

This is not an ADB material. The views expressed in this document are the views of the author/s and/or their organizations and do not necessarily reflect the views or policies of the Asian Development Bank, or its Board of Governors, or the governments they represent. ADB does not guarantee the accuracy and/or completeness of the material's contents, and accepts no responsibility for any direct or indirect consequence of their use or reliance, whether wholly or partially. Please feel free to contact the authors directly should you have queries.



Data Center Investment Opportunities in SEA

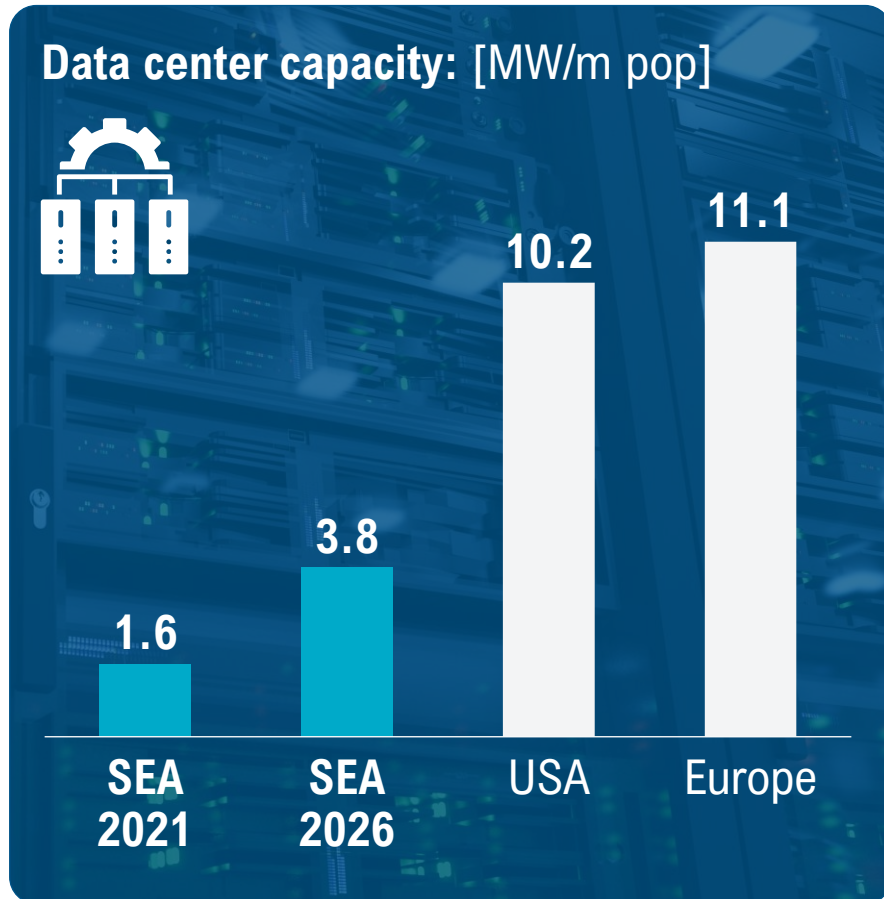
Mohit Gidwani
Partner, Roland Berger








DIGITAL X ADB

19 September 2023

SEA is far behind global averages in DC capacity

Overview of SEA data center market



Country	Number of DCs ¹⁾	Capacity ²⁾ , MW	MW/m POP ³⁾
 Singapore	73	640	106
 Malaysia	50	173	5.1
 Indonesia	62	159	0.6
 Thailand	40	98	1.4
 Philippines	21	78	0.7
 Vietnam	19	62	0.6
 Cambodia	5	12	0.7
Total	377	1,222	1.8

1) Speeda Industry Analysis; 2) IT Capacity MW; 3) With estimated SEA population in 2026 – 710 million people

Source: Desk research, Industry reports, Roland Berger, Statista

Data consumption boom and growing cloud adoption is pulling the supply

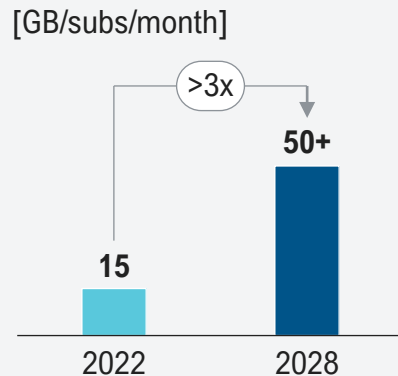
Key demand drivers of DC growth in SEA and impact on supply

B2C demand



Tripling of data – driven by video!

- Increasing adoption of **digital services** (content, commerce, etc.)
- Growth in **deployment of 5G** services will fuel data consumption



B2B demand



Rising colocation demand from enterprise and govts.

