AMBIT
Acumen at work

Techno E&E Co.

BUY

INITIATING COVERAGE | TEEC IN EQUITY | July 07, 2016

Wind in the sails

TEEC's unmatched working capital management, lean cost structure and bidding discipline make it a strong bet on rising T&D spends. Government funding support (IPDS, DDUGJY), increased state/PGCIL spending and reforms (UDAY, TBCB) will drive investments. TEEC's execution competence was evident in the previous high-growth cycle (FY04-09) wherein its revenue increased 8x, margins expanded and working capital was negative for most period. We expect a similar strong performance over FY16-18E – EPC revenue/EPS CAGR of 26%/29% and reduction in working capital to 36 days. We value EPC business at 20x FY18E EPS; strong management, high RoIC and growth visibility support premium multiples. Exit from the wind power segment will boost RoCE, release management bandwidth and increase ability to invest in relatively low RoCE but highly stable transmission assets.

Competitive position: MODERATE   Changes to this position: STABLE

Amongst the best contractors...

TEEC's industry-par RoEs for over 20 years despite lower leverage/margins come from low working capital (5-yr average of 37 days vs 66-182 for peers). Control over fixed costs (3% CAGR in last 5 years) implies overheads are 9% of revenue (18%+ for peers). Sensible bidding and tech savvy (STATCOM, HVDC) help it compete in high-margin, low-competition segments. These reflect a strong, sustainable EPC franchise, but capital allocation was less than perfect.

...in an industry geared for growth

We prefer transmission contractors due to subdued competitive intensity, lower land/RoW issues and strong government intent. Under-investment in T&D (33% of power spends over FY08-14 vs 50% ideal) seem to be reversing now. Government push to resolve sector problems by funding (IPDS, DDUGJY: ₹1tn) and reforms (UDAY, Electricity Act amendments, TBCB) combined with higher state spends (up 30% in FY16 for 9 large states) and PGCIL spends (₹1.4tn FY18-22 vs ₹1.2tn in FY13-17) will drive order inflow growth for the sector.

Capital allocation improving

Poor capital allocation is primarily investments in wind power generation, sub-par dividend payout and inter-corporate loans given in FY09. About 79% of capital employed is currently invested in wind business with a pre-tax RoCE of 3%, lower than 117% for the EPC business. Sale of the wind assets should result in improved RoCE but risks another bout of capital misallocation.

Punchy valuations will sustain

TEEC's industry leading operations, strong management and capital misallocation are akin to Thermax; it merits a premium to peers like Thermax does. EPC business value of ₹620 implies 20x FY18E profits, 30% higher than KECI. Strong growth and better capital allocation will sustain valuation; investments in transmission assets will impart stability to otherwise volatile business. Key risks: capital misallocation; state spending throttling off

Key financials

	FY15	FY16	FY17E	FY18E	FY19E
Revenue	7.9	11.0	14.6	17.7	21.8
Growth (YoY)	*12%*	*38%*	*33%*	*21%*	*23%*
EBITDA margin	26.2%	20.2%	23.7%	22.0%	20.8%
EPS	18	21	37	44	55
RoE	12%	13%	19%	20%	21%
P/E (ex-embedded value)	41	26	21	16	12
EV/EBITDA	18.6	16.9	10.6	8.6	6.8

Source: Company, Ambit Capital research

Engineering & Construction

Recommendation

Mcap (bn):	₹34/US$0.5
6M ADV (mn):	₹11/US$0.2
CMP:	₹600
TP (12 mths):	₹745
Upside (%):	24

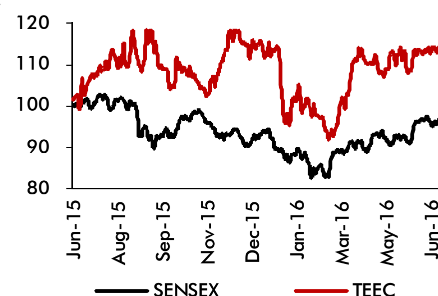
Flags

Accounting:	AMBER
Predictability:	AMBER
Earnings Momentum:	GREEN

Catalysts

- Sustenance of execution and order inflow pace in FY17
- Monetisation of the wind assets at par to our embedded valuation of ₹5.2bn

Performance (%)



Source: Bloomberg, Ambit Capital Research

Research Analysts

Utsav Mehta, CFA
+91 22 3043 3209
utsavmehta@ambitcapital.com

Nitin Bhasin
+91 22 3043 3241
nitinbhasin@ambitcapital.com

Ambit Capital and / or its affiliates do and seek to do business including investment banking with companies covered in its research reports. As a result, investors should be aware that Ambit Capital may have a conflict of interest that could affect the objectivity of this report. Investors should not consider this report as the only factor in making their investment decision.

Snapshot of Company Financials

Profit and Loss

Year to Mar (₹ mn)	FY16	FY17E	FY18E
Net revenue	10,972	14,620	17,712
EBITDA	2,213	3,467	3,893
Depreciation	495	578	596
Interest expense	1,650	2,488	3,009
Adjusted PBT	487	431	572
Tax	**1,226**	**2,123**	**2,509**
Adjusted net profit	1,407	2,123	2,509
Reported net profit	21	37	44
Profit and Loss Ratios			
EBITDA Margin (%)	20%	24%	22%
Net profit margin (%)	11%	15%	14%
P/E (ex-embedded value)	25.9	20.9	15.6
EV/ EBITDA	16.9	10.6	8.6
P/B	3.4	2.9	2.5

Company Background

Event	Year
Started operations as an EPC player	1963
Public listing	1980
Forayed into captive power plant segment	1985
Forayed into the power T&D segment	1990
Investment by Citigroup Venture Capital	2006
Forayed into the wind power generation space through 95MW acquisition	2009
Forayed into Transmission BOOT projects	2010
Sold 45MW of wind power capacity	2015

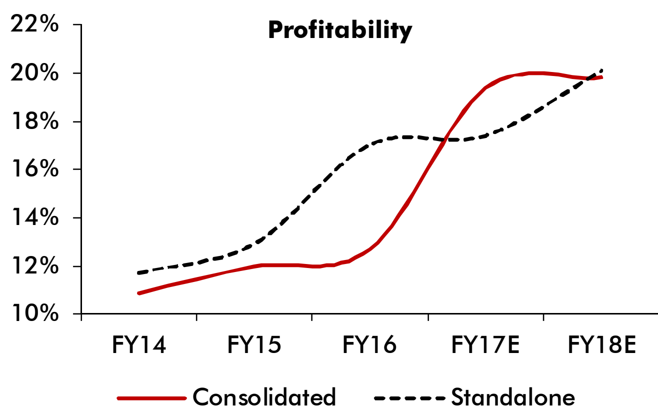
Balance Sheet

Year to Mar (₹ mn)	FY16	FY17E	FY18E
Total Assets	14,936	17,371	18,632
Fixed Assets	8,046	9,415	8,958
Current Assets	8,744	10,192	13,309
Investments	1,547	1,547	1,547
Total Liabilities	14,936	17,371	18,632
Total networth	10,145	11,769	13,544
Total debt	4,784	5,594	5,080
Current liabilities	3,600	3,982	5,381
Deferred tax liability	8	8	8
Balance Sheet ratios			
RoCE	9%	15%	15%
RoE	13%	19%	20%
Gross Debt/Equity (x)	0.5	0.5	0.4
Net debt (cash)/ Eq (x)	0.3	0.2	(0.1)
Working Capital turns (x)	3.4	4.2	5.7

Cash flow

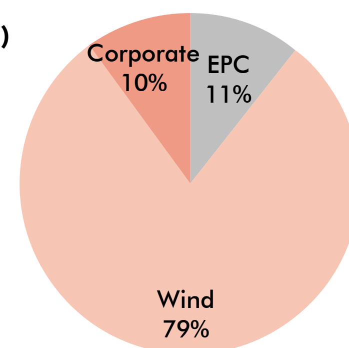
Year to Mar (₹ mn)	FY16	FY17E	FY18E
PBT	**1,894**	**2,488**	**3,009**
Depreciation	495	578	596
Direct taxes paid	(487)	(431)	(572)
Change in working capital	(895)	347	370
CFO	1,075	3,382	3,692
Purchase of fixed assets	1,511	(1,947)	(139)
Investments in subs	-	-	-
CFI	**1,689**	**(1,843)**	**300**
Proceeds from borrowings	(866)	811	(514)
Change in share capital	-	-	-
Interest paid	(443)	(504)	(478)
Dividends paid	(230)	(356)	(433)
CFF	**(1,539)**	**(50)**	**(1,425)**
Change in cash	**1,225**	**1,490**	**2,567**
Free cash flow	2,586	1,435	3,553

Profitability can increase even further if wind assets are sold



Since this business consumes more capital than the core EPC business

Capital employed (consolidated; `13.2bn)



Source: Bloomberg, Ambit Capital research

A brief introduction to Techno E&E

Contrary to popular perception of a niche-substation contractor, TEEC is a cross-functional contractor that operates across segments in the power space. It has construction capabilities in power generation, transmission and distribution. Building substations and switchyards is its primary revenue generator. The consolidated business has three businesses – contracting, wind power generation assets, and transmission BOOT assets.

Exhibit 1: An overview of Techno Electric

Segment	Sub-segment	Details	Revenue (₹ mn; FY16)	% of FY16 revenue	EBITDA (₹ mn; FY16)	EBITDAM (FY16)
Standalone						
EPC business	Power Generation	▪ Building captive power plants up to 100MW on a turnkey basis ▪ Parts of the BOP contracts such as fuel oil handling system, comprehensive electrical systems, piping, power evacuation systems and others ▪ Serves both Government/PSU and private customers	600	5%	NA	
	Transmission	▪ Building sub-stations and switchyards. The company is not present in the transmission lines segment ▪ Services largely PGCIL and multi-laterally funded state projects	8,543	78%	NA	
	Distribution	▪ Rural electricification and distribution management systems under Central Government programmes ▪ Primarily works with state distribution companies	1,000	9%	NA	
Total EPC			**10,143**	**92%**	**1,440**	**14.2%**
Wind power generation	Power Generation	▪ The standalone business has 45MW of wind power generation capacity spread across 2 states - Karnataka - (12MW) and Tamil Nadu (33MW); 30 turbines of 1.5MW ▪ This was acquired from Suzlon's promoters for ₹2.5bn in FY10	186	2%	144	77.4%
Total SA			**10,328**	**94%**	**1,583**	**15.3%**
Subsidiaries						
Patran Transmission	Transmission asset	▪ Transmission project won in FY14 and commissioned in Jun-16 ▪ Located in Punjab, the total project cost is ₹2bn with a concession period of 35 years	-	0%	-	NA
Simran Wind	Power Generation	▪ Acquired in FY10 with a capacity of 50.4MW, the entity added an additional 111.9MW. IFC invested ₹225mn for a 3.38% stake in FY12 ▪ The entity sold 44.45MW of capacity in FY16 for ₹2.15bn to an unnamed buyer ▪ Now has 117.9MW of capacity of which 6MW is in Karnataka and rest in Tamil Nadu	644	6%	620	96.3%
Total Consol			**10,972**	**100%**	**2,203**	**20.1%**
Associates						
Jhajjar KT Transco	Transmission asset	▪ Transmission project won in FY11 and commissioned in Mar-12 ▪ Located in Haryana the total project cost was ₹4.3bn with a concession period of 35 years with the option to end it at 25 years. ▪ If ended at 25 years, the company would receive five years of revenue upfront ▪ TEEC has a 49% stake				

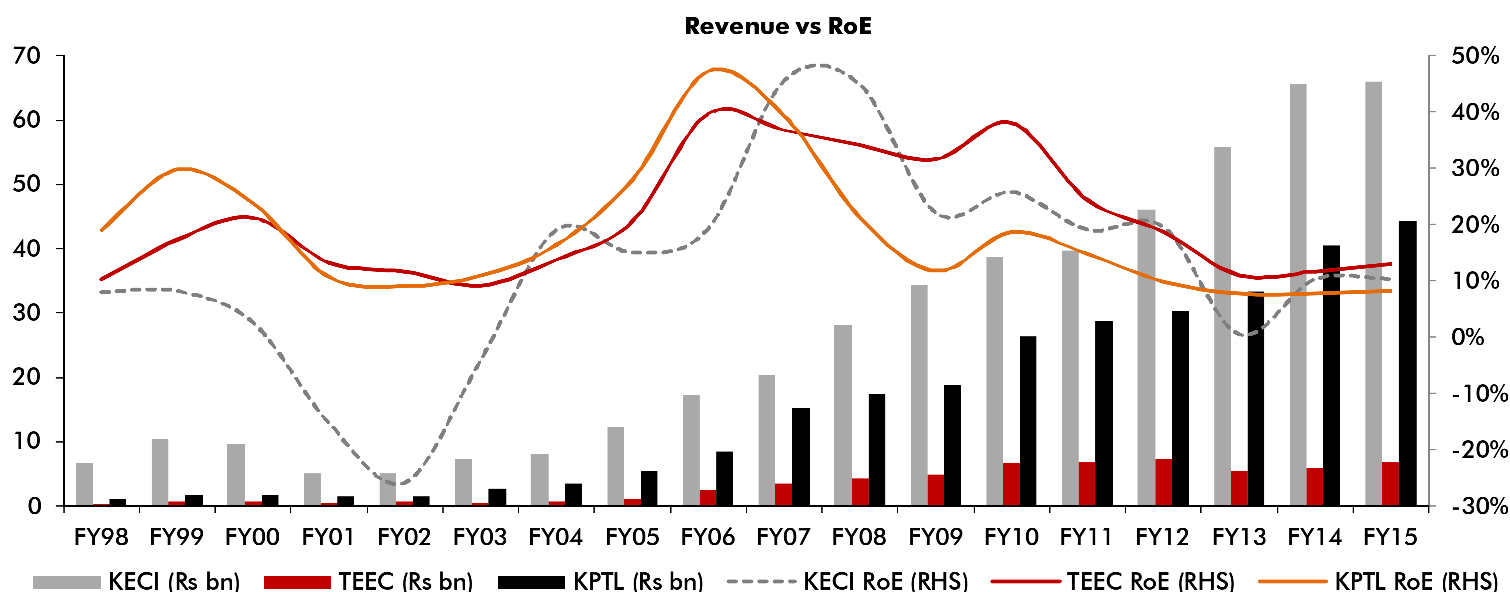
Source: Company, Ambit Capital research, Media sources; Note: Distribution and power generation revenues are Ambit estimates

Tracing the origins

Techno Electric (TEEC) was established in 1963. The current promoter (PP Gupta) acquired the company in the early 1980s. Through the late 1990s and 2000s the company operated as a contractor in the power space across various segments in generation, transmission and distribution. Key takeaways from studying the history of the company are:

- **TEEC has shown strong control over working capital** (negative in 9 of the 15 years over FY96-10) that enabled the company to maintain industry-average RoE despite sub-par margins (due to its smaller scale) and lower leverage.
- **TEEC is cross-functional contractor that operates across the power space** and not just a niche player in substation EPC as widely perceived.
- During the previous cycle of high investments in T&D, the company benefited from not only high growth but also higher margins and negative working capital.
- **Investing in wind power assets was a mistake**, which the company is now looking to reverse.

Exhibit 2: TEEC's industry-par profitability is despite its smaller scale, margins and lower leverage



Source: Company, Ambit Capital research; Note: Standalone figures used for all three entities to compare domestic T&D EPC businesses

FY98-FY03: Small-sized contractor that excelled in managing its balance sheet

TEEC's scale largely remained the same during this period (revenue base of ₹400mn-750mn). Due to the limited scale of operations, margins were in low-single digits. The company's substation business increased from ~60% of revenue to ~80%. A large proportion of orders, even during this phase, were from Government or public sector units such as Power Grid (PGCIL), NTPC, BHEL, NEEPCO and APTRANSCO.

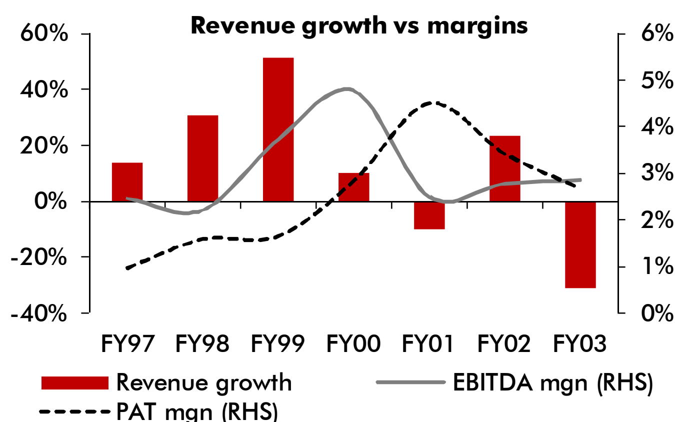
Revenue CAGR: 9%

Median RoE: 12%

Largest segment: substations/ switchyards (77% of revenue)

Focus was to become a preferred contractor across segments of the power space, including generation. These were substations, fuel oil handling plants and electrical systems. It also forayed into portions of Balance of Plants (BoP) projects through a subcontracting order.

Exhibit 3: TEEC's growth was patchy and margins were in single digits though it did not make a loss



Source: Company, Ambit Capital research

Exhibit 4: Substation was the main source of revenue; however, it had a footprint in generation as well

₹ mn	FY98	FY99	FY00	FY01	FY02	FY03
Fuel oil handling plant	50	114	39	48	22	10
% of total	*12%*	*18%*	*6%*	*8%*	*3%*	*2%*
Electrical systems	68	45	48	19	19	21
% of total	*17%*	*7%*	*7%*	*3%*	*3%*	*4%*
Sub-stn/ switchyard	247	370	550	490	662	444
% of total	*60%*	*60%*	*81%*	*80%*	*88%*	*85%*
Others	40	87	40	54	52	47
% of total	*10%*	*14%*	*6%*	*9%*	*7%*	*9%*
Total revenue	**408**	**617**	**678**	**611**	**755**	**521**

Source: Company, Ambit Capital research

Despite the smaller scale of operations and therefore lower margins, TEEC's profitability was comparable to peers such as Kalpataru. This was primarily driven by low working capital investments vis-à-vis peers and no manufacturing facilities. Leverage was minimal with a preference towards equity (two fund-raises through rights issues).

