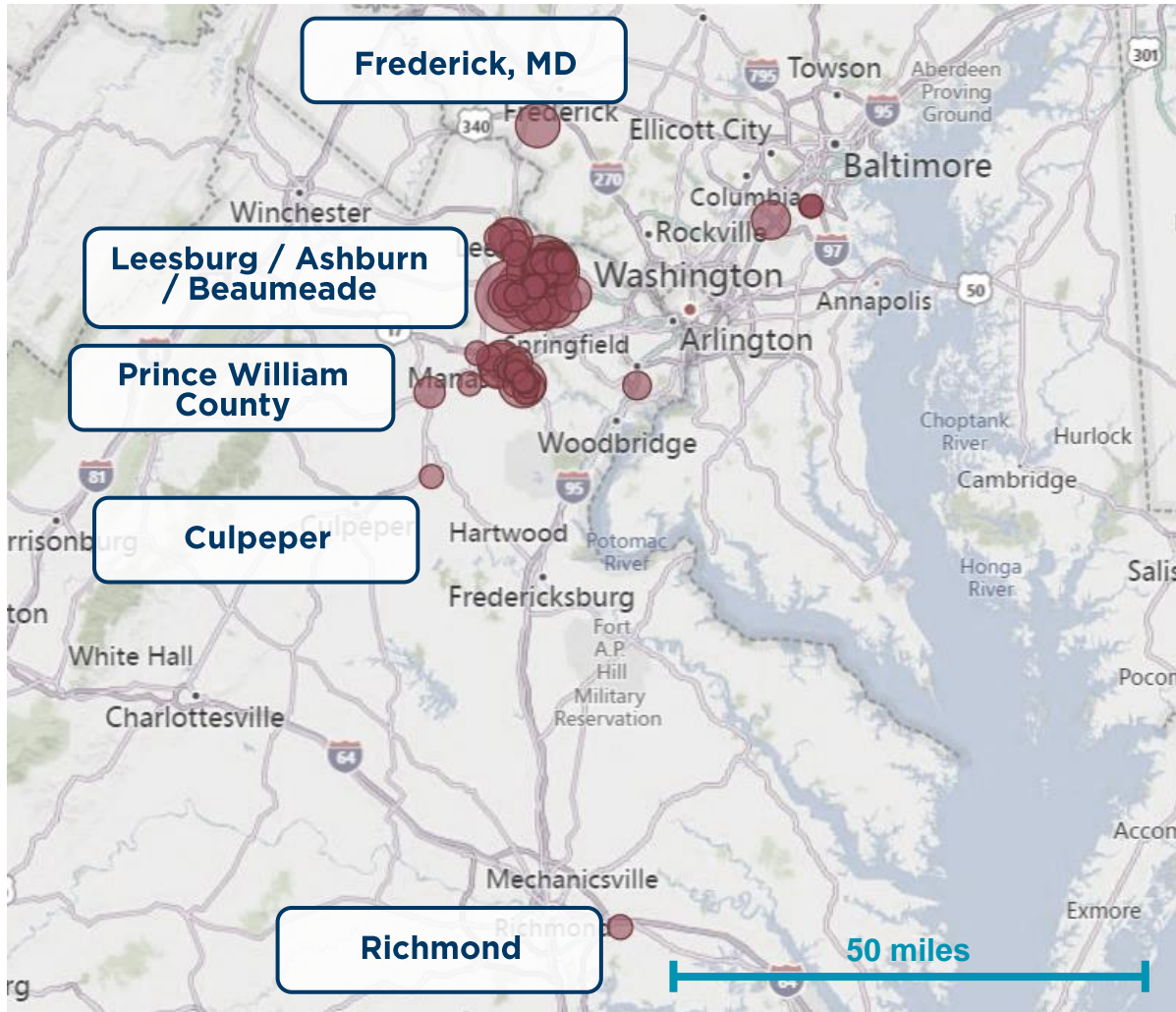


Land Pricing & Expansion to Outlying Areas

Price Per Acre

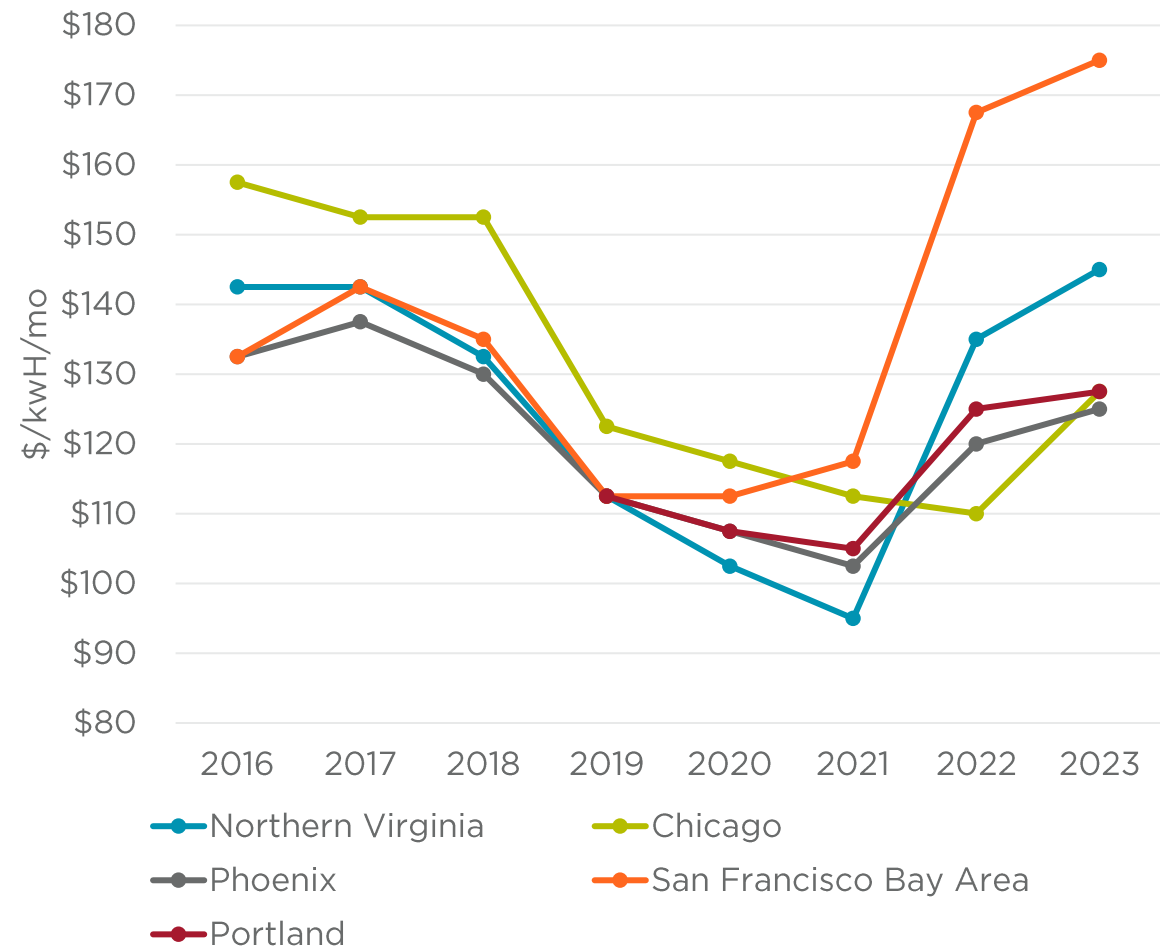


Outlying Expansion Example: Sample NoVa Land Transactions

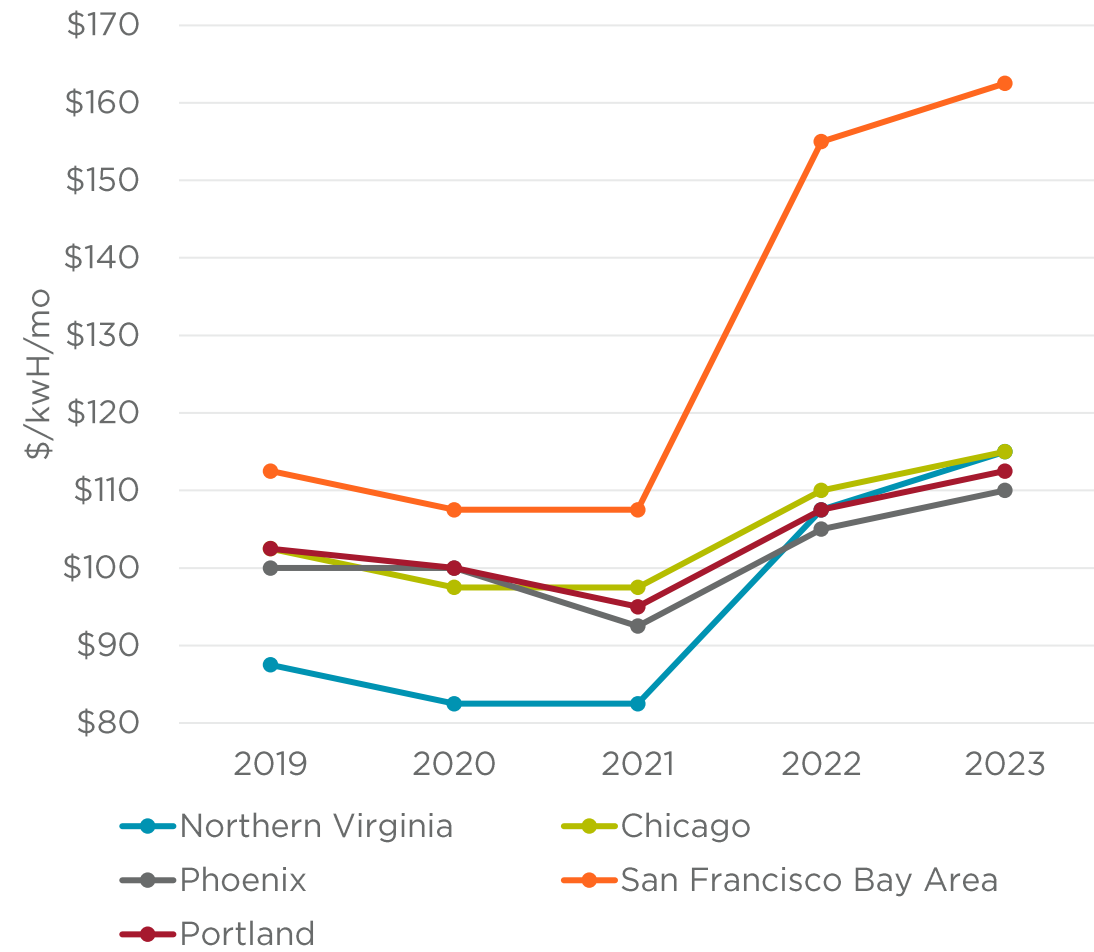


North America Pricing Changes

Wholesale Average Lease Pricing



Hyperscale Average Lease Pricing



APAC OVERVIEW



Vivek Dahiya

Head of Data Center
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TOP 10 MARKETS

