



INDIA RESEARCH

INITIATING COVERAGE

INDUSTRIALS



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Techno Electric & Engineering Co Ltd

A credible T&D EPC play; earnings set to accelerate



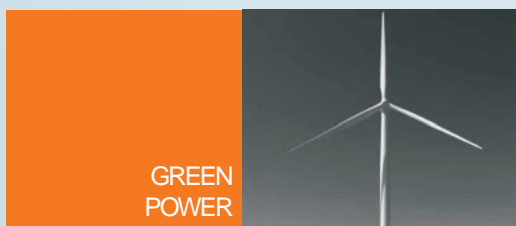
TRANSMISSION AND DISTRIBUTION



INDUSTRIAL SECTOR



BOOTS & BOOMS PROJECTS



GREEN POWER



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Reco	: BUY
CMP	: INR521
Target Price	: INR725
Potential Return	: 39%

INITIATING COVERAGE

Techno Electric & Engineering Co Ltd

A credible T&D EPC play; earnings set to accelerate

Techno Electric & Engineering Company (Techno) is well positioned in a market (read transmission and distribution) that is likely to post accelerated growth and provide it with significant growth opportunities. The company has delivered above average results in the past, driven by its: i) Prudent bidding practice, ii) Impeccable execution skill, iii) Focused approach, and iv) Asset light business model. We expect this trend to continue in future, resulting in 42% earnings CAGR over FY15-17e in consolidated earnings. The management hived off a part of its wind assets, which were a drag on return on capital employed (RoCE), while clearly stating its intention to sell-off the remaining wind assets to focus only on the engineering procurement and construction (EPC) business. Techno has moved into transmission BOOT (build, own, operate and transfer)/BOOM (build, own, operate and maintain) projects that are likely to provide it fixed annuity and steady revenue opportunities in its core EPC business. Looking at the growth profile and possibility of RoCE improvement, the stock's current valuations provide a reasonable entry point. We initiate coverage on the stock with a target price of INR725 per share.

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Market data

Sensex	:	27,866
Sector	:	Industrial
Market Cap (INRbn)	:	30
Market Cap (USDm)	:	469
O/S Shares (m)	:	57.1
52-wk HI/LO (INR)	:	560/237
Avg Daily Vol ('000)	:	11
Bloomberg	:	TEEC IN

Source: Bloomberg

Valuation

	FY15	FY16e	FY17e
EPS (INR)	18.4	27.4	37.1
PE (x)	20.5	19.0	14.0
P/BV (x)	2.4	2.8	2.4
EV/PBDIT (x)	11.7	11.0	8.4
Dividend Yield (%)	1.1	0.8	0.8

Source: Bloomberg

Returns (%)

	1m	3m	6m	12m
Absolute	2	31	34	105
Relative	1	29	37	88

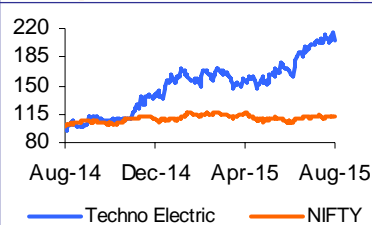
Source: Bloomberg

Shareholding pattern

Promoters	:	58%
FII	:	7%
DII	:	15%
Others	:	20%

Source: Bloomberg

Price performance vs Nifty



Source: Bloomberg Indexed to 100

Developing a niche; Delivery and performance best in class

We studied the key success factors behind Techno and feel it has delivered above average results in the past, driven by its: i) Prudent bidding practice, ii) Impeccable execution skill, iii) Focused approach, and iv) Asset light business model. The company has delivered consistent above average performance over the last six years.

Re-focussing on its core strength positive for operations and cash flow

Backed by strong cash flows, the company forayed into the wind power generation business. However, the wind assets did not perform on par with its expectations and had a negative impact on RoCE. Now, the management has decided to exit the wind energy business. Its re-focus and cash utilisation towards its core strength (EPC business) will provide a fillip to the latter and better tools to grab market share in the transmission and distribution (T&D) segment.

Humungous opportunity

The opportunity size and scalability for Techno is humungous, given the Centre's thrust on the T&D segment and the company's strong positioning in the market. Historically, India's T&D segment has remained under-invested, but now the government is moving in the right direction by trying to fix this anomaly. We believe steady orders from Power Grid Corporation of India (PGCIL) and state transmission companies (transcos) would provide steady opportunities to Techno, while the distribution sector is likely to show a pick-up on key government initiatives.

Expect 51% standalone earnings CAGR over FY15-17e

Based on our current estimates, Techno's standalone earnings is likely to grow at 51% CAGR over FY15-17e, led by 49/55% growth in sales/ EBITDA, respectively. We believe the company is likely to deliver an improvement in EBITDA margin from 12% in FY15 to 15% in FY16, which would be driven by a positive operating leverage. We expect order inflow to post 25% CAGR over the same period. There is meaningful traction in Transmission and Distribution space with increased government thrust. Techno's order inflow has doubled to INR14,931m at the end of FY15 from INR7,705m in FY14. We expect consolidated sales/net profit is expected to grow at 42% CAGR over FY15-17e, respectively.

Valuation and outlook

Our SoTP valuation of Techno provides a target price of INR725 per share. We have valued the EPC business at a P/E multiple of 20x. We have applied DCF valuation on a capital asset pricing (CAPM) model for the asset-based business: wind mills and transmission assets. Our DCF-based equity value for wind mills and transmission assets stands at INR3,246m and INR1,028m, respectively.

Investment rationale

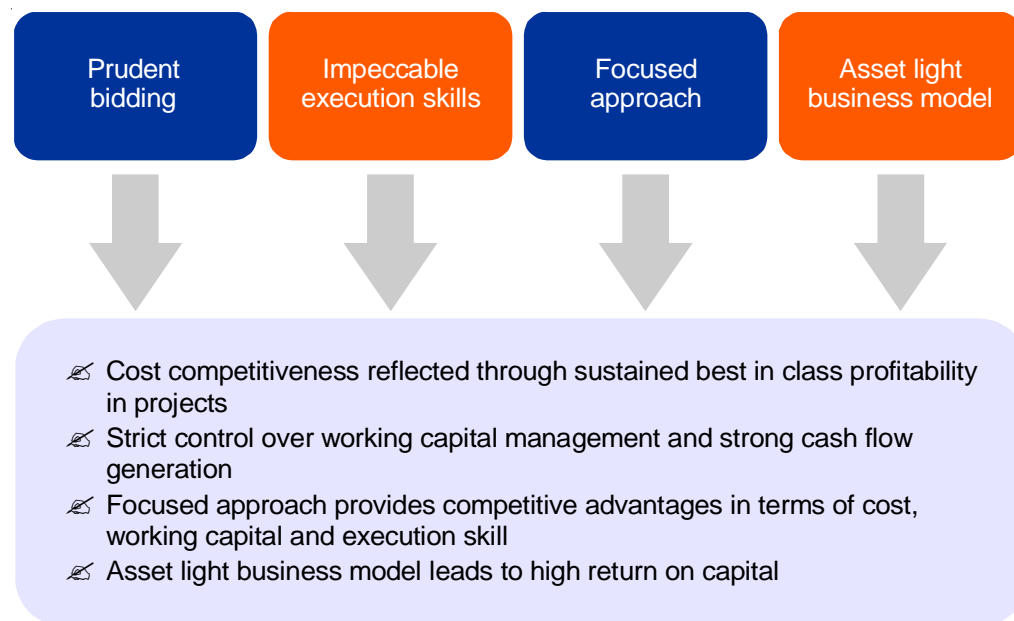
Techno is well positioned in a market (read T&D) that is likely to post accelerated growth and provide it with significant growth opportunities. The company has delivered above average results in the past, driven by its: i) Prudent bidding practice, ii) Impeccable execution skill, iii) Focused approach, and iv) Asset light business model. We expect this trend to continue in future, resulting in 42% CAGR in consolidated earnings over FY15-17e. The management hived off a part of its wind assets, which were a drag on RoCE, while clearly stating its intention to sell-off the remaining wind assets to focus only on the EPC business. Techno has moved into transmission BOOT/BOOM projects that are likely to provide it fixed annuity and steady revenue opportunities in its core EPC business. Looking at the growth profile and possibility of RoCE improvement, the stock's current valuations provide a reasonable entry point. We initiate coverage on the stock with a target price of INR725 per share.