- **Digitalization and cloud initiatives** by enterprises
- **E-Government** push and **data localization / privacy regulations**

RB Digitalization Index

	2017		2022
	83	➔	100
	71	➔	77
	55	➔	67
	61	➔	69
	59	➔	65
	54	➔	66

CDN / Caching / Streaming



- Growing **need for localized distribution capability** thereby increasing the demand for local/regional DC hosting

Hyper-scalers



- **>50% of hyperscaler DC capacity is being leased** in SEA – these form the key tenants for a DC's business case and drive wholesale colocation demand

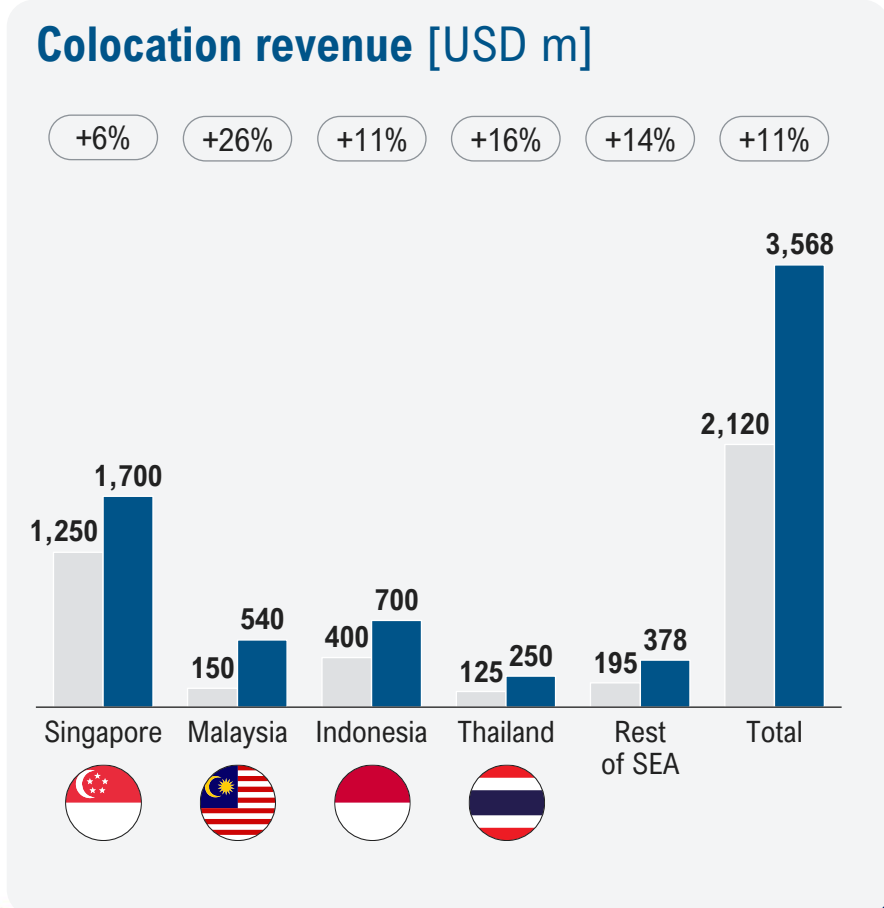
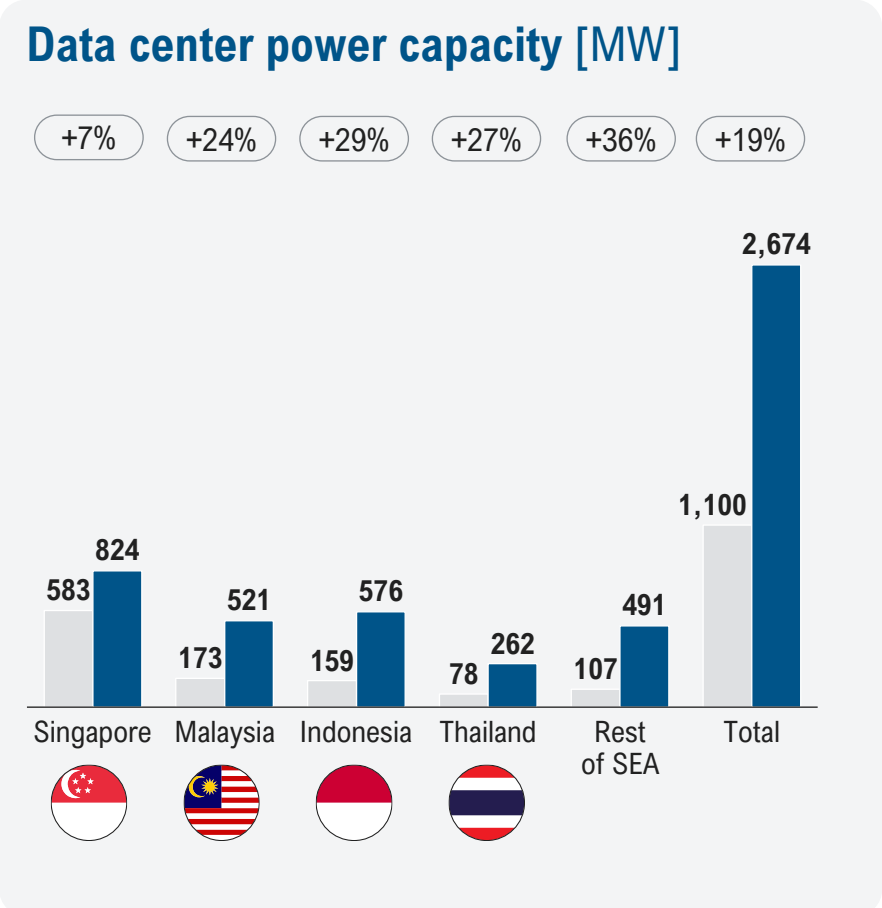
Enterprise colocation