Exhibit 5: TEEC vs transmission peers – asset-light model supports profitability

Standalone	**FY98**	**FY99**	**FY00**	**FY01**	**FY02**	**FY03**
Capital employed turnover						
TEEC	4.4	4.6	3.7	3.3	4.1	2.5
KECI	1.0	1.3	1.0	0.5	0.5	0.8
KPTL	1.3	1.4	1.3	1.2	0.9	1.4
PAT margin						
TEEC	2%	3%	5%	3%	3%	3%
KECI	4%	2%	1%	-9%	-13%	-1%
KPTL	7%	9%	9%	5%	5%	3%
Leverage						
TEEC	1.4	1.3	1.3	1.2	1.1	1.1
KECI	2.3	2.6	2.8	3.2	3.9	3.9
KPTL	2.2	2.3	2.0	1.8	1.9	2.3
RoE						
TEEC	10%	17%	21%	13%	12%	9%
KECI	8%	8%	3%	-15%	-26%	-4%
KPTL	19%	30%	24%	11%	9%	11%

Source: Company, Ambit Capital research; Note: Standalone figures used for all three entities to compare T&D EPC businesses

FY04-FY10: Industry growth boosts revenue

The Electricity Act of 2003 was an inflection point for companies in the T&D space, including generation companies. The quantum of investments in transmission and distribution multiplied, boosted by new regulations and schemes (Accelerated Power Development and Reforms Programme and Rural Electrification Scheme). Bifurcation of the debt saddled state electricity bodies into separate, functional units aided further investments, especially in distribution. As shown in the exhibit below, peers also grew at a fast pace in this period.

Revenue CAGR: 44%

Median RoE: 34%

Largest segment: Substations/ switchyards (41% of revenue)

Exhibit 6: KECI's warranted optimism in the FY05 annual report

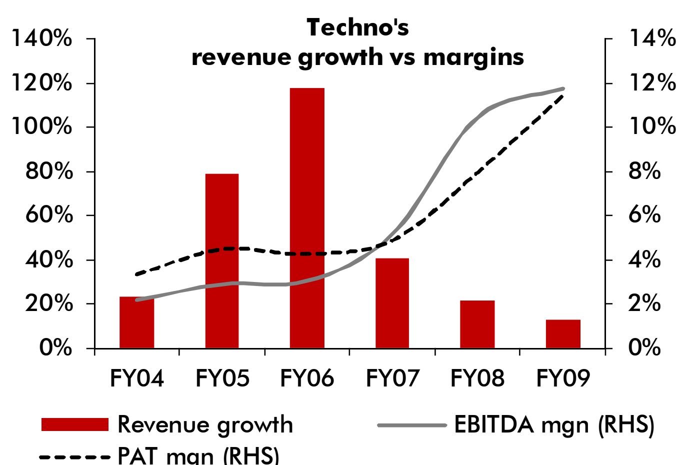
The Accelerated Power Development and Reforms Programme ("APDRP") has been put in place by the Government and projects worth over ₹.170 billion have already been approved under this scheme. The Government has also announced plans to add around 107,000 MW of additional power generation capacity by the year 2012 and evolved a transmission plan for strengthening regional grids as well as creating a national grid, which can support this target.

An investment of about ₹. 71,000 crores (₹710bn) is envisaged in power transmission under central sector and Transmission and Distribution of electricity generated is being accorded a high national priority in view of the significant capacity additions. The Government has launched Rajiv Gandhi Grameen Vidyutikaran Yojana ("RGGVY"), a Rural Electrification Scheme involving an expenditure of ₹. 16,000 crores

Source: Company

TEEC forayed into captive power plant and distribution segments during this phase. Its scale in distribution expanded significantly – by FY07, 58% of revenue came from the power distribution contracting segment driven primarily by projects in Andhra Pradesh and Bihar. Captive power/BOP projects were sporadic, resulting in small surges in revenue; substation reduced to 27% of revenue.

Exhibit 7: Govt impetus on the sector yielded strong growth for TEEC; margins also expanded substantially



Source: Company, Ambit Capital research

Exhibit 8: Revenue was broad-based with substations, distribution contributing the most

₹ mn	FY04	FY05	FY06	FY07	FY08	FY09	FY10
Oil handling plant	33	23	145	204	490	466	1,208
% of total	*5%*	*2%*	*6%*	*6%*	*11%*	*10%*	*18%*
Electrical sys	70	94	355	357	118	116	228
% of total	*11%*	*8%*	*14%*	*10%*	*3%*	*2%*	*3%*
Sub-stn/ switchyard	506	553	355	839	2,575	3,151	1,797
% of total	*79%*	*48%*	*14%*	*24%*	*60%*	*65%*	*27%*
Power distribution	-	52	1,017	2,052	988	789	1,463
% of total	*0%*	*4%*	*41%*	*58%*	*23%*	*16%*	*22%*
BOP/ Power Gen	3	241	432	33	-	194	1,154
% of total	*1%*	*21%*	*17%*	*1%*	*0%*	*4%*	*17%*
Others	31	189	203	41	124	144	468
% of total	*5%*	*16%*	*8%*	*1%*	*3%*	*3%*	*7%*
Total revenue	**643**	**1,152**	**2,506**	**3,526**	**4,296**	**4,860**	**6,680**

Source: Company, Ambit Capital research

Profitability also increased. Driven by strong top-line growth, EBITDA margins expanded to 11.2% in FY09. The company continued to exhibit strong control over working capital as indicated by high capital employed turnover vis-à-vis peers. Remarkably, due to high working capital turns, the company did not require external capital to fund growth. It raised equity in FY07 and FY08. Cash largely remained on the company's books unutilised until the company invested in wind assets.

Exhibit 9: TEEC's capital employed turnover and superior margins led to better profitability in this high growth phase

Standalone	FY04	FY05	FY06	FY07	FY08	FY09	FY10
Capital employed turnover							
TEEC	2.8	4.6	7.9	4.6	3.0	2.2	1.7
KECI	1.0	1.5	2.6	3.3	3.1	3.0	2.8
KPTL	1.7	2.5	2.6	2.2	1.7	1.4	1.7
PAT margin							
TEEC	4%	4%	5%	8%	11%	13%	17%
KECI	6%	3%	3%	5%	6%	3%	4%
KPTL	4%	5%	8%	10%	9%	5%	6%
Leverage							
TEEC	1.1	1.0	1.0	1.0	1.0	1.1	1.4
KECI	3.5	2.9	2.6	2.7	2.3	2.2	2.1
KPTL	2.4	2.1	2.3	1.7	1.5	1.6	1.7
RoE							
TEEC	14%	21%	40%	37%	34%	32%	38%
KECI	19%	15%	19%	46%	45%	22%	26%
KPTL	16%	28%	47%	39%	21%	12%	19%

Source: Company, Ambit Capital research

FY10-FY15: Expansion into non-contracting businesses drags profitability; industry growth slows

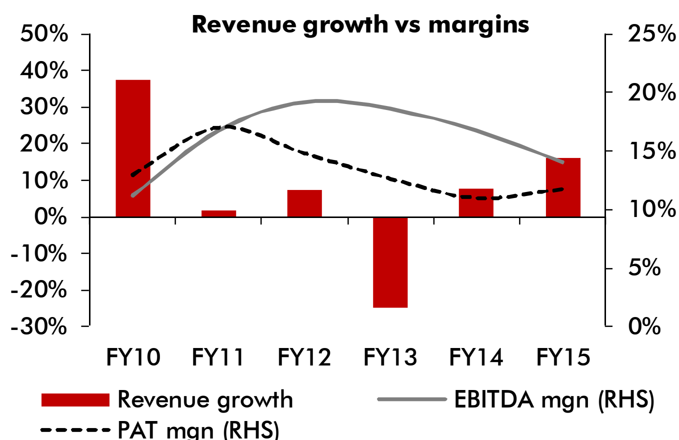
Revenue CAGR: 6%

Median RoE: 16%

In FY09-10, the company decided to venture into the power generation business by acquiring assets from Suzlon's promoters. Moreover, it also decided to invest in transmission BOOT projects, which are typically steady-return but asset-heavy projects. Hence, the company's return ratios declined significantly driven by declining capital employed turnover.

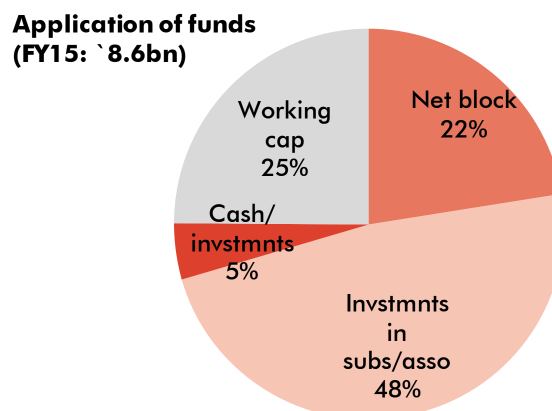
Moreover, increasing competition in the transmission space and the company's conservative, profit-focused nature resulted in limited revenue growth at the standalone level.

Exhibit 10: The company's growth was subdued as it chose to prioritise margins



Source: Company, Ambit Capital research

Exhibit 11: Wind and transmission asset investments weighed down the balance sheet



Source: Company, Ambit Capital research

Exhibit 12: TEEC's profitability declined significantly as capital employed turnover declined on the back of non-contracting business investments

Standalone	FY10	FY11	FY12	FY13	FY14	FY15
Capital employed turnover						
TEEC	1.7	1.1	1.0	0.7	0.8	0.8
KECI	2.8	2.3	2.6	2.9	2.8	2.5
KPTL	1.7	1.6	1.4	1.4	1.6	1.5
PAT margin						
TEEC	17%	15%	13%	11%	12%	12%
KECI	4%	4%	4%	0%	2%	2%
KPTL	6%	7%	5%	4%	4%	4%
Leverage						
TEEC	1.4	1.5	1.4	1.4	1.3	1.3
KECI	2.1	2.1	1.9	2.0	2.3	2.5
KPTL	1.7	1.4	1.3	1.3	1.4	1.4
RoE						
TEEC	38%	24%	19%	11%	12%	13%
KECI	26%	19%	20%	0%	10%	10%
KPTL	19%	15%	10%	8%	8%	8%

Source: Company, Ambit Capital research

Discipline and adaptability: The secret sauce

TEEC's main competitive advantages are discipline and adaptability. Its strong growth over the last 20 years with limited balance sheet risk (excluding the power generation aspirations) and consistent profitability (no net loss in any of the last 20 years) indicate high bidding discipline. Its seemingly opportunistic foray into allied contracting segments (distribution, captive power) and asset ownership of transmission and generation assets indicates flexibility. The architecture of the organisation is geared towards limited risk-taking and tight control over operations and is complemented by management's extensive experience in the space.

Architecture – based on cost and WC management

TEEC typically never has more than twenty open sites and is unlikely to undertake more than one distribution contract.

TEEC typically never has more than 20 open sites and is unlikely to undertake more than one distribution contract. This enables strong managerial and supervisory control over the execution pace, working capital management and cost control. Moreover, the company tends to take projects in hard-to-operate regions like Bihar to protect its margins. The company's exemplary track record in terms of working capital and margins demonstrates this. The company has not reported a net loss in any of the last 20 years. However, as the company increases in scale, it will need to increase its managerial bandwidth.

TEEC has been in the T&D contracting business since 1980. It has strong relationships with multiple Government and public sector units through decades of operating with them. As shown in the exhibit below, most of the company's projects are primarily with PSUs like NTPC and Power Grid. The MD, PP Gupta, has a strong reputation amongst peers.

Exhibit 13: TEEC has worked with most companies

Awarder	Contracts won
PCGIL	28
BHEL	23
Other state Electricity boards	22
AP Electricity boards	12
NTPC	11
Bihar Electricity boards	9
DVC	8
State OMCs	5
NEEPCO	2
Alstom	2
Others	30

Source: Company, Ambit Capital research

Exhibit 14: PP Gupta's background

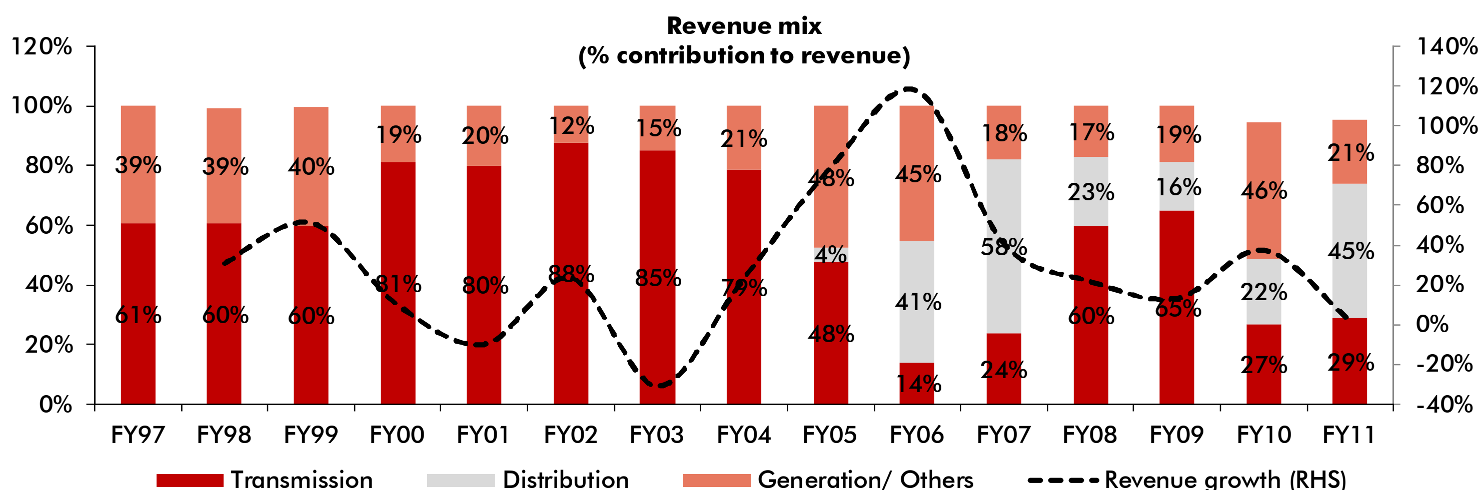
- Bachelor in Engineering and a Post Graduate in Business Management from IIM, Ahmedabad
- Took over TEEC in early 1980s
- Associated with the Planning Commission as a Financial Analyst and Management Consultant, deputed to BHEL
- Advisor in the Merchant Banking Division of the erstwhile ANZ Grindlays Bank, Kolkata
- Was the Vice President of Indian Electricals and Electronics Manufacturers Association (IEEMA)
- More than 30 years of experience in the current field

Source: Company, Ambit Capital research

Adaptability – agility in tapping new segments

TEEC has operated across the generation, transmission and distribution segments. Although transmission has always been the main driver of revenue, the company has been opportunistic enough to leverage on distribution and captive power plant demand whenever it arose. Due to limited number of active sites (20 at most), it is agile enough to target newer segments.

Exhibit 15: TEEC's changing revenue mix suggests an opportunistic (and capable) approach to high-growth segments



Source: Company, Ambit Capital research; Note: data for revenue breakup not available in Annual reports post FY11

The same is also witnessed within the substation EPC category. The company has always focused on identifying upcoming trends within its core area of expertise. It's relatively early foray into high KV segments, STATCOM and HVDC meant it was amongst the few Indian contractors vying for market share in this category.

Working capital management – best in class

TEEC's working capital management stands out as amongst the best in the industry. As shown in the exhibit below, the company's working capital cycle is the shortest amongst T&D peers despite steady deterioration over the last 5 years. TEEC is partially aided by lower inventory days since it doesn't own any manufacturing operations (all 3 T&D peers own tower manufacturing plants). Even adjusted for this, TEEC's cycle is shorter due to lower receivable days which may be a function of the project mix.

Its working capital is better than or on par-with most road contractors, if we exclude advances the road companies received from self-owned road assets. Note that we have excluded loans and advances from this calculation since these contain advances made to subsidiary companies.

Exhibit 16: TEEC's working capital advantages are driven by its asset-light model (no manufacturing) and better receivables management

	FY16						5 year average					
Days	**Inventory**	**Recb**	**Oth. asset**	**Payables**	**Oth. liab**	**Cycle**	**Inventory**	**Recb**	**Oth. asset**	**Payables**	**Oth. liab**	**Cycle**
Techno Electric	13	161	0	97	8	**70**	5	135	0	65	39	**37**
T&D Peers												
KECI	18	212	42	144	43	**84**	20	185	54	151	42	**66**
KPTL	35	159	52	124	21	**101**	44	147	59	121	28	**101**
Jyoti Structures	34	614	66	66	NA	**NA**	38	302	17	130	45	**182**
Alstom T&D	103	253	26	166	132	**83**	74	212	47	177	91	**65**
ABB	42	152	18	94	57	**61**	44	153	18	95	66	**55**
Road Contr.												
Ashoka	152	80	41	67	102	**104**	111	58	27	116	84	**(4)**
Sadbhav	16	119	10	42	55	**48**	20	123	5	51	62	**35**
KNR	14	52	65	45	109	**(22)**	15	57	65	43	99	**(5)**

Source: Company, Ambit Capital research; Note: Standalone figures used for all entities to narrow down on domestic contracting business metrics; for peers in the T&D business, international and non-T&D businesses may exist. We have excluded loans and advances to remove volatility caused by loans given to subsidiaries; 4-year average till FY15 used for Jyoti Structures due to lack of data

We believe the company's working capital requirement is a function of its conservative revenue recognition practices. Our primary checks indicate that PGCIL and multi-lateral agencies that fund state projects make payments in 60-90 days. A similar figure reported by the company prior to its foray into the wind business indicates the measured approach to revenue recognition.

The exhibit below illustrates the company's deterioration in standalone working capital over the last 5 years. This was driven by its foray into the wind business (increase in receivable days) and decline in advances possibly as a trade-off for higher margins since some customers demand interest on advances.

Exhibit 17: TEEC's standalone working capital has deteriorated but should improve hereon

Standalone	FY07-11 avg	FY12	FY13	FY14	FY15	FY16E	FY12-16 avg	FY17E	FY18E
Working capital days	**(0)**	**3**	**28**	**31**	**91**	**73**	**45**	**51**	**36**
Inventories	2	1	1	7	3	13	5	3	3
Receivables	21	38	60	50	104	108	72	76	71
Retention money	42	61	76	68	60	53	64	59	58
Other assets	0	0	-	1	0	0	0	0	0
L&A (excl loans to others/ subs)	26	8	12	8	8	3	8	3	3
Payables	37	49	59	54	65	97	65	70	71
Advances	53	53	55	45	18	3	35	17	25
Other liabilities	1	3	7	4	1	5	4	3	3

Source: Company, Ambit Capital research;

Over the next 2 years, the company's working capital should improve due to partial unwinding of receivables. A bulk of FY16 receivables are from the company's self-owned Patran project which will now reduce.