Developing a niche

Why do we have a positive view on Techno? The basic premise of our argument is based on the fact that: 1) The company has developed a competitive advantage over its peers, as reflected through its above average performance in a market which is not so niche, and ii) It is well positioned in a market (read T&D) that is likely to post accelerated growth and provide it with significant growth opportunities

Based on the above mentioned premise, we studied the key success factors behind Techno and feel it has delivered above average results in the past, driven by its: i) Prudent bidding practice, ii) Impeccable execution skill, iii) Focused approach, and iv) Asset light business model.

Techno: Key differentiating factors



Source: Company, Antique

Prudent bidding practice

The management has by far followed a strict and disciplined bidding process, as reflected in the last seven years data. Bidding has remained selective over this period. During FY10-11, Techno did not bag a single order in a highly competitive environment. In FY11, average number of bidders per project increased to 8, the highest in the last seven years. Although Techno bid for eight out of a total of 24 projects awarded by PGCIL, it did not win a single one. This clearly highlights the management's preference for profitability over turnover.

Conservative and prudent bidding practice

Year	Number of substation projects awarded	Average number of bidders	Project value (INR m)	Projects bid by Techno (Nos)	Projects bid by Techno (INRm)	Projects won by Techno (Nos)	Projects won by Techno (INRm)
FY09	33	4	23,809	4	3,012	1	1,169
FY10	22	5	18,522	2	1,506		-
FY11	24	8	15,994	8	7,044		-
FY12	34	6	25,527	12	9,122	4	3,129
FY13	22	6	14,577	7	3,264	1	814
FY14	14	5	10,188	3	2,728	2	2,308
FY15	11	4	8,572	3	1,462	2	1,134
Total	160	6	117,189	39	28,138	10	8,554

Source: Company, Antique

Impeccable execution skill

The management prefers timely completion of projects over aggressive bidding and cost over-runs. This fact can be corroborated from the 'Best Performance Award' to Techno by PGCIL for two successive years: FY13 and FY14. To analyze the management's execution skill from available data, we collected and collated key information from some of the major awards to the company by PGCIL over the last seven years. Of the total 10 projects bagged over FY09-15, we analyzed nine projects. Of the nine projects, it has completed four projects on time, three are under execution (likely to be completed within the set timeframe) and two projects witnessed moderate delays. Techno's execution skills in the substation space are reflected through its above industry profit margin.

Key orders bagged by Techno over FY09-15 in tendering by PGCIL

Month	Project detail	Amount (INRm)	Scheduled date of completion	Actual completion
Aug-11	765/400kV Raigarh pooling station (near Kotra), extension of 765kV Raigarh pooling station and extension of 400kV Raigarh (existing) substation associated with independent power producers (IPP) generation projects in Chhattisgarh	1,444	Dec-13	CY14
Oct-11	Substation package P238-SS01 for: i) Extension of 765/400kV Gwalior substation, ii) Extension of 765kV Bina substation, iii) Extension of 765kV Jabalpur pooling substation, and iv) Extension of 765/400kV Indore substation associated with transmission system for Phase I generation projects in Odisha	1,228	Dec-13	CY14
Nov-11	Substation package (P237-SS02) associated with transmission systems for IPP generation projects in Madhya Pradesh and Chhattisgarh and MB Power Madhya Pradesh (MBPMPL)	251	Nov-13	CY13
Nov-11	Substation package (P237-SS02) associated with transmission systems for IPP generation projects in Madhya Pradesh and Chhattisgarh and MBPMPL	206	Nov-13	CY13
Oct-12	Substation package P325-SS01 for supply, erection, testing commissioning of 765/400kV Kurnool (new) substation and extension of 400kV Kurnool (APTRANSCO) substation under transmission system associated with Krishnapatnam Ultra Mega Power Project	814	Oct-14	CY14
Aug-13	Substation package for extension of 765kV Angul substation, extension of 765kV Jharsuguda substation, ext of 765kV Dharamjaigarh substation, 400kV Srikakulam (new) substation and extension of 765kV Angul substation, extension of 400kV Srikakulam pooling station, extension of 400/220kV (air insulated switchgear or AIS) Melakottaiyur (Kalivanthapattu), extension of Kota substation	1,991	Jul-15	Under execution
Mar-14	Substation package - S3 for (a) extension of 765kV Jharsuguda substation under transmission system associated with Darlipali Super Thermal Power Station (TPS), and (b) Extension of 400kV Sagardighi substation and extension of 400kV Behrampur substation under Eastern Region Strengthening Scheme-X (ERSS-X)	317	Feb-15	CY15
May-14	Substation package S1 for: (i) Extension of 765kV Solapur substation and extension of 765kV Aurangabad substation under transmission system associated with inter-regional system strengthening scheme for WR-NR-Part A, (ii) Extension of 765/400kV Raigarh (Tamnar) substation under transmission system associated with bus reactor inter-connecting transformers (ICT) in Western Regional Transmission System (WRTS), (iii) Extension of 765kV Raichur substation and extension of 765kV Kurnool substation under system strengthening in southern region - XXII	608	Feb-16	Under execution
May-14	Substation package S1 for: (i) Extension of 765kV Solapur substation and extension of 765kV Aurangabad substation under transmission system associated with inter-regional system strengthening scheme for WR-NR-Part A, (ii) Extension of 765/400kV Raigarh (Tamnar) substation under transmission system associated with bus reactor ICT in WRTS, (iii) Extension of 765kV Raichur substation and extension of 765kV Kurnool substation under system strengthening in southern region - XXII	525	Feb-16	Under execution

Source: PGCIL, Company, Antique

Best performance award by PGCIL for FY13



Best performance award by PGCIL for FY14



Source: Company

Focused approach in geography, customers and business

The management follows a focused approach in its operations as far as its customers, geography and business operations are concerned. Techno's customers can be broadly divided into three categories viz: i) Public sector units (PSUs), ii) State generation, transmission and distribution companies, and iii) Private sector players. In the past, the management has consistently focused on customer selection. Almost 60% of its projects since CY01 have been from central PSUs and private sector players. State discoms constituted only 13% of projects over the same period. According to the management, the company bids for those projects in which payments seem to be secured: either the project should be funded through reputable agencies or customers should have the capacity to pay. The company has a history of repeat customers. Its top seven customers accounted for almost half of the projects over the last 15 years.