- Enterprise cloud and government cloud drive **retail colocation** – and is a key factor for **smaller, more distributed assets**

DC revenue growth – i.e. monetization – is likely to lag the pace of capacity build

Overview of SEA data center market



Monetization likely to be lower as more capacity comes online, wholesale dominates
 Longer term contracts, utilization, capex optimization are some key optimizations

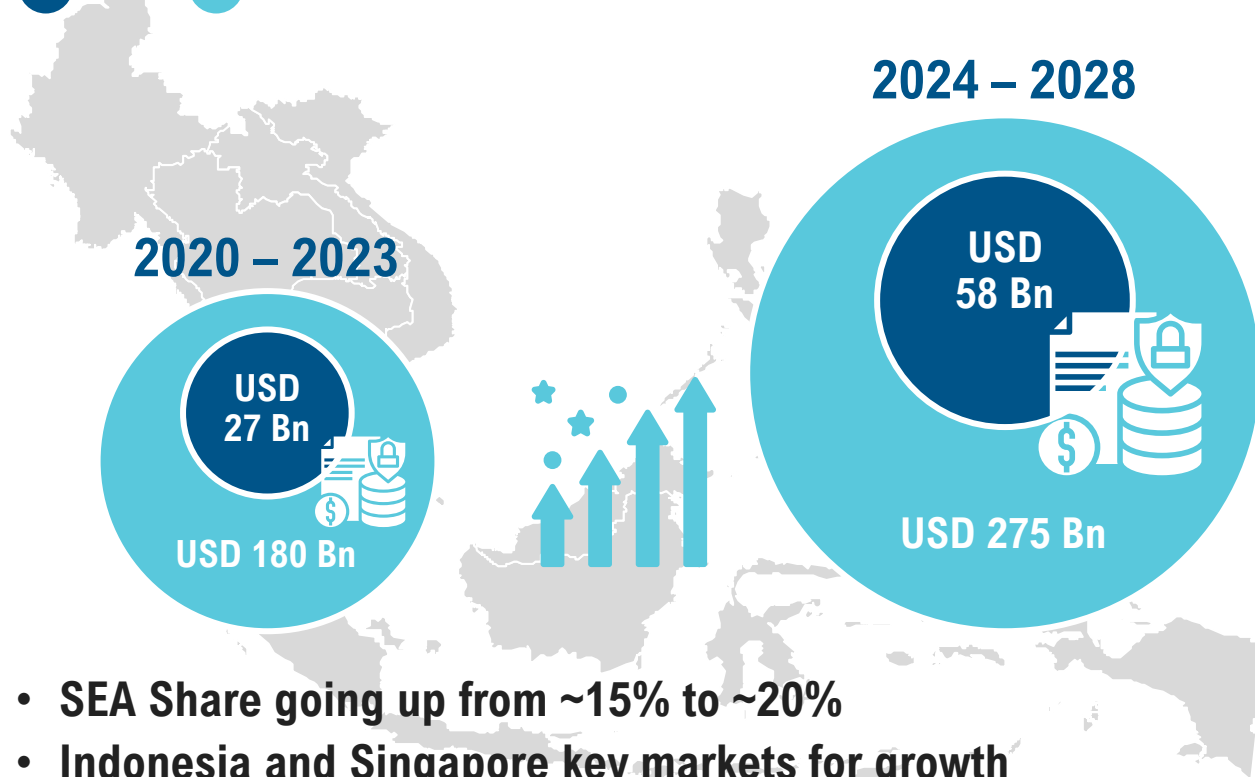


2021 2022

However, DC investments continue to grow rapidly across the region

Growing investment in SEA's DC markets, compared to global

● SEA ● Global



- **SEA Share going up from ~15% to ~20%**
- **Indonesia and Singapore key markets for growth**
- *... increasing government support for data center investments*

Some considerations for MDBs

- Not all countries and assets (and business cases) are equal – e.g. smaller assets, Tier 2 markets
- Commercial capital, typical partners may not have the flexibility or appetite for all situations
- Low carbon power is still a challenge



Roland
Berger