Cost efficiencies – controlled overheads

TEEC's fixed overheads have largely been steady over the last 5 years. Despite an 8% CAGR in revenue, fixed overheads have increased only at 3% CAGR. A largely asset-light, lean organisation structure has aided in overheads control. For instance, the company's employee base is the same as it was in Aug 2011. In the last 5 years, the company's profitability in its contracting business declined and thereafter increased. The decline in EBITDA margin in FY13 and FY14 was a function of a decline in revenue, indicated by the steady overheads.

Exhibit 18: Standalone business costs – TEEC's fixed overheads in the EPC business have largely remained steady

	FY07-11 CAGR	FY12	FY13	FY14	FY15	FY16E	FY12-16E CAGR
EPC business							
Revenue	13%	7,040	5,159	5,705	6,681	10,143	8%
Cost of material	11%	5,129	3,747	4,260	5,021	7,816	9%
Gross margin		27.1%	27.4%	25.3%	24.8%	22.9%	
Fixed over-heads	14%	783	839	843	722	888	3%
% of revenue		11.1%	16.3%	14.8%	10.8%	8.8%	
EBITDA		**1,128**	**573**	**602**	**937**	**1,440**	
EBITDA margin		**16.0%**	**11.1%**	**10.5%**	**14.0%**	**14.2%**	
Wind business							
Revenue		282	356	236	210	186	
Gross margin		100%	100%	100%	100%	100%	
Fixed over-heads		2	4	2	52	42	
% of revenue		0.6%	1.1%	1.0%	24.9%	22.6%	
EBITDA		**280**	**352**	**234**	**158**	**144**	
EBITDA margin		**99%**	**99%**	**99%**	**75%**	**77%**	

Source: Company, Ambit Capital research

A peculiar aspect of the company's operations is that it doesn't subcontract its projects unlike peers. Due to its lean overhead structure vis-à-vis peers, its fixed overheads compensates for its lower gross margins. Fixed overheads enable savings of 1,000bps for TEEC, as shown in the exhibit below. Higher overheads for peers could also be a function of tower manufacturing facilities owned by them.

Exhibit 19: TEEC's fixed overheads are its source of margin advantage over peers

	KECI (standalone)			KPTL (standalone)			TEEC (EPC)		
	FY14	FY15	FY16	FY14	FY15	FY16	FY14	FY15	FY16E
Revenue	**65,588**	**65,921**	**64,636**	**40,552**	**44,223**	**43,646**	**5,705**	**6,681**	**10,143**
Cost of materials	34,131	35,424	32,444	18,662	18,865	17,881	4,260	5,021	7,816
% of revenue	52%	54%	50%	46%	43%	41%	75%	75%	77%
Subcontracting	16,655	16,111	15,666	10,414	11,974	12,775	-	-	-
% of revenue	25%	24%	24%	26%	27%	29%	0%	0%	0%
Gross margin	**23%**	**22%**	**26%**	**28%**	**30%**	**30%**	**25%**	**25%**	**23%**
Employee cost	3,215	3,572	4,008	2,602	3,136	2,932	278	265	294
% of revenue	5%	5%	6%	6%	7%	7%	5%	4%	3%
Overheads	7,858	7,539	8,036	5,011	5,980	5,390	565	458	594
% of revenue	12%	11%	12%	12%	14%	12%	10%	7%	6%
EBITDA	**3,729**	**3,275**	**4,483**	**3,862**	**4,267**	**4,669**	**602**	**937**	**1,440**
EBITDA margin	**5.7%**	**5.0%**	**6.9%**	**9.5%**	**9.6%**	**10.7%**	**10.5%**	**14.0%**	**14.2%**

Source: Company, Ambit Capital research; Note: We have used only the EPC segment for TEEC's standalone business

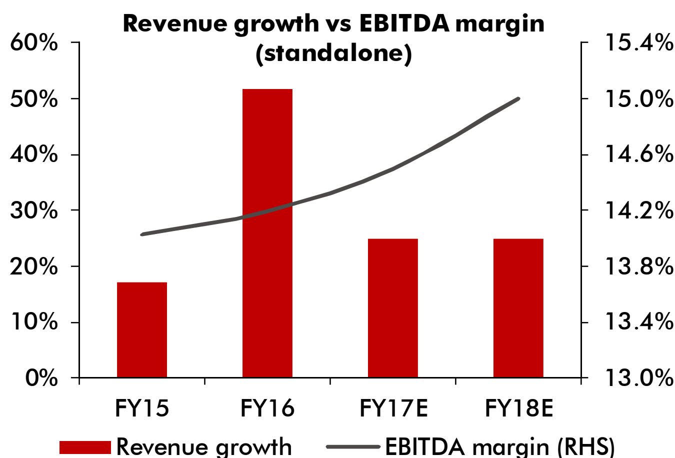
Exhibit 20: Product-oriented peers make higher gross margins but have significantly higher overheads

	ABB			Alstom T&D		
	FY14	FY15	FY16E	FY14	FY15	FY16E
Revenue	**77,220**	**77,333**	**81,403**	**35,235**	**37,213**	**34,500**
Cost of materials	49,303	48,371	48,336	23,936	25,388	23,010
% of revenue	64%	63%	59%	68%	68%	67%
Subcontracting	4,682	4,059	4,664	NA	NA	NA
% of revenue	6%	5%	6%	0%	0%	0%
Gross margin	**30%**	**32%**	**35%**	**32%**	**32%**	**33%**
Employee cost	6,771	7,052	7,499	3,434	3,457	3,673
% of revenue	9%	9%	9%	10%	9%	11%
Overheads	11,765	12,295	13,779	4,868	5,122	5,129
% of revenue	15%	16%	17%	14%	14%	15%
EBITDA	**4,699**	**5,557**	**7,125**	**2,997**	**3,246**	**2,689**
EBITDA margin	**6.1%**	**7.2%**	**8.8%**	**8.5%**	**8.7%**	**7.8%**

Source: Company, Ambit Capital research

We do not expect margins to expand materially henceforth despite strong revenue growth as the company will need to invest in its employee base and associated overheads to keep up with the increasing order book. However, management commentary suggests that execution cycles in the industry have declined significantly over the past year driven by a capitalisation-focused PGCIL. Moreover, competitive intensity in the industry has also declined (vs 2-3 years ago) as financially stressed companies have exited (discussed later). Shortening cycles will limit margin downside.

Exhibit 21: Margins should expand marginally driven by operating leverage…



Source: Company, Ambit Capital research

Exhibit 22: …and declining execution timelines in the industry

Clearly we are seeing that happening in Power Grid, we are seeing that happening in some of the SEBs, in Karnataka we are seeing projects where the execution cycle they are bringing it down to six months from 12 months.

- ***Vimal Kejriwal, MD & CEO, KEC International***

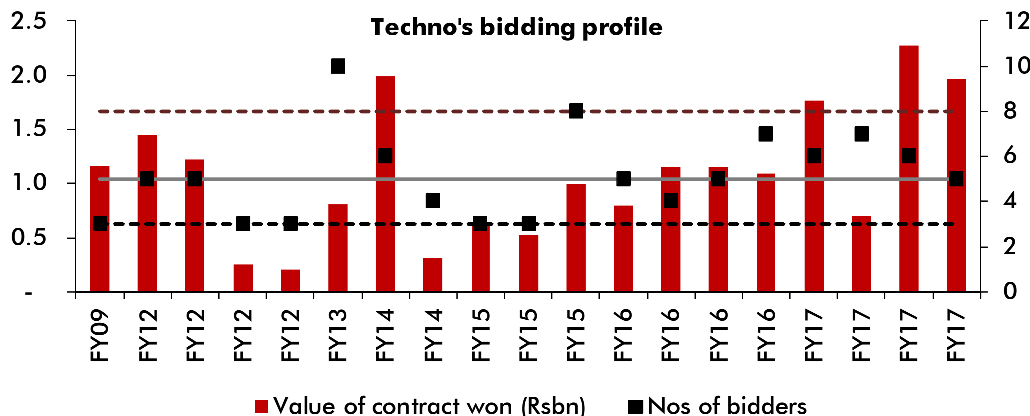
Source: Company, Ambit Capital research

Bidding discipline – avoiding crowded projects

Our primary checks indicate that TEEC is recognised as one of the more conservative players in the industry. The company is selective in its pursuit of projects as evidenced by the low number of bidders in the projects that it has won in the last few years. Moreover, TEEC sticks to its core area of expertise, bidding aggressively only when it is familiar with the package or region.

As highlighted in its history, TEEC's adaptability across multiple segments in transmission, generation and distribution will enable it to switch to more margin-lucrative segments depending on the opportunity.

Exhibit 23: TEEC has typically won projects that have had less than 5-6 bidders



Source: PGCIL, Ambit Capital research; Note: Bidders excludes disqualified companies' Each bar stands for a project won during that year

Like many of its peers, the company is constantly looking for newer technology and avenues that would enable it participate in less crowded projects. For instance, it was amongst the first few standalone T&D contractors to partner with Chinese manufacturer Rongxin to participate in STATCOM projects. Till now, there have been 3 STATCOM projects awarded by Power Grid, all of which had 3-5 accepted bidders. Rongxin has won 1 project and Siemens has won 2.

TEEC barely won any projects through FY10-13 (see Exhibit 38). This was because the competitive intensity in the substation space was very high. It is also possible that the new power generation projects absorbed part of the managerial bandwidth, which resulted in fewer project wins.

Exhibit 24: TEEC's market share increased in FY16 in the substation packages

	FY09	FY10	FY11	FY12	FY13	FY14	FY15	FY16
Total Value of substn packages(₹ bn)	24	21	18	29	47	26	73	24
Value of projects bid by TEEC (₹ mn)	3,681	1,055	4,305	9,820	5,488	2,308	4,228	6,329
% of total	15%	5%	24%	33%	12%	9%	6%	26%
Value of projects won by TEEC (₹ mn)	1,169	-	-	3,129	814	2,308	2,125	4,198
% of total	5%	0%	0%	11%	2%	9%	3%	17%

Source: Company, Ambit Capital research

ACxDC framework

We have used the ACxDC framework to create a suitable framework to evaluate various contractors in the T&D space. Note that we do not include equipment manufacturers in this framework since their competitive advantages expand into R&D. The framework covers the company's ability to bid effectively (margins), use of capital and financial headroom (capital), cash conversion, and exposure to the domestic power space. TEEC does reasonably well vis-à-vis peers due to its domestic-only presence and high margins. However, note that the framework doesn't cover valuations and therefore cannot be the sole driver of investment decision.

Exhibit 25: TEEC comes out on top of the ACxDC framework

Evaluation criteria	Companies				Comment
	TEEC	KECI	KPTL	Jyoti Structures	
Overall					▪ TEEC comes out on top of the framework, boosted by its pure-play India book, superior cash conversion and margin discipline
Ability/ track record					▪ All the players have extensive experience in the T&D space ▪ However, Jyoti's ability to bid in new projects is likely to be compromised due to its balance sheet stress
Cash conversion					▪ TEEC's cash conversion over FY11-15 was materially better than peers despite foraying into the wind business which resulted in an increase in receivables ▪ Kalpataru and KECI are largely comparable whilst Jyoti Structures is facing significant working capital issues
(Pre-tax CFO/EBITDA; FY11-15 cumulative)	*76%*	*54%*	*60%*	*-62%*	
Exposure to India					▪ Both KECI and Kalpataru have extensive interests abroad - KECI more so than KPTL ▪ However, note that 60% of KPTL's T&D revenue and 33% of T&D order book are international ▪ This makes TEEC more levered to increased spending in India T&D and vice-versa
Exposure to India in order book (FY16)	*100%*	*53%*	*At most 71%*	*NA*	
Exposure to India in revenue (FY15)	*100%*	*47%*	*66%*	*68%*	
Discipline					▪ TEEC's PBT margin is materially better than peers ▪ Whilst one may argue that it is boosted by the wind power business, the company's EPC PBT margins over FY12-15 averaged 10%, better than peers. ▪ Jyoti is a loss-making enterprise now
(PBT margin; FY12-16 average)	*17%*	*4%*	*4%*	*-4%*	
(PBT margin; FY17-18 consensus avg)	*17%*	*5%*	*3%*	*NA*	
Capital					▪ TEEC's RoIC over the last five years has been materially impacted by its foray into wind power ▪ RoIC has been marginally lower than that of KPTL and KECI ▪ However, lower leverage and intent to exit wind business (which will lower leverage and boost RoICs) will increase its financial flexibility to bid and win transmission BOOT projects
Returns					
(FY12-16 RoIC avg)	*13%*	*15%*	*14%*	*12%*	
Flexibility				*-*	
(FY16 Net debt/ Equity)	*0.2*	*1.6*	*1.4*	*(15.2)*	

Source: Ambit Capital research, Company

Note: - Strong; - Relatively Strong; - Average; - Relatively weak.

The ACxDC framework and rationale for parameters used

We have used 5 parameters in the ACxDC framework which are predicated on the 4 main drivers of a construction business – portfolio mix of the order book (covered by exposure to India), working capital, cash management (cash conversion and capital) and discipline (margins).

Exhibit 26: The ACxDC framework

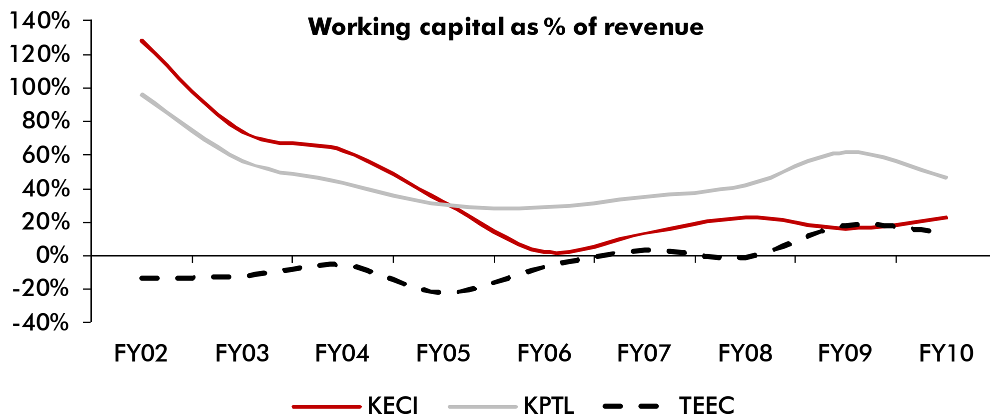
Parameter	Comment
Ability/ track-record	Covers the sustainability of order inflows. Whether the company has displayed capability to keep-up with changing technology requirements and remain relevant in the bidding.
Cash conversion	Mainly displays the ability of the company to manage its working capital effectively
Exposure to India	A company more levered to India for its order inflows is likely to benefit if T&D spends in the country increase. Moreover, more geographic exposure may boost profitability for peers but also adds to the risk profile of the project.
Discipline	Bidding discipline in order to protect margins rather than chase market share is a key parameter
Capital	The quality of the company's balance sheet management and its ability to capture new opportunities is covered under capital

Source: Ambit Capital research

Advent of India's T&D revolution, finally!

India's transmission and distribution sector has received limited focus especially vis-à-vis the power generation segment. This is evident in the lower quantum of investments in the sector over the past 20 years. With the Central Government focused on resolving issues through funding and legislative intent, state resources could be freed up to invest in upgrading state-level transmission systems to increase capacity and improve quality of power. Moreover, this trend could sustain if the states manage to successfully reduce AT&C losses since this would lead to further savings and increase ability to reinvest. Our calculations for the large states suggest double-digit growth in capex for FY16/FY17 and we expect a step-up in PGCIL's capex to ₹280bn p.a. starting FY18 vs ₹225bn in FY17. These measures will ensure sustained order inflow growth for T&D companies.

Exhibit 27: In the previous high growth cycle, the working capital cycle of all transmission EPC companies declined significantly



Source: Company, Ambit Capital research; Note: Standalone figures used; WC includes loans and advances

Transmission EPC – best segment to be in?

By our reckoning, transmission EPC is amongst the better plays in the push to build out infrastructure in the country. Compared to the other segments, it has the natural advantages of limited land acquisition problems, improving competitive environment and Government intent. Although we like the roads segments (we are BUYers on Sadbhav, SIPL and Ashoka), competitive intensity in EPC contracts and land remain major problems. Indian Railways and power distribution may witness a significant uptick in spending but has limited pure-play listed companies that can be invested in to leverage this trend.