01/ Singapore

02/ Hong Kong

03/ Sydney*
Seoul*

05/ Tokyo

06/ Beijing

07/ Mumbai

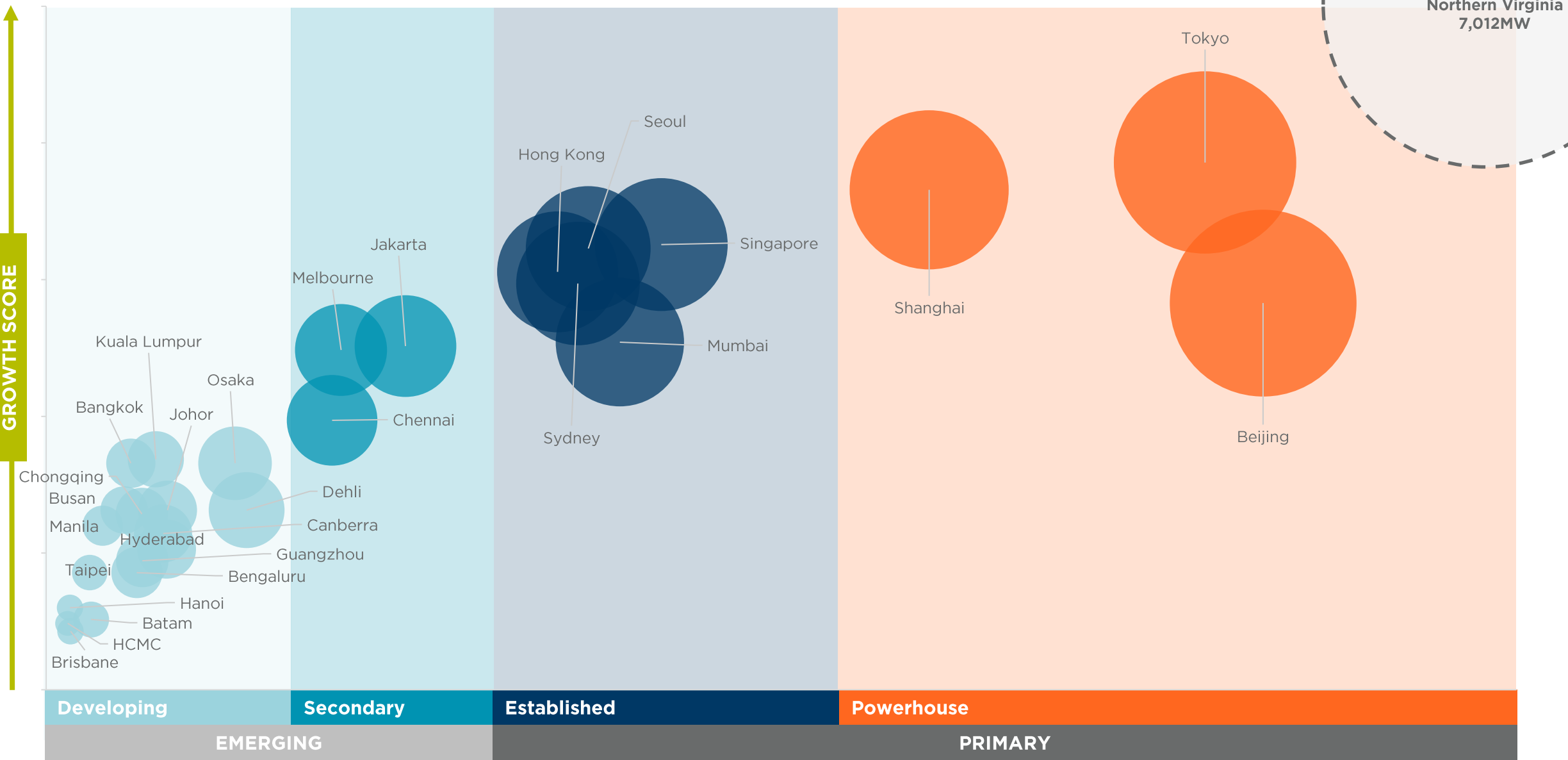
08/ Shanghai

09/ Melbourne

10/ Kuala
Lumpur

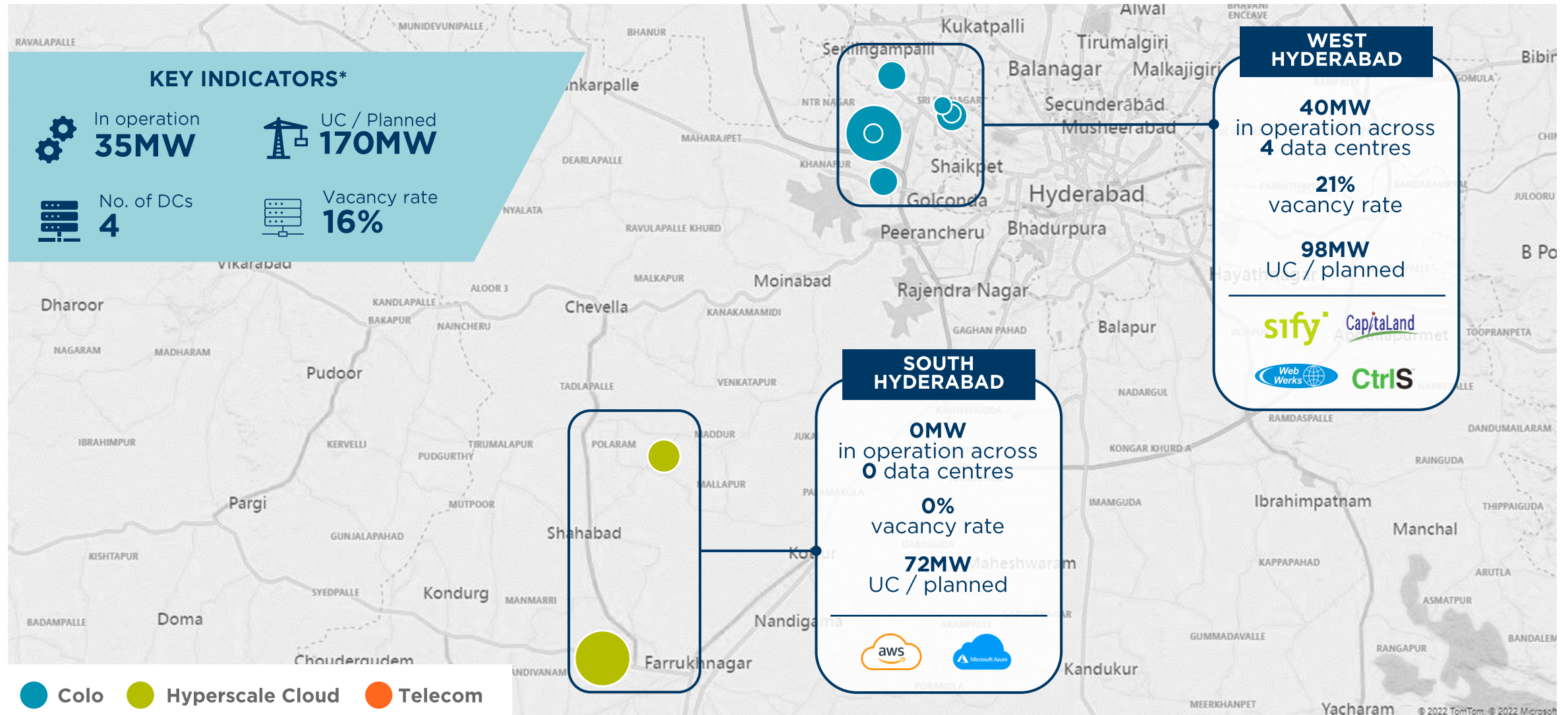
** Ranking tie*

APAC Markets Maturity Index



