Initiating Coverage

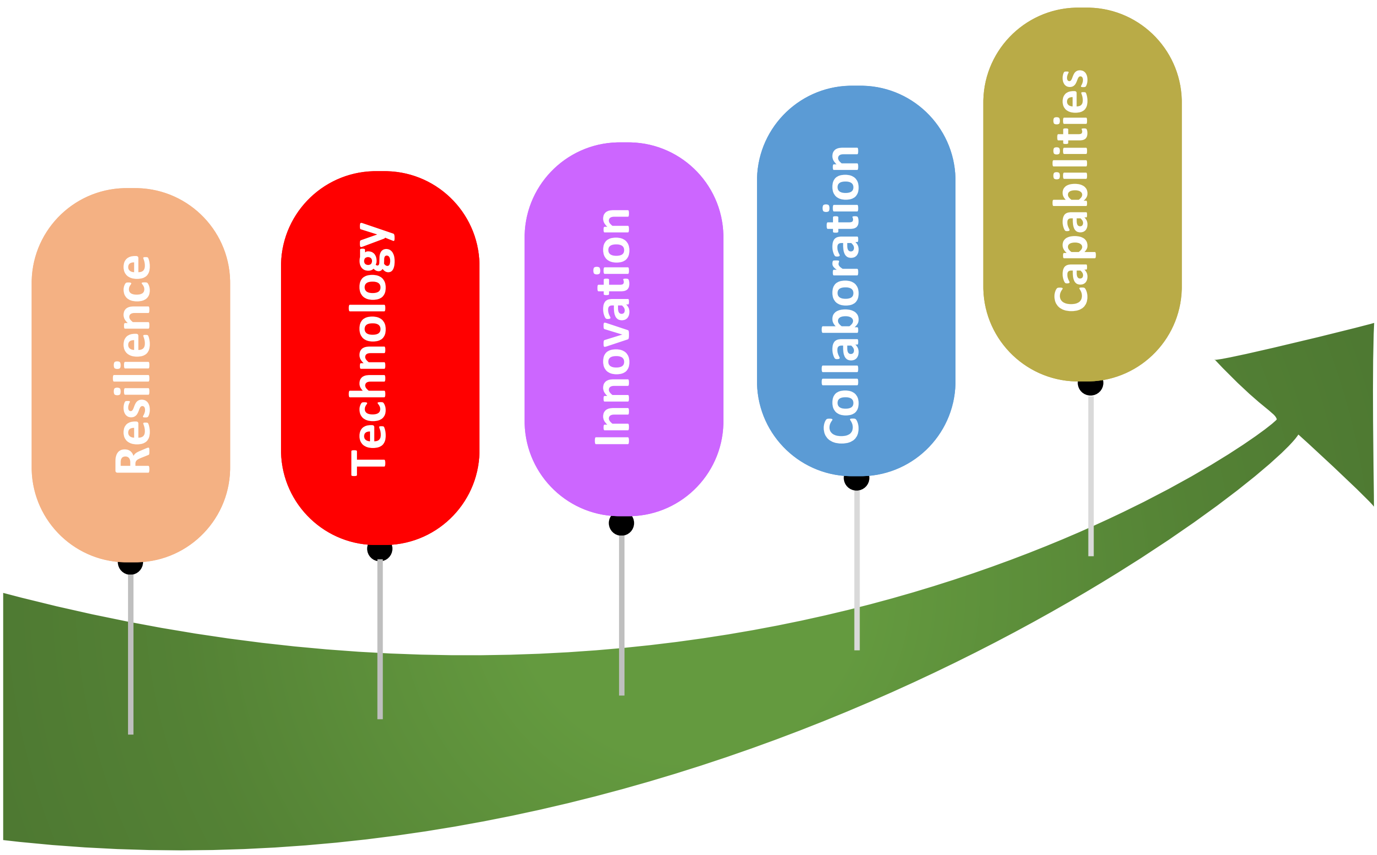
India I Mid Cap

22 August, 2022

Institutional Research

Praj Industries

Leveraging Legacy to Leadership



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CENTRUM

Praj Industries

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22 August, 2022

BUY

Price: Rs373

Target Price: Rs508

Forecast return: 36%

Institutional Research

Praj Industries (PRJ), an accomplished industrial biotechnology company, with robust order backlog (OB) of Rs32.4bn (1.4x FY22 revenues) and its buoyant addressable market provides visibility for 30% revenue CAGR over FY22-24E. We see strong order pipeline in PRJ's core segment i.e., Bio-energy space (both domestic and international) which augurs well for the company. With cooling off in key commodity prices and levers on operating front we expect uptick in margins by 190bps over FY22-24E. In this backdrop, we expect PRJ to post superlative earnings CAGR of 44% over FY22-24E. Further, with multiple new product offerings on the anvil, PRJ is all set to continue on its growth journey post FY24. We initiate coverage on Praj Industries with BUY and TP of Rs508, assigning 30x FY24E EPS.

Growing with India's (bio)energy security initiatives

Volatility in crude prices (every 1USD increase in prices raises India's import bill by Rs115bn), environmental hazards emanating from ever increasing consumption of fossil fuels and security concerns given over dependence on imports (80-85%) of petroleum products have resulted into Ethanol Blending Programme (EBP) being implemented by GoI. Over the next two years, total expected ordering for E20 under EBP is around 15,000KLPD, which would entail total addressable market size for PRJ at Rs50-60bn.

Early signs of pick up in international business

PRJ has global footprint (>10% share in E1G space, ex China) and recently has achieved first breakthrough order in starchy feedstock based ethanol market from Brazil during FY22. International business order booking/net sales posted yoy growth in FY22 at 32.7%/29.5%, respectively. Further, PRJ is witnessing a strong traction in enquiries for low carbon ethanol from the North American market as countries contemplate to enhance share of biofuels in their energy mix. We expect it to witness order inflow of Rs15-20bn over FY22-24E vs. aggregate Rs18bn over last 4 years.

Technology prowess the key moat

In domestic market, PRJ is a market leader in first generation ethanol (E1G) space and currently, ~60% of India's ethanol production capacity of plants use PRJ's technology. PRJ is accredited with many firsts in bioenergy space – (1) It has patented first of its kind patented technology for producing BIOSYRUP®; (2) It has built India's first of its kind integrated bioenergy complex that produces ethanol, biogas, bio fertilizer and other by-products; and (3) PRJ is executing India's first E2G plant and it will commence commissioning from 3QFY23.

Robust earnings growth + improving return ratios = Buy

We expect PRJ to post healthy revenue CAGR of 30% over FY22-24E on the back of robust OB and continuing momentum in order booking. Margin expansion, operating leverage, minimal capital expenditure and debt free balance sheet will push earnings growth going ahead. We expect PRJ to post healthy earnings CAGR of 44% and report PAT of Rs3.1bn in FY24E vs. Rs1.5bn in FY22. Strong earnings growth should drive ROE expansion to 26% in FY24E from 18% in FY22. We assign a PE multiple of 30x on FY24E EPS of Rs16.9 and arrive at a target price of Rs508, a potential upside of 36%.

Financial and valuation summary

YE Mar (Rs mn)	FY20A	FY21A	FY22A	FY23E	FY24E
Revenues	11,024	13,047	23,333	33,196	39,121
EBITDA	781	1,123	1,938	3,403	3,990
EBITDA margin (%)	7.1	8.6	8.3	10.2	10.2
Adj. Net profit	704	811	1,502	2,493	3,110
Adj. EPS (Rs)	3.8	4.4	8.2	13.6	16.9
EPS growth (%)	3.0	15.0	84.9	65.9	24.7
PE (x)	97.0	84.3	45.6	27.5	22.0
EV/EBITDA (x)	40.5	24.5	35.3	18.8	15.9
PBV (x)	9.5	8.5	7.5	6.3	5.3
RoE (%)	9.6	10.7	17.5	25.0	26.2
RoCE (%)	10.1	10.9	17.5	24.8	26.0

Source: Company, Centrum Broking

Market Data

Bloomberg:	PRJ IN
52 week H/L:	447/288
Market cap:	Rs69.6bn
Shares Outstanding:	183.7mn
Free float:	67.2%
Avg. daily vol. 3mth:	8,58,661

Source: Bloomberg

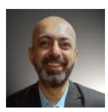
PRJ relative to Nifty Midcap 100

Source: Bloomberg

Shareholding pattern

	Jun-22	Mar-22	Dec-21	Sep-21
Promoter	32.8	32.8	32.8	32.8
FIIs	15.9	13.8	15.0	15.0
DIIs	9.9	8.8	8.3	6.7
Public/other	41.3	44.6	43.9	45.5

Source: BSE



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Mid Cap

Thesis Snapshot

Centrum vs. consensus

YE Mar (Rs bn)	Centrum FY23E	Consensus FY23E	Variance (%)	Centrum FY24E	Consensus FY24E	Variance (%)
Revenue	33,196	31,055	6.9	39,121	38,781	0.9
EBITDA	3,403	2,965	14.8	3,990	3,994	-0.1
PAT	2,493	2,231	11.8	3,110	3,119	-0.3
EPS (Rs)	13.6	12.5	11.8	16.9	17.0	-0.3

Source: Bloomberg, Centrum Broking

Praj Industries versus NIFTY Midcap 100

	1m	6m	1 year
PRJ IN	(2.1)	15.1	22.1
NIFTY Midcap 100	2.3	(5.1)	(5.2)

Source: Bloomberg, NSE

Key assumptions

YE Mar	FY23E	FY24E
Bio-energy order booking	23,667	32,000
Bio-energy net revenues	23,320	28,983
Engineering order booking	6,158	7,697
Engineering net revenues	7,220	7,460
HPS order booking	2,550	2,805
HPS net revenues	2,656	2,678
Consolidated EBITDAM (%)	10.3	10.2

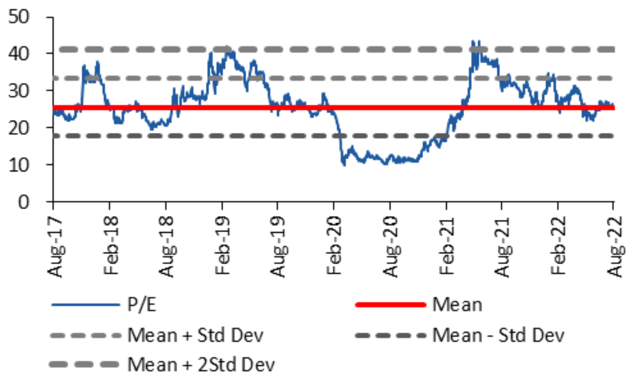
Source: Centrum Broking

Valuations

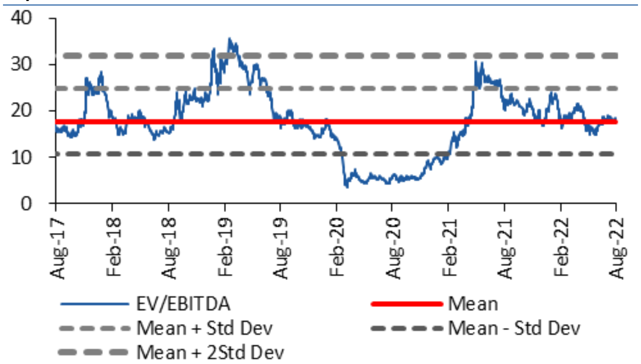
At current price of Rs373, stock is trading at 22x far below its trading average PE multiple of 29x on one year forward earnings. We believe that current multiple doesn't factor in the growth opportunities and benefits accruing due to recent cooling commodity prices. Further, the stock has been trading on five year and three-year average PE multiple at 26x and 24x, respectively. We initiate coverage with BUY on PRJ with PE based TP of Rs508, assigning 30x to FY24E consolidated EPS of Rs16.9, implying an upside of 36% from current levels. Further, at our target multiple of 30x PE it would be trading at lower than mean + 1SD multiple which gives further comfort to our assigned PE multiple recommendation.

Valuations	Rs/share
FY24E EPS	16.9
Target multiple (x)	30
Target Price	508

P/E mean and standard deviation



EV/EBITDA mean and standard deviation



Source: Bloomberg, Centrum Broking

Order backlog at historical high; execution capabilities in place

- **Over FY19-22, PRJ has clocked a stupendous CAGR of 35.4% and 26.9% in order booking and net revenues, respectively, thanks to EBP. OB stands at ATH of Rs32.4bn (1.4x FY22 revenues) lending revenue visibility.**
- **Currently, the annual ethanol production capacity in India is around 8.5bn litres and expected to reach 18-19bn litres over the next three years. Our calculations suggest that 4.5bn litre capacity production orders have been already granted as on FY22.**
- **Over the next two years, total expected ordering for E20 under EBP is around 15,000KLPD (5-6bn litres of ethanol production capacity) which would entail total addressable market size for PRJ at Rs50-60bn.**
- **In this backdrop, we factor in cumulative order booking of around Rs55bn (including CBG orders of Rs20bn) in FY23/24 for PRJ's bioenergy segment vis-à-vis Rs39bn recorded in FY21/22. This healthy order booking will ensure that bioenergy segment continues to contribute >70% of order booking and net revenues.**
- **We factor in cumulative order booking of around Rs14bn in FY23/24 for PRJ's engineering division vis-à-vis Rs11bn recorded in FY21/22.**
- **Healthy order booking will ensure that engineering segment continues to contribute ~20% of order booking and net revenues.**
- **PRJ has developed a team of dedicated engineering vendors and outsourced non-core activities to ensure not only timely completion of orders but also achieved higher (~4x) gross asset to turnover ratio in FY22 vis-à-vis historical average of ~2.2x.**

As on 1QFY23, OB stands at 1.4x of FY22 revenues lending revenue visibility

PRJ manufactures plants and machinery for bioenergy space (currently, predominantly Distillery plants for 1G ethanol production) and is a leader with 60% share in domestic market. PRJ has witnessed robust order booking as India's EBP picked momentum in FY19/20 and resulting in an all-time high OB (Rs32.4bn) and revenues (Rs23.3bn) as on FY22 for the company. As on 1QFY23, OB stands at 1.4x of FY22 revenues lending revenue visibility.