Key customers and total number of projects executed/under-execution over CY01-15

Name of the customer	Total number of projects
Bharat Heavy Electricals (BHEL)	38
APTRANSCO	21
PGCIL	17
Bihar State Electricity Board (BSEB)	13
NTPC	12
Rajasthan Rajya Vidyut Prasaran Nigam (RRVPL)	9
Damodar Valley Corporation (DVC)	8
West Bengal State Electricity Distribution Company (WBSEDCL)	6
ABB	5
Bihar State Power Transmission Company	5
National Aluminium Company (Nalco)	5
Assam State Electricity Board	4
Indian Oil Corporation (IOCL)	4
Madhya Pradesh Power Transmission Company (MPPTCL)	4
Bengal Energy	3
Bharat Oman Refineries (BORL)	3
Maharashtra State Electricity Transmission Company (MSETCL)	3
North Bihar Power Distribution Company (NBPDC)	3

Source: Company, Antique

Customer categorywise projects handled in last seven years

	Projects handled (nos)	%
Central PSUs	95	41
Private sector	40	17
State discoms	29	13
State gencos	12	5
State transcos	48	21
Others	8	3

Source: Company, Antique

Key Customer-wise order book at FY15-end

Customer	INR mn
Power Grid Corporation of India Ltd.	6,950
North Bihar Power Distribution Co Ltd	3,900
Bihar State Power Transmission Co. Ltd	2,800
Patran Transmission Co Ltd.	1,750
Rajasthan Rajya Vidyut Prasharan Nigam Ltd.	1,450
APTRANSCO Ltd, Hyderabad	950
NTPC Ltd	725
MCC PTA India Corp Pvt Ltd.	690
Others	1,035
Total	20,250

Source: Company, Antique

Key projects bagged in the last three years

Month	Project Details	INR mn	Customer
Apr-13	765/400 KV SS orders from PGCIL for Solapur, Aurangabad, Kurnool, Raichur etc	1,250	PGCIL
Apr-13	400 KV GIS SS package from Patran Transco	1,750	Patran Transco
Apr-13	220/132/33 KV Grid SS at Sonnagar and Samastipur	1,400	Bihar State Power Transmission Ltd
Jul-14	BOP contract from Mitsubishi Heavy Chemicals, Haldia	900	Mitsubishi Heavy Chemicals
Jul-14	765/400 KV SS extn package for Tanmar, PGCIL	750	PGCIL
Jul-14	220/132/33 KV SS at Mushairi and Kishanganj, Bihar	1,500	Bihar State Power Transmission Ltd
Aug-14	Village Electrification Work in Gopalgunj Bihar under RGGVY	3,840	North Bihar Power Distribution Co Ltd
Mar-15	Village Electrification Work in Gopalgunj Bihar under RGGVY	260	North Bihar Power Distribution Co Ltd
Apr-15	765/400 KV SS at Chitorgarh by PGCIL	1,160	PGCIL
Apr-15	400/230 KV Pooling Station at Tiruneveli and Tuticorin by PGCIL	1,390	PGCIL
Apr-15	Extn of Damoh, Rajgarh Solapur Substation, by PGCIL	800	PGCIL
Apr-15	SS Package in Ajmer by PGCIL	1,150	PGCIL
Jul-15	Substation Package for STATCOM Installation at 400kV Solapur, 400kV Satna & 400kV Aurangabad	2,679	PGCIL

Source: Company, Antique

In its area of operations, the company has prudently remained focused on T&D projects. Over the last 15 years, T&D constituted roughly half of the projects executed by the company.

Project categorywise execution over last seven years

Segment	Project Type	Number of projects
Power T&D	132kV switchyard	19
	220kV switchyard	24
	400kV switchyard	38
	400KV switchyard gas-insulated switchgear(GIS)	2
	765kV switchyard	7
	Distribution	10
	Rural electrification	3
Power generation	Captive power plants (CPP)	6
	Balance of plant (BOP)	6
Industrial	Plant electricals	10
	Cabling project	18
	Condensate storage facility	17
	Industrial installations	7
	Naphtha and diesel systems	7
	Oil handling for power plants	16
	Water systems	7
	HVAC/ fire Fighting	27
Others	Others	8
Total		232

Source: Company, Antique

Geographically, Techno has gradually expanded in the eastern parts of the country. From its geographical footprints it is clear that its presence is centered in clusters. It is focused on eastern states and mainly operates in Andhra Pradesh/Rajasthan/Madhya Pradesh in the southern/western/central regions, respectively. We believe this approach helps in better execution and logistics.

Geographical focus in key states

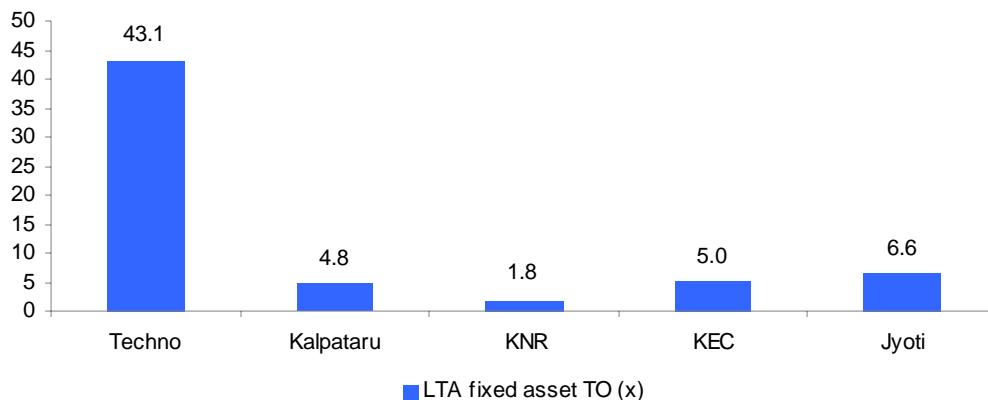
State	No. of projects	Region
UP	15	Eastern states
Orissa	18	
West Bengal	35	
Bihar and Jharkhand	34	
Assam	9	
Andhra Pradesh	38	Southern state
Madhya Pradesh	30	Central region
Rajasthan	16	Western state
Others	37	

Source: Company, Antique

Asset light business model

The management has followed an absolutely lean structure. In comparison to its peers, its fixed asset turnover is significantly high. Average fixed asset turnover over last five-to-six years has been 43x versus an industry trend of 5-6x.

Techno's fixed asset turnover ratio is by far the highest among peers as it follows an absolutely lean asset structure



Note: Except for Jyoti Structures, standalone performance has been considered in all other entities; In the case of Techno, wind mill assets have been excluded; Source: Company, Antique

Re-focussing on its core strength positive for operations and cash flow

Backed by strong cash flows, the company forayed into the wind power generation business. At its peak, it held 207MW of wind mills spread over Karnataka and Tamil Nadu. All of these were quality assets, which generated an average 26% plant load factor (PLF) at its pinnacle. However, PLF fell due to power evacuation issues and poor implementation of renewable energy certificates (RECs), which had a negative impact on cash flows. Now, the management has decided to exit the wind energy business.

The management said it would sell off the remaining wind mills (163MW) as and when opportunity arises. The company had invested a total of INR11,000m, including debt, on wind assets of 207MW. Of that, 45MW has been sold for INR2,160m. The management expects to fetch roughly INR9,000m from the remaining wind projects (163MW).

We have valued the remaining wind assets (163MW) at an enterprise value of INR8bn using the DCF method. The management's re-focus and cash utilisation towards its core strength (EPC business) will provide a fillip to the latter and better tools to grab market share in the T&D segment.

Financial performance of wind mills

	FY10	FY11	FY12	FY13	FY14	FY15	FY16e	FY17e
Installed capacity (MW)	96	96	207	207	207	207	163	163
Units sold (MW/h)	214	203	291	472	345	300	249	249
Total sales (INRm)	703	678	1,158	1,835	1,380	1,258	1,033	1,033
Average realisation (INR per kWh)	3.3	3.3	4.0	3.9	4.0	4.2	4.1	4.1
Average PLF	25.6%	24.2%	16.0%	26.0%	19.0%	16.5%	17.4%	17.4%
Operating Income (INRm)	674	664	1,115	1,765	1,324	1,194	983	981
PAT (INRm)	222	267	372	805	439	388	372	390

Source: Company, Antique

Details of wind mills

	Techno Electric	Simran Wind Project Limited (100% subsidiary)	
Capacity	45 MW	6 MW	111.90MW
Date of acquisition/ commissioning	During 2009-10	During 2009-10	31 March 2011- 24 February 2012
Location	Karnataka (12MW) and Tamil Nadu (33 MW)	Karnataka	Tamil Nadu
No. of turbines	30 turbines - 1.5MW each	4 turbines - 1.5MW each	48 turbines - 1.5MW each, 19 turbines - 2.1MW each
PLF	18%-26%	19%-26%	19%-26%
Tariff	INR3.40 (Karnataka) and INR3.39 (Tamil Nadu)	Preferential tariff - INR3.40	APPC tariff - INR2.63 (TN) for 111.90MW

Source: Company, Antique

Best in class delivery and performance

Backed by the above mentioned competitive advantages, which the company has developed over a period of time, and disciplined approach, Techno has delivered an above average performance in the past. In the past six years, it has outpaced the industry average in almost all key financial parameters. The table below shows how the company has outperformed the industry in profitability and RoCE. However, sales growth has remained below average due to the management's prudent and disciplined bidding approach.