Hyderabad

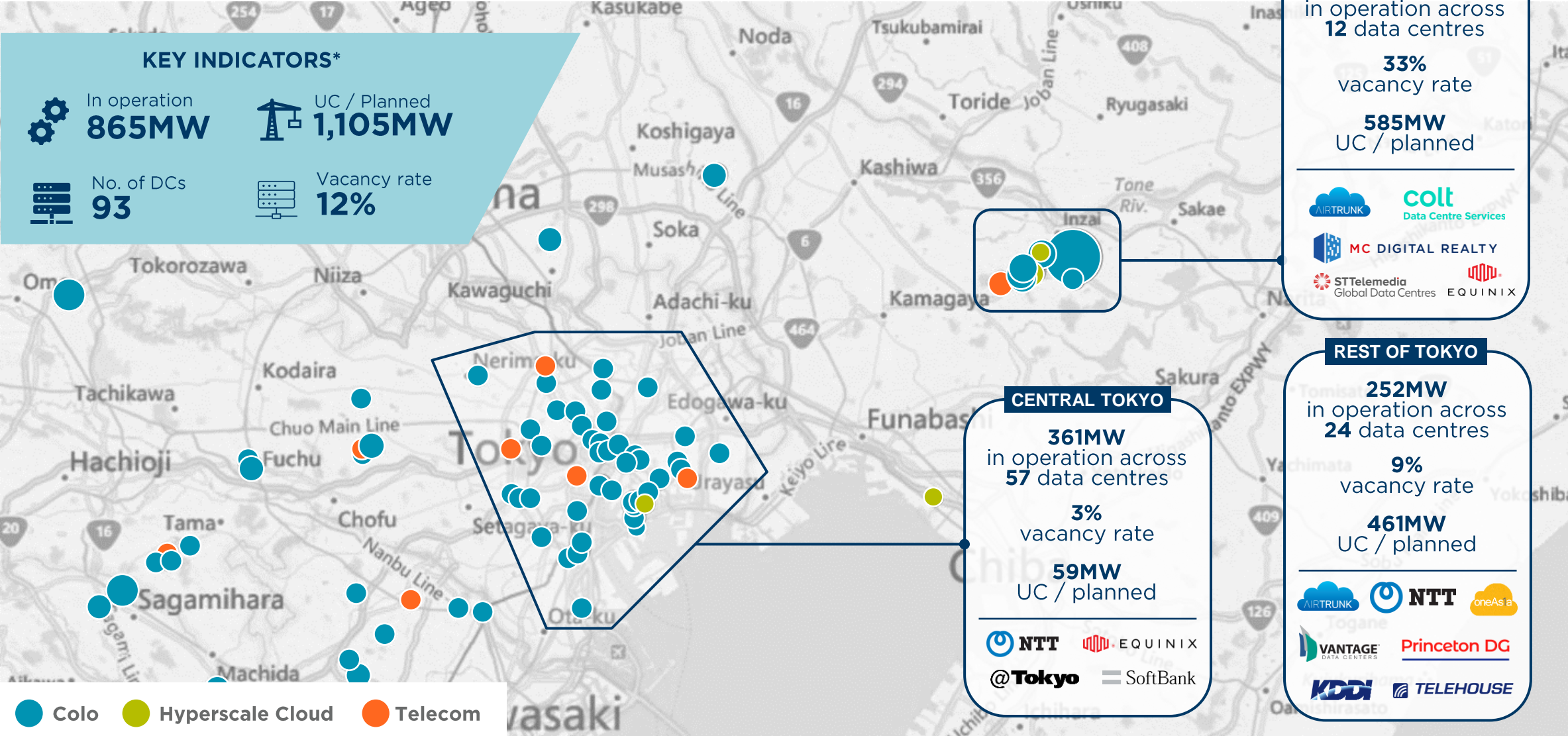
Hyderabad will become the largest market for hyperscalers in India



**Definition: Key indicators are based on operational Hyperscale Cloud, Colo, Edge & Telco data centre facilities in the market and excludes Captive & ICT.*

Greater Tokyo

Greater Tokyo takes up about 80% of Japan's entire data center market



*Definition: Key indicators are based on operational Hyperscale Cloud, Colo, Edge & Telco data centre facilities in the market and excludes Captive & ICT.