A perspective on order booking/revenue growth, over FY19-22, PRJ has clocked a stupendous CAGR of 35.4% and 26.9% in order booking and net revenues, respectively. For FY22-24E, we pencil in PRJ to post 29.5% and 10.8% CAGR in net revenues and order booking, respectively on the back of healthy OB and as EBP proceeds further towards its target of E20 by FY25/26, we expect PRJ being a market leader at 60% would continue to benefit from the same.

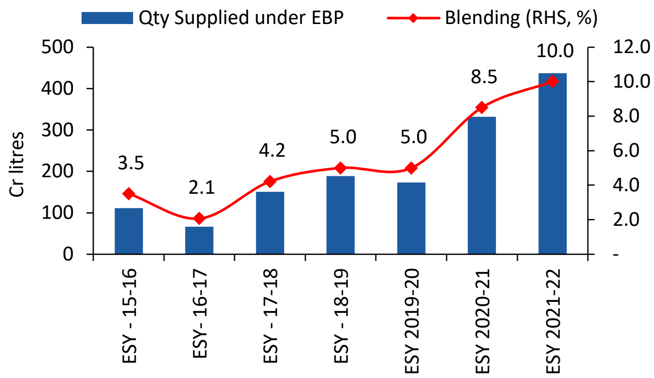
Bioenergy contributes lion's share at >70% of order booking, net revenues and OB

Under the EBP for achieving E20 blending more than 1,016cr litres of ethanol is needed by ESY25/26 and currently the annual ethanol production capacity in India is around 8.5bn litres

The domestic bioenergy sector has seen significant momentum with several positive and structural measures announced to boost the ethanol production/consumption in India under EBP. Oil Marketing Companies (OMCs) have contracted about 4.4bn litres for ESY22, a yoy jump of >33%. This would enable India to have ethanol blending of ~10% for the current ESY vis-à-vis 4.2% in ESY18.

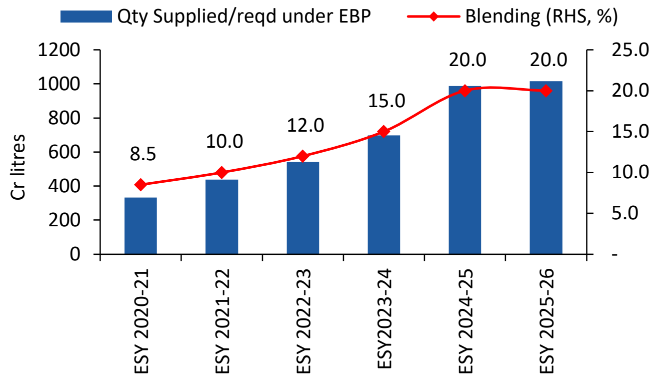
Under the EBP for achieving E20 blending more than 1,016cr litres of ethanol is needed by ESY25/26. Currently, the annual ethanol production capacity in India is around 8.5bn litres. Majority of the ethanol production is based on the sugary feedstock (5.7bn litres), mainly cane molasses and a small but growing proportion of starchy feedstock (2.8bn litres). Further, our calculations suggest that 4.5bn litre capacity production orders have been already granted as on FY22.

Exhibit 1: EBP has impressive track record…



Source: Centrum Broking, Company Data

Exhibit 2: …that gives confidence for future



Source: Centrum Broking, Company Data

In bioenergy space, PRJ has a domestic market share of ~60% with respect to their scope of work which is around 1/3rd of overall capital expenditure in setting up a distillery facility

Further, ethanol has other applications (**it is one of the largest volume organic chemicals used in industrial and consumer products**) and demand is expected to be around 4-5bn litres by ESY25/26 from current 2-3bn litres. This entails that total production capacity envisaged by end of EBP would be around 18-19bn litres (considering operational efficiencies at 70-80%).

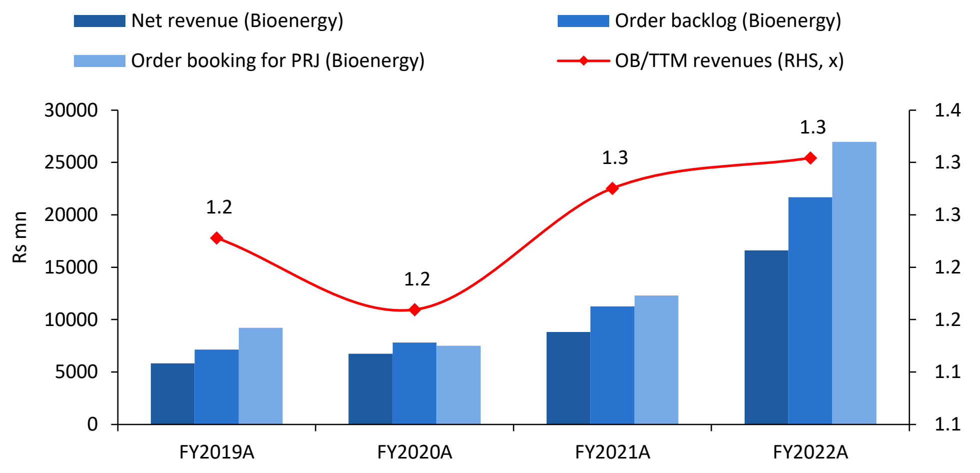
As per the management of PRJ, in bioenergy space they have a domestic market share of ~60% (with respect to their scope of work, which is around 1/3rd of overall capital expenditure in setting up a distillery facility). Further, over FY19-22, bioenergy has contributed ~70% of overall order bookings and revenues for PRJ given favourable segment dynamics.

Consequently, PRJ's bioenergy segment has recorded excellent performance and posted a CAGR of 43.1% and 41.9% in order booking and net revenues, respectively over the same period. Therefore, the total expected ordering under E20 for EBP is around 15,000KLPD (5bn litres of ethanol production capacity) over next two years which would entail total addressable market size for PRJ at Rs50-60bn. This augurs well for PRJ and we believe that order inflow will remain robust under EBP.

Further, we expect some traction on CBG front and pick up of orders from international front (read CBG/International section below for further details) too in FY23/FY24. Therefore, we factor in cumulative order booking of around Rs55bn in FY23/24 for PRJ's bioenergy segment vis-à-vis Rs39bn recorded in FY21/22. This healthy order booking will ensure that bioenergy segment continues to contribute >70% of order booking and net revenues.

Total expected ordering under E20 for EBP is around 15,000KLPD (5bn litres of ethanol production capacity) over next two years which would entail total addressable market size for PRJ at Rs50-60bn

Exhibit 3: EBP played a crucial role to enhance revenue visibility



Source: Centrum Broking, Company Data

Exhibit 4: Bioenergy segment – the key driving force (Rs mn)

Particulars	FY2018A	FY2019A	FY2020A	FY2021A	FY2022A	FY2023E	FY2024E	CAGR FY19-22	CAGR FY22-24E
Opening order book	5,330	3,848	7,146	7,798	11,257	21,668	22,014		
Addition to OB during the year	**5,200**	**9,200**	**7,492**	**12,298**	**26,969**	**23,667**	**32,000**	**43.1**	**8.9**
Revenue from Bioenergy business	**4,766**	**5,819**	**6,725**	**8,826**	**16,611**	**23,320**	**28,983**	**41.9**	**32.1**
Closing OB	3,848	7,146	7,798	11,257	21,668	22,014	25,031	44.7	7.5
Order booking (%) to total Order Book	50.0	66.0	59.7	62.4	77.9	73.1	75.3		
Order booking (yoy, %)	-15.9	76.9	-18.6	64.1	119.3	-12.2	35.2		
Revenue booking (yoy, %)	-7.0	22.1	15.6	31.2	88.2	40.4	24.3		
Bioenergy - OB/TTM revenues (x)	**0.8**	**1.2**	**1.2**	**1.3**	**1.3**	**0.9**	**0.9**		
Bioenergy % to Total revenues	**52.0**	**51.0**	**61.0**	**67.6**	**71.2**	**70.2**	**74.1**		

Source: Centrum Broking, Company Data

Engineering division's performance is linked to capital expenditure in several sectors namely metals, power, specialty chemicals, fertilizers, refinery & petrochemicals, F&B, etc.

Engineering and HiPurity segment form balance 30% of business

In engineering segment, PRJ provides designing and engineering of plants and machinery and processes that minimize off-spec products, consumption of energy and water, all types of emissions and use of non-recyclable material. The plants are designed to exceed regulatory norms of environment, health and safety and thereby reduce customers' compliance risks. Engineering division's performance is linked to capital expenditure in several sectors namely metals, power, specialty chemicals, fertilizers, refinery & petrochemicals, F&B, etc.

Over FY19-22, **Engineering segment** has contributed ~22% of overall order bookings and revenues for PRJ. Further, PRJ's engineering segment has posted a CAGR of 17.0%/4.9% in order booking/net revenues over the same period, respectively. As on FY22, OB for the segment stands at Rs5.7bn with average execution time frame of around 15 months. Going ahead, as per the management, they have witnessed robust enquiry pipeline across key focus segments and it should do well.

In this backdrop, we factor in cumulative order booking of around Rs14bn in FY23/24 for PRJ's engineering division vis-à-vis Rs11bn recorded in FY21/22 factoring in revival in private capex. This healthy order booking will ensure that segment continues to contribute ~20% of order booking and net revenues.

Exhibit 5: Engineering segment financial modelling (Rs mn)

Particulars	FY2018A	FY2019A	FY2020A	FY2021A	FY2022A	FY2023E	FY2024E	CAGR FY19-22	CAGR FY22-24E
Opening order book	3,834	2,093	1,670	2,058	5,069	5,726	4,664	-	-
Addition to OB during the year	**3,744**	**3,346**	**3,494**	**5,449**	**5,355**	**6,158**	**7,697**	**17.0**	**19.9**
Revenue from Engineering business	**2,658**	**4,039**	**3,087**	**2,583**	**4,667**	**7,220**	**7,460**	**4.9**	**26.4**
Closing OB	2,093	1,670	2,058	5,069	5,726	4,664	4,901	50.8	-7.5
Order booking (%)	36.0	24.0	27.8	27.7	15.5	19.0	18.1	-	-
Order booking (yoy, %)	25.2	-10.6	4.4	56.0	-1.7	15.0	25.0	-	-
Revenue booking (yoy, %)	-6.3	52.0	-23.6	-16.3	80.7	54.7	3.3	-	-
Engineering - OB/TTM revenues (x)	**0.8**	**0.4**	**0.7**	**2.0**	**1.2**	**0.6**	**0.7**	**-**	**-**
Engineering % to Total revenues	**29.0**	**35.4**	**28.0**	**19.8**	**20.0**	**21.7**	**19.1**	**-**	**-**

Source: Centrum Broking, Company Data

PHS as a leader offers process engineering and complex process skids

PRJ HiPurity Syestem (PHS) offers high purity water systems (WS), Modular Process Systems (MPS) including fermentation-based solutions to customers engaged in biopharmaceuticals, sterile formulations, complex injectables & nutraceutical.

Further, with continued focus on NDDS (New Drug Delivery Systems) there is an unprecedented activity right from research to product development to commercialization in the space of complex injectables. PHS, as a leader, offers process engineering and complex process skids. There is a huge interest and potential for creating fermentation-based manufacturing capacity in the country. PHS has expertise to set up fermentation plants from pilot scale to Ultra-High capacity. There is a drive for "localization" for critical medicines and outreach of Indian Pharma to semi-regulated & regulated markets globally. We believe that PHS is well poised to cater to opportunities in this space by offering critical

We factor in cumulative order booking of around Rs5.4bn in FY23/24 for PRJ's PHS division vis-à-vis Rs4.3bn recorded in FY21/22

end to end high purity water systems. Further, PHS' international business is also experiencing traction as clients from various countries are increasingly aiming to be self-sufficient in pharma & biologics products.

Historically, PHS segment has contributed ~7/9% of overall order bookings/revenues for PRJ, respectively. However, PHS segment has posted a CAGR of 18.5%/9.8% in order booking/net revenues over FY19-22, respectively. Going ahead, as per the management, robust enquiry pipeline across key focus segments has been witnessed and it should do well.

Therefore, we factor in cumulative order booking of around Rs5.4bn in FY23/24 for PRJ's PHS division vis-à-vis Rs4.3bn recorded in FY21/22. This healthy order booking will ensure that segment continues to contribute ~9% of order booking and net revenues. As on FY22, OB for the segment stands at Rs1.4bn with average execution time frame of around 6 months.