Exhibit 28: Overview of multiple infrastructure segments

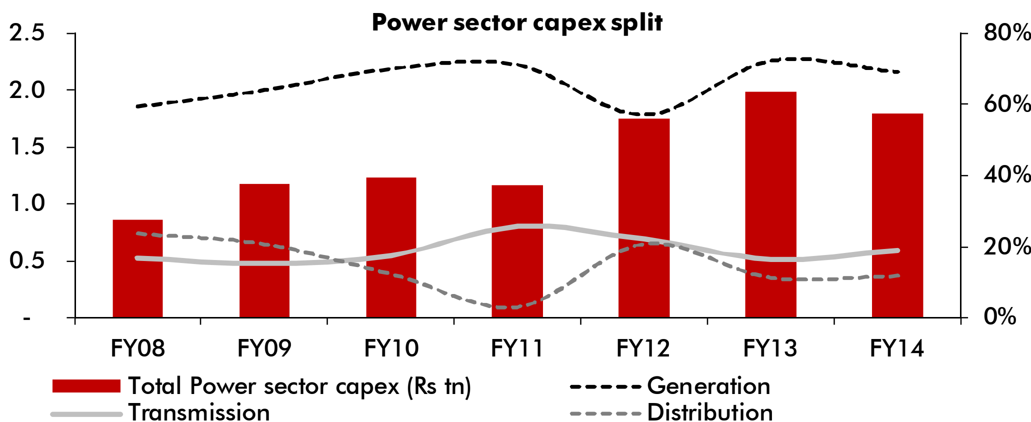
	Roads		Railways		T&D	
	National	**State**	**Indian Railways**	**Metros**	**Transmission**	**Distribution**
Government intent	●	◕	●	◕	◕	●
Comment	*There has been a significant push by the Central Govt to invest in roads. Allocations, ordering and execution pace have increased by 25%-120% in FY16 and the momentum is likely to sustain. Certain states have also increased spending on roads such as Andhra Pradesh*		*The India Railways increased its capex by 70% in FY16 and is expected to step up spending by a further 17% in FY17. DFCC orders have been placed and will enter execution now. Metros projects increasing but partly impacted by lack of funding in states like AP.*		*PGCIL has maintained its capex and is likely to increase it starting FY18. Distribution spending supported by Central Govt schemes is likely to increase*	
Competitive intensity	◔	◔	◑	◑	◑	◔
Comment	Very high competitive intensity in road EPC projects which is not waning. Upwards of 10 competitors for every project.		The competitive intensity in railway projects will continue to decline as ticket sizes increase; DFCC has limited competition especially on the Western side. Metros also has handful of competitors		Transmission competitive intensity has declined due to increased black-listing by PGCIL, as per our primary checks. States likely to follow suit. Intensity in distribution projects will remain elevated unless ticket sizes expand materially	
RoW/ Land issues	◑	◑	◕	◔	◕	◔
Comment	Highways are susceptible to land acquisition issues. Although the problems have reduced recently, some companies continue to struggle due to this problem. However, problems will not be as acute since rural land is relatively easier to acquire		Indian Railways' projects have limited problems since (1) DFCC land tract is largely acquired already and (2) railways typically owns the more stretches next to current lines. The problem is metro projects is more acute due to the urban land acquisition and resettlement problems		Transmission projects face fewer issues due to limited land needed especially in substation projects. Distribution faces execution issues due to urban right of way problems.	
Listed players	●	◔	◔	◑	◕	◑
Comment	High quantum of listed players in the space that enables an investor to choose the best and most conservative players		Very few listed players participate in Indian Railways. Some T&D players like KECI participate. L&T, a diversified conglomerate is straddled across both opportunities		Pure-play distribution has very few players but transmission has atleast 5-6 companies in the listed space	
Overall	◕	◑	◕	◑	◕	◑

Source: Ambit Capital research, Note: ● - Strong; ◕ - Relatively Strong; ◑ - Average; ◔ - Relatively weak.

Years of under-investment...

T&D has typically not received adequate investments vis-à-vis generation. Over FY08-14, only 25% of power sector spends were invested in transmission and 14% in distribution vs an ideal ratio of 25% each (based on our primary checks). With Power Grid stepping up its investments and capitalisation, especially at the higher end of the KV spectrum, states are likely to be forced to invest in upgrading systems.

Exhibit 29: T&D capex has been 33% of total power sector capex vs 50% ideally



Source: CEA, Ambit Capital research

... with an evolving power system

The need for accelerated investments in transmission is also necessitated by the changing production centers, consumption centers and type of power in the country. Changing production and consumption centers will drive further need for capacity enhancements and new lines. Increase role of renewables and focus on high-technology investments by PGCIL will lead to higher focus on 'quality of power' investments.

Exhibit 30: Mix of installed capacity is changing in terms of regions, which will necessitate further investment

Mix of installed MW	FY12	FY17	FY22	FY27
North	26%	24%	22%	24%
West	32%	35%	32%	30%
South	27%	26%	26%	25%
East	14%	13%	17%	15%
North East	1%	2%	3%	3%

Source: Company, Ambit Capital research

Exhibit 31: Change in mix towards renewables is likely to accelerate

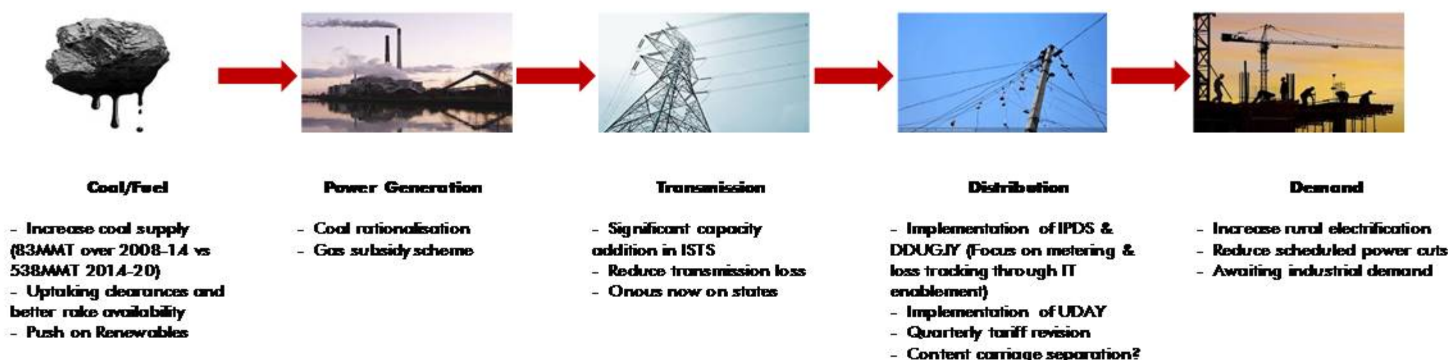
Mix of installed MW	FY97	FY02	FY07	FY12	FY15
Thermal	71%	71%	65%	66%	71%
Nuclear	3%	3%	3%	2%	2%
Hydro	25%	25%	26%	20%	15%
Renewables	1%	2%	6%	12%	12%
Total	**100%**	**100%**	**100%**	**100%**	**100%**

Source: Company, Ambit Capital research

Central Government action plan – resolving issues across the value chain

The central Government seems to have a multi-level approach to resolve the power sector problems in the country. These include pushing Coal India to increase production, improving coal linkages and pushing renewables. A bulk of the Government's T&D program is aimed for resolving distribution side problems. These include UDAY (to reduce interest costs for state-owned distribution companies) and IPDS and DDUDJY (aimed at providing infrastructure build-out support).

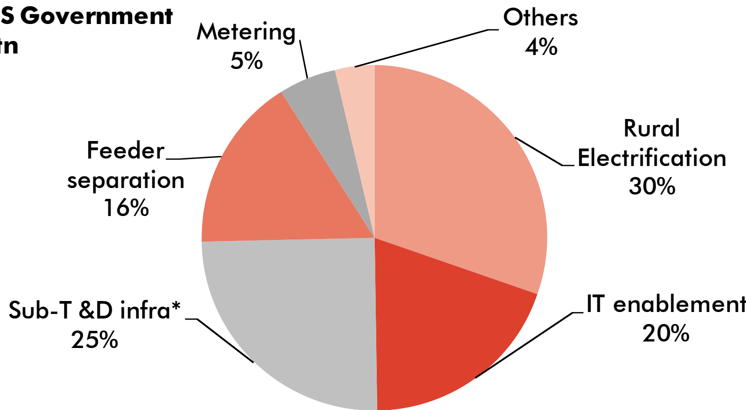
Exhibit 32: The Center is working towards resolving the power sector's issues



Source: Media, Power Min, Ambit Capital research

Moreover, regulatory changes to encourage private sector participation in inter-state transmission have been or will be implemented. These include separation of CTU from Power Grid, ensuring a majority of projects are open for competitive bidding and reduction of concept to commissioning of transmission projects. The Electricity Act amendments aim to separate a distribution licensee from a supply licensee, which should result in more competitive power tariff pricing.

Exhibit 33: The Government has created two schemes to support infra spends in distribution, which could open up resources towards transmission spending

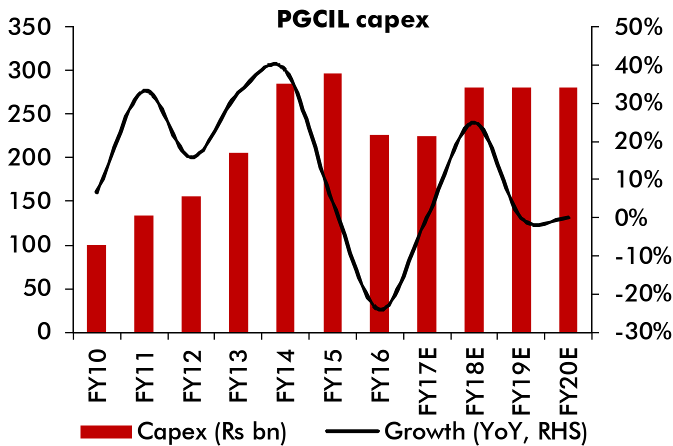


Source: GoI, Ambit Capital research; Sun-T&D stands for sub-transmission and distribution infrastructure

Power Grid spending – improving cash generation will boost capex

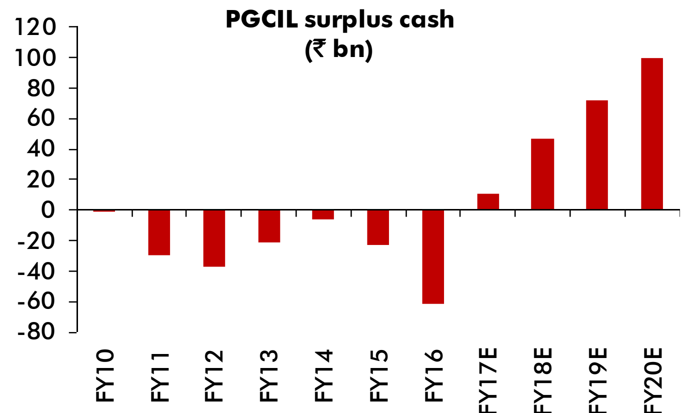
Power Grid is likely to increase its capex from FY18 as the 13th Plan is implemented. As highlighted in our Apr-16 report on PGCIL, A new look at old problems, the company is likely to become cash surplus by FY17/ FY18 and therefore is likely to increase either its dividend payout and/or its capex. We expect the company's capex in the 13th Plan (FY18-22) to increase from ₹1.2tn in the 12th Plan (FY13-17) to ₹1.4tn, which will result in a capex increase of 25% YoY in FY18 itself. This boost in industry growth will benefit TEEC given that a bulk of the order book (69% as of FY16) is derived from PGCIL.

Exhibit 34: PGCIL's capex is likely to step up in FY18 as the new Plan spend is ascertained…



Source: Company, Ambit Capital research

Exhibit 35: …boosted by surplus cash generation starting FY17E



Source: Company, Ambit Capital research; surplus cash is calculated by CFO less 30% of capex less interest and debt repayments

Private foray into transmission – a potentially new market?

A sizable chunk of inter-state transmission projects will continue to be bid out under the competitive model (TBCB), which will enable private sector participation. This will also, in due time, become prevalent at the state level. This will enable TEEC to (1) increase its own transmission BOOT assets and (2) win orders from private sector players. As of now, the company doesn't have any orders from the private transmission companies.

Exhibit 36: Projects in the pipeline under the TBCB scheme as per Empowered Committee approvals in Sept 2014

Name of line	Value (₹ bn)
Khargone TPP	24
North Karanpura	14
NERSS V	4
NERSS VI	7

Source: Company, Ambit Capital research

State spending – likely to increase especially if discom bandwidth is freed

This will be the key driver for the order book growth for TEEC. As shown in the exhibit below, the capex for most large states is likely to increase in FY17 and we believe that this trend is sustainable given the support that the states are now likely to receive in terms of central Government funds (IPDS, DDUGJY). The pace of investments could further accelerate if the states meet their targets to reduce AT&C losses, which will reduce cost of power and open up more funds for investments in infrastructure. Our conversation with other industry participants also indicates that the quantum of multi-laterally funded projects has also increased recently.

Exhibit 37: States have stepped up investments in transmission; note that as per PFC's FY14 estimates, these 9 state transcos represented ~70% of the country's transco capex

Capex in ₹ mn	FY12	FY13	FY14	FY15	FY16	FY17
Uttar Pradesh Transco	23,364	14,632	11,855	12,825	33,600	61,000
Bihar Transco	1,436	8,535	2,492	5,637	23,455	24,561
Maharashtra Transco	26,180	21,710	15,840	14,135	11,683	16,680
AP Transco	12,244	11,356	13,707	29,774	31,383	15,123
Karnataka Transco	1,320	10,114	8,876	7,543	7,543	15,000
MP Transco	4,328	4,946	6,074	6,410	6,410	5,130
Rajasthan Transco	18,690	22,410	16,270	17,409	20,250	
Punjab Transco	9,227	9,790	7,520	5,247	5,034	
Gujarat Transco	20,850	21,490	24,974	27,231	24,110	
Total of 6 states where FY17 available	**68,871**	**71,294**	**58,843**	**76,323**	**114,073**	**137,494**
Growth (YoY)		**4%**	**-17%**	**30%**	**49%**	**21%**
Total of 9 states where FY16 available	**117,638**	**124,984**	**107,607**	**126,210**	**163,467**	**NA**
Growth (YoY)		**6%**	**-14%**	**17%**	**30%**	**NA**

Source: States Regulators; Note: 9 states transcos included are Uttar Pradesh, Bihar, Maharashtra, AP, Karnataka, Madhya Pradesh, Rajasthan, Punjab and Gujarat; the six states exclude Gujarat, Rajasthan and Punjab since FY17 data is not available for these states; note there capex is only for the transmission entities and may include figures from the transco's petition though preference has been given to the regulator's approved capex

Given the high element of political will involved in reducing AT&C losses at the state level, determining the exact states that will drive the investments is difficult to determine. TEEC's historical footprint has been in states such as Andhra Pradesh, Bihar and West Bengal though the company has a track record of execution in difficult geographies such as J&K.

Exhibit 38: States are a key problem in the transmission systems

*It may not be correct to conclude that the transmission constraints being experienced are only because of transmission system development by POWERGRID lagging behind or because of POSOCO being too conservative for ensuring a totally safe operation. One of the main reasons of the constraint is also the inadequacies of State level transmission and sub-transmission systems. **There are examples that power could be reached through National Grid into the State, but such transmission would be handicapped because the State level transmission and/or sub-transmission system may not be able to absorb.***

Source: CERC, Report of the CAC Sub-Committee on Congestion in Transmission, June 2015

Substation sub-segment – reducing competition

TEEC operates specifically in the substation segment of transmission EPC. Substations have a lower proportion of bought-out elements than transmission line making it more civil oriented than transmission line projects. The key players in this segment are Alstom T&D, TEEC, BHEL, Siemens and the Asian vendors (New North East, Hyosung and Rongxin). Barring TEEC and BHEL, the others are largely equipment manufacturers that either use their in-house EPC capabilities (European players) or outsource to Indian vendors (Asian players).

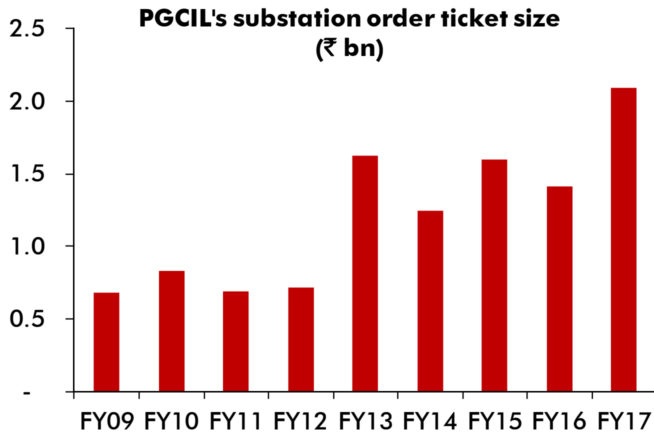
Exhibit 39: Major players in the substation segment

Company	Comments
ABB	The Power systems segment offers turnkey systems and services for transmission and distribution for power grid and power plants. The Power products segment includes manufacturing, engineering and supply of key T&D components such as transformers, high and medium voltage switchgears, circuit breakers and capacitors
Siemens	The Energy segment offers high-efficiency products for power generation, transmission & distribution segment including High Voltage Direct Current (HVDC) transmission systems, substations, switchgear and transformers
Alstom T&D	Alstom T&D has a product portfolio of power T&D equipment for low, high and ultra-high voltage electricity transmission; it also provides EPC services for substations
BHEL	NA
Bharat Bijlee	Manufactures power transformers and it EPC of indoor and outdoor EHV & HV Switchyards up to and including 220 kV
L&T	Amongst the largest players in the Power T&D space in India and GCC
Kalpataru	Mainly a transmission tower manufacturer and a contractor, it now has developed capabilities in the substation space as well
Tata Projects	Tata Projects is one of the leading EPC players for installation of substation and transmission systems
Jyoti Structures	It provides a range of solutions such as survey, design and engineering, tower testing, construction and project management of substations and transmission lines; in addition, the company has a tower manufacturing facility
KEC International	The company undertakes EPC projects of electrical sub-stations, distribution network, cabling project works, etc
EMCO	The company is involved in manufacturing of transformers and transmission line towers; the company is also involved in commissioning of sub-stations, industrial switchyards and power distribution systems
Hyosung Corporation, South Korea	Hyosung is a conglomerate that operates in various fields including fabrics, industrial material, chemical, heavy industrial products, construction, product trading, etc. The company caters to the power sector by manufacturing transformers, switchgears, intelligent electronic devices, etc.
New Northeast Electric (Shenyang), China	It designs, develops, manufactures, and markets electrical transmission and transformation equipment. It also provides installation, maintenance, and after-sale service of power transmission and transformation equipment.
Pinggao Group, China	It is a wholly-owned subsidiary of the State Grid Corporation of China, the world's largest transmission utility. The company has the largest researching, developing and manufacturing base for high voltage, extra-high voltage and ultra-high voltage switchgears in China. It offers various products for application in power transmission and transformation system, which include GIS solutions, circuit breaker, disconnector and earthing switches, compass solutions, and vacuum circuit breakers.
Xian Xd Switchgear Electric, China	It engages in research, development, and production of high voltage switchgears in China.