EMEA OVERVIEW



Andrew Fray

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TOP 10 MARKETS

01/ Amsterdam

02/ Paris

03/ Zurich

05/ Madrid*
Dublin*

06/ London

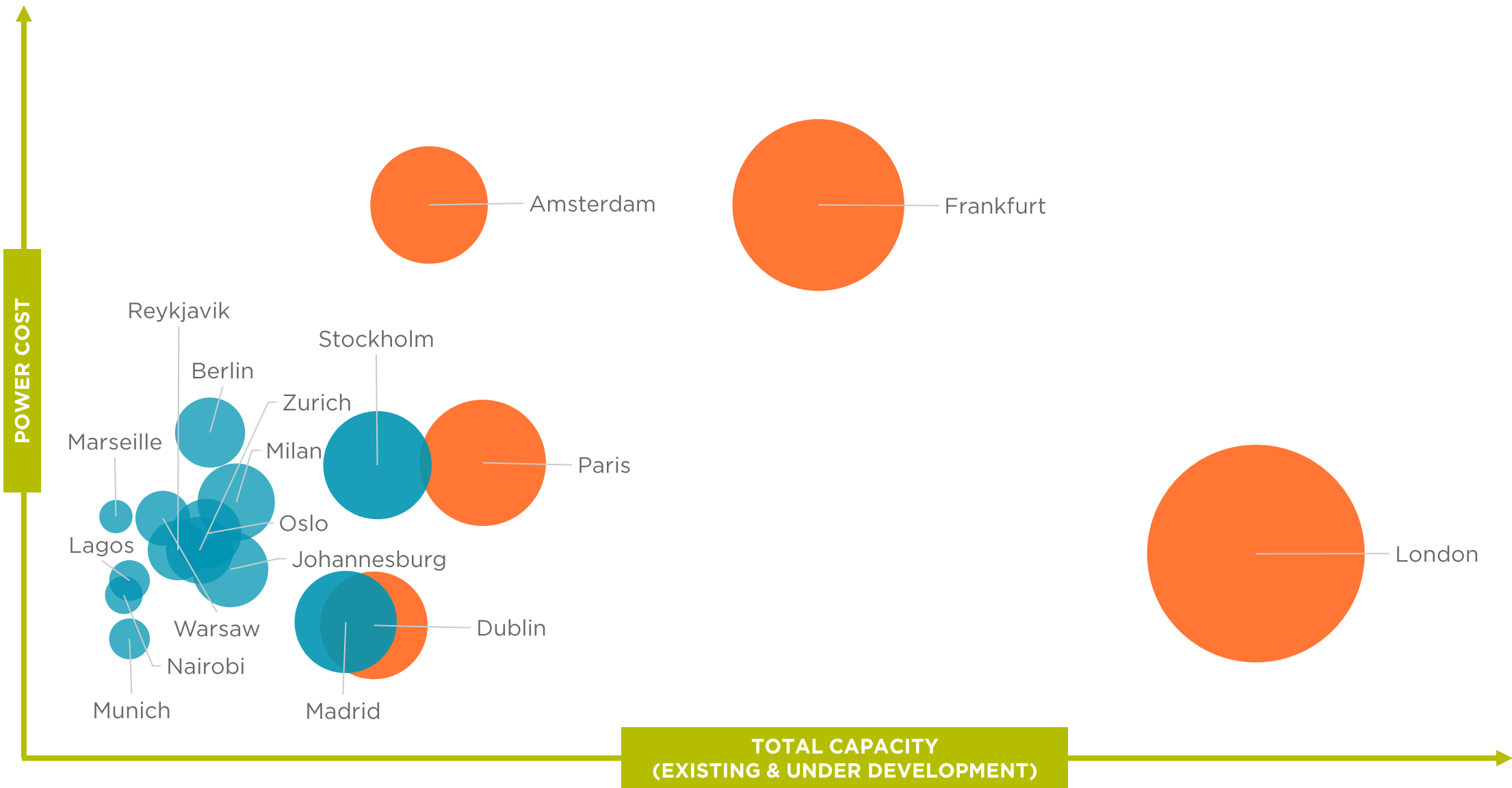
07/ Frankfurt

08/ Stockholm*
Oslo*

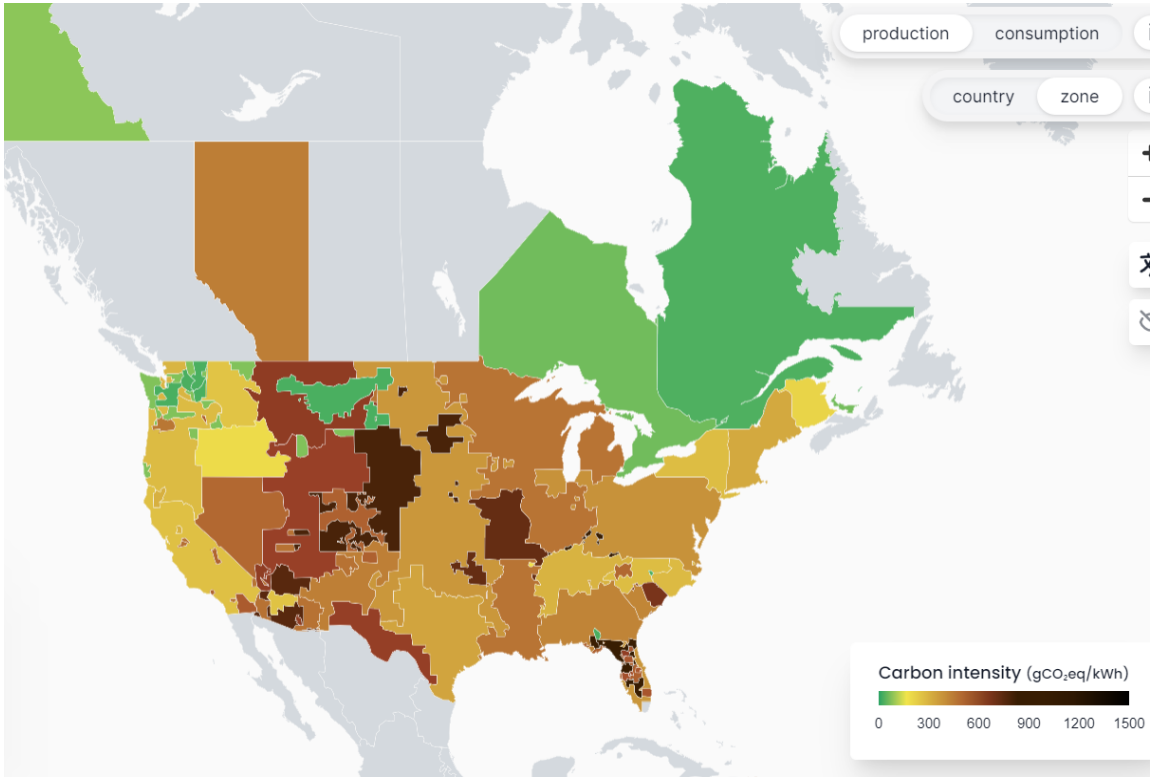
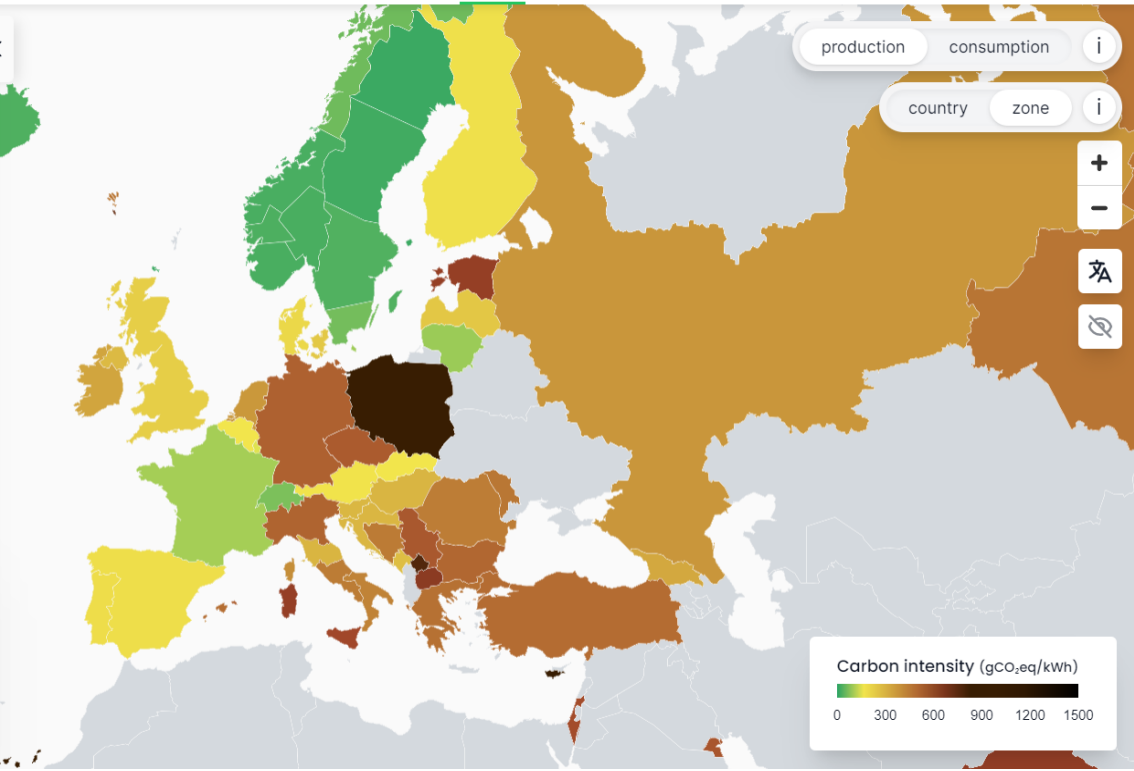
10/ Berlin

** Ranking tie*

EMEA Markets Capacity vs Power Cost



Carbon Intensity: Europe vs. North America



Source: <https://app.electricitymaps.com/map>

EMEA Growth Markets

NORDICS: SHOC-R

1,162 MW Operational

15% vacancy rate

810 MW UC / planned

FLAP-D

4,462 MW Operational

7% vacancy rate

4,127 MW UC / planned

CENTRAL EASTERN EUROPE

251 MW Operational

14% vacancy rate

201 MW UC / planned

MEDITERRANEAN (M³+)