Exhibit 6: HPS segment showing early signs of growing (Rs mn)

Particulars	FY2018A	FY2019A	FY2020A	FY2021A	FY2022A	FY2023E	FY2024E	CAGR FY19-22	CAGR FY22-24E
Opening order book	187	810	464	975	1,154	1,381	1,275		
Addition to OB during the year	**1456**	**1394**	**1,574**	**1,960**	**2,318**	**2,550**	**2,805**	**18.5**	**10.0**
Revenue from HiPurity business	**1742**	**1552**	**1,213**	**1,637**	**2,055**	**2,656**	**2,678**	**9.8**	**14.1**
Closing OB	810	464	975	1,154	1,381	1,275	1,403	43.9	0.8
Order booking (%)	14.0	10.0	12.5	9.9	6.7	7.9	6.6	-	-
Order booking (yoy, %)	82.5	-4.3	12.9	24.5	18.3	10.0	10.0	-	-
Revenue booking (yoy, %)	46.5	-10.9	-21.9	35.0	25.6	29.2	0.8	-	-
HiPurity - OB/TTM revenues (x)	**0.5**	**0.3**	**0.8**	**0.7**	**0.7**	**0.5**	**0.5**	**-**	**-**
HiPurity % to Total revenues	**19.0**	**13.6**	**11.0**	**12.5**	**8.8**	**8.0**	**6.8**	**-**	**-**

Source: Centrum Broking, Company Data

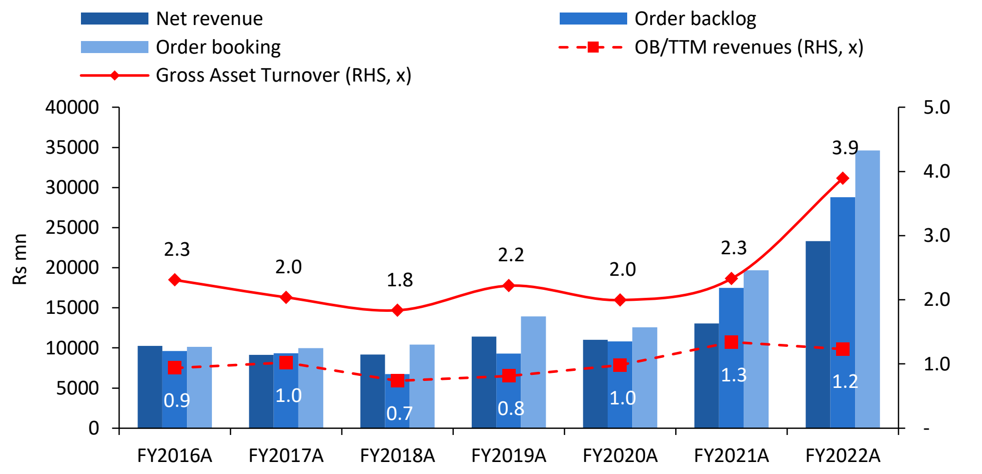
Strategy to outsource non-core activities and achieve higher gross block to asset turnover ratios

PRJ which had witnessed an average order bookings of Rs11.4bn (with peak order inflow of 14.0bn in FY19) over FY16-20 saw order bookings of Rs19.7bn/34.6bn in FY21/22, an astronomical jump over the previous mentioned *run rate*

PRJ has seen sharp rise in activities over the last couple of years since the EBP implementation. PRJ which had witnessed average order bookings of Rs11.4bn (with peak order inflow of 14.0bn in FY19) over FY16-20 saw order bookings of Rs19.7bn/34.6bn in FY21/22, an astronomical jump over the previous mentioned run rate.

Given the average execution period of its total order book (12-15 months) and criticality (time bound capacity addition would be remunerative to client) of the same, ensuring timely execution of order book is of paramount importance for PRJ. In this backdrop, PRJ has developed a team of dedicated engineering vendors and outsourced non-core activities to ensure not only timely completion of orders but also achieved higher (~4x) gross asset to turnover ratio in FY22 vis-à-vis historical average of ~2.2x.

Exhibit 7: Robust order booking led to improving asset turnover



Source: Centrum Broking, Company Data

PRJ a dominant EPC player in bio-energy space; Growing with India's (bio)energy security initiatives

- **Volatility in crude prices (resulting in fiscal uncertainty), environmental hazards emanating from ever increasing consumption of fossil fuels (ethanol blending helps reduce emission of GHG) and security concerns given over dependence on imports (80-85%) of petroleum products have resulted into EBP being implemented by GoI.**
- **Once E20 target is achieved in ESY24/25, we believe the next leg of demand for ethanol will come from blending in diesel (note – diesel consumption is 3x of petrol), E100 vehicles and FFVs.**
- **We believe that next big opportunity for PRJ would come from various other initiatives like CBG/RCM/SAF/E2G in which it is fast gaining ground vis-à-vis competition through patented technologies/know how/research and forming critical partnerships.**
- **International business is seeing good traction - order booking/net sales posting yoy growth in FY22 at 32.7%/29.5%, respectively. However, given the jump in domestic opportunity, we believe the share of international performance would be dwarfed vis-à-vis domestic performance.**

Our back of the envelope calculations suggest that every dollar increase in price of crude oil raises India's import bill by ~Rs115bn on an annualised basis

India imports about 80-85% of its petroleum product requirements. Though India's crude oil import bill fell drastically during FY21 in the absence of demand and soft oil prices, it is all set to cross USD110 billion this fiscal given that India has already spent USD94.3 billion in the first 10 months (April-January). India spent USD101.4 billion on crude oil imports in 2019-20 and USD111.9 billion in 2018-19. India spends nearly 4% of its GDP on crude oil import bill. Further, our back of the envelope calculations suggest that every dollar increase in price of crude oil raises India's import bill by ~Rs115bn on an annualised basis.

Most of the petroleum products imported are used in transportation sector. Further, it is expected that this demand will continue to grow given rising income levels, expansion in GDP and overall under-penetration of vehicles. The vehicle population in the country is ~22cr for 2/3 wheelers and ~3.6cr for 4-wheelers (SIAM). The 2/3 wheelers consume 2/3rd of the gasoline by volume, while 4-wheelers consume balance 1/3rd by volume. The growth rate of vehicles in this segment is pegged at around 8-10% per annum. An estimate of year-wise addition of gasoline based vehicles in the country is given in the exhibit below.

Exhibit 8: Projected addition of gasoline vehicles implies petrol consumption is headed only one way

Units in (lakhs)	FY20	FY21	FY22	FY23	FY24	FY25	FY26	FY27	FY28	FY29	FY30
Two-wheeler gasoline	174	151	134	150	162	175	189	204	221	238	257
PV gasoline	20	20	23	25	27	30	32	34	37	40	43

Source: SIAM, Centrum Broking; Note: expected CAGR of 8% in all segments; Share of petrol vehicles will be 83% of the total passenger vehicle sale

Based on expected vehicle population, the demand projections of gasoline in India are given in the exhibit below.

Exhibit 9: Developing sustainable, affordable and alternate transportation is imperative

Product / Year	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Motor Gasoline (MMTPA)*	27.7	31	32	33	35	36	37	39	40	41
Motor Gasoline (Crore Litres)	3,908	4,374	4,515	4,656	4,939	5,080	5,221	5,503	5,644	5,785

Source: MoP&NG, Centrum Broking; Note- *Interim figures from PPAC considering growth @ 3-4% YoY * Projection interval is for 5 years and the data has been linearly extrapolated; The effect of COVID pandemic and introduction of EVs are considered

We believe that domestic biofuels provide a strategic opportunity to India, as they not only reduce the dependence on imported fossil fuels but also are alternate sustainable energy sources

The above table clearly depicts that India's petroleum demand is headed only one way. This leads to three major challenges for India's transportation sector, namely volatility in crude prices (resulting in fiscal strain), environmental hazards emanating from ever increasing consumption of fossil fuels and security concerns given over dependence on imports. **Hence, developing a sustainable, alternate and affordable transportation is imperative.**

In this backdrop, we believe that domestic biofuels provide a strategic opportunity to India, as they not only reduce the dependence on imported fossil fuels but also are alternate sustainable energy sources. Ethanol is considered to be one of most suitable alternative blending and transportation fuels due to better fuel quality (ethanol has a higher octane number) and environmental benefits (enhanced ethanol blending will help reduce the emission of greenhouse gases).

Globally as well, three major factors that drive the production of ethanol and its usage in the transportation sector are **(1) Demand Enrichment:** Governments' mandate for blending a minimum percentage (%) of ethanol with gasoline fuel & production of ethanol compatible vehicles; **(2) Supply Enrichment:** Schemes for ethanol production from different feedstock and encouragement to augment bio-refineries and their capacities; **(3) Incentives:** Promoting the use of higher ethanol blends through price incentives (tax relief at the retail level) and tax incentives for vehicles compatible with E20 and E85.

Exhibit 10: Whole world is mandating ethanol blending with Brazil being the role model

Country	Roadmap / Mandate for ethanol blends	Program	Implementation by	Vehicle Type
Brazil	National policy of Brazil continues the mandate for blending of 18-27.5% of ethanol in gasoline which originally started from 2015; this is currently at 27%	National biofuels policy (Dec 2017)	Ministry of mines and energy (MME)	Mainly flex. Motorbikes and other two-wheeler engines use E27
United States	The Clean Air Act requires EPA to set the Renewable Fuel Standards (RFS) volume requirements annually; EPA updates volume requirements each year based on fuel availability	Renewable fuel standard (RFS) program	Environmental protection agency (EPA)	Primarily normal; Flex for E30 or E85 only
European Union (EU)	EU aims to have 10% of the transport fuel of every EU country come from renewable sources, such as bio-fuels by 2020	Renewable energy directive	European commission	Flex and normal
China	The Chinese government announced legislation proposing the use of ethanol in fuel for all of China with the target of 10% ethanol blending	Fuel quality standards	National energy administration	Primarily normal; Flex for E30 or E85 only.
Thailand	Alternative Energy Development Plan (ADEP) targets the share of renewable and alternative energy from biofuel to increase from 7% of total fuel energy use in 2015 to 25% in 2036	ADEP	Ministry of Energy	Primarily normal
India	National Policy on Biofuels (2018) was introduced which has set the road map for the Indian industry; it aims to develop biofuel economy by increasing mandated blending rates in petrol from 5% to 20% by ESY25-26 and in diesel from 0.1% to 5.0% by ESY30	EBP	DFPD	Primarily normal and FFVs

Source: Government reports, Centrum Broking

In pursuit of above mentioned objectives, National Policy on Biofuels (2018) was introduced which has set the road map for the Indian industry. It aims to develop biofuel economy by increasing mandated blending rates in petrol from 5% to 20% by ESY25/26 and in diesel from 0.1% to 5.0% by ESY30. Further, many subsequent policy decisions have depicted long term intent and consistency lending much needed impetus and aiding in achieving set out goals.

Exhibit 11: The future course of EBP indicates immense growth potential for sugar industry

A	Projected Petrol Sale (B) (Million Tonne)	B1 = B*1411/10	Blending (%)	Req of Ethanol for Blending in Petrol (Crore Litres)*/ - D= B1*C
2019-20	24	3908	5%	173
2020-21	28	3908	8.5%	332
2021-22	31	4374	10%	437
2022-23	32	4515	12%	542
2023-24	33	4656	15%	698
2024-25*	35	4939	20%	988
2025-26*	36	5080	20%	1016

Source –Government websites, Centrum Broking * The petrol projections may undergo revision due to various factors like penetration of Ev's etc; "*/ The figures are optimistic, as the E20 fuel will be consumed by new vehicles from April 2023 only. The demand for ethanol will, however, increase due to penetration of E100 two wheelers, which are going to be manufactured in the country.

Ethanol blending demand scenario – Potential is huge

Even after modelling in penetration of EVs, the ethanol demand for petrol blending is in the range of 722-921cr litres, entailing a CAGR of 16.8%/22.6% over FY21-26

Over FY21-26E the demand for ethanol is estimated to reach 1,016cr litres, clocking a CAGR of 25.1% based on expected growth of vehicle population and ramp up in ethanol blending program. Further, even after modelling in penetration of electric vehicles estimates, the ethanol demand for petrol blending is in the range of 722-921cr litres in 2026 entailing a CAGR of 16.8%/22.6% over the same period. Currently, sugar-based ethanol is driving the overall supply but going ahead grain based and sugar based are expected to share equally.

Exhibit 12: Ethanol - Huge demand in the offing

Ethanol Demand (in million litres)	Sugar Based	Grain based	Total
2019-20	2,570	1,660	4,230
2020-21E	4,000	1,920	5,920
2021-22E	4,400	2,670	7,070
2022-23E	5,350	2,930	8,280
2023-24E	6,000	3,880	9,880
2024-25E	6,600	6,280	12,880
2025-26E	6,840	6,660	13,500

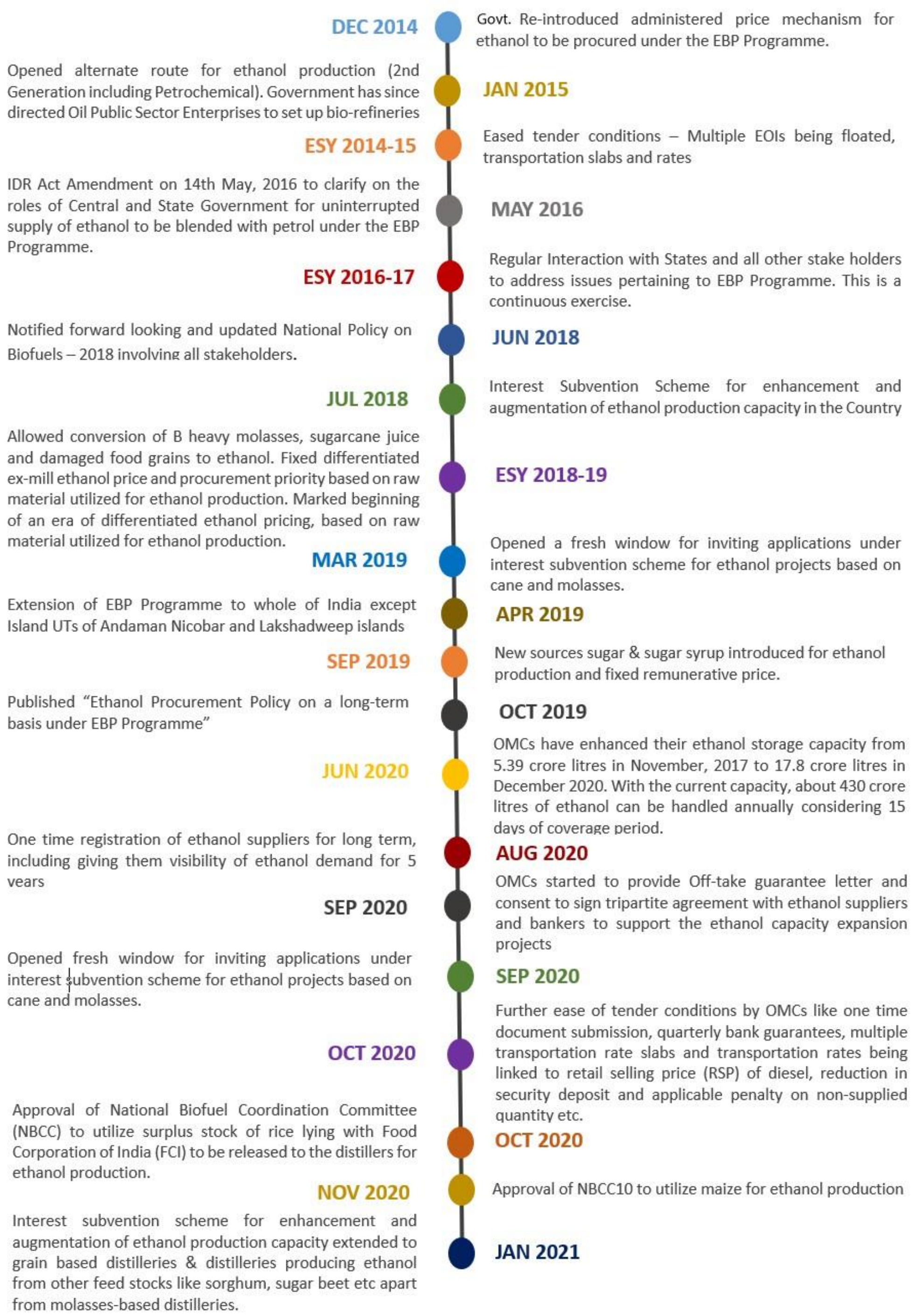
Source: Government websites, Centrum Broking