Source: Company, Ambit Capital research

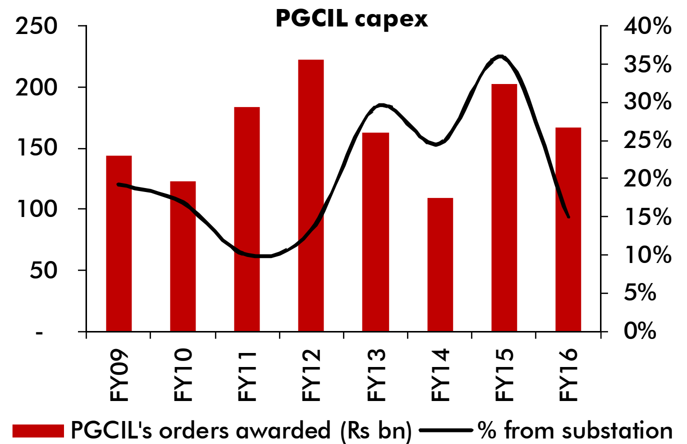
Over the past few years, the proportion of substation ordering by PGCIL has increased. This is because transmission lines are ordered earlier in a cycle (due to longer completion timelines). There was a catch-up required for substations which has largely been normalised now. Moreover, the ticket sizes of substation orders have been increasing as PGCIL continues to move up the value chain in terms of technology.

Exhibit 40: Competitive intensity in the substation space has declined since its peak in FY11



Source: Company, Ambit Capital research

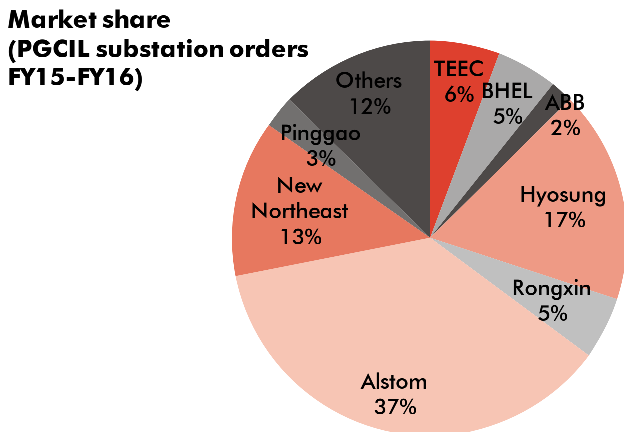
Exhibit 41: Substation order awards had increased over FY13-15 and are now expected to be steady



Source: Company, Ambit Capital research

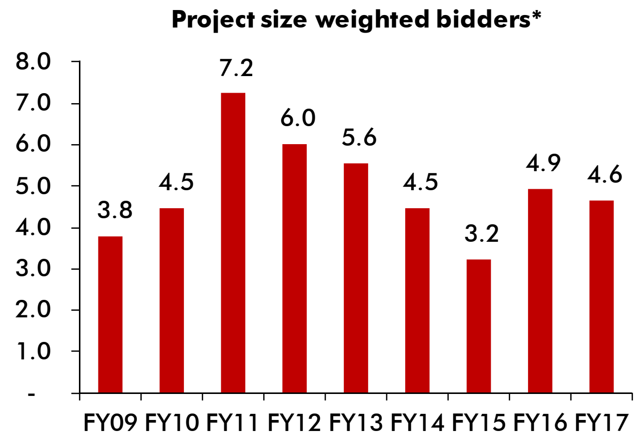
The competitive intensity in the substation space has declined significantly over the past few years. As per our primary checks, this is because of (1) higher technology projects which typically require partnerships with equipment manufacturers and (2) increased focus on execution by PGCIL, which has led to higher black-listing of smaller vendors.

Exhibit 42: Alstom has the highest market share in substation driven by a large order (Champa-Kurukshetra)



Source: Company, Ambit Capital research

Exhibit 43: Competitive intensity in substations has declined over the past few years



*Source: Company, Ambit Capital research; * - Calculated by multiplying bidders into the project size and then dividing by the total projects awarded*

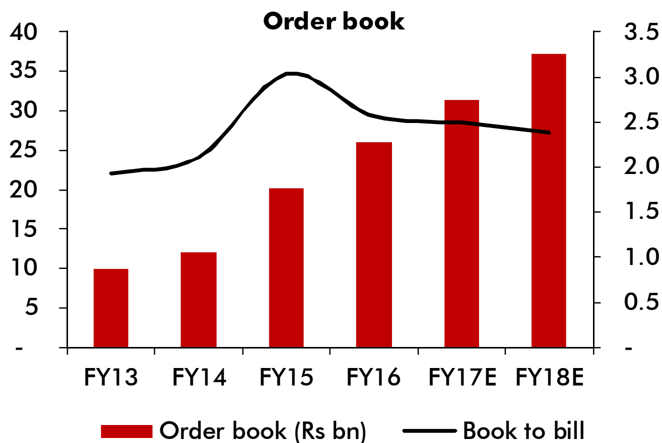
Growth uptick to sustain

Over the next 3 years, the company's revenue from T&D is likely to increase (either EPC or asset ownership). The wind power assets are likely to be sold in FY17. This will open up significant capital employed, which will then be redeployed into transmission assets and reduce leverage. Given that TEEC's EPC business has low working capital requirement which is likely to reduce further, we do not expect the core business to require additional funds for growth.

Strong growth momentum

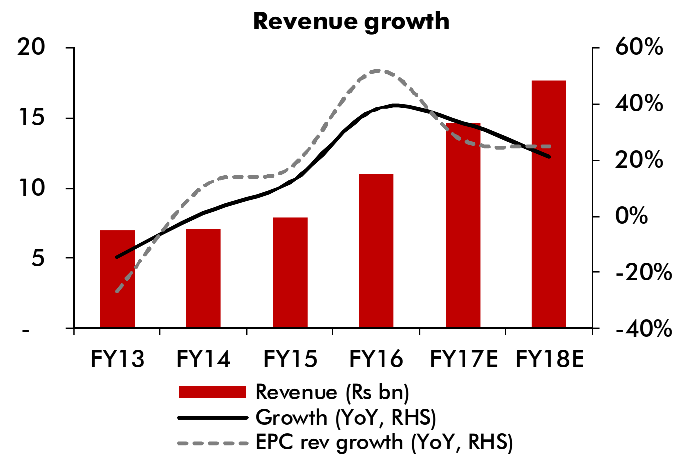
Given the current order book of ₹26bn and past execution run-rate of ~50% of opening order book, revenue growth in FY17E is likely to be 25% which should sustain in FY18 as well. The company has already won orders of ~35% of its FY16 inflows and therefore we expect the order book to be suitably replenished. This growth doesn't factor in any potential upsides from the solar EPC business where ticket sizes range from ₹5bn-10bn. Given the high competitive intensity in this segment, combined with TEEC's margin-focused track record, we do not build in any upsides from solar EPC.

Exhibit 44: The company's order book is likely to grow steadily as states and PGCIL increase spending



Source: Company, Ambit Capital research

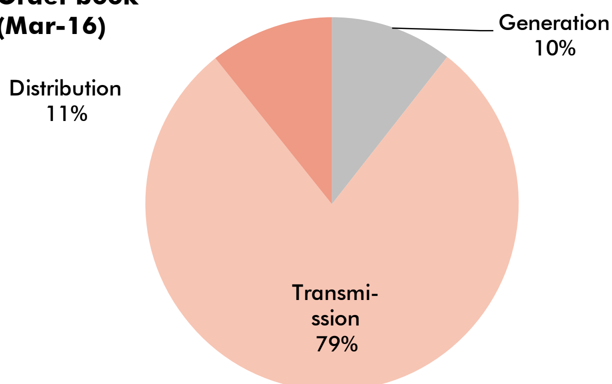
Exhibit 45: Revenue growth may sustain at 20%+ driven by order book accretion and operationalization of Patran



Source: Company, Ambit Capital research

A bulk of the company's current transmission order book is from the central utility (~70%). This is because the company typically shies away from non-multilaterally funded state projects. This is likely to change over the next 3-5 years. In the previous cycle, the company's working capital cycle remained healthy despite state exposure.

Exhibit 46: Order book currently is largely made up of transmission orders, though this is likely to be fluid



Source: Company, Ambit Capital research

Exhibit 47: The company's transmission book is largely made up of PGCIL orders

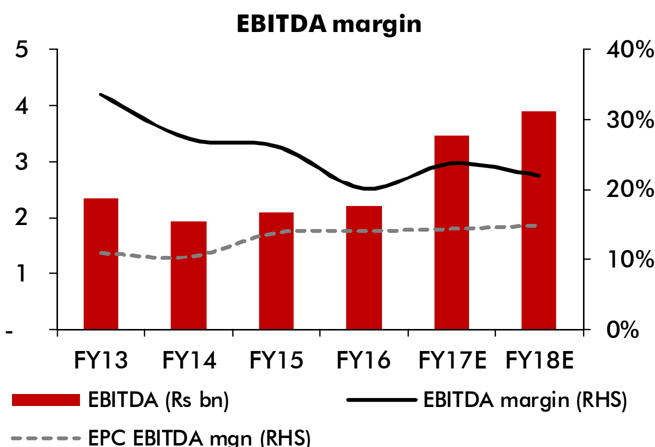
Awarding body	Outstanding book (₹ mn)	% of total
Power Grid	17,820	69%
North Bihar Power Distribution Co Ltd	2,800	11%
NTPC	2,135	8%
Rajasthan Rajya Vidyut Prasaran Nigam	1,165	4%
Bihar State Electricity Board	800	3%
APTRANSCO	345	1%
Others	925	4%
Total	**25,990**	**100%**

Source: Company, Ambit Capital research

Steady margins

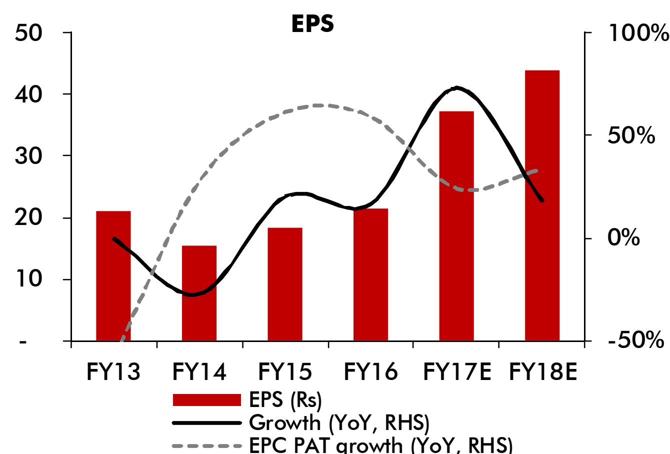
EPC margins are likely to remain largely steady (~15%). The company already works on a lean fixed overhead structure and hence further growth will need additional operating expenses. However, headline standalone EBITDA margin will decline when the company manages to sell its high-margin wind assets. As a result of steady margins, earnings growth is likely to track the company's revenue growth.

Exhibit 48: EPC EBITDA margins have been range-bound since FY14 and we expect this to sustain



Source: Company, Ambit Capital research

Exhibit 49: Earnings CAGR of 43% over FY16-18E; EPC business profits to increase at 29% CAGR



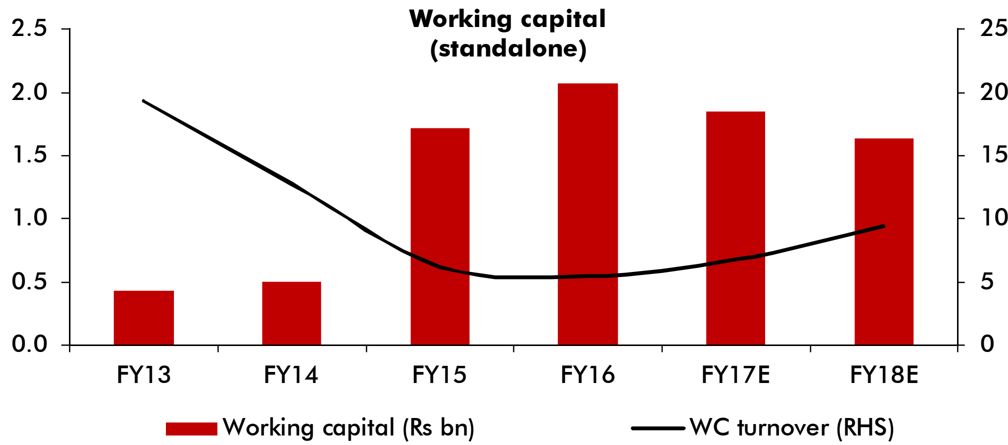
Source: Company, Ambit Capital research

Working capital should decline

TEEC's standalone working capital requirements have increased over the last few years. This was partly due to its power generation segment in which receivable days are typically longer and higher retention monies since revenue growth was strong in FY16.

We expect the company's working capital to unwind henceforth led by (1) sale of the wind power business; (2) the company's outstanding receivable from self-owned Patran project is likely to be settled since it has now been commissioned; and (3) loans and advances, a remnant of inter-corporate advances given in the past, should continue to reduce.

Exhibit 50: Return ratios will improve led by the sale of wind assets and unwinding of working capital



Source: Company, Ambit Capital research

Additional investments could materialise

As working capital unwinds, the company's core EPC business is unlikely to need significant cash investments to fund its growth. Therefore, any cash received from sale of the wind assets is likely to be redeployed in transmission BOOT projects (we have discussed potential capital allocation). We have not factored in any additional investments in the transmission BOOT space.

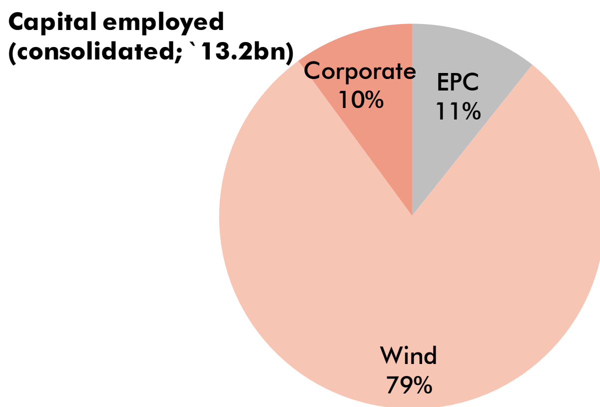
Will keep re-inventing itself; being opportunistic

TEEC has displayed a remarkable history of adapting to new technology faster than peers in order to compete in low competition segments. This is exemplified in exhibit 23, which shows that TEEC's project wins typically have low competition. Investments in STATCOM and HVDC will continue to pay off. Moreover, just like in the past, we expect the proportion of revenue from its core segment (substations) to reduce if suitably large opportunities arise.

Capital allocation – not the best, but improving

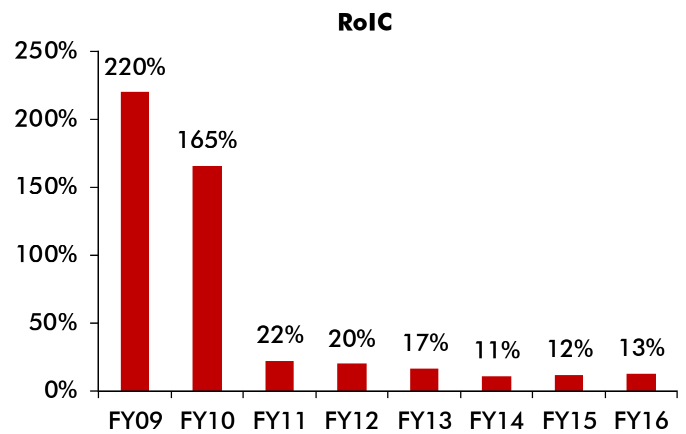
TEEC's capital allocation has been less than ideal. Investments in power generation assets, inter-corporate loans and upfront equity investments in transmission projects were not the best decisions made by the company. About 79% of capital employed is currently invested in the wind power generation business with a pre-tax RoCE of 3%, materially lower than the core EPC business pre-tax RoCE of 117%. As shown in the exhibit below, the company's RoIC dropped significantly since the investments were in wind.

Exhibit 51: Wind constitutes the bulk of capital employed by the business...



Source: Company, Ambit Capital research

Exhibit 52: ...which has resulted in a sharp decline in RoIC for the consolidated entity

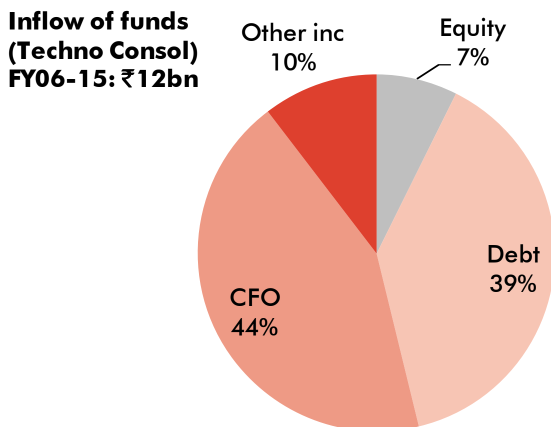


Source: Company, Ambit Capital research

The main error – investing in wind assets

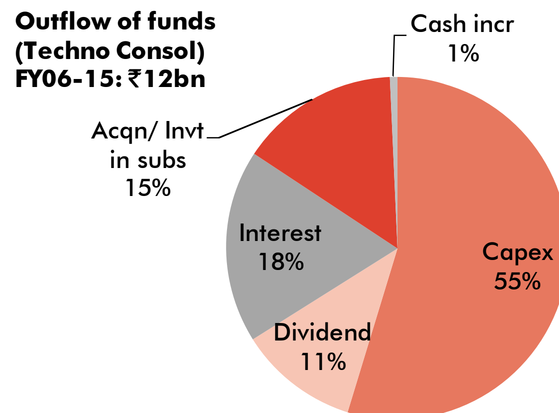
The company has redeployed a majority of its funds in capex, primarily in the wind power generation business (98% of the gross block addition). However, note that the company has largely relied on equity and internal accruals to fund its investment which has limited the leverage in the company (FY16E: 0.5x). Management's rationale to invest in wind was to expand its revenue stream into non-core contracting businesses. By our calculations, the equity value of the wind assets is ₹5.2bn. Added to sale value of ₹2.15bn, the company would have recovered ₹7.4bn vs investments of ₹6bn.

Exhibit 53: The company has relied on internal accruals and equity in the last few years...



Source: Company, Ambit Capital research

Exhibit 54: ...to fuel its diversification ambitions – wind power constitutes 98% of gross block addition



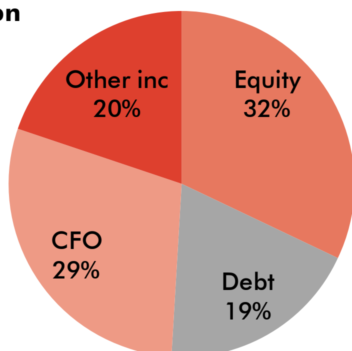
Source: Company, Ambit Capital research

High cash inflows but low dividends

In the five years preceding the company's wind asset foray, the company's cash generated through its business and through equity-raise (from Citigroup Ventures) largely remained on its balance sheet as cash or investments. Whilst this may indicate reluctance to pay dividend, note that the company was preparing to invest in its diversification plans, which led to an increase in cash and investments.

