

CAPITAL GOODS

09 January 2023

Data centre capex to nudge up product demand

- India's data centre capacity estimated to more than double in 3Y to 1.8GW, a 32% CAGR and cumulative US\$ 4.4bn opportunity
- Expansion to open up growth avenues for power and cooling products, albeit limited to an estimated 2-5% of TTM revenue for capital goods players
- SIEM (BUY, TP Rs 3,500) looks best placed as its addressable market covers 37% of potential data centre spends

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Explosive growth in domestic data centres...: As highlighted in our Nov'22 capital goods initiation report, [On the cusp of a capex supercycle](#), data centres in India are poised to add ~350MW of capacity per year till CY25 fuelled by hybrid operating models and rising internet penetration. This represents a 32% CAGR to 1.8GW over CY22-CY25, indicating a US\$ 4.4bn opportunity (at Rs 350mn/MW; USDINR Rs 80).

...backed by accelerated digitisation: Among the key end users of data centres are high-growth industries such as IT services, telecom and BFSI, where we can expect waves of growth led by emerging trends such as 5G penetration, digital currencies and healthcare digitisation. The proposed Data Protection Bill lends further impetus to domestic data centre capex given the requirement for localised data storage/processing.

New growth avenues for power and cooling products...: Technology and infrastructure comprise ~80% of data centre capex, with land forming the balance 20%. Of the total capex, 33% would be expended on power equipment (UPS, HV/MV/LV switchgears, backup generator sets) and 20% on cooling products (half of which would be for chillers).

...but at relatively low revenue contribution: Our analysis of listed power product players suggests data centre business will form less than 10% of revenue – in the range of 2-5% for companies such as ABB, SIEM and KKC (11% for POWERIND due to its lower base than peers; Fig 3). Similarly, in cooling products, we estimate single-digit revenue contribution for HVAC players such as VOLT and BLSTR (Fig 5). Our estimates assume a 30% contract win rate.

SIEM best placed: In addressable market terms, we believe SIEM's product portfolio is capable of catering to 37% of potential data centre spends. The opportunity for other product companies (ABB, POWERIND, KKC) is in the range of 10-14%. Similarly, the total addressable market for VOLT and BLSTR in the cooling business is ~10% of data centre outlay. As such, our capital goods picks remain LT (TP Rs 2,390), SIEM (Rs 3,500), AIAE (Rs 3,100), POWERIND (Rs 3,600) and KECI (Rs 500).