As per government estimates (also our back of the envelope calculations) a successful E20 blending program can save the country forex of USD4-4.5 billion per annum, i.e., more than Rs300bn. Besides, ethanol is a less polluting fuel, and offers equivalent efficiency at lower cost than petrol. Achieving energy security and the transitioning to a thriving low carbon economy is critical for a growing nation like India. **Further, blending locally produced ethanol with petrol will help India strengthen its energy security, enable local enterprises and farmers to participate in the energy economy and reduce vehicular emissions.**

Ethanol – Supply side is ramping up

We believe availability of large arable land, rising production of food grains and sugarcane leading to surplus availability of feedstock to produce ethanol from plant-based sources, and feasibility of making vehicles compliant to ethanol blended petrol will aid in achieving EBP goal. Different government agencies have made rapid moves to put in place a favourable regulatory and retail ecosystem for safe, and effective use of ethanol blended petrol enhancing ethanol demand.

Exhibit 13: Timeline of government initiatives indicate adaptability and commitment



Source: Government reports, Centrum Broking

In a nutshell, the government is adopting a multi-pronged approach to promote and encourage bio-fuels under EBP; this holistic approach further boosts our confidence on longevity and seriousness of the program

Similarly, for achieving this EBP target, government has also addressed many supply-side issues that have discouraged the production of biofuels in India in the past. Like in sugar sector conventionally, all the ethanol manufactured in India (for ethanol-blended petrol) was derived through the C-heavy molasses route. For the first time, the Indian government permitted the manufacture of ethanol from B-heavy molasses and cane juice route, enhancing not only supply of ethanol but also giving operational flexibility to sugar mills to decide best route suited.

Similarly, EBP Programme supports ethanol derived from multiple feedstock. Until now, only ethanol produced from sugarcane was approved for this purpose. Feedstock such as sugar beet, corn, damaged foodgrain, potatoes and even municipal solid waste are now permitted. To aid on the financial side, loan interest subvention scheme has also been expanded to include grain-based distilleries apart from sugar or molasses-based distilleries.

In a nutshell, the government is adopting a multi-pronged approach to promote and encourage bio-fuels under EBP. This holistic approach further boosts our confidence on longevity and seriousness of the program.

Next leg of demand for ethanol will come from blending in diesel (note – diesel consumption is 3x of petrol), E100 vehicles and FFVs

Ethanol demand to remain robust even after E20 target is achieved

Once E20 target is achieved in ESY24/25 we believe the next leg of demand for ethanol will come from blending in diesel (note – diesel consumption is 3x of petrol), E100 vehicles and FFVs. Further, we hosted Mr. Ramakrishna (expert on bio-energy space), to discuss on ethanol blending with diesel. He highlighted that they had conducted an experiment on 70 state buses in Bangalore, which were operated on ethanol blended with diesel to the tune of 7.8%. The results of the blending were wonderful/satisfactory and no engine modification was required. In nutshell, ethanol demand to remain robust over next 5-7 years. However, on bio-diesel he mentioned that lot of work needs to be done and it will only be fructified in long term (8-10 years) when we have required feedstock policy in place.

We factor in PRJ to maintain 60% of market share from this opportunity and expect order inflows of over Rs55bn over FY22-24 for PRJ in bioenergy segment

PRJ operates in fast growing and crucial bioenergy area

PRJ is a market leader in first generation ethanol (E1G) space and currently, ~60% of India's ethanol production capacity of plants use PRJ's technology. Further, since the adoption of National Policy on Biofuels (2018) there has been a tectonic jump in ethanol production capacity in India increasing at a CAGR of ~20% over FY19-22 leading to increase in Total addressable market (TAM) for PRJ.

As per Industry estimates, India's current ethanol producing capacity is 8.5bn litres and orders for further enhancing it by 3.8bn litre capacity over next 12-18 months has been finalised as on FY22. Going ahead, as India motors along the EBP road it is expected that more than 10bn litre (potentially double from enhanced existing capacity) ethanol production capacity would be needed in next 2-3 years. We believe PRJ being the market leader and with track record of timely and seamless execution is direct beneficiary of this expansion. We factor in PRJ to maintain 60% of market share from this opportunity and expect order inflows of over Rs55bn over FY22-24 for PRJ in bioenergy segment.

Praj with focus and persistence on technology is ensuring to maintain market dominance as bioenergy space expands

We believe that next big opportunity for PRJ (after E1G is completely played out in FY25/26) would come from various other initiatives like CBG (Compressed Biogas)/RCM (renewable chemicals and material)/SAF (sustainable aviation fuel) /E2G (second generation ethanol) in which PRJ is fast gaining ground vis-à-vis competition through patented technologies/know how/research and forming critical partnerships.

We notice that all these opportunities are at different stages of fructification and vary in various aspects like level of competition/size of market opportunity, etc. We have not factored in major ordering or revenues from this medium to long term opportunities (read RCM, E2G, SAF, etc.), but we will keenly keep a tab on the same as they are critical in providing long term growth visibility.

Adding new segments to diversify skill sets

We are constructive on CBG space owing to (1) Recent pricing revisions and linking of the same with retail prices and (2) Our interactions with industry players indicate other constructive positive measures are on the anvil

Compressed Biogas (CBG) – Early signs of supportive policy initiatives by government

As compared to EBP, Biogas policy (which was issued in 2018) implementation has witnessed lacklustre performance owing to (1) Covid-19 related issues; (2) reluctance from financial institutions to finance the projects given nascent stage of the program and lack of sample projects which were successful on both operational and commercial parameters; and (3) removal of capital subsidy (viability gap funding - VGF) from government side last year in the month of April.

However, things are falling in place for the program and we expect exponential jump in CBG plants getting set up in India. This optimism flows from three key factors (**1)** New **Pricing mechanism –** there has been an upward revision in CBG floor prices from Rs46/kg to Rs54/kg. Further, at prices above Rs70/kg there would be proportionate increase in offtake prices for CBG. Basically, ~80% of retail rates would be transferred to CBG supplier and 20% will be the retention for OMCs as their share (including dealer margins); (**2) Government initiatives –** As per industry sources government is working on re-introducing the VGF for the program, **which is expected to be announced in near term**, and that would give big fillip to the commercial viability of CBG plants. Further, given the variations in operational cost of CBG plants (depending upon the feedstock) it is proposed and government is working on **differential pricing formula for CBG** on similar lines with E1G via different routes (Bh/Ch/direct) to make it more attractive for private participation; and (**3) Financial institution participation to increase with 30-40 plants operational –** given the track record with 30-40 plants achieving commercial and operational viability in India and in light of other positive developments (point 1 & 2) participation from the financial institutions is all set to improve.

Government has ambitious plans to set up 5,000 CBG plants (by FY27), which will fulfil 35% of total natural gas consumption of the country and decrease natural gas imports by the tune of 65-70%.

PRJ is one of the early movers for setting up CBG plants. CBG plant depending upon the feedstock (press mud/agriculture waste, etc.) and capacity (200/t or 100/t per day) would require capital expenditure from Rs500-1,000mn (excluding land cost). We believe PRJ’s scope of work would entail ~50% of the total capital expenditure.

We expect 100-200 CBG plants in India over the next 12-24 months and this would imply TAM for PRJ of around Rs50-100bn. We have factored in order inflow of Rs12bn over next two years for PRJ from this opportunity.

PRJ with IOCL is conducting feasibility study for setting up of facility for SAF

Sustainable aviation fuel (SAF) – Future potential

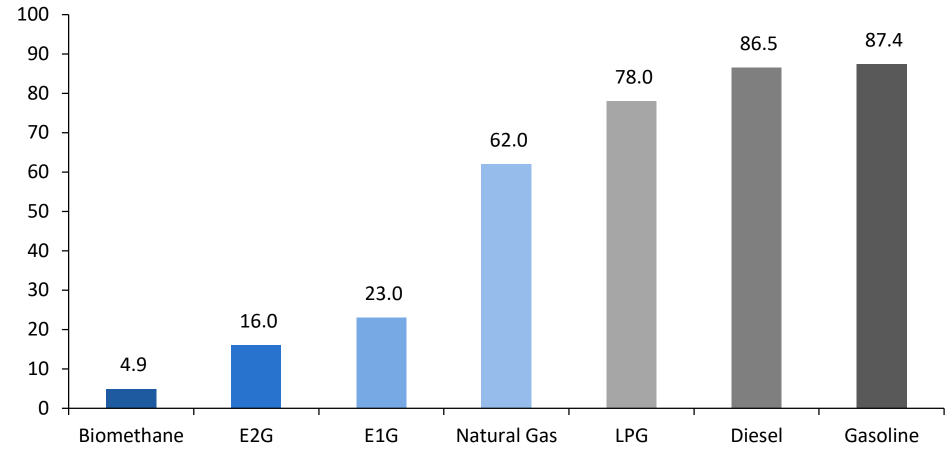
PRJ has signed an MOU with IOCL to explore opportunities in cleaner and greener sources of energy. Both companies will jointly explore avenues such as the production of Sustainable Aviation Fuel (SAF), 1G & 2G Ethanol, Compressed Bio Gas (CBG). This MOU will boost SAF production capacity and its use in India which will in turn help curb emissions emanating from the airplanes as per IATA's (International Air Transport Association) mandate. Under the MOU, PRJ with IOCL is conducting feasibility study for setting up of facility for SAF. For de-carbonization of aviation industry, SAF will be produced via isobutanol route from sugary feedstock.

PRJ wants to become a key supplier of second-generation ethanol (E2G) produced from sugarcane waste, which emits ~80% less greenhouse gases (GHG) than fossil fuels

E2G – Key would be watch government direction

The execution of three advanced biofuel refineries in India, based on PRJ’s proprietary 2G technology are in advanced stages of completion. Construction and installation activities are in full swing at all sites. Execution of the IOCL project has progressed up to 90% completion level. Plant commissioning will start in 2QFY23. With a patented and proven industrial process, PRJ wants to become a key supplier of second-generation ethanol (E2G) produced from sugarcane waste, which emits ~80% less greenhouse gases (GHG) than fossil fuels. However, we believe that this would need government policy initiatives as its not commercially viable project for private capital given 6x capital expenditure in comparison with E1G plant. Therefore, we have not factored in any order inflow from this venture.