609 MW Operational

18% vacancy rate

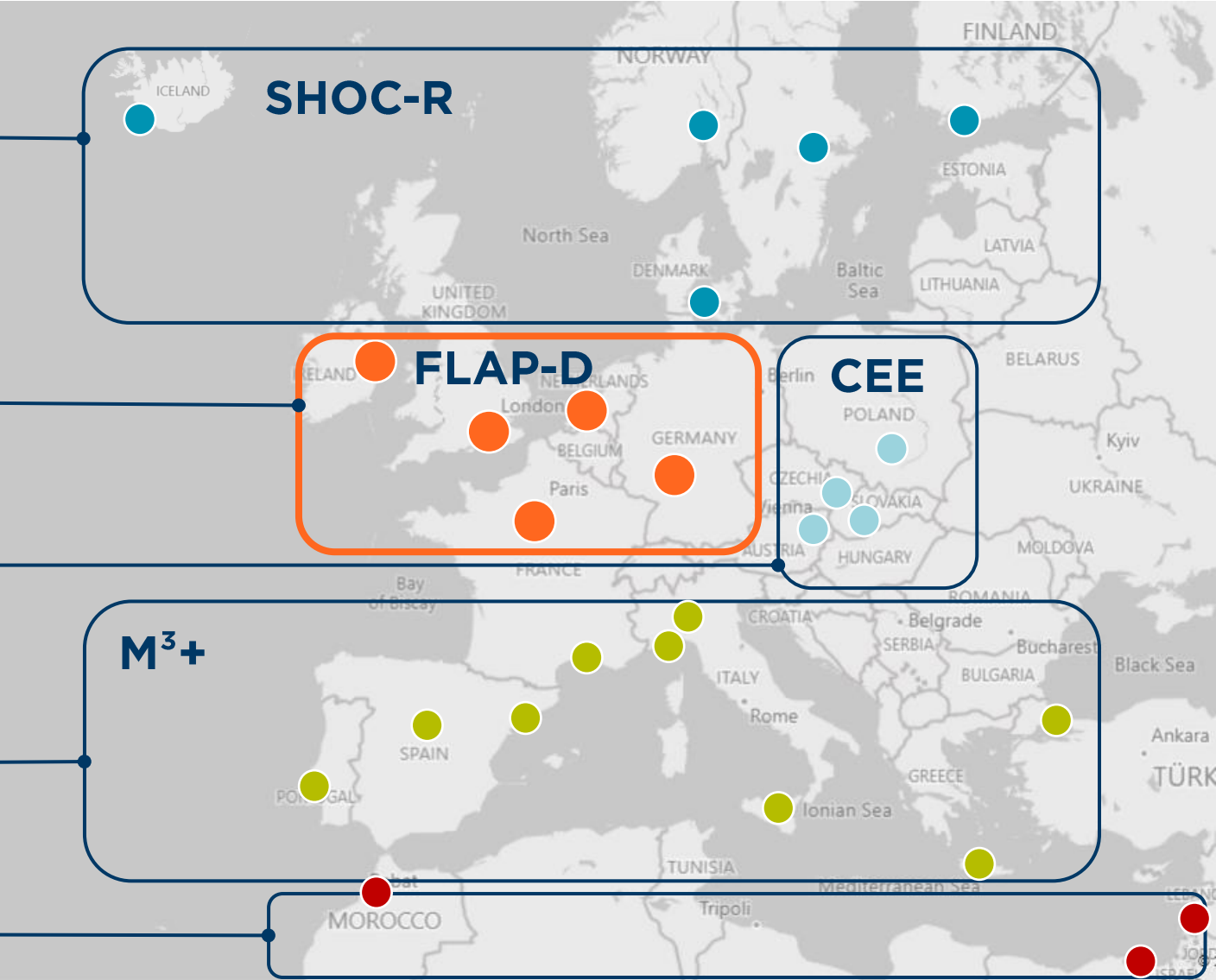
698 MW UC / planned

W/E AFRICA + MIDDLE EAST

605 MW Operational

24% vacancy rate

652 MW UC / planned



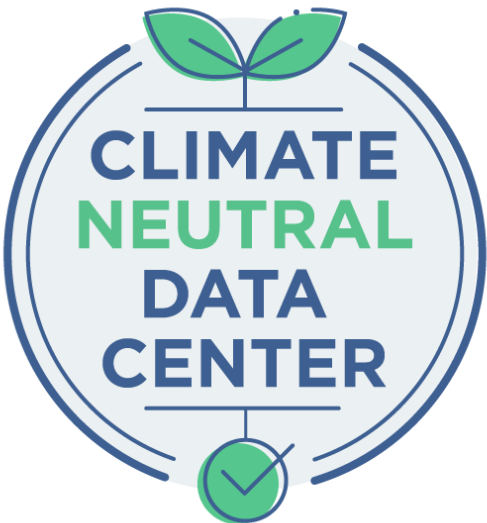
Source: DC Byte, Cushman & Wakefield Research
CUSHMAN & WAKEFIELD

Developing Scenarios

Growth in
'Everything,
Everywhere,
All At Once'

Technology
Saves
The Day

Data Purpose
Analysis
and/or Data
Taxation



Q&A



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THANK YOU

About Cushman & Wakefield

Cushman & Wakefield (NYSE: CWK) is a leading global real estate services firm that delivers exceptional value for real estate occupiers and owners. Cushman & Wakefield is among the largest real estate services firms with approximately 52,000 employees in over 400 offices and approximately 60 countries. In 2022, the firm had revenue of \$10.1 billion across core services of Property, facilities and project management, Leasing, Capital markets, and Valuation and other services. To learn more, visit www.cushmanwakefield.com or follow @CushWake on Twitter.

**A recording of this webinar
will be available soon.**