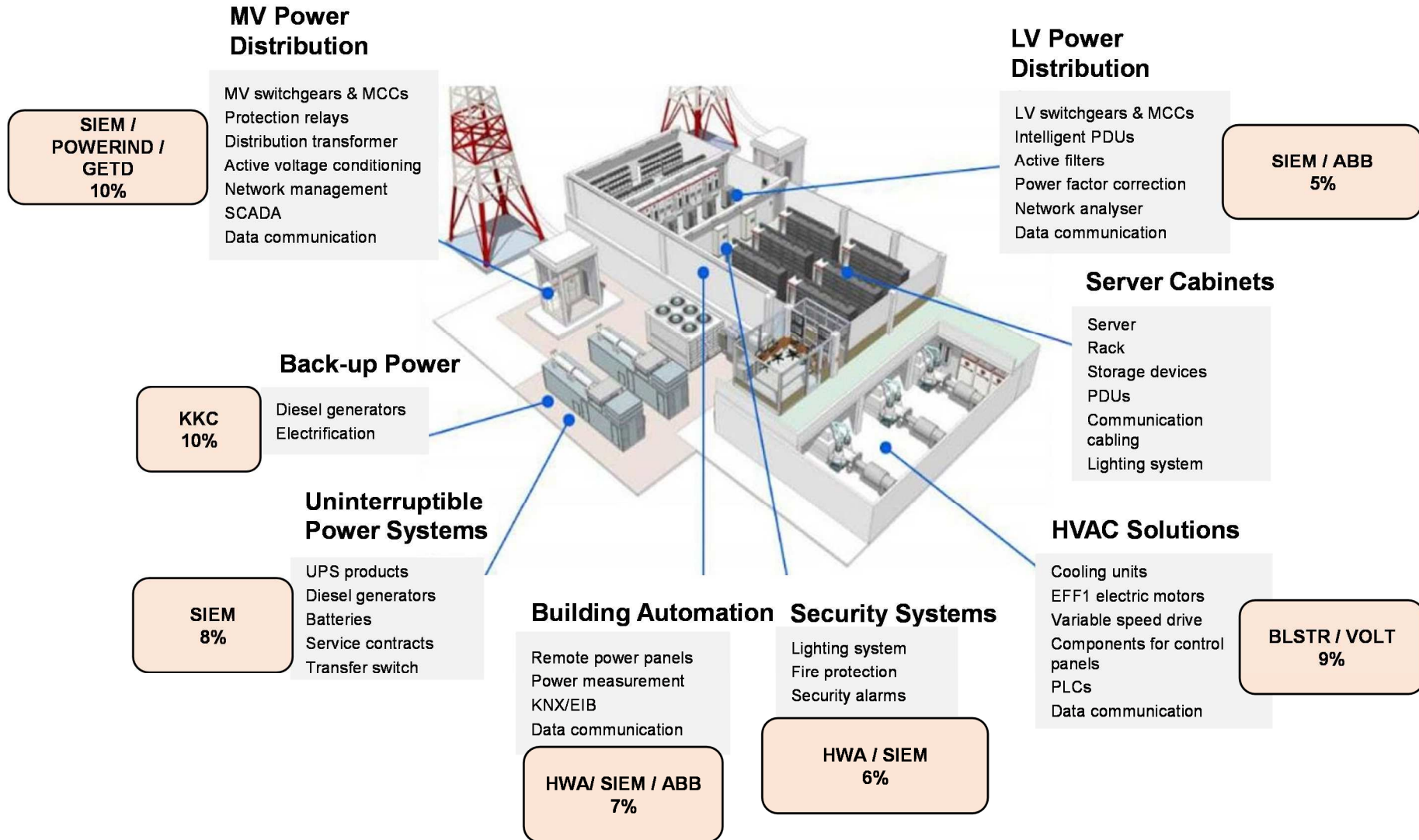
Recommendation snapshot

Ticker	Price	Target	Rating
ABB IN	2,844	3,100	HOLD
AIAE IN	2,510	3,100	BUY
KECI IN	486	500	BUY
KKC IN	1,431	1,300	HOLD
LT IN	2,087	2,390	BUY
POWERIND IN	3,288	3,600	BUY
SIEM IN	2,892	3,500	BUY
TMX IN	1,963	2,100	HOLD

Price & Target in Rupees | Price as of 6 Jan 2023



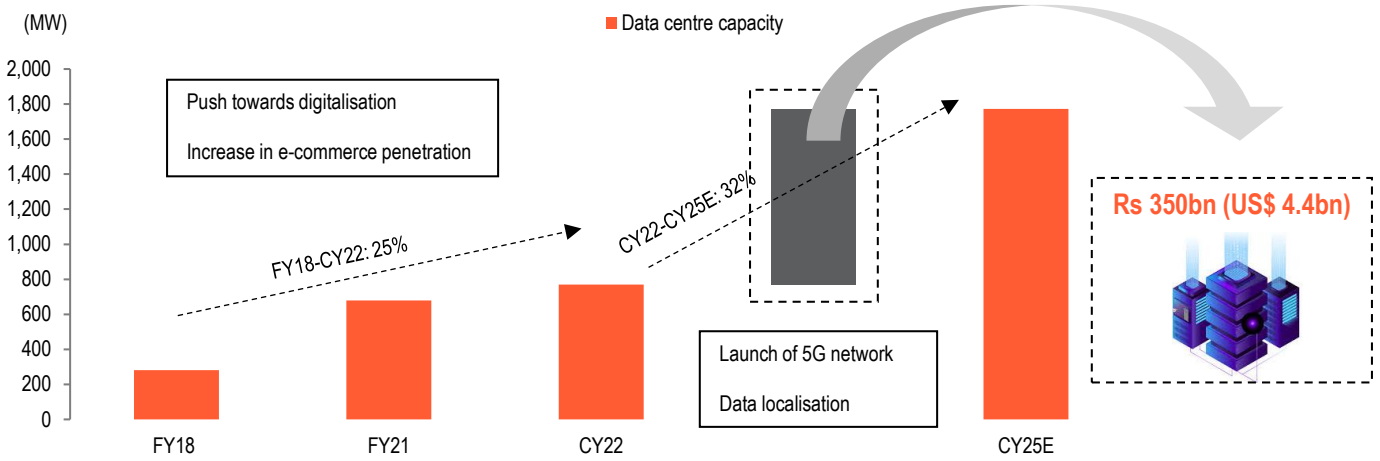
Fig 1 – Data centre opportunities in a nutshell