Exhibit 14: Emissions by Fuel Type (gCO2eq/MJ)



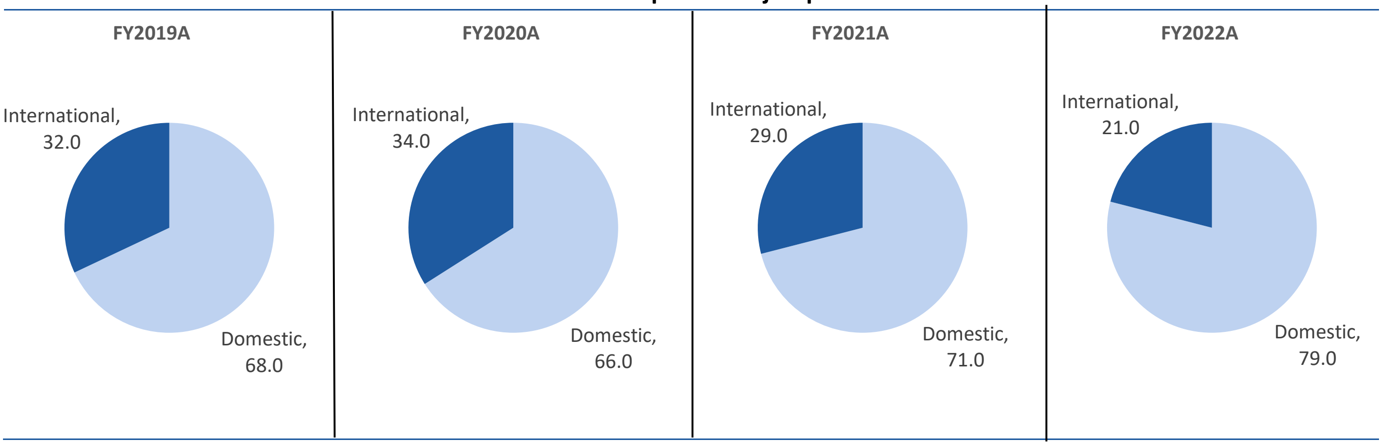
Source: Centrum Broking, Company Data, Industry Reports

Given the jump in domestic opportunity we believe that domestic performance would dwarf international performance

Decent performance on international front

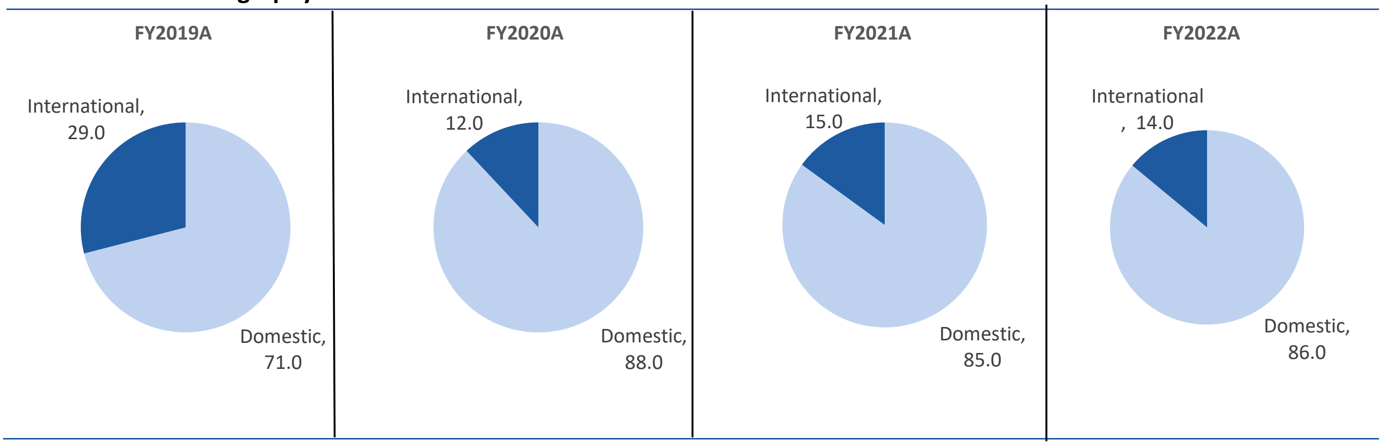
International business is seeing good traction (order booking and net sales recorded yoy growth in FY22 at 32.7% and 29.5%, respectively). This impressive performance is primarily on the back of many economies around the world working to make biofuels and/or low carbon intensity of operation for their economies as a priority and biofuels have a very important role to play there, which is what we will see unfold as we go forward.

Exhibit 15: International revenue share declined due to exponential jump in domestic business



Source: Company, Centrum Broking

Exhibit 16: OB – Geography wise



Source: Company, Centrum Broking

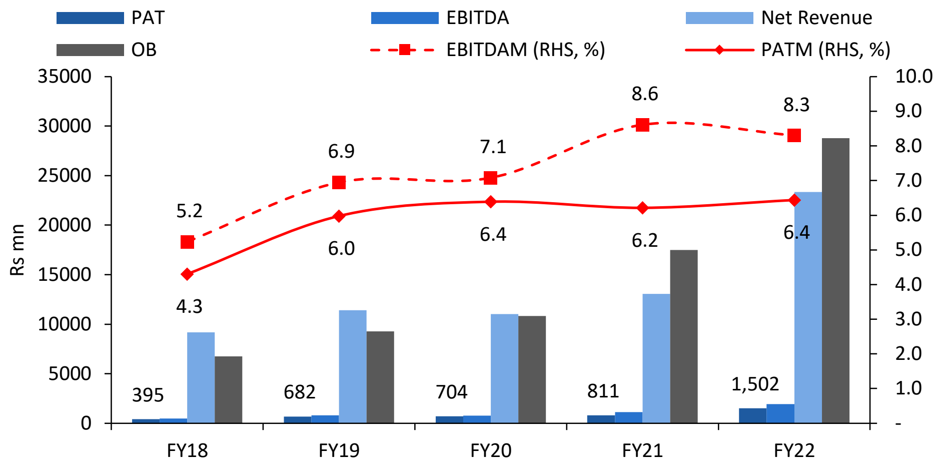
FY22 Annual Report Analysis

Operating performance – Excellent

Revenues/EBITDA/PAT for the year grew at 78.8%/72.5%/85.3% respectively

Praj Industries (PRJ) witnessed robust performance for FY22 primarily led by unprecedented order booking (Rs34.6bn vis-à-vis 19.7bn, a yoy 75.8% jump). Revenues/EBITDA/PAT for the year grew at 78.8%/72.5%/85.3%, respectively. OB at Rs28.7bn for the year at 1.23x TTM revenues lends visibility. We believe that PRJ has done exceedingly well by not only maintaining market leadership position (60% in bioenergy segment) but also by protecting EBITDA margins (flattish at 8.3% against 8.6% in FY21), especially considering spike/volatility in Stainless Steel (SS – their key commodity) prices during FY22.

Exhibit 17: Improving financial performance



Source: Centrum Broking, Company Data

Segmental performance – All guns blazing

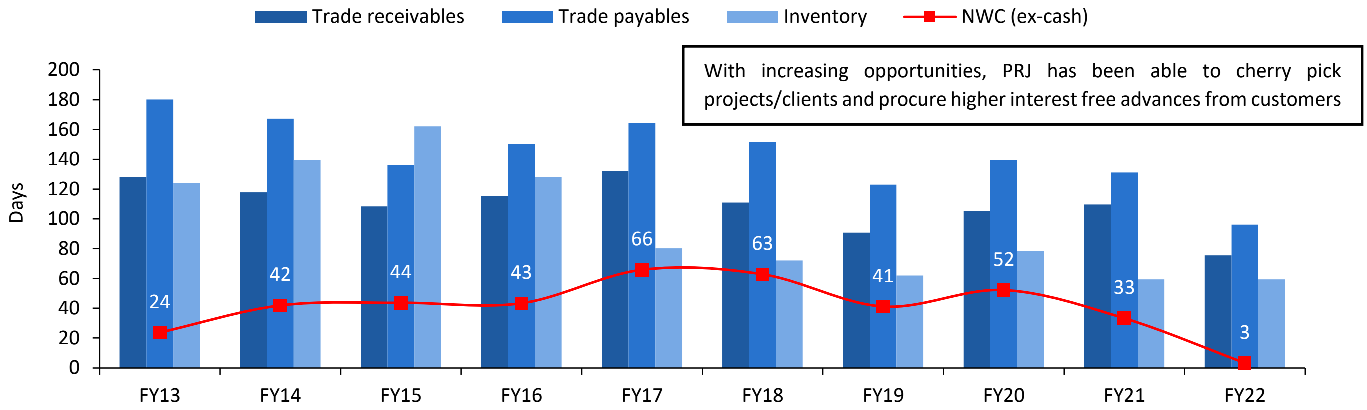
Bio-energy segment is the key driver for growth in numbers for PRJ

- **Bioenergy segment (>70% of FY22 net revenues, pre-dominantly domestic)** performed exceedingly well with 88.2%/119.3% yoy jump in revenues/order booking, respectively; OB stands at Rs21.7bn (1.3x TTM revenues). The growth was due to increase in ethanol production capacity to 8.5bn litres led by uptick in EBP.
- **Engineering segment (~20% of FY22 net revenues, pre-dominantly international)** also performed well with CAGR of 23.0%/23.8% jump in revenues/order booking over FY20-22, respectively. OB stands at Rs5.7bn (1.23x TTM revenues), primarily led by better performance on international front.
- **HiPurity segment (~9% of FY22 net revenues)** is showing early signs of growth, albeit at low base, with CAGR of 30.2%/21.4% jump in revenues/order booking over FY20-22; OB stands at Rs2.1bn (0.7x TTM revenues, given shorter duration orders of 5-6 months).
- **International business (~21% of FY22 net revenues),** has done very well although dwarfed by domestic (higher share in overall pie and exceptional growth) performance. International business posted CAGR of 14.3%/82.2% jump in revenues/order booking over FY20-22, respectively. OB stands at Rs4.0bn (0.8x TTM revenues).

Working capital cycle – Picture perfect

With increasing opportunities PRJ has been able to cherry pick projects/clients and procure higher interest free advances from customers (at Rs6.8bn, whopping yoy jump of 125.5%, as on FY22) leading to minimal net working capital requirement. Therefore, in FY22, PRJ witnessed a decline in net working capital (ex-cash) days to near zero levels.

Exhibit 18: PRJ carving out its working capital needs via interest free customer advances



Source: Centrum Broking, Company Data

Summary from Management Discussion and Analysis

Outlook for ethanol industry remains positive beyond E20 and likely to be driven by FFVs, stationary diesel engine conversion to ethanol and diesel blending program

- PRJ's ethanol technology has crossed formidable 11bn litres annually translating to over 10% global ethanol production (ex-china) highlighting its leadership position.
- As India embarks on EBP programme, currently at 10% blending mark, its ethanol production capacity stands at 8.5bn litres (67%/33% on sugary/starchy feedstock, respectively). Further, during the year 5.78bn litres of ethanol capacity was ordered to be built. As per the management, 6-7bn litres of ethanol capacity addition is expected in next 2-3 years.
- Outlook for ethanol industry remains positive beyond E20 and likely to be driven by FFVs, stationary diesel engine conversion to ethanol and diesel blending program.
- PRJ has maintained its dominance in domestic Bioenergy market and maintained market share at ~60% with respect to its scope of work.

AR highlights first breakthrough order in starchy feedstock based ethanol market from Brazil and BIOSYRUP solution is also attracting lot of attention in Brazil

- AR highlights first breakthrough order in starchy feedstock based ethanol market from Brazil during the year. Also, the unique technology solution, BIOSYRUP is attracting lot of attention globally, especially from Brazil. Further, with several projects commissioned in North America, PRJ is witnessing a strong traction in enquiries for low carbon ethanol from the market as countries contemplate to enhance share of biofuels in their energy mix.

On the international front (read EU), management has highlighted opportunity of 2.75bn litres capacity on advanced biofuel by 2030 which translates into opportunity of 40-50 plants of 200KLPD capacity

- On E2G front, India would witness three plants being commissioned in next 12 months; PRJ's technology with execution of IOCL project is expected to be completed by 2QFY23. On the international front, management has highlighted opportunity of 2.75bn litres by 2030 which translates into 40-50 plants of 200KLPD capacity. However, due to Russia-Ukraine war, delay and limited action is expected in FY23.
- On CBG front, there are early signs of revival with revision in CBG prices from Rs46/kg to Rs54/kg and further linked to retail selling price of CNG.
- On manufacturing capability, PRJ has created a dedicated sub vendor base to cater to increased demand of domestic ethanol market. This has led to increase in asset turn and also protect margins.
- On future outlook, on E1G front future orders are expected from starchy feedstock. As for CBG business, the ecosystem development across the value chain continues to be work in progress and is taking more time than expected.

- Key favourable developments going ahead are (1) introduction of FFVs; (2) ethanol blending in diesel; (3) expansion of biofuels basket; and (4) feedstock differentiated pricing for ethanol (we read as E2G).

Capital expenditure and new products

Our interaction with the management indicates that going ahead the capital expenditure would remain in similar range for FY23/24

Historically, PRJ has worked on minimal capital expenditure requirements as depicted by in exhibit 18 above. Notably, with the surge in order booking over FY20-22, PRJ has created a dedicated team of vendors which has led to higher asset turn and capex light business model. Further, our interaction with the management indicates that going ahead the capital expenditure would remain in similar range for FY23/24.

Related party transactions

During the year, the company had not entered into any contract/arrangement/transaction with related parties, which could be considered material.

Contingent liabilities/claims

On contingent liabilities, we note there has not been any material increase which could impact PRJ going ahead. However, there has been jump in guarantee issued in respect of obligations of a subsidiary by Rs243mn, which we believe is with respect to increase in business activity and part of normal course of EPC business. There has also been marginal increase in disputed demand in appeals towards taxes by Rs161mn during the year.

Independent Auditors Report

Auditor’s believe that the audit evidence obtained is sufficient and appropriate to provide a basis for their opinion that Consolidated Financial Statements of PRJ give the information required by the Companies Act, 2013 (“the Act”) and give a true and fair view in conformity with the accounting principles generally accepted in India.

Historical analysis of cash flows and balance sheet over the past decade

- **PRJ has seen a healthy and positive trend of improvement in operating cash flow generation over the years with OCF in FY22 at Rs1.8bn compared to Rs283mn in FY13.**
- **Ex-cash net working capital has reduced from 30 days in FY13 to negative days (marginally) in FY22. This is primarily on the back of PRJ's leadership position in the bioenergy space and technological prowess – it has been able to fund working capital by interest free advances from customers (~80days) – one of the moats for PRJ.**
- **Establishing dedicated sub vendor base has led to jump in asset turnover in FY22 and led to lower capital expenditure.**
- **Historically, PRJ doesn't carry any debt on balance sheet and for FY22 has sizeable cash and liquid investments to the tune of Rs5.5bn owing to three main reasons (1) minimal working capital needs; (2) strong operating cash flows; and (3) prudent capital expenditure policy.**

Interest free advances from customers is the strongest moat that PRJ has, which ensures that the business runs on negligible or minimal working capital needs

PRJ has seen a healthy and positive trend of improvement in operating cash flow generation over the years with OCF in FY22 at Rs1.8bn (despite blocking Rs3.5bn in inventories – a jump of 168% over FY21 – to cushion the volatility in commodity prices and supply chain issues) compared to Rs283mn in FY13. Ex-cash net working capital has reduced from 30 days in FY13 to negative days (marginally) in FY22. Trade receivable days has declined from 128 days in FY21 to 75 days in FY22 (the average for the period being 109 days). Further, there has been reduction in trade payable days as well from 180 days in FY13 to 96 days in FY22 (the average for the period being 144 days).