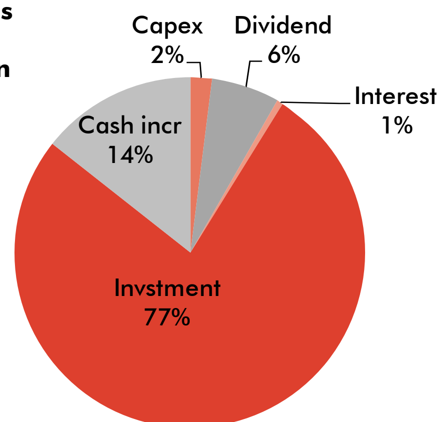
Moreover, the company chose to invest its equity upfront in the Jhajjar and Patran projects, which are likely to drag the project IRR.

Exhibit 55: In the period prior to wind investments, the company had raised to cash for investments in wind…



Source: Company, Ambit Capital research

Exhibit 56: …which remained on the balance sheet during the period – investments mostly in bonds/mutual funds



Source: Company, Ambit Capital research

Inter-corporate deposits – still creating issues

The company's loans and advances increased materially in FY09 (₹1.4bn from ₹128mn in FY08) driven by a spike in loans and other advances. TEEC had given inter-corporate deposits to other companies as a part of its treasury operations. However, repayment of these loans has been problematic and ₹690mn of short-term loans and advances weigh down the balance sheet. The company continues to attempt recovery and expects a gradual receipt of money. However, this has been a poor capital allocation decision.

What will happen if this were to unwind? And what would the company do with the cash?

Management has indicated that it is looking to sell its wind assets since the returns are not commensurate to its expectations.

Exhibit 57: The company is looking to exit its wind power generation business

"We don't feel that renewable generation fits in our core competency so we gradually want to exit this space to have money to focus on BOOT/BOOM projects in transmission space."

- **PP Gupta, MD of Techno Electric**

Source: Media

Of the total 207MW of generation capacity created by the company, it has already sold 45MW in FY16 for ₹2.15bn, a valuation of ₹48mn/MW. As per our estimates, the remaining wind assets (163MW) are likely to receive a valuation of ₹8bn (enterprise value) if they were to be sold. This cash inflow (the timing is still uncertain). We see three scenarios of how this could play out:

- **Transmission BOT assets:** The company has indicated that it will redeploy this cash to build its portfolio of transmission assets like its investments in Jhajjar and Patran. TEEC has bid for the rights to build and own transmission assets with ticket sizes varying from ₹5bn-13bn which would require equity investments of ₹1bn-4bn through the construction period.

  Transmission assets are relatively safe investments as long as the company has bid conservatively (which has been TEEC's forte). Unlike road BOT projects where the company is exposed to traffic risk (both initial and growth), transmission projects have a pre-fixed revenue stream and therefore IR₹ are fixed from the day of commissioning (though still exposed to construction and interest rate risk).

- **Returning cash to shareholders**: The company may choose to return the excess cash to shareholders. This is unlikely given management's stated ambition to redeploy in transmission assets.

- **Other alternative assets in the power space**: The riskiest of the three scenarios is if the company chooses to reinvest the surplus cash into other power generation assets. Other opportunities could also emerge in distribution asset ownership if the Government's proposal to separate content and carriage were to be successful.

Valuations – not as expensive as it seems

Although the core EPC business is currently valued at a punchy 16x FY18E EPS, we expect the valuations to sustain. There are three key drivers of valuations: (1) the company's exemplary track record of execution and management quality; (2) high growth that will make valuations seem high; and (3) unwinding of its capital allocation mistake post sale of wind asset will lead to material cash holding, in turn reducing the valuation ascribed to the core business. The core business is valued at a premium to Indian contractors like KECI but at a deserved discount to ABB and Alstom T&D due to its inability to innovate new products. The company is at a 80% premium to its 5- year average though it might not be the best benchmark for comparison given the constantly changing valuations of the embedded assets and impending high operating leverage.

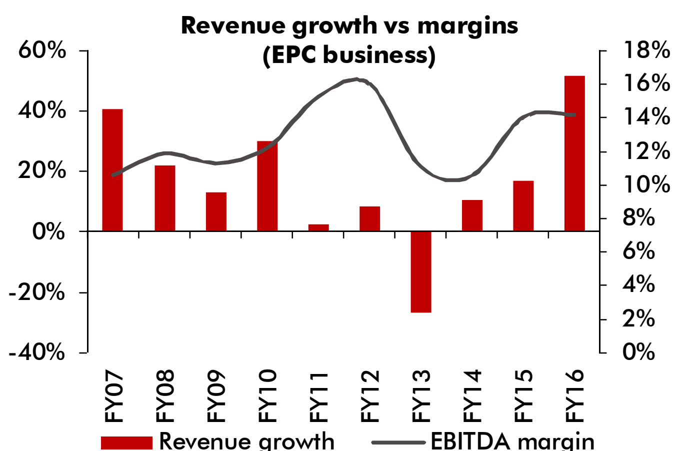
Capital allocation to drive valuations henceforth

Steep valuations led by high growth outlook and relatively strong managerial track record are likely to sustain. However, the key reasons for a potential increase/decline in valuations will be the company's capital allocation decisions over the next 2-3 years. A repeat of sub-par investments (like in power generation), providing inter-corporate loans with low dividend payout ratios could potentially lead to a decline in implied multiples. Although transmission BOOT projects will drag RoIC down, it will provide stable revenue and stable compounding of invested equity. Therefore, the company's re-investment plans for any proceeds from wind asset sales will drive valuations over the next two years.

Deserved valuation for low-risk managerial track record

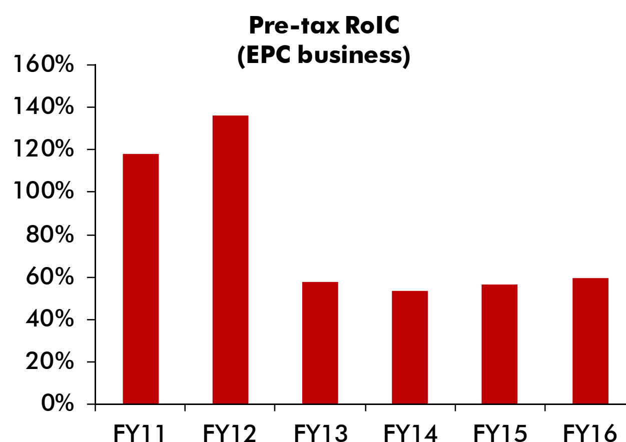
TEEC's high valuation (16x FY17E core earnings, ex-embedded value) should be looked at in conjunction with its highly conservative, profit-first track record. It has never reported a net loss, even in years with poor growth and has relatively stable margins in its contracting business. Strong management control also manifests itself in low capital employed. As shown in the exhibit below, the company's RoIC (pre-tax) has been in excess of 50% over the last few, relatively low growth years.

Exhibit 58: The company's EBITDA margin in EPC has not reduced below 11% despite a mixed growth phase



Source: Company, Ambit Capital research

Exhibit 59: Focus on profitability reflected in 50%+ RoIC

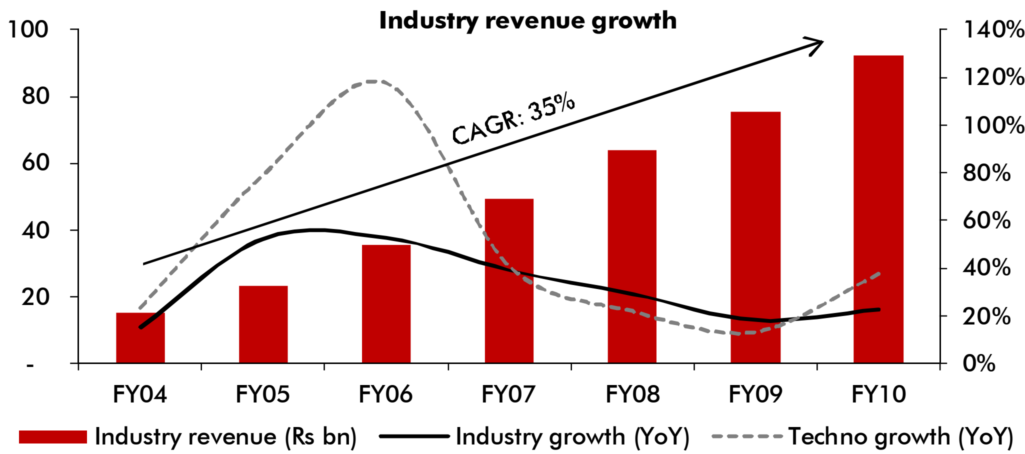


Source: Company, Ambit Capital research; Note: Invested Capital for EPC: Equity and debt less net block in windmill, less investments and cash assuming that the wind-business has no impact on working capital cycle

High growth to sustain – valuations will continue to look high

TEEC's strong order book (₹26bn as of Mar-16; 2.6x book to bill) should drive a revenue/profit CAGR of 26%/29% over FY16-18E in the EPC business. Growth will remain strong thereafter driven by continued investments in the sector by the states. Moreover, the company's penchant to foray into new segments and work across generation, transmission and distribution should ensure growth and margin sustenance even if the competition in its core segment ebbs and flows (with the cycle). In a high growth scenario (like that of the previous investment cycle post the Electricity Act of 2003), valuations may continue to seem punchy.

Exhibit 60: The industry (KECI, KPTL, TEEC, Jyoti) had 7 years of growth tailwind post the Electricity Act reforms



Source: Company, Ambit Capital research; Note: Standalone revenue used

Key assumptions

Exhibit 61: Key assumptions – all parameters are directionally positive

₹ mn	Standalone			Consolidated		
	FY16	FY17	FY18	FY16	FY17	FY18
Order Book						
Order inflow (₹ bn)	15.9	18.3	21.9	15.9	18.3	21.9
Growth (YoY)	*7%*	*15%*	*20%*	*7%*	*15%*	*20%*
Closing order book	26	31	37	26	31	37
Book to bill	2.6	2.4	2.3	2.6	2.4	2.3
Income statement						
Revenues	**10,328**	**13,216**	**16,396**	**10,972**	**14,620**	**17,712**
Growth (YoY)	*50%*	*28%*	*24%*	*38%*	*33%*	*21%*
EPC	***10,143***	***12,881***	***16,102***	***10,143***	***12,881***	***16,102***
Transmission BOOT	-	-	-	-	*164*	*225*
Wind	*186*	*335*	*295*	*829*	*1,574*	*1,385*
Wind PLF	14%	25%	22%	13%	25%	22%
EBITDA	1,593	2,119	2,636	2,213	3,467	3,893
EBITDA margin	**15%**	**16%**	**16%**	**20%**	**24%**	**22%**
EPC	**14%**	**15%**	**15%**	**14%**	**15%**	**15%**
Transmission BOOT	NA	NA	NA	NA	NA	NA
Wind	77%	75%	75%	92%	92%	91%
Depreciation	136	138	143	495	578	596
EBIT	1,457	1,981	2,493	1,718	2,888	3,297
PBT	**1,528**	**1,875**	**2,457**	**1,650**	**2,488**	**3,009**
EPC	***1,217***	***1,680***	***2,240***	***1,217***	***1,680***	***2,240***
Transmission BOOT	-	-	-	-	(10)	21
Wind	21	130	100	48	714	559
PBT margin	**15%**	**14%**	**15%**	**15%**	**17%**	**17%**
EPC	***12%***	***13%***	***14%***	***12%***	***13%***	***14%***
Transmission BOOT	NA	NA	NA	NA	-6%	9%
Wind	*12%*	*39%*	*34%*	*6%*	*45%*	*40%*
PAT	**1,247**	**1,443**	**1,892**	**1,226**	**2,123**	**2,509**
EPS (₹)	22	25	33	21	37	44
Core EPS (₹)	**18**	**23**	**30**	**18**	**23**	**30**
Growth (YoY)	***59%***	***24%***	***34%***	***59%***	***24%***	***34%***
Balance sheet						
Working capital	2,073	1,853	1,636	3,653	3,306	2,936
Working Capital turns	5.4	6.7	9.4	3.4	4.2	5.7
Capital Employed	9,409	10,120	11,349	14,936	17,371	18,632
Capem turns	1.1	1.4	1.5	0.7	0.9	1.0
Net debt/ Equity	0.1	(0.0)	(0.2)	0.3	0.2	(0.1)
RoE	17%	17%	20%	13%	19%	20%
RoCE	13%	16%	18%	9%	15%	15%

Source: Company, Ambit Capital research

Order book

We expect momentum in order inflow to sustain backed by higher ordering by PGCIL and the states and lower competitive intensity. Large orders can materialize from segments such as STATCOM. The company also plans to foray into the solar EPC segment which could meaningfully add to the order book. However, we have not included this into our assumptions yet.

Revenue

Although we have built in an improvement in the wind-business PLF on the back of a strong season in FY17, this will not materially alter our final valuation of the company. A bulk of the strong 33% consolidated revenue growth is due to operationalization of the Patran project and higher PLF in the wind business. The key metric to follow is the EPC business performance. Revenue momentum in the EPC business should sustain at least for 2 years based on the current order book.

EBITDA margin

Core EPC EBITDA margin will remain steady though it can decline if the company takes on solar EPC orders; however, revenue growth estimates will require upward revision then. Consolidated EBITDA margins take a step jump in FY17 primarily due to the wind business which has 95%+ EBITDA margins.

Working capital

Working capital turns to increase since receivables are inflated by ₹1.1bn on account of the Patran project which will be paid on commissioning. Moreover, the sale of the wind business could materially alter the company's consolidated working capital cycle.

Exhibit 62: Our estimates for the consolidated entity are significantly ahead of consensus

₹ mn	Ambit	Consensus	%diff	Comment
Revenue				
FY17	14,620	13,870	5%	
FY18	17,712	16,685	6%	
Revenue growth				
FY17	33%	26%	680 bps	It is hard to ascertain the reason for the differential but it may be due to (1) we have considered revenues from the Patran project; (2) PLF assumption for the wind project; Our core EPC growth assumption of 27% is largely in-line with management's guidance of 25%
FY18	21%	20%	90 bps	
EBITDA				
FY17	3,467	2825	23%	
FY18	3,893	3250	20%	
EBITDA margin				
FY17	23.7%	20.4%	330 bps	The margin differential mainly arises from the revenue mix from the wind project; we have assumed flat EPC margins
FY18	22.0%	19.5%	250 bps	
PAT				
FY17	2,123	1677	27%	
FY18	2,509	2145	17%	

Source: Bloomberg, Company, Ambit Capital research

SOTP valuation – allied businesses available at no cost

Our SOTP-based target price of ₹745 values the core business at ₹620, 20x FY18E core EPS with an embedded value of the wind business (₹92/share) and transmission BOOT business (₹34/share) covering the rest. These valuations are justified given the high-growth segment the company operates in and management track record.

Exhibit 63: SOTP-based valuation of ₹680 – allied businesses come at no incremental cost

	Equity Invested (₹ mn)	Implied Multiple (x)	Implied multiple unit	Methodology	Fair value (₹ mn)	Fair value per share (₹)
EPC business (A)		**20.3**	**P/ Core EPS**	**DCF**	**35,251**	**618**
Wind assets (B)	**5,225**				**5,225**	**92**
Standalone business	*1,684*	*1.0*	*P/ Net block*	*P/ Net block*	*1,684*	*30*
Simran Wind	*3,540*	*1.0*	*P/ Equity invested*	*P/ Equity invested*	*3,540*	*62*
BOOT projects (C)	**932**				**1,918**	**34**
Jhajjar KT project	*376*	*3.1*	*P/ Equity invested*	*DCF*	*1,148*	*20*
Patran, Punjab	*556*	*1.4*	*P/ Equity invested*	*DCF*	*770*	*14*
Total (A+B+C)						**744**
CMP						**600**
Upside						**24%**

Source: Ambit Capital research, Company

Standalone business (ex-wind)

We do not estimate any earnings from the wind-segment at the standalone level since the company is looking to sell its wind power generation business. Our DCF based TP for the core business of ₹620 is based on estimates in exhibit 61. We use a WACC of 15% and terminal growth rate of 4%. The TP implies a valuation of 20x FY18E core-EPS.

Exhibit 64: DCF-based value of ₹620

	+ 1-year
Total PV of free cash flow (a)	17,853
PV of terminal value (b)	13,989
EV (a) + (b)	**31,842**
Net debt	(3,409)
Equity value	35,251
Per share	618
Embedded value	7,143
No. of shares	57
Implied share price (₹)	**744**

Source: Company, Ambit Capital research

Exhibit 65: Assumption sensitivity – we use 15%/ 4% WACC/ perpetual growth

Perpetual growth	WACC 13%	14%	15%	16%
2%	688	627	576	533
3%	720	652	596	548
4%	758	681	618	566
5%	807	717	645	587

Source: Company, Ambit Capital research

Transmission BOOT business

The company has stake in two entities – 49% in Jhajjar KT Transco and 100% in Patran. As of Jun 2016, both projects are operational. Since both projects are operational (therefore no execution risk) and since transmission BOOT projects have a pre-fixed stream of revenue guaranteed by the state (therefore no payment risk), IRR volatility is limited.

Exhibit 66: Key assumptions in calculating project IRR

	Jhajjar project	Jhajjar early termination	Patran project
Cost of Debt	10%	10%	11%
Cost of equity	15%	15%	15%
Debt/ (debt+equity)	78%	78%	75%
WACC	8.6%	8.6%	9.8%
Cost of project (₹ mn)	4,350	4,350	2,000
Revenue (₹ mn; FY17)	552	552	164
TEEC's stake	49%	49%	100%
Equity value (₹ mn)	1,148	1,265	770
Equity value (₹ /share)	20	22	14

Source: Ambit Capital research, Company

We estimate an IRR of 15-16% for both the projects and value them at ₹32 using a DCF. Although the implied valuation of 1.4x-3.1x on equity invested may seem punchy, it needs to be looked at in conjunction with the age of equity invested. On a restated equity basis (where invested equity are increased at the project IRR), both projects are valued at 1x equity.