Source: Greendata.com, BOBCAPS Research | MCC: Motor Control Centers; SCADA: Supervisory Control and Data Acquisition; KNX/EIB: European Installation Bus; PDU: Power distribution unit; PLC: Programmable Logic Controller

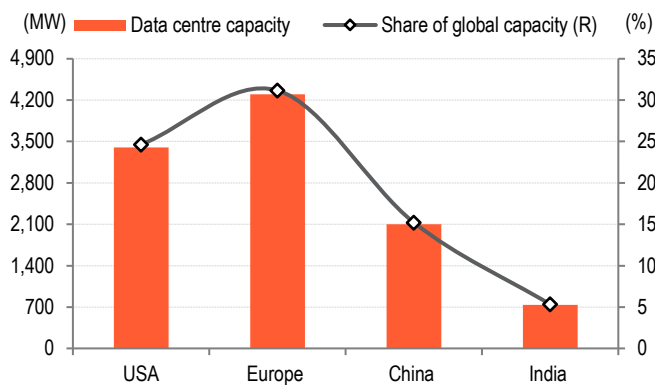
Key facts & figures

Fig 2 – India has a large data centre opportunity



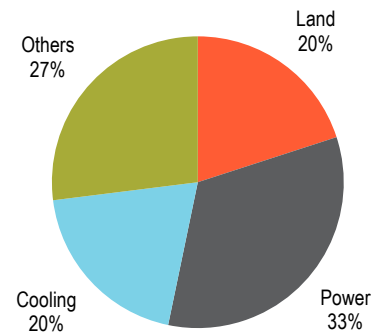
Source: Colliers, Crisil, Bobcaps Research

Fig 3 – India’s data centre industry still nascent



Source: Anarock, Bobcaps Research

Fig 4 – Data centre cost breakdown indicates heavy spends on power and cooling products



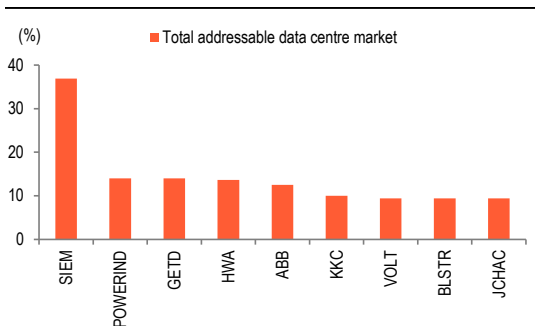
Source: Anarock, Bobcaps Research

Fig 5 – Segment-wise opportunity size

Power		Cooling		Others	
Components	% of Overall Cost	Components	% of Overall Cost	Components	% of Overall Cost
UPS	8	Computer Room Air Handler	5	IT Enclosures & Containment	7
Power Genset	10	Chiller	9	Building Automation	7
Medium Voltage (MV) / High Voltage (HV)	10	Cooling Tower	2	Safety & Security	6
Low Voltage (LV)	5	Others	3	Others	7
Total	33	Total	20	Total	27

Source: Schneider Electric dashboard, BOBCAPS Research

Fig 6 – SIEM well placed



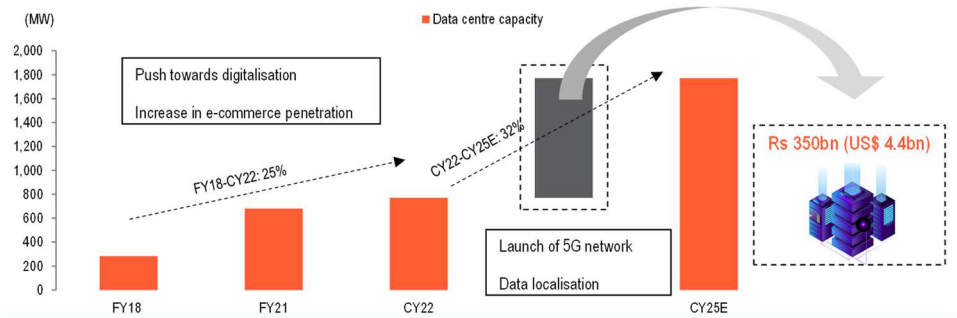
Source: Company, BOBCAPS Research

India data centre outlook

US\$ 4.4bn market opportunity by CY25E

India’s data centre capacity is currently at 770MW as of Nov’22 (per Colliers) and expected to rise to 1.8GW by CY25. This implies the addition of ~350MW per year. Setting up 1MW of capacity requires an investment of ~Rs 350mn, implying high capital intensity and translating to an enormous potential market cumulatively worth Rs 350bn (US\$ 4.4bn) over the next three years.