Peer comparison: Techno has outperformed peers in almost all financial parameters

	FY10	FY11	FY12	FY13	FY14	FY15		Comments	
Sales (INRm)							CAGR (%)		
Techno	6,318	6,488	7,040	5,159	5,705	6,681	1.1	Conservative approach as far as sales over profitability is concerned. The company has delivered below average sales growth with a focus on profitability. Among peers KNR has followed a similar approach	
Kalpataru Power Transmission	26,316	28,763	30,327	33,354	40,552	44,220	10.9		
KNR Constructions	7,125	7,930	7,505	6,921	8,348	8,761	4.2		
KEC International	38,772	39,651	46,043	55,921	65,588	65,680	11.1		
Jyoti Structures	21,498	24,060	27,743	30,177	36,655	27,870	5.3		
EBITDA margin (%)							Average		
Techno	12.2	15.2	16.9	11.5	11.7	11.7	13.2	Techno has delivered above industry average	
Kalpataru Power Transmission	12.4	12.3	11.6	10.2	9.5	9.6	10.9	EBITDA margin over the last six years, in line with KNR, which has delivered the highest	
KNR Constructions	15.7	16.3	17.7	16.7	15	14.4	15.9	EBITDA margin in the same period	
KEC International	10.8	10.7	8.1	5.0	6.6	5.0	7.7		
Jyoti Structures	12.5	13.1	13.2	10.9	9.3	10	11.5		
Debt-to-equity ratio (x)							Average		
Techno	0.5	0.5	0.3	0.4	0.3	0.3	0.4	On the positive side. Techno has remained conservative in raising debt. Growth has been largely fuelled by internal accruals	
Kalpataru Power Transmission	0.6	0.3	0.3	0.3	0.4	0.4	0.4		
KNR Constructions	0.4	0.2	0.1	0.2	0.2	0.2	0.2		
KEC International	1.0	1.0	0.7	1.1	1.4	1.3	1.1		
Jyoti Structures	0.8	0.8	1.5	1.7	2.2	3.5	1.7		
Working capital days (x)							Range (months)		
Techno	45	124	93	134	105	135	1.5-4.5	Although not at uncomfortable levels, Techno's working capital cycle is slightly higher than the industry benchmark because of lower customer advances	
Kalpataru Power Transmission	153	108	116	102	100	117	3.5-5		
KNR Constructions	48	46	49	108	42	74	1.5-3.5		
KEC International	77	78	48	59	68	67	1.5-3		
Jyoti Structures	109	125	141	145	154	334	4-11		
RoCE (%)							Average		
Techno	29.6	28.4	30.3	14.2	18.6	22.5	23.9	The company's RoCE has remained way above the industry's long-term average, led by focus on profitability and cash flow	
Kalpataru Power Transmission	15.9	13.2	11.6	9.8	9.7	8.9	11.5		
KNR Constructions	15.1	14.8	13.2	11.5	12.2	12.4	13.2		
KEC International	18.1	14.2	18.5	7.9	12	11.2	13.6		
Jyoti Structures	19.7	19.7	13.8	11.9	10.9	-2.1	12.3		

Note: i) Except for Jyoti Structures, standalone performance has been considered in all other entities to evaluate efficiency of the EPC business; ii) best available peers have been chosen however apple to apple comparison is not possible as dissimilarities in business profile among competitors. Source: Company, Antique

Humungous opportunity

T&D capex in the economy likely to accelerate

Historically, India's T&D segment has remained under invested. In an ideal scenario, investment in the T&D and power generation segments should be in the 1:1 ratio. However, the long-term average ratio between investments in power generation capacity addition and T&D segment over CY51-96 has remained 1:0.45 (Source: TERI). In the X and XI Five Year Plan also, the ratio of investments has remained in the same range. Moreover, uneven investment in power generation capacity across geographies, depending on resources and fuel, has resulted in irregular power availability across India. There is power surplus in some states in the Northern and Western India and a power shortage in the south. The government has now committed itself to fix these anomalies. If its power for all by FY19 is to be achieved, T&D investments have to come through.

The 12th Five Year Plan envisages roughly 110,000 circuit km (ckm), including lines below 400kV, of line additions and 270,000MVA, including lines below 400kV, of substation capacity, excluding a high-voltage direct current (HVDC) line. Total T&D investment planned in the 12th Five Year Plan is INR4,860bn, which results in an annual opportunity of INR972bn. Of this, roughly 60% is planned in the distribution space. In the past, the T&D segment was largely plagued by under investment in the distribution space, while investments in transmission, although not sufficient, remained decent.

According to draft perspective transmission plan for 20 years, total planned transmission expenditure during the 13th Five Year Plan is INR2,600bn. It is estimated that during the 13th Five Year Plan period, ~62,800ckm of transmission lines, 15,000MW of HVDC terminal capacities and 128,000MVA capacity of 400kV and above voltage level transmission systems would be required. This infrastructure would require a rough investment of INR2,600bn. A further INR1,000bn is expected to be invested online, below or equal to 220kV.

Plan wise capex in T&D segment

INRbn	10th Five Year Plan (A)	11th Five Year Plan (RE)	12th Five Year Plan (E)
Generation	1,826	4,796	6,386
T&D	877	2,230	4,860
Transmission	457	1,230	1,800
Distribution	420	1,000	3,060

Source: Report of Working Group on Power (11th and 12th Five Year Plan); A: Actual; RE: Revised estimates; E: Estimates

Plan-wise physical transmission infrastructure network and likely addition in the 12th Five Year Plan

Transmission system	Type/voltage	Unit	As at the end of					12th Five Year Plan addition			Addition over the next 2 years	% of 5-year target
			9th Plan	10th Plan	11th Plan	15-May	12th Plan	12th Plan	PGCIL	Others		
Transmission line												
765kV	CKM		1,160	2,184	5,250	19,602	32,250	27,000	13,000	14,000	12,648	47%
HVDC and 500kV bi-pole	CKM		4,738	5,872	9,432	9,432	16,872	7,440	7,440	-	7,440	100%
400kV	CKM		49,378	75,722	106,819	138,170	144,819	38,000	24,000	14,000	6,649	17%
230/220kV	CKM		96,993	114,629	135,980	151,218	170,980	35,000	-	35,000	19,762	56%
Total	CKM		152,269	198,407	257,481	318,422	364,921	107,440	44,440	63,000	46,499	43%
Substations												
765	MVA		-	-	25,000	132,000	174,000	149,000	90,000	59,000	42,000	28%
400	MVA		60,380	92,942	151,027	194,417	196,027	45,000	30,000	15,000	1,610	4%
230/220	MVA		116,363	156,497	223,774	274,958	299,774	76,000	-	76,000	24,816	33%
Total	MVA		176,743	249,439	399,801	601,375	669,801	270,000	120,000	150,000	68,426	25%
HVDC	MW		5,200	8,200	9,750	13,500	22,500	12,750	12,750	-	9,000	71%

Source: CEA, Antique

In line with the government's vision of power for all by FY19, it has launched two key schemes, which envisages a total investment of INR75bn. The two schemes are Deendayal Upadhyaya Gram Jyoti Yojana (DDUGJY) and Integrated Power Development Scheme (IPDS). DDUGJY's emphasis is on feeder separation in rural areas, while IPDS focuses on strengthening distribution systems in urban areas. Erstwhile schemes - Rajiv Gandhi Grameen Vidyutikaran Yojana (RGGVY) and Restructured Accelerated Power Development and Reforms Programme (R-APDRP) - have been subsumed with DDUGJY and IPDS, respectively.