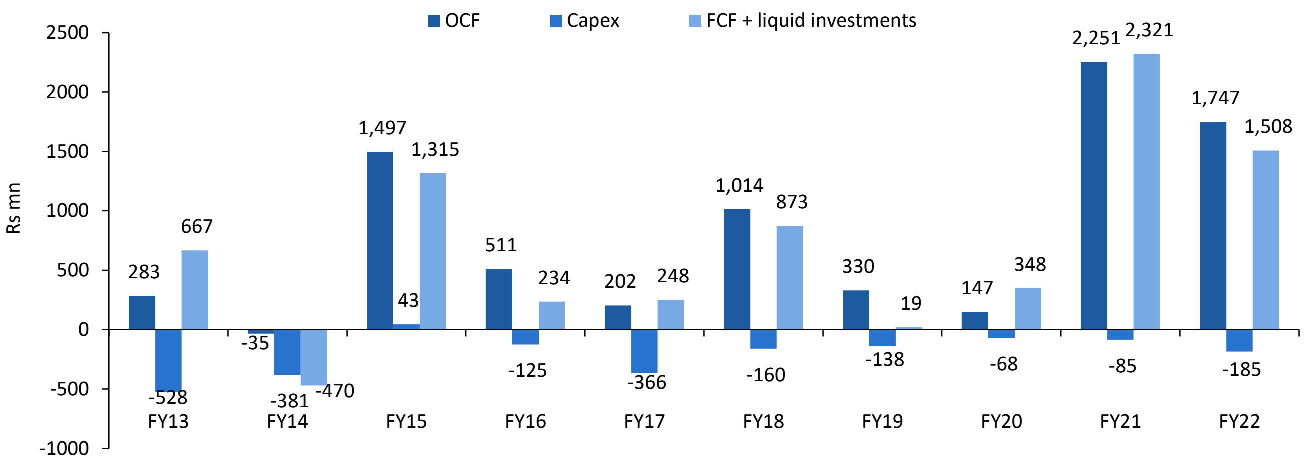
However, it is pertinent to note that owing to PRJ's leadership position in the bioenergy space and technological prowess – it has been able to fund working capital by interest free advances from customers. PRJ has been able to maintain around 80 days as advances from customers over the last 10 years. For FY22, advances from customers stand at Rs6.8bn. We believe this is the strongest moat that PRJ has, which ensures that the business runs on negligible or minimal working capital needs. Further, it is also a testimony of clients trust and preference for PRJ over its competitors.

bit 19: PRJ's technological moat leads to light working capital business model

	FY2013A	FY2014A	FY2015A	FY2016A	FY2017A	FY2018A	FY2019A	FY2020A	FY2021A	FY2022A
Debtor days	128	118	108	115	132	111	91	105	110	75
Inventory days	124	140	162	128	80	72	62	78	60	59
Payable days	180	167	136	150	164	152	123	139	131	96
Non-cash WC days	24	42	44	43	66	63	41	52	33	3

Source: Centrum Broking, Company Data

Exhibit 20: Minimal capital expenditure ensures high FCF generation



Source: Centrum Broking, Company Data

Over FY13-22, on a cumulative basis, its OCF/EBITDA is impressive at >84%

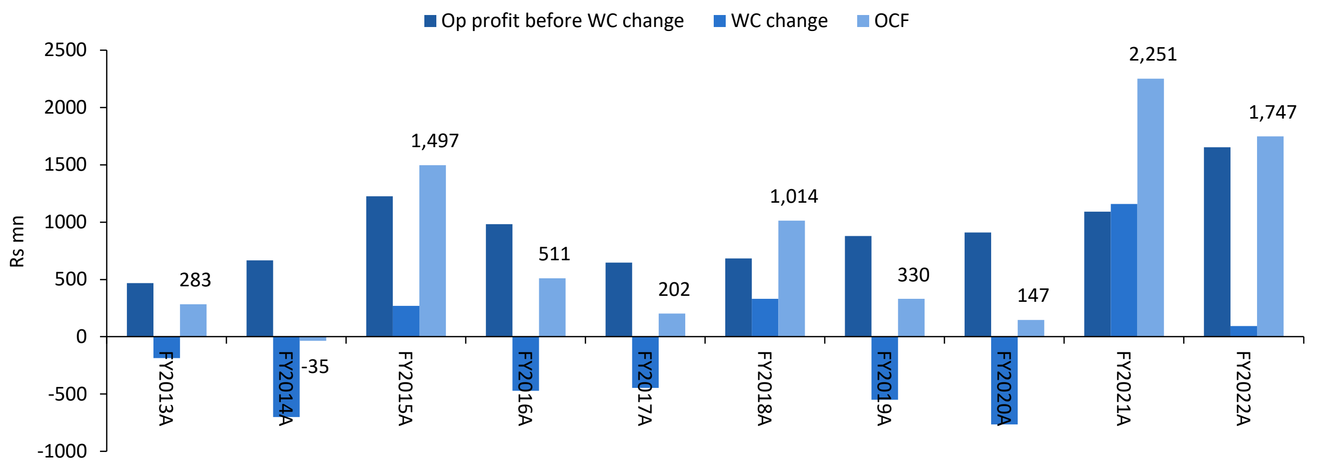
Therefore, PRJ is able to carve out most of its working capital requirements from clients. Over FY13-22, on a cumulative basis, its OCF/EBITDA is impressive at >84%. Over FY13-22, the conversion of OCF to FCF too is excellent. PRJ has >85% (considering liquid investments as part of FCF) of OCF being converted to FCF primarily due to scalability of its business with minimum O&M and capital expenditure.

Exhibit 21: Quadruple jump in customer advances (from Rs1.6bn to Rs6.8bn) over FY20-22 leads to higher OCF

	FY2013A	FY2014A	FY2015A	FY2016A	FY2017A	FY2018A	FY2019A	FY2020A	FY2021A	FY2022A
OCF/PAT (%)	41.6	-6.3	196.2	62.0	45.3	256.8	48.4	20.9	277.7	116.3
OCF/EBITDA (%)	33.3	-4.4	176.5	44.8	29.4	211.2	41.6	18.9	200.4	90.1

Source: Centrum Broking, Company Data

Exhibit 22: PRJ's leadership position ensures business model remains working capital light (Rs mn)



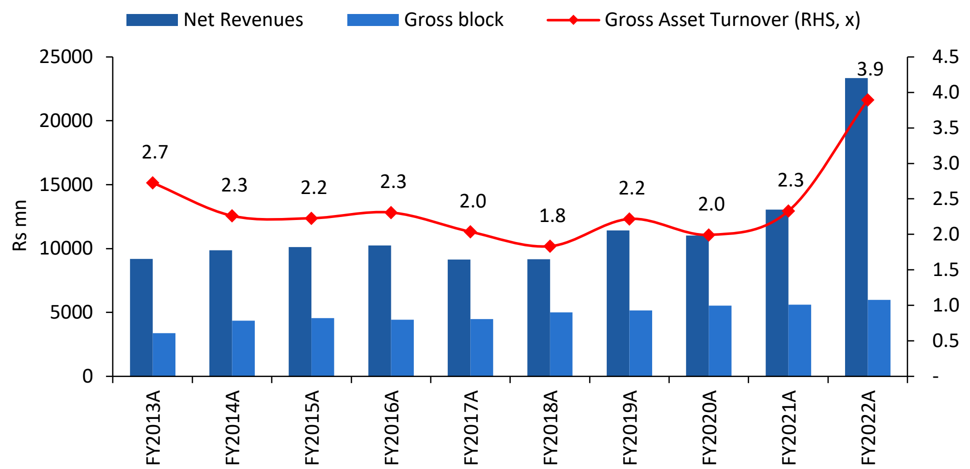
Source: Centrum Broking, Company Data

PRJ is able to create dedicated sub vendor base to execute its burgeoning order book and leading to higher asset turn ratio of ~4x in FY22

Dedicated sub vendor base pushed asset turnover higher in FY22

Over FY13-21, PRJ's fixed asset turnover has averaged at 2.2x, which is in-line with the industry norms. As customised manufacturing and fabrication is capital intensive, the gross block base also needs to increase consistently in line with revenue growth. However, compared to past, the fixed asset turnover is higher at 3.9x in FY22. This asset light business approach is on the back of management call to create dedicated sub vendor base (primarily for non-core part of domestic bioenergy segment) to execute its burgeoning order book. Therefore, the capital expenditure remained under check in spite of jump in revenues (78.8% yoy growth in FY22).

Exhibit 23: Establishing dedicated sub vendor base has led to jump in asset turn in FY22



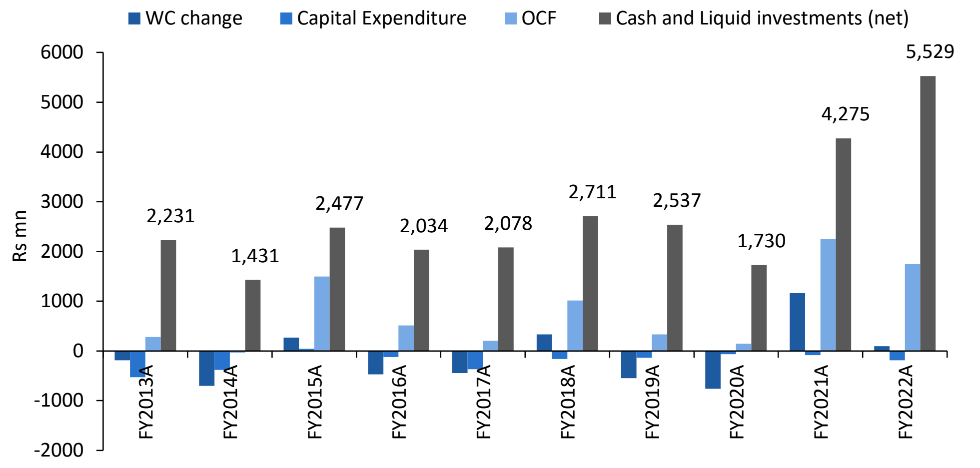
Source: Centrum Broking, Company Data

Debt free balance sheet; decent return ratios

PRJ is a net cash company owing to minimal working capital needs and prudent capital expenditure policy

PRJ doesn't carry any debt on balance sheet and in fact has sizeable cash and liquid investments to the tune of Rs5.5bn as on FY22 owing to three main reasons (1) minimal working capital needs; (2) prudent capital expenditure policy; and (3) strong operating cash flows.

Exhibit 24: PRJ a net cash company (Rs mn)



Source: Centrum Broking, Company Data

With improvement in macro environment since last two years we are seeing visible improvement in return ratios (RoE/RoCE at >17% and RoIC at 33% in FY22)

Past sub optimal return ratios are showing signs of improvement with growth in business

Over FY13-20, PRJ has broadly performed poorly on return ratio profile (RoE/RoCE/RoIC - ~10%) mainly due to single digit margin profile and lack of growth. However, with improvement in macro environment (read bioenergy segment) since last two years we are seeing visible improvement in return ratios (RoE/RoCE at >17% and RoIC at 33% in FY22).

Exhibit 25: Return ratios turn respectable on the back of growth (%)

	FY2013A	FY2014A	FY2015A	FY2016A	FY2017A	FY2018A	FY2019A	FY2020A	FY2021A	FY2022A
Net revenue growth	-8.4	7.3	2.7	1.1	-10.6	0.2	24.5	-3.4	18.4	78.8
PAT growth	1.7	-21.0	38.5	5.4	-46.0	-11.3	72.7	3.3	15.1	85.4
RoE	12.1	9.5	12.7	12.9	6.5	5.5	9.3	9.6	10.7	17.5
RoCE	8.0	6.5	6.6	10.6	4.5	2.5	6.0	6.6	8.5	14.5
RoIC	13.7	9.2	9.5	16.1	6.4	3.7	9.3	9.3	14.1	33.3

Source: Centrum Broking, Company Data

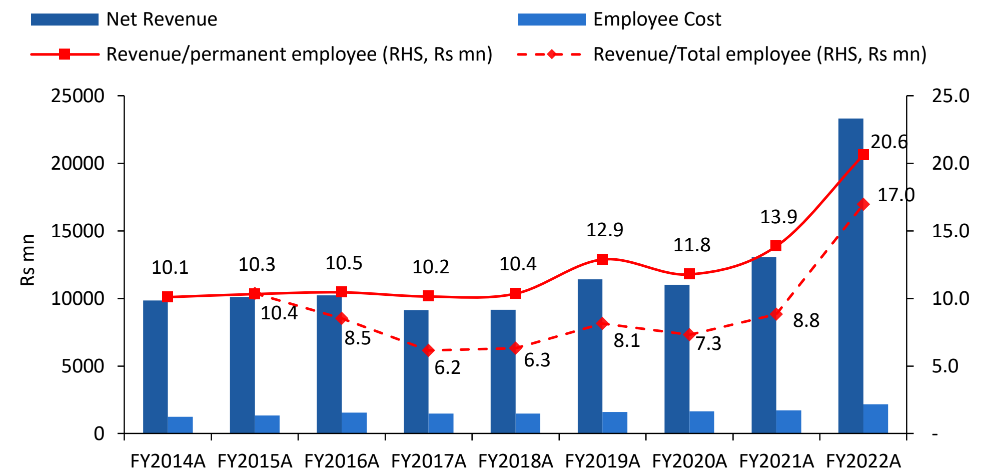
Exhibit 26: Cash flow statement over FY13-22 depicts prudent working capital management and capital allocation