Fig 7 – India data centre capex estimated at Rs 350bn (\$ 4.4bn) in 3Y



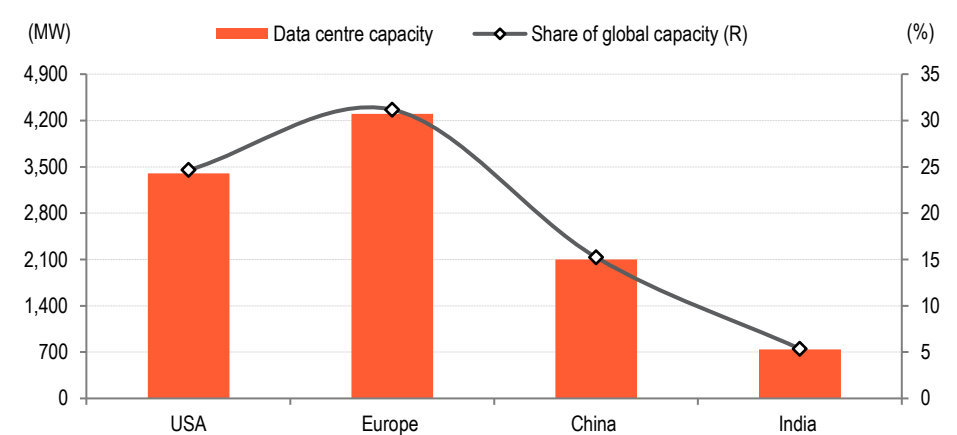
Source: Colliers, Crisil, BOBCAPS Research

Pandemic catalysed demand

A massive surge in data consumption and storage alongside requirements for lower latency has resulted in soaring demand for data centres the world over. The Covid-19 pandemic, in particular, accelerated demand growth due to multilocation working coupled with greater cloud adoption, as well as traction in high-definition video applications requiring round-the-clock data processing. Post pandemic, companies continue to run hybrid operating models, which will ensure sustained demand.

In India, the data centre industry, which accounts for 6% of the global pie, looks poised for takeoff in coming years, fuelled by rapid digitalisation and the lowest data tariffs in the world.

Fig 8 – Data centre capacity: India vs. peers



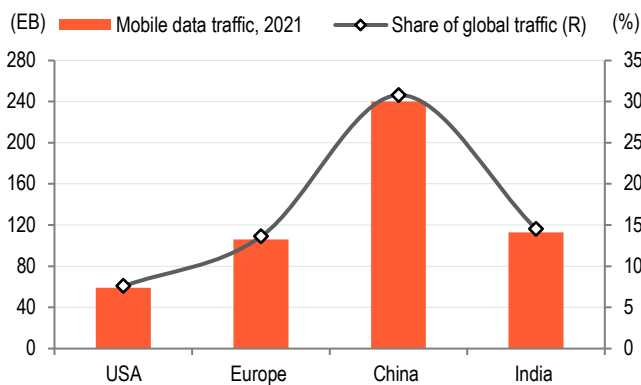
Source: Anarock, BOBCAPS Research

Data centre industry in India poised for take-off

Among the key end users of data centres are high-growth industries such as IT services, telecom and BFSI, where demand has been driven by swift digitalisation, financial inclusion and greater proliferation of e-commerce. Going forward, India’s data consumption is expected to reach 25GB/month in three years, up from the current 18GB (vs. the global average of 15GB). This will see most Big Tech players invest in local data storage.