New schemes launched by the government

Scheme	INRbn
Deendayal Upadhyaya Gram Jyoti Yojana	430
Rajiv Gandhi Grameen Vidyutikaran Yojana	393
Integrated Power Development Scheme	326
Restructured Accelerated Power Development and Reforms Programme	440
	1,589

Note: RGGVY and R-APDRP are old schemes and merged in the new schemes; Source: Company, Antique

Proposed infrastructure under DDUGJY

	Numbers	INRbn
Feeders to be separated	16,500	247.5
New substations	1,620	40.5
Existing substation augmentation	1,615	
New 33kV/66kV lines	21,900	15.2
Distribution transformers (DTRs)	200,000	53.5
Meters	11,910,000	64.5
Total		421.1

Source: Company, Antique

Proposed Infrastructure under IPDS

	Numbers	INRbn
New substations	2,700	301.9
Existing substation augmentation	1,615	
New 11/22kV lines	170,000	
DTRs	200,000	
Meters	5,800,000	17.1
Total		319.0

Source: Company, Antique

Additional investment in the green energy corridor can provide INR426bn opportunity

The Centre has put forward aggressive renewable energy targets. It has set a target of 100/60GW of solar power/wind energy by FY22, respectively. The existing solar/wind capacity is 4/24GW, respectively. This plan will require additional investments in the inter-state and intra-state transmission space. India's renewable potential is concentrated in states like Tamil Nadu, Karnataka, Andhra Pradesh, Gujarat, Maharashtra, Rajasthan, Himachal Pradesh and Jammu and Kashmir. Large scale renewable energy parks would require power to be transmitted across the country.

According to a PGCIL report titled, 'Green Energy Corridor', total additional investment on the green energy corridor is likely to be INR426bn. The work is divided into two phases. Phase I is for inter-state transmission system strengthening, with Phase II for intra-state. Work on Phase I green energy corridor, which includes inter-state transmission system strengthening, has already commenced, while the report on Phase II has been submitted to the government.

It must be noted that the green energy corridor had been conceptualised prior to the government's revised target on renewable energy.

Key projects planned under the green energy corridor

	INRbn
Intra-state transmission system strengthening for all seven states, including last mile connectivity	205
Inter-state transmission system (ISTS) strengthening, including last mile connectivity to ISTS	188
Dynamic reactive compensation	6
Real time monitoring system (power management unit/power distribution center), including fibre optic communication links	5
Energy storage	20
Establishment of renewable energy management center	2
Total	426

Source: PGCIL, Antique

PGCIL's ordering robust, Techo commanded 100% market share in extra high voltage (EHV) substations in FY15

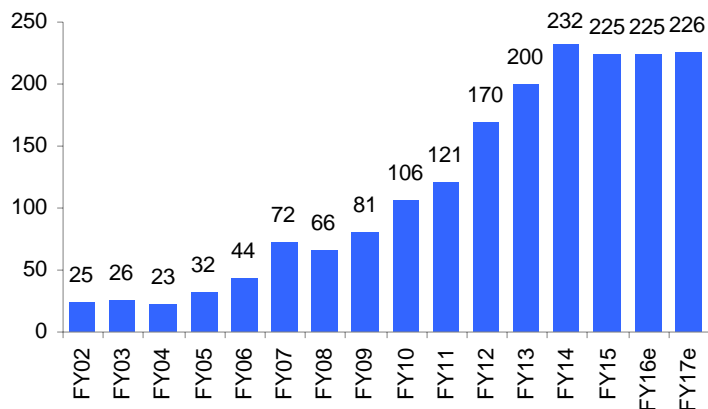
PGCIL's order awards during FY15 stood at INR193bn, including INR33bn order for Champa-Kurukshetra HVDC Phase II. Excluding the HVDC order, FY15 orders stood at INR160bn vs INR108bn in FY14 and peak of INR221bn in FY12. Ordering for the 12th Five Year Plan has been showing healthy traction after bottoming out in FY14. Post FY12, it was consistently lower than the company's actual capex. In our note on PGCIL's ordering pattern, dated December 19, 2014, we had highlighted that this trend was unsustainable and likely to reverse in the near future, as its annual capex plan was steady at INR222-226bn for the next three years. Integration of renewable energy to grid, through green energy corridors, could potentially provide additional opportunities of INR500bn till FY17. This slow ordering trend is already reversing, with Mar-15 seeing a significant ramp-up in ordering. During 1QFY16, it has already awarded orders worth INR52bn.

Order awards by PGCIL over the last seven years; Techno's addressable market was ~16% of PGCIL's total order awards

Product/package	Mar-10	Mar-11	Mar-12	Mar-13	Mar-14	Mar-15	% share over the last seven years
Communication	1.0	0.6	4.5	2.1	1.1	0.2	1.0
Conductor	14.8	29.8	54.4	11.5	11.7	16.5	13.8
Insulator	9.6	3.3	5.6	5.4	4.3	5.4	3.3
Others	2.6	3.6	2.9	5.7	3.6	11.7	3.2
Reactor	12.8	2.6	13.4	5.9	5.3	3.5	4.3
Substation	18.5	16.0	25.5	14.6	10.2	8.6	9.7
GIS	2.1	2.0	3.8	10.8	15.9	25.8	6.5
Transformer	11.3	7.6	13.1	5.1	4.0	6.3	4.8
Circuit breaker	-	-	0.6	1.3	0.8	-	0.3
Tower package/transmission line	44.0	64.5	97.1	69.5	43.5	75.9	39.8
Power electronics	-	-	-	-	-	4.9	0.9
Renewable energy (RE) works	2.7	-	-	-	3.6	1.6	0.8
Energy management system (EMS)	-	0.0	0.1	4.1	3.6	-	0.8
Concentrator	-	0.4	-	0.6	-	-	0.1
HVDC	-	53.0	-	25.0	-	32.7	10.7
Total	119.4	183.5	220.9	161.5	107.6	193.0	

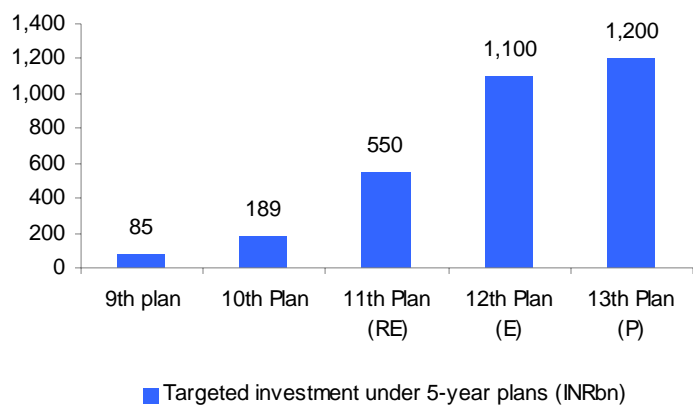
Source: PGCIL, Antique

PGCIL's target capex over the next two years



Source: PGCIL, Antique

PGCIL's targeted investment under five year plans



RE: Revised Estimate; E: Estimate; P: Antique Projection; Source: PGCIL, Antique

Market share in the EHV substation space showing an increasing trend

Techno has bagged over 62/100% EHV substation orders during FY14/15, respectively. The company bagged all orders in the EHV substation space during FY15, beating players like Bharat Heavy Electricals, Siemens, Alstom T&D, L&T, ABB India, and Jyoti Structures.