	FY2013A	FY2014A	FY2015A	FY2016A	FY2017A	FY2018A	FY2019A	FY2020A	FY2021A	FY2022A
YE March Rs mn										
Profit before Tax	923	769	864	1,054	675	530	879	831	1,131	2,049
Depreciation and Amortisation	215	238	378	250	221	241	230	218	221	226
Net Interest	-18	-9	-6	-33	-28	-33	-76	79	50	68
Net Change - WC	-185	-701	270	-470	-446	331	-548	-763	1,159	93
Direct taxes	-476	-281	93	-361	-205	-127	-206	-178	-149	-450
Others	-176	-51	-102	70	-16	71	52	-41	-162	-239
Net Cash from Operations - OCF	**283**	**-35**	**1,497**	**511**	**202**	**1,014**	**330**	**147**	**2,251**	**1,747**
Capital expenditure	-528	-381	43	-125	-366	-160	-138	-68	-85	-185
Acquisitions etc.	-	-	-	-	-	-	-	-	-	-
Investments	631	528	-933	17	205	-611	29	584	-1,628	-1,170
Others	152	36	89	94	80	65	50	105	70	87
Net cash from investing	255	184	-801	-14	-80	-707	-59	621	-1,643	-1,268
FCF	**538**	**149**	**696**	**497**	**122**	**307**	**271**	**768**	**608**	**479**
Issue of Share Capital	-	-	-	-	-	-	-	-	-	-
Increase/(decrease) in debt	-75	74	-41	-12	-117	16	-60	-0	-	-
Dividend Paid	-334	-461	-336	-688	-5	-349	-463	-949	-4	-397
Buyback of shares	-153	-	-	-	-	-	-	-	-	-
Interest paid	-23	-14	-25	-13	-6	-4	-0	-24	-22	-19
Others	-	-	-	36	89	89	89	-6	-37	-27
Net cash from Financing	**-585**	**-401**	**-402**	**-678**	**-39**	**-247**	**-434**	**-980**	**-63**	**-444**
Net Change in Cash	-47	-252	294	-181	83	60	-164	-212	545	36

Source: Centrum Broking, Company Data

Employee cost (average of ~14% of net revenues for FY13-22) is third highest cost in P&L after RM cost (~52%) and manufacturing expenses (~15%)

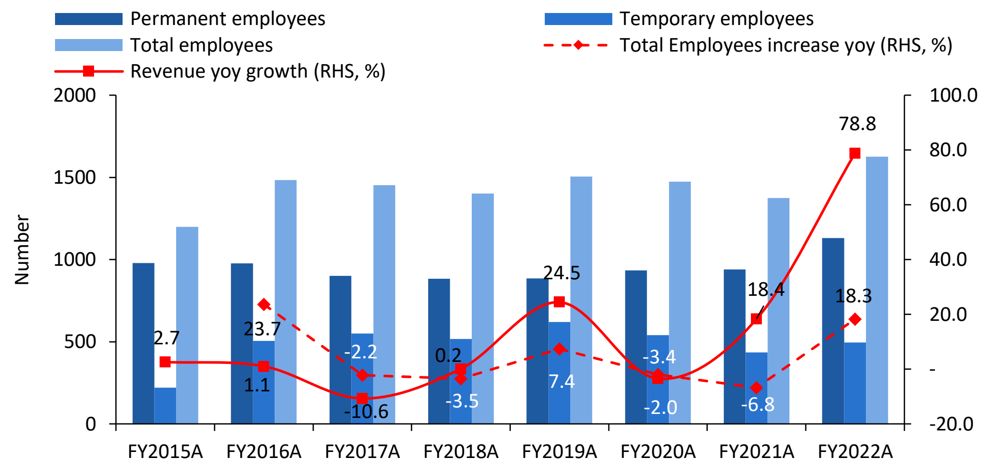
Exhibit 27: PRJ enjoys huge operating leverage on employee cost – the 3rd highest cost



Source: Centrum Broking, Company

There has been yoy increase in number of employees albeit at lower pace than revenue increase

Exhibit 28: Engineers and technologists form the major portion of PRJ's employee



Source: Centrum Broking, Company

Robust earnings growth + improving return ratios = Buy

- **PRJ is one of the few companies that can be accredited with many firsts in bioenergy space not only in India but also in the world.**
- **We believe tides have changed for PRJ and bioeconomy is poised to play pivotal role in the energy transition both in domestic and international markets.**
- **In this backdrop, we expect PRJ to post healthy revenue CAGR of 30% over FY22-24E on the back of robust OB and continuing momentum in order booking (aided primarily by E1G and CBG).**
- **PRJ's order book is mostly on fixed price contracts and therefore, PRJ had to bear the brunt of hike in commodity prices (read SS) over the last two years. During FY21/22, SS prices (300 series grade) witnessed a yoy increase by 13.7%/56.4% to Rs1,49,339/2,33,579 per tonne, respectively, resulting in gross margin compression for PRJ to 37.7%.**
- **In recent times, there has been cool off in SS prices and our house view is that in FY23/24, SS prices would remain subdued. This will entail that PRJ would see some uptick in margins led by cool off in commodity prices.**
- **We have pencilled in 190bps jump in EBITDA margins (management guidance is in the range of 200-250bps) over FY22-24E from 8.3% to 10.2%.**
- **Minimal capital expenditure and debt free balance sheet offsets lower EBITDA margins and ensures reasonable PATM of 6.4% for PRJ.**
- **In this backdrop, we expect PRJ to post healthy earnings CAGR of 44% and report PAT of Rs3.3bn in FY24E vis-à-vis Rs1.5bn in FY22.**
- **Historically, PRJ has generated poor return ratios primarily due to low margins and lack of growth. However, going ahead we expect PRJ to post healthy return ratios (read RoIC) on the back of robust top-line growth and margin expansion.**

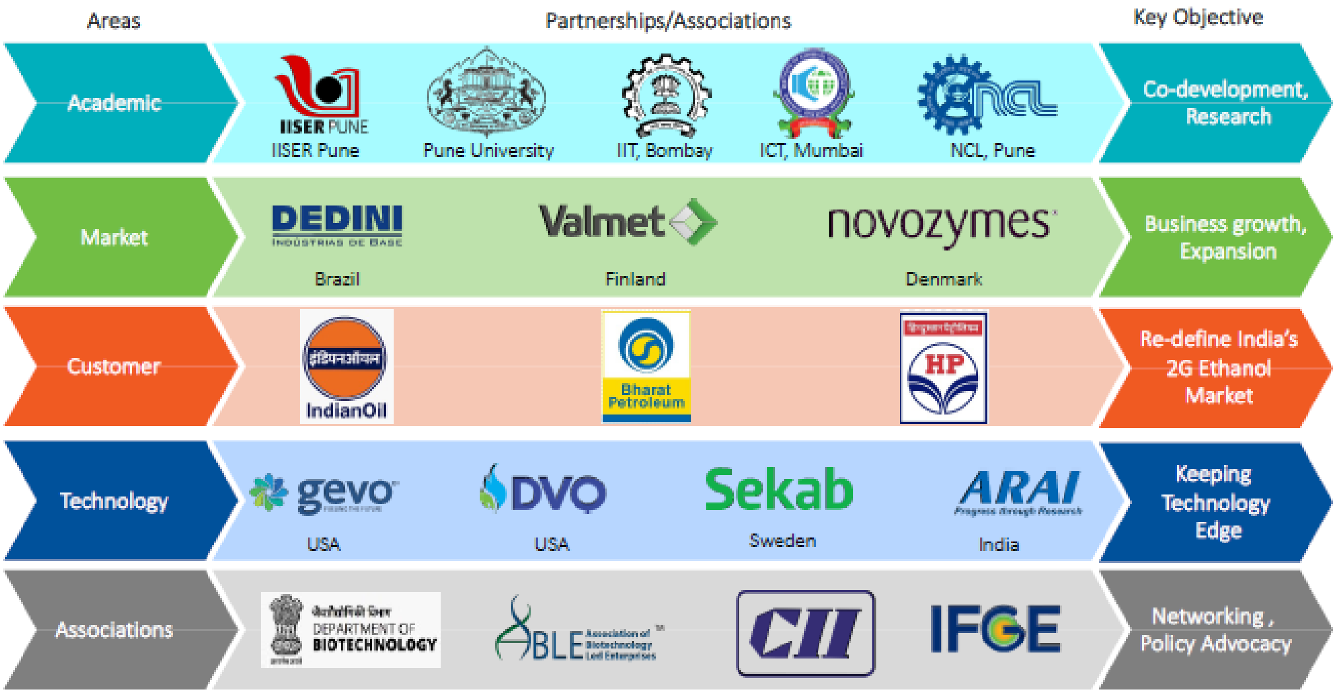
PRJ is one of the few companies that can be accredited with many firsts in bioenergy space not only in India but also in the world

Over the period of FY13-20, PRJ has witnessed lack of growth (2.6% revenue CAGR) primarily due to no meaningful traction in the bioenergy space (domestic as well as international). However, there has not been an impediment for management of PRJ to pursue, achieve and excel in technological prowess and innovation required for bioenergy space. PRJ is one of the few companies that can be accredited with many firsts in bioenergy space not only in India but also in the world. Further, PRJ has also entered into many important partnerships with global technological giants in bioenergy space.

Few of the firsts credited to PRJ

- PRJ has patented first of its kind technology for producing BIOSYRUP®.
- PRJ has built India's first of its kind integrated bioenergy complex that produces ethanol, biogas, bio fertilizer and other by-products – CBG Plant of M/s Indian Potash Limited, Muzaffarnagar.
- PRJ is executing India's first E2G plant and **it will commence commissioning from 3QFY23 (as of now reached 90% execution level)**. It is worth noting that there are only 3 E2G plants in the world – Brazil, Italy and Romania – and India is expected to have four operational in next 12-18 months.

Exhibit 29: Key partnerships of PRJ to capture future opportunities emanating from Bioenergy space



Source: Centrum Broking, Company

For PRJ we pencil in order inflow for FY23/24 at Rs33.9bn/Rs42.1bn vis-à-vis Rs34.6bn in FY22

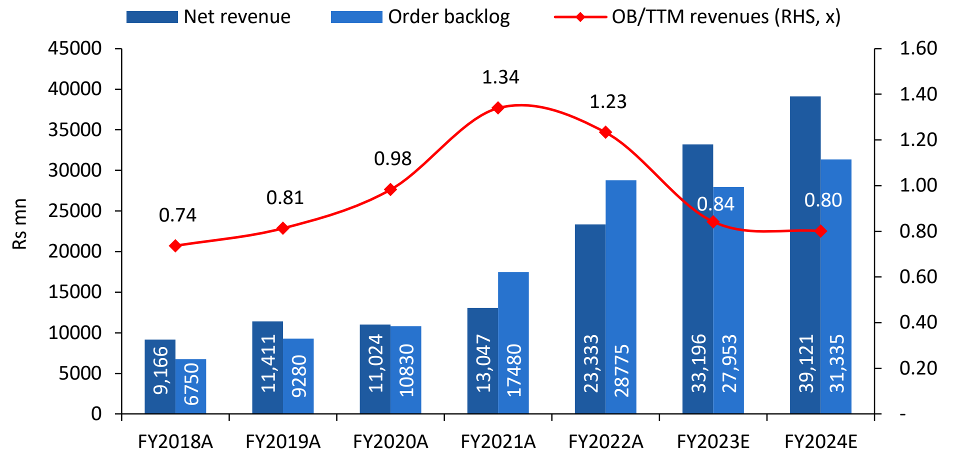
However, we believe tides have changed for PRJ and Bio-economy is poised to play pivotal role in the energy transition. It is well established that Bio-economy facilitates sustainable climate actions by way of decarbonisation and carbon recycling. By institutionalizing progressive policy framework, countries around the world are mainstreaming Bio-economy. We believe that with PRJ's technological and patent knowhow, it is in pole position to capitalize on the emerging opportunities.

Further, volatile oil prices in international markets because of Russia-Ukraine war have served as a stark reminder for prioritising energy security around the world. Rise in inflation has engulfed global economy. Clarion calls are heard all over for safeguarding energy needs by leveraging captive energy sources and alternative resources. This energy transition bodes well for PRJ and opens many doors of opportunity.

We are already witnessing PRJ reaping the benefits (OB/TTM revenues at 1.2x) out of EBP (increasing production of ethanol) envisaged by GoI and going ahead as well we believe PRJ will continue to reap benefits from bioenergy segment – both in domestic (CBG/E2G) and international market (E2G). Further, PRJ is also working on RCM, which is expected to be promising solution to global majors who are exploring low carbon alternatives in pursuit of carbon neutrality.

In this backdrop, we expect PRJ to post healthy revenue CAGR of 29.5% over FY22-24E on the back of robust OB and continuing momentum in order booking (aided primarily by E1G and CBG). We pencil in order inflow for FY23/24 at Rs33.9bn/Rs42.1bn vis-à-vis Rs34.6bn in FY22. This order inflow would be primarily driven by E1G (total expected ordering under E20 for EBP is around 15,000KLPD over next two years which would entail total addressable market size for PRJ at Rs50-60bn). Further, we expect some traction on CBG front (Rs20bn) and pick up of orders from international front too in FY23/FY24.