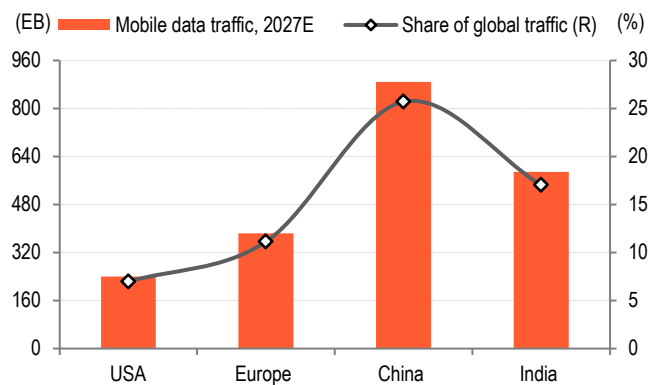
While growing internet penetration (15% of global mobile traffic, expected to rise to 17% by FY25) has resulted in a steady rise in data consumption over the years, we expect the upcoming Data Protection Bill 2022 to catalyse a step-change in demand in the near term given that it mandates data localisation. Further, 5G rollout in India, the RBI’s new digital currency, and digitalisation of healthcare should bump up data consumption. Proposed infrastructure status for data centres would lend a further fillip to the industry.

Fig 9 – Mobile data traffic, 2021



Source: Anarock. Ericson monthly report, BOBCAPS Research | 1EB (Exabyte) = 10⁹GB (Gigabyte)

Fig 10 – Mobile data traffic, 2027E: Rising global share



Source: Anarock, BOBCAPS Research

India enjoys a geographical advantage

In India, the city of Mumbai has seen concentrated capacity addition, accounting for 49% of the country’s installed data centre capacity. Mumbai benefits from reliable power supply, undersea fibre connectivity and its status as the financial capital of India. Chennai has a comparable advantage.

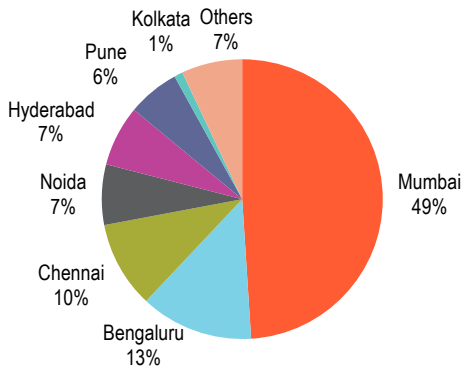
Bengaluru and Hyderabad are the least vulnerable to environmental hazards such as high seismic zones and flood-prone areas, while also harbouring large clusters of technology companies.

Fig 11 – Mumbai and Chennai have the highest undersea cabling

City	Cable landing
Mumbai	12
Chennai	8
Cochin	3
Puducherry	1
Tuticorin	1
Total	25

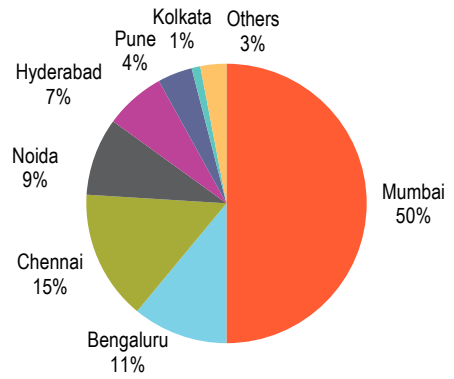
Source: Submarinenetworkd.com, BOBCAPS Research