In Apr-15, it bagged its first gas-insulated substation (GIS) substation order from PGCIL, where China's Xian XD Switchgear Electric Co is the main contractor. Notably, this is the second GIS substation order awarded to an Indian player. Chinese and Korean players continue to dominate the GIS space. However, during FY15, Alstom T&D bagged its maiden order for a 400kV GIS substation in Betul. Going forward, PGCIL's compulsory requirement of domestic manufacturing will benefit local players.

In Jul-15, the company also bagged a high-end static compensator (STATCOM) installation at 400kV substation in Solapur, Satna and Aurangabad. The main contractor in this INR4,854m order is Rongxin Power Electronic Co, of which 55% will be executed by Techno.

EHV substation orders: Techno commanded a 62% market share in FY14 and 100% in FY15

Contractor (INRm)	FY09	FY10	FY11	FY12	FY13	FY14	FY15
ABB	5,210		1,558	1,815	867		
Crompton Greaves				1,440			
Alstom T&D India		1,641	2,568	2,625		1,390	
Jyoti Structures				2,536			
L&T				3,225	2,663		
Siemens	2,001	4,969	3,147	1,722	761		
Techno				2,672	814	2,308	1,134
Others			63	1,697	7		
Total	7,212	6,610	7,336	17,731	5,113	3,698	1,134
Market share	0%	0%	0%	15%	16%	62%	100%

Source: PGCIL, Antique

Key projects received from PGCIL over last three years

Month	Project details	INRm
Apr-13	765/400kV SS orders from PGCIL for Solapur, Aurangabad, Kurnool, Raichur etc	1,250
Jul-14	765/400kV SS extension package for Tamnar, PGCIL	750
Apr-15	765/400kV SS at Chittorgarh by PGCIL	1,160
Apr-15	400/230kV pooling station at Tirunelveli and Tuticorin by PGCIL (GIS)	1,390
Apr-15	Extension of Damoh, Rajgarh, Solapur substation by PGCIL	800
Apr-15	Substation package in Ajmer by PGCIL	1,150
Jul-15	Substation package for static compensator (STATCOM) installation at 400kV Solapur, 400kV Satna and 400kV Aurangabad	2,679
Total		9,179

Source: PGCIL, Company, Antique

Techno has largely focused on the EHV segment; Order awards in the sub-EHV segment remains virtually negligible

	Value (INRm)						Market share					
	FY08-10	FY11	FY12	FY13	FY14	FY15	FY08-10	FY11	FY12	FY13	FY14	FY15
Siemens	6,256	1,702	518	-	934	-	22%	20%	7%		14%	0%
Alstom T&D	5,749	-	410	814	1,566	1,751	20%		5%	9%	24%	24%
BHEL	-	-	3,151	-	1,138	896			40%		18%	12%
L&T	2,856	-	528	3,974	-	-	10%		7%	42%		
ABB	1,230	395	114	-	-	-	4%	5%	1%			
Crompton Greaves	2,234	-	-	1,985	1,012	-	8%			21%	16%	
G.E.T	1,865	3,116	478	-	-	-	7%	36%	6%			
Emco	1,443	-	-	-	-	2,378	5%					32%
Hyosung Corporation	632	-	-	-	-	-	2%					
ICSA (India)	1,295	-	136	-	-	-	5%		2%			
Shyama Power India	1,173	-	-	1,548			4%			16%		
Jyoti Structures	1,140	429	852	-	-	-	4%	5%	11%			
Techno	585	-	457	-	-	-	2%	6%				
Tata Projects	265	-	-	-	-	-	1%					
KEC International	-	1,298	590	717	-	-		15%	8%	8%		
TBEA Company					1,421						22%	
Toshiba Corporation						818						11%
Others	1,787	1,718	562	426	419	1,595	6%	20%	7%	5%	6%	21%
Total	28,510	8,658	7,796	9,464	6,490	7,438	100%	100%	100%	100%	100%	100%

Source: PGCIL, Antique

Transmission BOOT projects likely to provide another round of opportunity

Inter-state transmission system for renewable energy in the Northern Region	Regulated tariff mechanism	2,179
Ajmer Suratgarh Moga	PFC Consulting (PFCCCL)	4,440
Creation of 400/220kV substations in NCT (National Capital Territory) of Delhi during the 12th Five Year Plan	Regulated tariff mechanism	
Establishment of 220/66kV, 2x160MVA GIS substation at Sector 47, Chandigarh along with a 220kV DC line from Sector 47 to 400/220kV Panchkula substation of PGCIL as an inter-state line	Regulated tariff mechanism	
Northern Region System Strengthening Scheme Part XXXIV	Regulated tariff mechanism	
Constraints in 400kV bays extensions at 400kV Vemagiri substation	Regulated tariff mechanism	
Additional inter-regional AC link for import into the southern region	PFCCCL	8,570
HVDC bi-pole link between western region (Raigarh, Chhattisgarh) and southern region (Pugalur, Tamil Nadu and Madakkathara, Kerala)	Regulated tariff mechanism	26,820
Strengthening of transmission system beyond Vemagiri	REC Transmission Projects Company	7,032
Connectivity for Kudankulam 3 and 4 units (2x1,000MW), with inter-state transmission system	Regulated tariff mechanism	
Erection of 220kV line to Neyveli Lignite Corporation (NLC) Karaikal - Karaikal 220kV DC line	Regulated tariff mechanism	
North East Region System Strengthening Scheme - II	RECTPCL	1,652
Common transmission system for Phase-II generation projects in Odisha		
Jharsuguda (Sundargarh) - Raipur pool 765kV DC line	PFCCCL	2,596
Loop-in-loop-out (LLO) of both circuits of Rourkela-Raigarh 400kV DC line (second line)	Regulated tariff mechanism	
Immediate evacuation system for Odisha Power Generation Corporation's (OPGC) 1,320MW project in Odisha	PFCCCL	152
Transmission system strengthening in the Indian system for transfer of power from new hydroelectric power stations (HEPs) in Bhutan		
(i) Jigmeling-Alipurduar 400kV DC line, with quad moose conductor (Indian portion)	Regulated tariff mechanism	
(ii) Alipurduar-Siliguri 400kV DC line (second), with quad moose conductor	RECTPCL	2,240
(iii) Kishanganj-Darbhanga 400kV DC	RECTPCL	

Source: CEA, Antique

Jhajjar KT Transco project details

The 400KV transmission system comprises a double-circuit quad moose line extending from Jharli to Kabulpur, Rohtak (35km) and Kabulpur to Dipalpur, Sonapat (64 km), with two substations of 400/220kV with 24 bays each at Rohtak and Sonapat. The transmission network is designed to evacuate 2,400MW of power and will initially transmit 1,320MW (2x660MW) of power from Jhajjar power plant in Haryana.