Exhibit 67: Methodology behind restated equity

Equity invested in (₹ mn)	FY11	FY12	FY13	FY14	FY15	FY16	FY17
Jhajjar KT Project	376	-	-	-	-	-	-
Patran	-	-	-	215	-	341	-
Simran Wind	1,800	375	-	-	-	-	-
Number of days	365	366	365	365	365	366	365
Number of years equity in play	7.0	6.0	5.0	4.0	3.0	2.0	1.0
IRR							
Jhajjar KT Project							
Patran							
Simran Wind							
Value of equity today							
Jhajjar KT Project	999	-	-	-	-	-	-
Patran	-	-	-	382	-	455	-
Simran Wind	4,792	868	-	-	-	-	-
Total value of equity							
Jhajjar KT Project	999						
Patran	837						
Simran Wind	9,839						
Re-stated P/Equity invested							
Jhajjar KT Project	1.1						
Patran	0.9						
Simran Wind	0.4						

Source: Ambit Capital research

Wind power assets

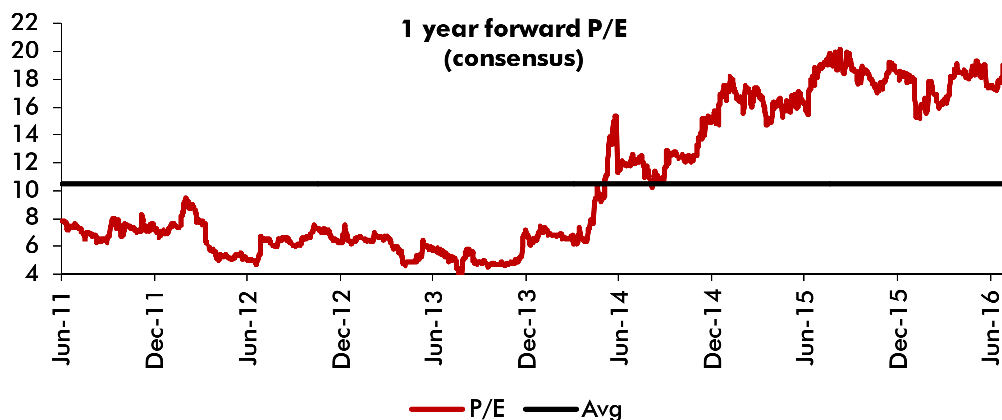
We value both wind assets (117.9MW held by a subsidiary, Simran Wind, and 45MW at the standalone level) at the carrying cost. Simran Wind is valued at the equity invested in the project of ₹3.5bn and the standalone wind assets at the book value of the plant of ₹1.7bn. Using a similar restated equity concept as the one used in for transmission assets (with 15% cost of equity), Simran Wind is valued at 0.4x restated equity. Our DCF driven valuation indicates a similar equity value.

Sale of 44.45MW of assets at ₹2.15bn in May-15 valued TEEC's wind-assets at ₹48mn/MW (enterprise value). Using a similar yardstick, the enterprise value of the existing assets is ₹7.9bn and ₹5.1bn excluding debt of ~₹2.8bn.

Cross-cycle valuations

Cross-cycle valuations are hard to ascertain for the company given (1) limited quantum of consensus estimates for the last 5 years and (2) constantly changing embedded value of the investments. On a consolidated basis, the stock currently trades at a 80% premium to its 5-year average.

Exhibit 68: TEEC is valued at a significant premium to its 5-year history though past valuations may not be the right parameter to judge the business



Source: Bloomberg, Ambit Capital research

Relative valuation to its closest peers and a case study

The closest comparable to TEEC in the T&D space is KEC International. Although Kalpataru's core business is also in T&D, its valuation is a consolidation of multiple other businesses. Given TEEC's largely India exposure, its premium to peers is likely to sustain.

Exhibit 69: TEEC is valued at a premium to KEC

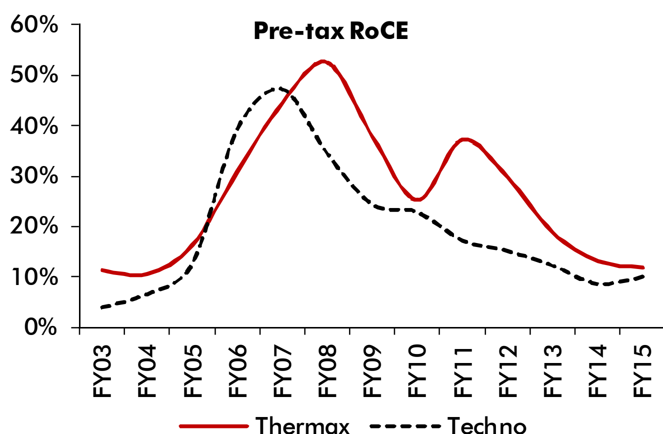
	KECI	TEEC	TEEC	TEEC	Alstom T&D	ABB
Estimates	Consensus	Ambit	Ambit	Consensus	Consensus	Consensus
Standalone/ consol	Consolidated	Standalone	Consolidated	Consolidated	Standalone	Standalone
FY18E EPS	12	33	44	37	11	25
FY16-18E EPS CAGR	27%	23%	43%	30%	90%	32%
CMP	143	417	540	600	357	1,206
FY18E P/E	12	16	12	16	33	49
FY18E RoE	16%	20%	20%	17%	18%	15%

Source: Bloomberg, Ambit Capital research; Note: We have used Ambit estimates for standalone due to lack of consensus estimates; Moreover, for the standalone business, EPS is core EPS (EPC business less other income) and CMP is ex-embedded value of Rs125/share

Tale of capital allocation slippages for 2 sector leaders - TEEC vs Thermax

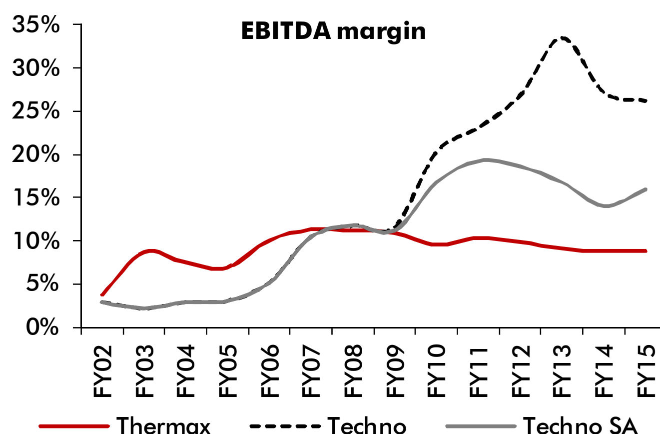
TEEC and Thermax share a lot of similarities – amongst the leaders in their sub-segments, these companies are recognised for cost competitiveness, working capital management and strong returns profile. The companies had similar return metrics for the best part of the decade. Moreover, the well-run operations of both companies ensured strong performance on all parameters vis-à-vis peers over the last 10 years as shown in the exhibits below.

Exhibit 70: Thermax's return profile has been marginally better than TEEC's but the trajectory has been the same



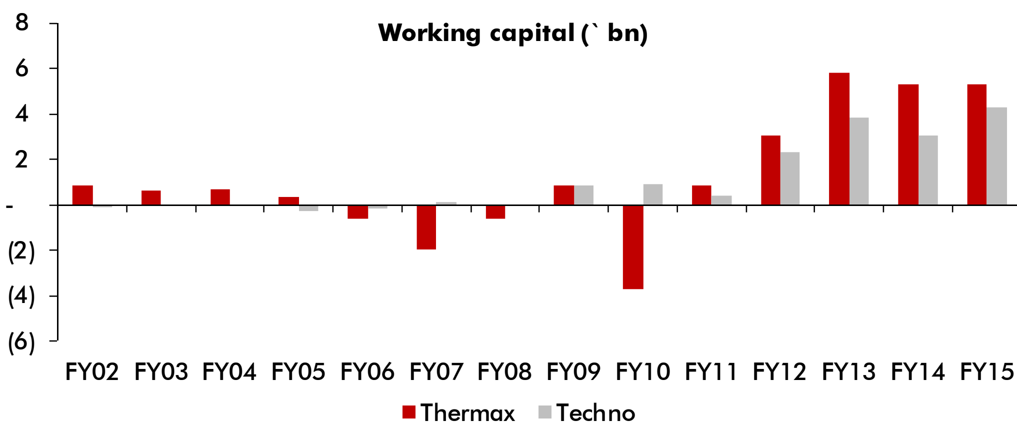
Source: Company, Ambit Capital research

Exhibit 71: Both companies' margins have improved or remained steady indicating cost control and bid discipline



Source: Company, Ambit Capital research;

Exhibit 72: Just like Thermax, TEEC's working capital needs were negligible until the capital misallocation in FY11 for Thermax and TEEC in FY10



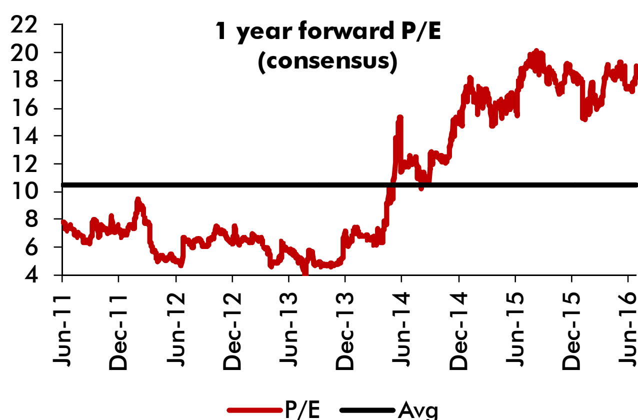
Source: Company, Ambit Capital research

However, poor capital allocation decisions meant a sharp deterioration in RoCE for both companies during a time when the industry was slowing down. Given Thermax's mainly fixed cost base, the poor investment dragged the net profit of the company down whereas in TEEC's case, it was saddled with high capital employed.

- **Thermax's capital allocation error:** Thermax's decision to foray into the super-critical boilers space led to a contraction in the returns profile in FY11. It partnered with its erstwhile partner, Babcock and Wilcox (B&W), to manufacture super-critical boilers, a domain with players such as BHEL, Shanghai Electric, Hyosung, and Dongfang. The plan was to incur a capex of ₹8bn (18% of FY13 capital employed) to set up a 3,000MW super-critical boiler factory, with a debt:equity mix of 50:50.
- **TEEC's error**: TEEC's capital allocation missteps include the investments in the wind space, some poor loans and advances gives and limited dividend payouts.

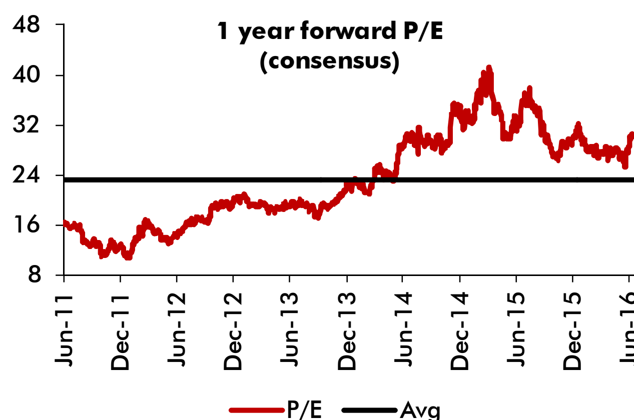
Despite the poor capital allocation decisions, Thermax continued to get a premium valuation vis-à-vis peers. We believe that TEEC, on a similar vein, should continue to attract a premium to its peers.

Exhibit 73: TEEC's premium valuation to its history is deserved



Source: Company, Ambit Capital research

Exhibit 74: Just like Thermax's premium valuation currently



Source: Company, Ambit Capital research;

Catalysts

- **Sustenance of execution and order inflow pace in FY17**

  TEEC has already won orders of ₹6.7bn in 1QFY17 (though one is through a JV) from PGCIL. Assuming 40% is TEEC's share in the JV, the PGCIL order inflow already constitutes to 35% of FY16 order inflows. Sustained growth in order inflows and revenue (FY17E: 25% in EPC) will ensure that implied multiples remain elevated to current levels since visibility of high-growth will remain. Profitability should sustain/increase marginally.

- **Monetisation of wind assets and subsequent reinvestment**

  Although largely expected by consensus given management's commentary, monetisation of the assets and subsequent announcements on capital utilisation will result in a re-rating. Current consensus calculations assume a certain sale value of the assets in the SOTP which could then receive a multiple if the company decides to invest in higher-yielding businesses (for instance, transmission assets with equity IR₹ greater than 15%). Sale of wind assets will boost consolidated return ratios.

- **Unwinding of working capital**

  This is perhaps the key metric that is currently deteriorating. Unwinding of Patran and wind asset receivables (at the standalone level) could materially reduce the working capital investments and boost RoIC. We expect the company's standalone working capital to decline to 36 days in FY18 from 73 days in FY16.

Risks

- **Poor capital allocation decision post sale of wind assets**

  Perhaps the biggest risk is a poor capital allocation decision with the monies realised by the sale of wind assets. The company has made some poor capital allocation decisions in the past partly through the management's own conservative approach (investing equity upfront in the Jhajjar project). Any sub-par capital allocation decision could potentially lead to contracting of implied multiples. Sticking to the core contracting business, given the strong pipeline of orders, should be the key focus.

- **Management bandwidth needs to expand**

  The company is led by Mr. PP Gupta who has been involved in the contracting business for over 30 years. However, increasing scale of the company will push the company to increase its managerial bandwidth and possibly decentralisation of some operations. Given that the company has never operated under such a construct in the past, this could lead to a transitory period.

- **State capex tapers**

  State spending on transmission tends to be volatile. The recent governmental measures to support the power value chain should result in continued impetus in T&D infrastructure investments. Our long-term growth is predicated on sustained investments in the segment. Note that TEEC undertakes state projects only if the financing is done through multi-lateral agencies such as World Bank and Asian Development Bank. State order inflow for the company could taper if multi-lateral funding throttles.

- **Inability to sell wind assets – dead capital**

  This would lead to a significant amount of capital employed to be invested in low yielding assets. Re-rating for that portion of the capital employed would therefore not be possible. Management has maintained it will not sell these assets unless it receives the right valuation. If it results in material delays to the sale date, it could cap upsides though the core business continues to perform well.

Exhibit 75: Explanation for flags on the front page

Paramter	Flag	Comment
Accounting	AMBER	Techno ranks in the sixth decine in our accounting universe using our proprietary framework. It ranks at the median amongst peer EPC companies. However, most of the parameters that it gets penalised for can be partly attributed to its investments in the wind power business. It fares poorly on volatility of depreciation rate, low free cash generation and high debtors of more than six months which may be due to the wind business. It also scores poorly on high miscellaneous expenses and other income volatility.
Predictability	AMBER	As with most EPC companies, the business is not predictable, especially on a quarterly basis. The company trying to add stability through investments in BOOT projects
Earnings momentum	GREEN	The company's earnings are likely to grow more than 20% over each of the next two years. In the last three months, consensus revenue/ EBITDA/ EPS estimates have been upgraded by 5-6%

Source: Bloomberg, Ambit Capital research

Balance sheet

₹ mn	FY15	FY16	FY17E	FY18E	FY19E
Shareholder's funds	**9,147**	**10,145**	**11,769**	**13,544**	**15,752**
Minority Interest	199	-	-	-	-
Debt	5,649	4,784	5,594	5,080	4,566
Sources of funds	**15,002**	**14,936**	**17,371**	**18,632**	**20,326**
Net block	**10,052**	**8,046**	**9,415**	**8,958**	**8,498**
Goodwill	157	200	200	200	200
Investments (incl current)	**1,347**	**1,547**	**1,547**	**1,547**	**1,547**
Inventories	63	379	109	135	168
Sundry Debtors	3,449	4,963	5,301	6,149	7,505
Cash and Bank	247	1,116	2,605	5,172	7,565
Other Current Assets	404	1,181	1,184	1,187	1,191
Loans and Advances	1,057	1,105	994	666	279
Trade Payables	1,367	2,875	2,667	3,321	4,160
Other Current Liabilities	290	544	1,058	1,573	1,792
Provisions	155	181	257	487	674
Net current assets	**3,408**	**5,144**	**6,210**	**7,928**	**10,081**
Application of funds	**15,003**	**14,936**	**17,371**	**18,632**	**20,326**

Source: Company, Ambit Capital research

Income statement

₹ mn	FY15	FY16	FY17E	FY18E	FY19E
Revenue	**7,939**	**10,972**	**14,620**	**17,712**	**21,770**
EPC	*6,681*	*10,143*	*12,881*	*16,102*	*20,127*
Transmission BOOT	-	-	*164*	*225*	*258*
Wind	*1,258*	*829*	*1,574*	*1,385*	*1,385*
Total expenses	5,859	8,759	11,153	13,818	17,242
EBITDA	**2,080**	**2,213**	**3,467**	**3,893**	**4,528**
EPC	*937*	*1,440*	*1,868*	*2,415*	*3,019*
Transmission BOOT	-	-	*156*	*216*	*249*
Wind	*1,143*	*764*	*1,443*	*1,262*	*1,260*
EBITDA margin	**26.2%**	**20.2%**	**23.7%**	**22.0%**	**20.8%**
Depreciation	603	495	578	596	604
EBIT	1,477	1,718	2,888	3,297	3,924
Interest expense	431	443	504	478	438
Other income	202	375	104	189	312
Exceptional income	-	244	-	-	-
Adj PBT	**1,248**	**1,650**	**2,488**	**3,009**	**3,798**
Tax	185	487	431	572	740
Adj PAT	**1,051**	**1,226**	**2,123**	**2,509**	**3,138**
Reported PAT	1,051	1,407	2,123	2,509	3,138
Adj EPS (₹)	**18**	**21**	**37**	**44**	**55**

Source: Company, Ambit Capital research

Cash flow statement

₹ mn	FY15	FY16	FY17E	FY18E	FY19E
PBT	**1,385**	**1,894**	**2,488**	**3,009**	**3,798**
Depreciation	603	495	578	596	604
Others	281	68	400	289	126
Direct taxes paid	(242)	(487)	(431)	(572)	(740)
Change in working capital	(1,560)	(895)	347	370	(254)
CFO	466	1,075	3,382	3,692	3,533
Purchase of fixed assets	(7)	1,511	(1,947)	(139)	(144)
Interest/dividend received	14	375	104	189	312
CFI	**630**	**1,689**	**(1,843)**	**300**	**474**
Proceeds from borrowings	(544)	(866)	811	(514)	(514)
Interest paid	(444)	(443)	(504)	(478)	(438)
Dividends paid	(342)	(230)	(356)	(433)	(662)
CFF	**(1,330)**	**(1,539)**	**(50)**	**(1,425)**	**(1,614)**
Change in cash	**(234)**	**1,225**	**1,490**	**2,567**	**2,392**
Free cash flow	460	2,586	1,435	3,553	3,389