Fig 12 – Current data centre capacity in Mar'22



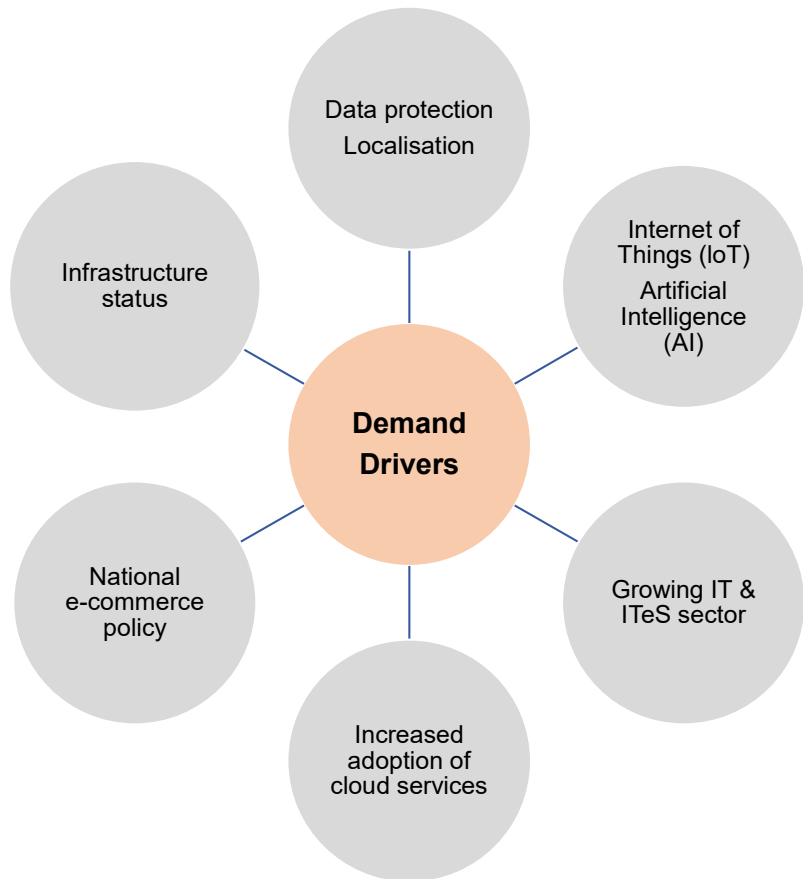
Source: Anarock, BOBCAPS Research

Fig 13 – Future capacity in Dec'25E – Mumbai to witness majority of addition



Source: Anarock, BOBCAPS Research

Fig 14 – Drivers of data centre boom

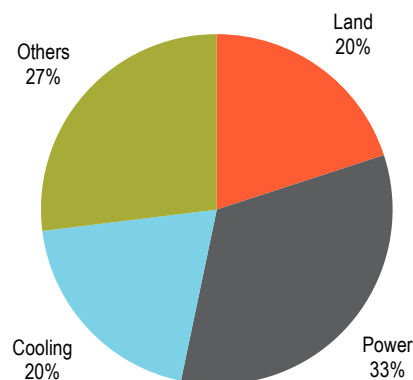


Source: BOBCAPS Research

Potential stock and sector plays

While the US\$ 4.4bn data centre opportunity over the next three years looks sizeable, our detailed analysis points to limited revenue potential for listed players in the capital goods sector, at <10% of their trailing 12-month topline. Demand will largely come from the power equipment, cooling and ancillary segments, as discussed below. In terms of total addressable market, we believe SIEM is best placed as its diverse portfolio makes it eligible to target 37% of potential data centre spends.

Fig 15 – Data centre cost breakdown



Source: SE dashboard, Bobcaps Research

Fig 16 – Segment-wise opportunity size

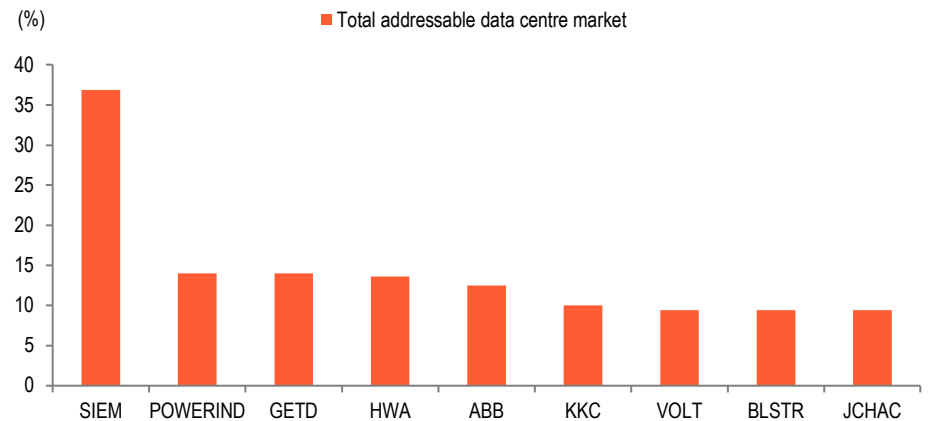
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Medium Voltage (MV) / High Voltage (HV)	10	Cooling Tower	2	Safety & Security	6
Low Voltage (LV)	5	Others	3	Others	7
Total	33	Total	20	Total	27