Project cost (INRm)	4,440
<i>Debt (INRm)</i>	2,760
<i>Combined equity (INRm)</i>	760
<i>Government grant (INRm)</i>	920
Project award	May-10
Commercial Operation Declaration (COD)	Mar-12
Concession period	25 years on design-finance-operate-transfer (DFOT) basis
Transmission charges	INR450m in the first year
Terminal value	60 months revenue post 25 years

Source: Company, Antique

Patran, Punjab project details

Patiala-Kaithal 400kV double circuit triple snow bird line at Patran (5km). The line will have 400/220kV substation with 14 bays in Patran

Project cost (INRm)	2,000
<i>Debt (INRm)</i>	1,500
<i>Equity (INRm)</i>	500
<i>Central grant (INRm)</i>	-
COD	May-16
Concession	35 years
Levelised transmission charges (INRm)	274

Source: Company, Antique

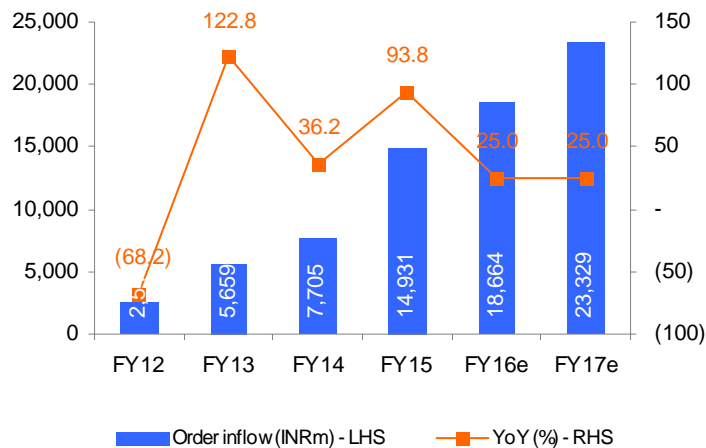
Expect 51% standalone earnings CAGR over FY15-17e

Based on our current estimates, Techno's standalone earnings is likely to grow at 51% CAGR over FY15-17e, led by 49/55% growth in sales/ EBITDA, respectively. We believe the company is likely to deliver an improvement in EBITDA margin from 12% in FY15 to 15% in FY16, which would be driven by a positive operating leverage.

We expect order inflow to post 25% CAGR over the same period. There is meaningful traction in Transmission and Distribution space with increased government thrust. Techno's order inflow has doubled to INR14,931m at the end of FY15 from INR7,705m in FY14.

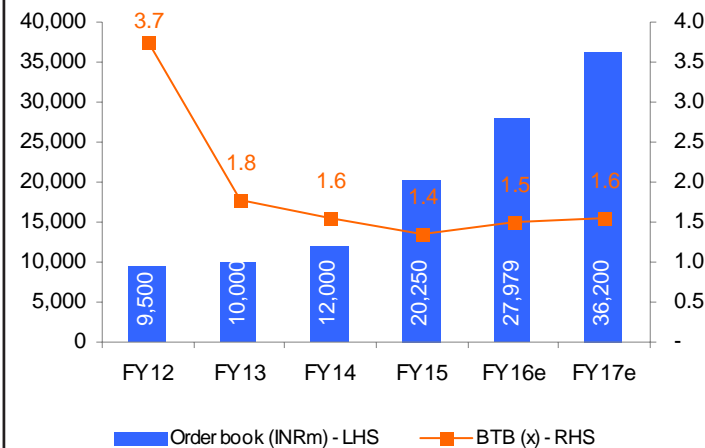
We expect consolidated sales/net profit is expected to grow at 42% CAGR over FY15-17e, respectively.

Order inflow likely to benefit from a pick-up in T&D space



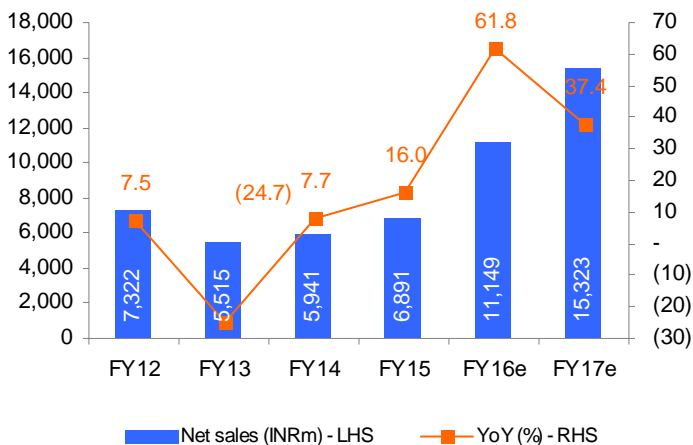
Source: Company, Antique

Order book likely to show a gradual increase, led by robust inflow



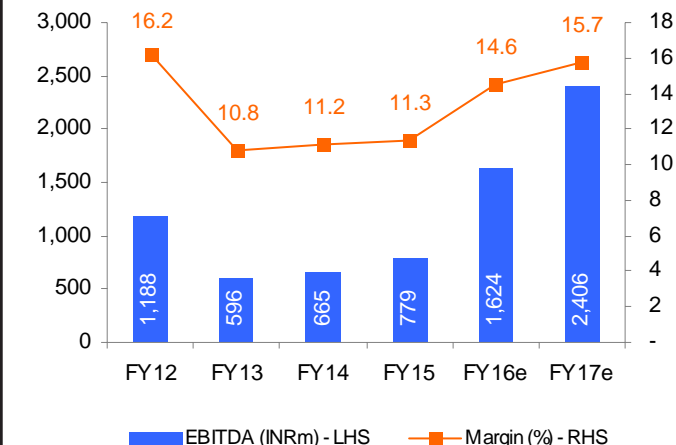
Source: Company, Antique

Net sales likely to show a healthy growth on robust order inflow and healthy execution



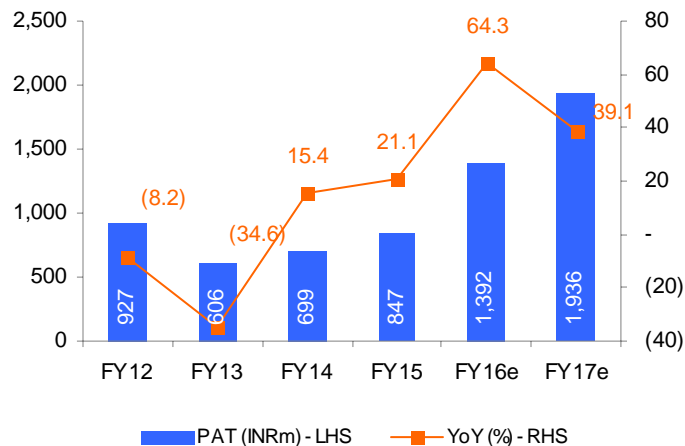
Source: Company, Antique

EBITDA in the EPC business likely to show a steady increase, led by improved operating leverage