Source: Company, Ambit Capital research

Ratios

	FY15	FY16	FY17E	FY18E	FY19E
Growth					
Revenue	**12%**	**38%**	**33%**	**21%**	**23%**
EPC	17%	52%	27%	25%	25%
Transmission BOOT	NA	NA	NA	37%	15%
Wind	-9%	-34%	90%	-12%	0%
EBITDA	**8%**	**6%**	**57%**	**12%**	**16%**
EPC	56%	54%	30%	29%	25%
Transmission BOOT	NA	NA	NA	38%	15%
Wind	-14%	-33%	89%	-13%	0%
EBIT	17%	16%	68%	14%	19%
PBT	35%	32%	51%	21%	26%
Net profit	20%	17%	73%	18%	25%
Margin					
EBITDA	**26%**	**20%**	**24%**	**22%**	**21%**
EPC	14%	14%	15%	15%	15%
Transmission BOOT	NA	NA	95%	96%	96%
Wind	91%	92%	92%	91%	91%
EBIT	19%	16%	20%	19%	18%
PBT	16%	15%	17%	17%	17%
Net profit	13%	11%	15%	14%	14%
Balance sheet					
Gross Block Turnover (x)	0.6	0.9	1.1	1.3	1.6
Net Block Turnover (x)	0.8	1.2	1.7	1.9	2.5
Working Capital turns (x)	4.1	3.4	4.2	5.7	7.1
Net debt/ equity	0.5	0.3	0.2	(0.1)	(0.2)
Gross debt/ equity	0.6	0.5	0.5	0.4	0.3
Net debt/ EBITDA	2.1	1.4	0.7	(0.2)	(0.8)
Book value per share	160	178	206	238	276
Balance sheet					
RoE	12%	13%	19%	20%	21%
RoCE	8%	9%	15%	15%	16%
Valuation					
P/E (ex-embedded value)	41.3	25.9	20.9	15.6	12.3
EV/ EBITDA	18.6	16.9	10.6	8.6	6.8
P/B	3.7	3.4	2.9	2.5	2.2

Source: Company, Ambit Capital research

Institutional Equities Team

Saurabh Mukherjea, CFA | **CEO, Institutional Equities** | **(022) 30433174** | **saurabhmukherjea@ambitcapital.com**

Research Analysts

Name	Industry Sectors	Desk-Phone	E-mail
Nitin Bhasin - Head of Research	E&C / Infra / Cement / Industrials	(022) 30433241	nitinbhasin@ambitcapital.com
Aadesh Mehta, CFA	Banking / Financial Services	(022) 30433239	aadeshmehta@ambitcapital.com
Aakash Adukia	Oil & Gas / Chemicals / Agri Inputs	(022) 30433273	aakashadukia@ambitcapital.com
Abhishek Ranganathan, CFA	Retail	(022) 30433085	abhishekr@ambitcapital.com
Achint Bhagat, CFA	Cement / Home Building	(022) 30433178	achintbhagat@ambitcapital.com
Anuj Bansal	Mid-caps	(022) 30433122	anujbansal@ambitcapital.com
Ashvin Shetty, CFA	Automobile	(022) 30433285	ashvinshetty@ambitcapital.com
Bhargav Buddhadev	Power Utilities / Capital Goods	(022) 30433252	bhargavbuddhadev@ambitcapital.com
Deepesh Agarwal, CFA	Power Utilities / Capital Goods	(022) 30433275	deepeshagarwal@ambitcapital.com
Dhiraj Mistry, CFA	Consumer	(022) 30433264	dhirajmistry@ambitcapital.com
Gaurav Khandelwal, CFA	Automobile	(022) 30433132	gauravkhandelwal@ambitcapital.com
Girisha Saraf	Mid-caps / Small-caps	(022) 30433211	girishasaraf@ambitcapital.com
Karan Khanna, CFA	Strategy	(022) 30433251	karankhanna@ambitcapital.com
Kushank Poddar	Technology	(022) 30433203	kushankpoddar@ambitcapital.com
Pankaj Agarwal, CFA	Banking / Financial Services	(022) 30433206	pankajagarwal@ambitcapital.com
Paresh Dave, CFA	Healthcare	(022) 30433212	pareshdave@ambitcapital.com
Parita Ashar, CFA	Metals & Mining / Aviation	(022) 30433223	paritaashar@ambitcapital.com
Prashant Mittal, CFA	Strategy / Derivatives	(022) 30433218	prashantmittal@ambitcapital.com
Rahil Shah	Banking / Financial Services	(022) 30433217	rahilshah@ambitcapital.com
Rakshit Ranjan, CFA	Consumer	(022) 30433201	rakshitranjan@ambitcapital.com
Ravi Singh	Banking / Financial Services	(022) 30433181	ravisingh@ambitcapital.com
Ritesh Gupta, CFA	Oil & Gas / Chemicals / Agri Inputs	(022) 30433242	riteshgupta@ambitcapital.com
Ritesh Vaidya, CFA	Consumer	(022) 30433246	riteshvaidya@ambitcapital.com
Ritika Mankar Mukherjee, CFA	Economy / Strategy	(022) 30433175	ritikamankar@ambitcapital.com
Ritu Modi	Automobile	(022) 30433292	ritumodi@ambitcapital.com
Sagar Rastogi	Technology	(022) 30433291	sagarrastogi@ambitcapital.com
Sumit Shekhar	Economy / Strategy	(022) 30433229	sumitshekhar@ambitcapital.com
Utsav Mehta, CFA	E&C / Industrials	(022) 30433209	utsavmehta@ambitcapital.com
Vivekanand Subbaraman, CFA	Media	(022) 30433261	vivekanands@ambitcapital.com

Sales

Name	Regions	Desk-Phone	E-mail
Sarojini Ramachandran - Head of Sales	UK	+44 (0) 20 7614 8374	sarojini@panmure.com
Dharmen Shah	India / Asia	(022) 30433289	dharmenshah@ambitcapital.com
Dipti Mehta	India / USA	(022) 30433053	diptimehta@ambitcapital.com
Hitakshi Mehra	India	(022) 30433204	hitakshimehra@ambitcapital.com
Krishnan V	India / Asia	(022) 30433295	krishnanv@ambitcapital.com
Nityam Shah, CFA	USA / Europe	(022) 30433259	nityamshah@ambitcapital.com
Parees Purohit, CFA	UK / USA	(022) 30433169	pareespurohit@ambitcapital.com
Praveena Pattabiraman	India / Asia	(022) 30433268	praveenapattabiraman@ambitcapital.com
Shaleen Silori	India	(022) 30433256	shaleensilori@ambitcapital.com

Singapore

Pramod Gubbi, CFA – Director	Singapore	+65 8606 6476	pramodgubbi@ambitpte.com
Shashank Abhisheik	Singapore	+65 6536 1935	shashankabhisheik@ambitpte.com

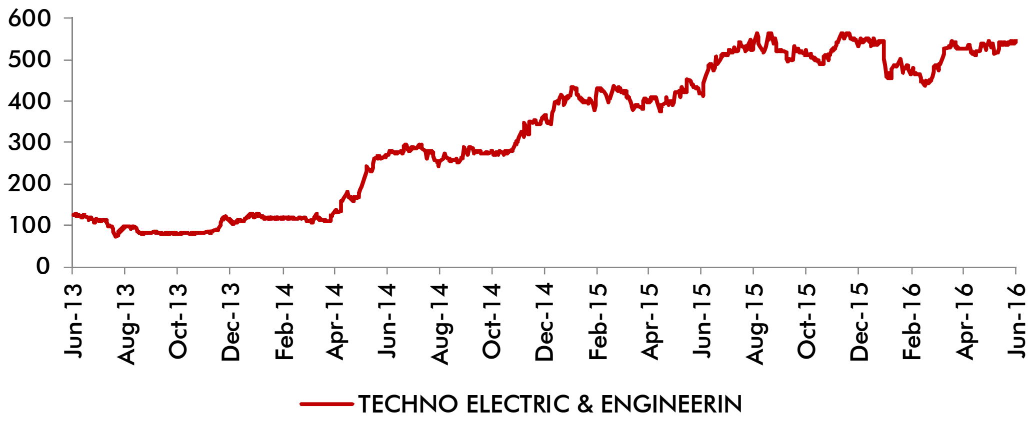
USA / Canada

Ravilochan Pola - CEO	Americas	+1(646) 361 3107	ravipola@ambitpte.com

Production

Sajid Merchant	Production	(022) 30433247	sajidmerchant@ambitcapital.com
Sharoz G Hussain	Production	(022) 30433183	sharozghussain@ambitcapital.com
Jestin George	Editor	(022) 30433272	jestingeorge@ambitcapital.com
Nikhil Pillai	Database	(022) 30433265	nikhilpillai@ambitcapital.com

Techno E&E Co. (TEEC IN, BUY)



Source: Bloomberg, Ambit Capital research

Explanation of Investment Rating

Investment Rating	Expected return (over 12-month)
BUY	>10%
SELL	≤10%
NO STANCE	We have forward looking estimates for the stock but we refrain from assigning valuation and recommendation
UNDER REVIEW	We will revisit our recommendation, valuation and estimates on the stock following recent events
NOT RATED	We do not have any forward looking estimates, valuation or recommendation for the stock
POSITIVE	We have a positive view on the sector and most of stocks under our coverage in the sector are BUYs
NEGATIVE	We have a negative view on the sector and most of stocks under our coverage in the sector are SELLs

Disclaimer

This report or any portion hereof may not be reprinted, sold or redistributed without the written consent of Ambit Capital. AMBIT Capital Research is disseminated and available primarily electronically, and, in some cases, in printed form.

Additional information on recommended securities is available on request.

Disclaimer

1. AMBIT Capital Private Limited ("AMBIT Capital") and its affiliates are a full service, integrated investment banking, investment advisory and brokerage group. AMBIT Capital is a Stock Broker, Portfolio Manager and Depository Participant registered with Securities and Exchange Board of India Limited (SEBI) and is regulated by SEBI
2. AMBIT Capital makes best endeavours to ensure that the research analyst(s) use current, reliable, comprehensive information and obtain such information from sources which the analyst(s) believes to be reliable. However, such information has not been independently verified by AMBIT Capital and/or the analyst(s) and no representation or warranty, express or implied, is made as to the accuracy or completeness of any information obtained from third parties. The information, opinions, views expressed in this Research Report are those of the research analyst as at the date of this Research Report which are subject to change and do not represent to be an authority on the subject. AMBIT Capital may or may not subscribe to any and/ or all the views expressed herein.
3. This Research Report should be read and relied upon at the sole discretion and risk of the recipient. If you are dissatisfied with the contents of this complimentary Research Report or with the terms of this Disclaimer, your sole and exclusive remedy is to stop using this Research Report and AMBIT Capital or its affiliates shall not be responsible and/ or liable for any direct/consequential loss howsoever directly or indirectly, from any use of this Research Report.
4. If this Research Report is received by any client of AMBIT Capital or its affiliate, the relationship of AMBIT Capital/its affiliate with such client will continue to be governed by the terms and conditions in place between AMBIT Capital/ such affiliate and the client.
5. This Research Report is issued for information only and the 'Buy', 'Sell', or 'Other Recommendation' made in this Research Report such should not be construed as an investment advice to any recipient to acquire, subscribe, purchase, sell, dispose of, retain any securities and should not be intended or treated as a substitute for necessary review or validation or any professional advice. Recipients should consider this Research Report as only a single factor in making any investment decisions. This Research Report is not an offer to sell or the solicitation of an offer to purchase or subscribe for any investment or as an official endorsement of any investment.
6. This Research Report is being supplied to you solely for your information and may not be reproduced, redistributed or passed on, directly or indirectly, to any other person or published, copied in whole or in part, for any purpose. Neither this Research Report nor any copy of it may be taken or transmitted or distributed, directly or indirectly within India or into any other country including United States (to US Persons), Canada or Japan or to any resident thereof. The distribution of this Research Report in other jurisdictions may be strictly restricted and/ or prohibited by law or contract, and persons into whose possession this Research Report comes should inform themselves about such restriction and/ or prohibition, and observe any such restrictions and/ or prohibition.
7. Ambit Capital Private Limited is registered as a Research Entity under the SEBI (Research Analysts) Regulations, 2014. SEBI Reg.No.- INH000000313.

Conflict of Interests

8. In the normal course of AMBIT Capital's business circumstances may arise that could result in the interests of AMBIT Capital conflicting with the interests of clients or one client's interests conflicting with the interest of another client. AMBIT Capital makes best efforts to ensure that conflicts are identified and managed and that clients' interests are protected. AMBIT Capital has policies and procedures in place to control the flow and use of non-public, price sensitive information and employees' personal account trading. Where appropriate and reasonably achievable, AMBIT Capital segregates the activities of staff working in areas where conflicts of interest may arise. However, clients/potential clients of AMBIT Capital should be aware of these possible conflicts of interests and should make informed decisions in relation to AMBIT Capital's services.
9. AMBIT Capital and/or its affiliates may from time to time have or solicit investment banking, investment advisory and other business relationships with companies covered in this Research Report and may receive compensation for the same.

Additional Disclaimer for U.S. Persons

10. The research report is solely a product of AMBIT Capital
11. AMBIT Capital is the employer of the research analyst(s) who has prepared the research report
12. Any subsequent transactions in securities discussed in the research reports should be effected through Enclave Capital LLC. ("Enclave").
13. Enclave does not accept or receive any compensation of any kind for the dissemination of the AMBIT Capital research reports.
14. The research analyst(s) preparing the email / Research Report/ attachment is resident outside the United States and is/are not associated persons of any U.S. regulated broker-dealer and that therefore the analyst(s) is/are not subject to supervision by a U.S. broker-dealer, and is/are not required to satisfy the regulatory licensing requirements of FINRA or required to otherwise comply with U.S. rules or regulations regarding, among other things, communications with a subject company, public appearances and trading securities held by a research analyst account.
15. This report is prepared, approved, published and distributed by the Ambit Capital located outside of the United States (a non-US Group Company"). This report is distributed in the U.S.by Enclave Capital LLC, a U.S. registered broker dealer, on behalf of Ambit Capital only to major U.S. institutional investors (as defined in Rule 15a-6 under the U.S. Securities Exchange Act of 1934 (the "Exchange Act")) pursuant to the exemption in Rule 15a-6 and any transaction effected by a U.S. customer in the securities described in this report must be effected through Enclave Capital LLC (19 West 44th Street, suite 1700, New York, NY 10036). In order to receive any additional information about or to effect a transaction in any security or financial instrument mentioned herein, please contact a registered representative of Enclave Capital LLC., by phone at 646 361 3107.
16. As of the publication of this report Enclave Capital LLC, does not make a market in the subject securities.
17. This document does not constitute an offer of, or an invitation by or on behalf of Ambit Capital or its affiliates or any other company to any person, to buy or sell any security. The information contained herein has been obtained from published information and other sources, which Ambit Capital or its Affiliates consider to be reliable. None of Ambit Capital accepts any liability or responsibility whatsoever for the accuracy or completeness of any such information. All estimates, expressions of opinion and other subjective judgments contained herein are made as of the date of this document. Emerging securities markets may be subject to risks significantly higher than more established markets. In particular, the political and economic environment, company practices and market prices and volumes may be subject to significant variations. The ability to assess such risks may also be limited due to significantly lower information quantity and quality. By accepting this document, you agree to be bound by all the foregoing provisions.

Additional Disclaimer for Canadian Persons

18. AMBIT Capital is not registered in the Province of Ontario and /or Province of Québec to trade in securities and/or to provide advice with respect to securities.
19. AMBIT Capital's head office or principal place of business is located in India.
20. All or substantially all of AMBIT Capital's assets may be situated outside of Canada.
21. It may be difficult for enforcing legal rights against AMBIT Capital because of the above.
22. Name and address of AMBIT Capital's agent for service of process in the Province of Ontario is: Torys LLP, 79 Wellington St. W., 30th Floor, Box 270, TD South Tower, Toronto, Ontario M5K 1N2 Canada.
23. Name and address of AMBIT Capital's agent for service of process in the Province of Montréal is Torys Law Firm LLP, 1 Place Ville Marie, Suite 1919 Montréal, Québec H3B 2C3 Canada.

Additional Disclaimer for Singapore Persons

24. This Report is prepared and distributed by Ambit Capital Private Limited and distributed as per the approved arrangement under Paragraph 9 of Third Schedule of Securities and Futures Act (CAP 289) and Paragraph 11 of the First Schedule to the Financial Advisors Act (CAP 110) provided to Ambit Singapore Pte. Limited by Monetary Authority of Singapore.
25. This Report is only available to persons in Singapore who are institutional investors (as defined in section 4A of the Securities and Futures Act (Cap. 289) of Singapore (the "SFA")." Accordingly, if a Singapore Person is not or ceases to be such an institutional investor, such Singapore Person must immediately discontinue any use of this Report and inform Ambit Singapore Pte. Limited.

Disclosures

26. The analyst (s) has/have not served as an officer, director or employee of the subject company.
27. There is no material disciplinary action that has been taken by any regulatory authority impacting equity research analysis activities.
28. All market data included in this report are dated as at the previous stock market closing day from the date of this report.
29. Ambit and/or its associates have financial interest/equity shareholding in Ashoka Buildcon, Siemens, Thermax

Analyst Certification

Each of the analysts identified in this report certifies, with respect to the companies or securities that the individual analyses, that (1) the views expressed in this report reflect his or her personal views about all of the subject companies and securities and (2) no part of his or her compensation was, is or will be directly or indirectly dependent on the specific recommendations or views expressed in this report.

© Copyright 2015 AMBIT Capital Private Limited. All rights reserved.

AMBIT Acumen at work

Ambit Capital Pvt. Ltd.
Ambit House, 3rd Floor. 449, Senapati Bapat Marg,
Lower Parel, Mumbai 400 013, India.
Phone: +91-22-3043 3000 | Fax: +91-22-3043 3100
CIN: U74140MH1997PTC107598
www.ambitcapital.com