Source: Schneider Electric dashboard, BOBCAPS Research

Fig 17 – Company-wise opportunity size

Company	Power				Cooling	Others			Addressable market (%)
	LV	MV/HV	Genset	UPS	Chillers	Building Automation	Safety & Security	EPC	
SIEM	✓	✓		✓		✓	✓		37
ABB	✓					✓			13
POWERIND		✓		✓					14
GETD		✓		✓					14
KKC			✓						10
HWA						✓	✓		14
VOLT					✓				9
BLSTR					✓				9
JCHAC					✓				9
LT								✓	5
KECI								✓	5
TECHNOE								✓	5

Source: Company, BOBCAPS Research

Fig 18 – SIEM well placed

Source: BOBCAPS Research

Power equipment provides the single largest opportunity

Our analysis indicates that power equipment accounts for 33% of data centre capex, totaling an estimated Rs 120bn over two years. The major cost components include (i) switchgears (high/medium voltage): 14%, (ii) power gensets: 10%, (iii) critical power distribution: 5%, and (iv) UPS (uninterrupted power supply): 4%.

We believe SIEM stands to benefit the most given its ability to cater to demand across the critical power distribution (LV), switchgear (HV/MV), UPS, and building automation segments, which together offer an addressable market of Rs 84bn. POWERIND and GE T&D follow, each with an addressable market size of Rs 51bn catering to the switchgear (MV/HV) segment. KKC is the largest player in power generation, with an estimated opportunity size of Rs 36bn.

Fig 19 – Power equipment players

Product	SIEM	POWERIND	ABB	GE T&D	KKC
UPS	✓	✗	✗	✗	✗
Genset	✗	✗	✗	✗	✓
Switchgears (MV/HV)	✓	✓	✗	✓	✗
Low Voltage (LV)	✓	✗	✓	✗	✗

Source: BOBCAPS Research

Fig 20 – Data centre power equipment: Opportunity size for listed Indian players

Company	Segments	Addressable market (%)	Opportunity in 3Y (Rs bn) (30%-win rate)	% of TTM revenue
SIEM	MV/HV + LV+UPS	23	25	5
POWERIND	MV/HV	10	11	8
GE T&D	MV/HV	10	11	12
KKC	Genset	10	11	5
ABB	LV	5	6	2

Source: BOBCAPS Research | Note: SIEM's total addressable market includes the Others category

Cooling segment holds limited scope for Indian players

In cooling systems, the preference is for proven players that offer complete data centre solutions, such as MNCs IBM (Cool Blue), Schneider Electric (Uniflair), Vertiv (Liebert Cooling Systems), Mitsubishi (Data Center Cooling), and Vertiv Geist (SwitchAir). In the Indian context, BLSTR, VOLT and JCHAC could potentially address cooling unit requirements – mainly chillers which constitute up to 9% of data centre spends.

Fig 21 – Top cooling systems

Cooling system	% of Overall data centre cost	Addressable market (Rs bn)	Potential beneficiaries
Computer Room Air Handler (CRAH)			IBM (Cool Blue), Schneider Electric (Uniflair), Vertiv (Liebert Cooling Systems), Mitsubishi, VOLT, and JCHAC
Chiller	20	70	
Cooling tower			
Chilled Water Pumps, Piping, Valves			BLSTR, and JCHAC

Source: BOBCAPS Research

Fig 22 – Data centre cooling systems: Opportunity size for listed Indian players

Company	Segments	Addressable market (%)	Opportunity in 3Y (Rs bn) (30% Win rate)	% of TTM revenue
Voltas	Chiller	9	10	4
Bluestar	Chiller	9	10	5
Johnson Control Hitachi	Chiller	9	10	13

Source: BOBCAPS Research

Sizeable market for safety solutions, building automation

Aside from power equipment and cooling, we see a sizeable market for safety solutions and building automation, with Honeywell, SIEM and ABB as potential beneficiaries. Honeywell is the market leader in building automation, followed by SIEM, which has made significant inroads into the sector. ABB is still in the early stages of exploring this business.

Fig 23 – Data centre ancillary products: Opportunity size for listed Indian players

Company	Segments	Addressable market (%)	Opportunity in 3Y (Rs bn) (30%-win rate)	% of TTM revenue
Honeywell	Building Automation + Safety & Security	14	14	15
SIEM	Building Automation + Safety & Security	14	14	3
ABB	Building Automation	7	8	3

Source: BOBCAPS Research

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HOLD – Expected return from -6% to +15%

SELL – Expected return <-6%

Note: Recommendation structure changed with effect from 21 June 2021

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