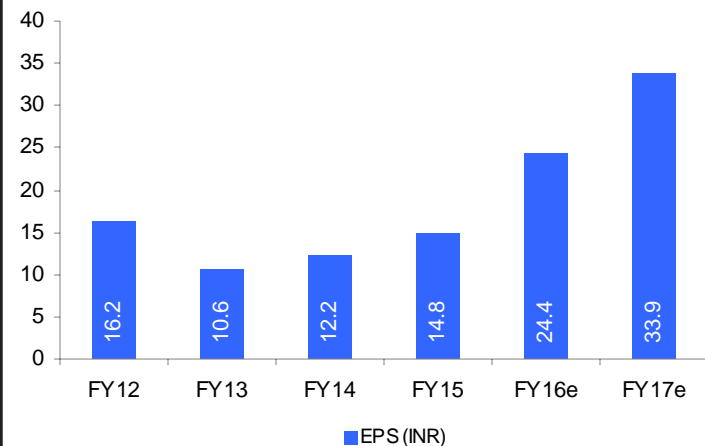
Source: Company, Antique

PAT likely to post a 34% CAGR over FY15-18e



Source: Company, Antique

Standalone EPS at INR35 by FY18e-end



Source: Company, Antique

Operating matrix

(INRm)	FY11	FY12	FY13	FY14	FY15	FY16e	FY17e
EPC Business							
Order book	14,000	9,500	10,000	12,000	20,250	27,979	36,200
Order inflow	7,988	2,540	5,659	7,705	14,931	18,664	23,329
Growth %		(68.2)	122.8	36.2	93.8	25.0	25.0
Execution Rate (%)	51.9	50.3	54.3	57.1	55.7	54.0	54.0
Net Sales	6,488	7,040	5,159	5,705	6,681	10,935	15,108
% growth	2.7	8.5	(26.7)	10.6	17.1	63.7	38.2
EBITDA	989	1,188	596	665	779	1,624	2,406
Margin %	15.2	16.9	11.5	11.7	11.7	14.9	15.9
Net Working Capital	2,198	1,792	1,897	1,643	2,471	4,007	5,218
% of sales	32.3	24.5	34.4	27.7	35.9	36.6	34.5
Wind Asset							
Installed Capacity (MW)	95.5	207.4	207.4	207.4	207.4	163.0	163.0
Units Sold (m MWH)	202.5	291.3	471.9	344.6	300.4	249.1	249.1
% growth	(5.3)	43.8	62.0	(27.0)	(12.8)	(17.1)	-
PLF (%)	24.2	16.0	26.0	19.0	16.5	17.4	17.4
Unit rate (INR/KWH)	3.3	4.0	3.9	4.0	4.2	4.1	4.1
Net Sales	678	1,158	1,835	1,380	1,258	1,033	1,033
EBITDA	664	1,115	1,765	1,324	1,194	983	981
Consolidated							
EPS (INR/Share)	19.8	21.2	21.1	15.3	18.4	27.4	37.1
EPC Business	15.1	14.8	7.3	10.7	14.2	22.9	32.4
Wind Assets	4.7	6.4	13.7	4.7	4.2	4.5	4.7
Gross Debt	2,896	6,231	6,676	6,077	5,405	5,165	4,267
Standalone	2,387	1,849	2,105	1,614	1,757	1,757	1,357
Simraan	509	4,382	4,571	4,463	3,648	3,408	2,910
Du Pont Analysis [Standalone]							
Net Margin (%)	14.8	12.7	11.0	11.8	12.3	12.5	12.6
Asset TO (x)	1.0	1.0	0.7	0.8	0.8	1.1	1.4
Leverage	1.5	1.3	1.4	1.3	1.3	1.2	1.1
ROE (%)	22.0	17.5	10.6	11.2	12.4	17.4	19.9

Source: Company, Antique

Valuations reasonable

Our SoTP valuation of Techno provides a target price of INR616 per share. We have valued the EPC business at a P/E multiple of 20x. We have applied DCF valuation on a CAPM model for the asset-based business: wind mills and transmission assets. Total equity investment on wind assets (163MW) is roughly INR4,770m. Our DCF-based equity value for wind mills and transmission assets stands at INR3246m and INR1,028m, respectively.

SoTP

	Valuation basis	Equity value (INRm)	INR per share
EPC Business	PE @ 20x	36,995	648
Wind Assets	DCF	3,246	58
Transmission assets	DCF	1,028	19
Target Price			725

Source: Antique

Financials - Consolidated

Profit and loss account (INRm)

Year ended 31 Mar	2013	2014	2015	2016e	2017e
Net Sales	7,001	7,085	7,939	11,968	16,141
EBITDA	2,386	1,926	2,080	2,607	3,386
Other Income	206	120	202	305	316
Depreciation	655	667	603	492	510
EBIT	1,937	1,379	1,679	2,420	3,193
Interest	561	454	431	393	320
PBT	1,376	925	1,248	2,027	2,873
Tax	151	38	186	464	753
PAT	1,225	887	1,062	1,563	2,120
Minority Interest	21	12	12	-	-
Net Profit	1,204	875	1,050	1,563	2,120

Balance sheet (INRm)

Year ended 31 Mar	2013	2014	2015	2016e	2017e
Shareholders's Funds	7,700	8,371	9,147	10,476	12,361
Minority Interest (BS)	188	193	199	199	199
Debt	6,676	6,077	5,405	5,165	4,267
Capital Employed	14,564	14,641	14,751	15,840	16,827
Net Fixed Assets	11,036	10,729	10,247	7,405	7,045
Investments	646	1,870	1,347	1,347	1,347
Current Assets	5,019	3,602	4,816	7,093	9,436
Current Liabilities	1,520	1,335	1,892	2,679	3,805
Net Current Assets	3,499	2,268	2,925	4,414	5,631
Cash	718	481	247	3,004	2,811
Net Deferred Tax	(7)	(9)	(7)	(7)	(7)
Other Assets	233	297	403	17	-
Other Liabilities	844	514	166	341	-
Total Assets	14,564	14,641	14,750	15,840	16,827

Per share data

Year ended 31 Mar	2013	2014	2015	2016e	2017e
No of Shares	57.1	57.1	57.1	57.1	57.1
EPS	21.1	15.3	18.4	27.4	37.1
DPS	3.0	3.0	4.0	4.0	4.0
BVPS	134.9	146.6	160.2	184.0	215.5
Dividend Payout (%)	14.2	19.6	21.7	14.3	11.2
Divi. Yield (%)	2.0	2.7	1.1	0.7	0.7

Margin (%)

Year ended 31 Mar	2013	2014	2015	2016e	2017e
EBITDA	34.1	27.2	26.2	21.8	21.0
EBIT	27.7	19.5	21.2	20.2	19.8
PAT	17.2	12.4	13.2	13.1	13.1

Source: Company, Antique

Cash flow statement (INRm)

Year ended 31 Mar	2013	2014	2015	2016e	2017e
Profit before Tax	1,376	925	1,248	2,027	2,873
Depreciation	655	667	603	492	510
Interest	561	454	431	393	320
Interest income	206	120	202	305	316
Others	623	(278)	(247)	(239)	-
Change in Working Capital	(1,827)	839	(1,113)	(935)	(1,541)
Tax Paid	151	38	186	464	753
Cash flow from Operations	1,031	2,449	535	969	1,093
Invest. in Fixed Assets	(198)	(330)	(122)	2,351	(150)
Other Investments	(98)	(1,224)	522	0	-
Int. / Divi. Income etc	561	120	202	305	316
Others (Invest.)	(328)	-	-	-	-
Cash from Investing	(63)	(1,434)	603	2,656	166
Free Cash Flow	968	1,015	1,138	3,625	1,259
Equity Raised / Repaid	-	(23)	(33)	-	-
Debt Raised / Repaid	267	(600)	(672)	(240)	(898)
Dividend Paid	(199)	(176)	(235)	(235)	(235)
Interest Paid	(561)	(454)	(431)	(393)	(320)
Others (Financing)	66	-	-	-	-
Cash from Financing	(426)	(1,252)	(1,372)	(867)	(1,453)
Net Change in Cash	542	(237)	(234)	2,757	(194)

Growth indicators (%)

Year ended 31 Mar	2013	2014	2015	2016e	2017e
Revenue	(13.9)	1.2	12.1	50.7	34.9
EBITDA	6.7	(19.3)	8.0	25.3	29.9
PAT	(0.4)	(27.3)	20.0	48.8	35.6
EPS	(0.4)	(27.3)	20.0	48.8	35.6

Valuation (x)

Year ended 31 Mar	2013	2014	2015	2016e	2017e
PE	7.2	7.3	20.5	19.0	14.0
P/BV	1.1	0.8	2.4	2.8	2.4
EV / Sales	2.1	1.7	3.4	2.7	1.9
EV / PBDIT	5.6	5.9	11.7	11.0	8.4

Financial ratios

Year ended 31 Mar	2013	2014	2015	2016e	2017e
RoE (%)	15.6	10.5	11.5	14.9	17.2
Roce (%)	11.7	9.0	9.6	11.8	14.0
Net Debt/Equity (x)	0.8	0.7	0.6	0.2	0.1
EBIT/ Interest (x)	3.5	3.0	3.9	6.2	10.0

Source: Company Antique

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