Exhibit 30: Strong OB at 1.2x FY22 revenue lends visibility



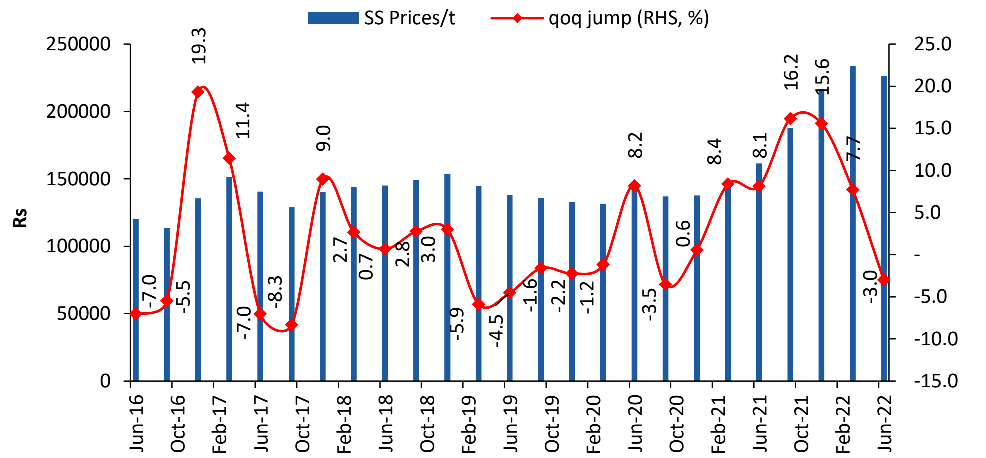
Source: Centrum Broking, Company Data

Recent cool off in commodity prices should aid margins for PRJ going ahead

PRJ's order book is mostly on fixed price contracts with no real price escalation built in – this is the norm of the industry – owing to (1) clients' reluctance for price escalations; and (2) shorter time duration of execution. Therefore, PRJ had to bear the brunt of hike in commodity prices (read stainless steels – being their major raw material) over the last two years.

PRJ witnessed margin pressures due to unprecedented hike in commodity prices over the last two years

Exhibit 31: FY22 was an exceptional year in terms of qoq jump in SS prices



Source: Centrum Broking, Company; Note- We have considered Jindal stainless steel average realisations being the major supplier for SS in domestic markets

PRJ, taking cognizance of the volatility in commodity prices took steps to safeguard their margins and profitability by – (1) outsourcing non-core activities via back to back orders and (2) increasing inventory levels

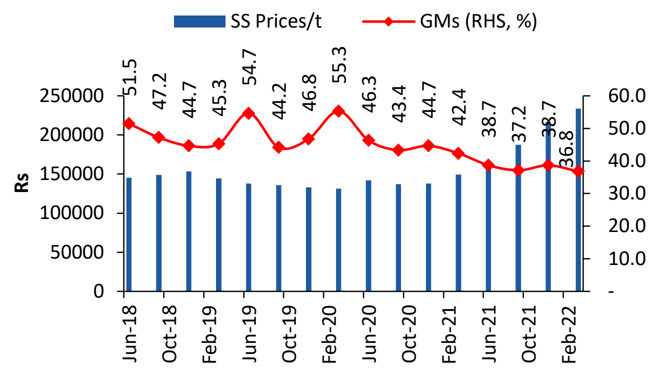
Historically, PRJ has enjoyed stable margins till the SS prices were below 1,50,000/t. During FY21, SS prices which witnessed a yoy increase by 13.7% to Rs1,49,339/t impacted PRJ's gross margins for FY21 by 630bps to 43.6% from 49.9%. This sharp drop in gross margins took away the operating leverage benefit for the year and reported earnings growth of mere 15% even after 18% jump in revenue.

However, in FY21, taking cognizance of the volatility in commodity prices, supply chain issues and increasing order booking management, PRJ took steps to safeguard its margins and profitability. First, PRJ started outsourcing non-core business activities on back to back basis – leading to protecting/softening the impact of increase in SS, optimum utilization of resources and timely completion of order book without major capital expenditure in books. Secondly, PRJ also started maintaining higher inventory levels (69 days in FY22 vis-à-vis 50 days average of FY13-21) – again to counter continuous spike in SS and to ensure raw material supply chain doesn't get disrupted. Lastly, in continuation with their policy, PRJ maintained higher customer advances – ensuring the first two steps do not expand the working capital cycle of the company.

SS prices appreciated by 56.4% in FY22 and led to mere 588bps compression in gross margins for PRJ to 37.7%

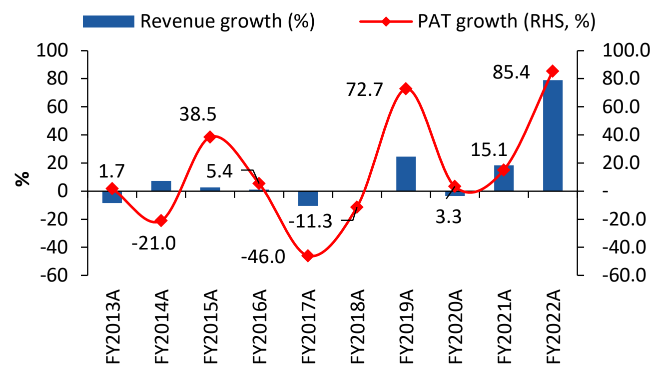
In this backdrop, FY22, which witnessed an unprecedented spike in SS prices to Rs2,33,579/t, up yoy by 56.4% over FY21 prices, resulted in gross margin compression for PRJ of mere 588bps from 43.6% to 37.7% - lower than that witnessed in FY21. We believe it highlights crucial points – (1) clients value PRJ's technology and service and don't mind paying interest free advances; and (2) management of PRJ approached a volatile year in a very prudent and pragmatic way ensuring both business (stupendous growth on all fronts), balance sheet (no deterioration in quality – remain debt free and WC days in fact has improved) and margins doesn't suffer.

Exhibit 32: Increase in SS prices impacting GMs



Source: Centrum Broking, Company Data; Note- We have considered Jindal stainless steel average realisations being the major supplier for SS in domestic markets

Exhibit 33: Business model of PRJ enjoys operating leverage



Source: Centrum Broking, Company Data

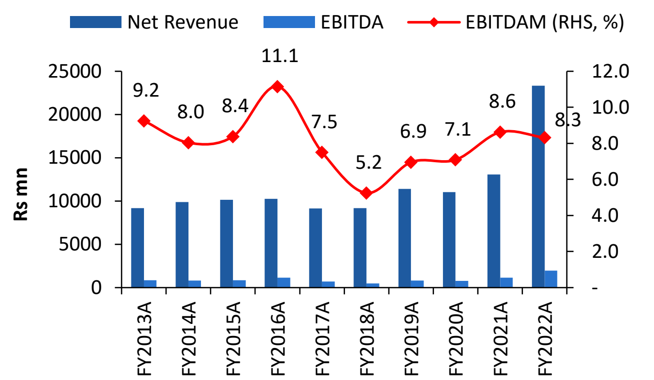
Recent cool off in SS prices would lead some uptick in margins; we have pencilled in 190bps jump in EBITDA margins (management guidance is in the range of 200-250bps) over FY22-24 from 8.3% to 10.2%

However, in recent times there has been cool off in SS prices and our house view is that in FY23/24, SS prices would remain subdued. This will entail that PRJ would see some uptick in margins led by cool off in commodity prices. We have pencilled in 170bps jump in EBITDA margins (management guidance is in the range of 200-250bps) over FY22-24 from 8.3% to 10%.

Minimal capital expenditure offsets lower EBITDA margins

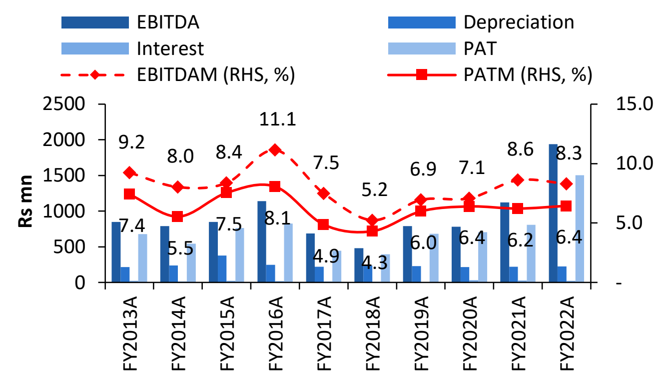
PRJ's average EBITDA margin over last five years was 7.2%. However, PRJ has enjoyed decent average PATMs of 5.9% during the same period given (1) lower capex intensity – leading to lower depreciation, and (2) market leadership position – leading to lean working capital needs, debt free balance sheet and lower interest expenses. In this backdrop, we expect PRJ to post healthy earnings CAGR of 43.9% and report PAT of Rs3.3bn in FY24 vis-à-vis Rs1.5bn in FY22.

Exhibit 34: EBITDAM garnered by PRJ has been low



Source: Centrum Broking, Company Data

Exhibit 35: Lower capex and interest ensures decent PATM

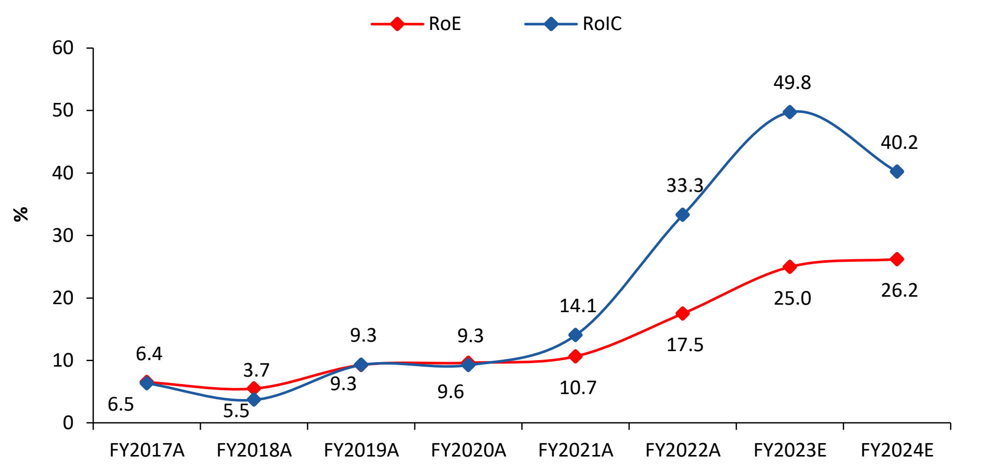


Source: Centrum Broking, Company Data

Return ratios set to improve – Thanks to growth

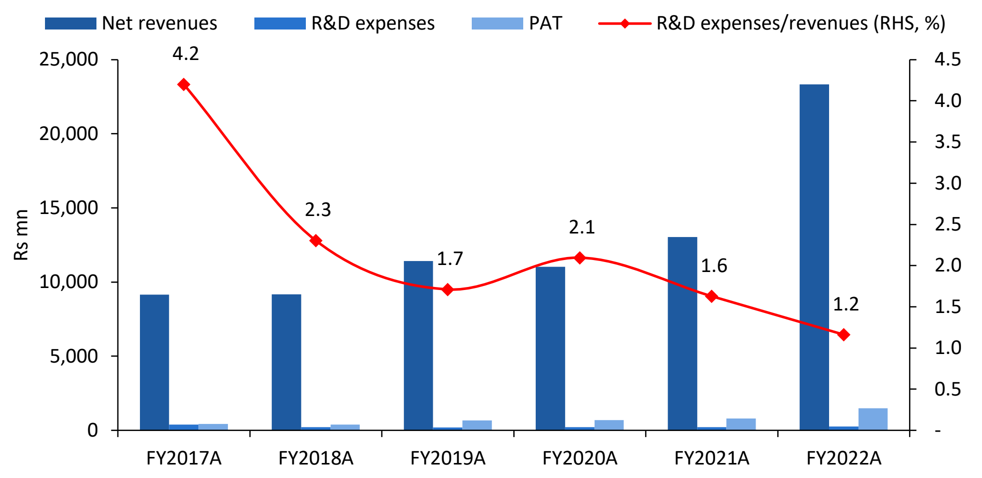
Over FY13-19, PRJ has generated poor return ratios (RoE/RoIC – 10% range) primarily due to low margins and lack of growth. However, in last two years there has been an uptick with RoE/RoIC – 11%/18% and 14%/33% in FY21/22. Further, going ahead we believe this trend to continue on the back of robust top-line growth and cooling commodity prices. Further, it should be noted that PRJ spends reasonable amount of earnings on research and development which benefits in long run.

Exhibit 36: Return ratios will further improve in FY23/24



Source: Centrum Broking, Company Data

Exhibit 37: Innovation and technology have been an integral part of PRJ's business model



Source: Centrum Broking, Company Data

Valuation: Market leader + growing opportunity = Higher PE multiple

Dominant leadership in profitable bioenergy segment (>60% market share), niche positioning in advanced fuels market (positive contribution expected in future) and solid business model (focused on profitability, cash flows and capital allocation) makes PRJ a scalable and differentiated play on Indian bioenergy space. We bake in 30%/44% revenue/earnings CAGR over FY22-24, respectively.

At current levels of Rs373, PRJ is trading at its historical mean of around 22x one year forward earnings and doesn't factor in the growth opportunities and benefits accruing due to cooling commodity prices that we foresee for PRJ. At current price of Rs373, stock is trading at its historical mean PE multiple of 22x on one year forward earnings. We believe that current multiple doesn't factor in the growth opportunities and benefits accruing due to recent cooling commodity prices. Further, the stock has been trading on five year and one year average PE multiple at 26x and 29x, respectively. We initiate coverage with BUY on PRJ with PE based TP of Rs508, assigning 30x to FY24E consolidated EPS of Rs16.9, implying an upside of 36% from current levels. Further, at our target multiple of 30x PE it would be trading at lower than mean + 1SD multiple which gives further comfort to our assigned PE multiple recommendation.

What should drive stock performance?

In our view, market focus has decisively shifted to: (i) profitability; (ii) cash flows; & (iii) capital allocation - all aspects that PRJ should do well on

In our view, market focus has decisively shifted to: (i) profitability; (ii) cash flows; & (iii) capital allocation - all aspects that PRJ should do well on. We expect PRJ to post 43.9% earnings growth. On cash flow front, PRJ being a market leader is able to operate with minimum working capital requirement (thanks to interest free customer advances consistently at ~80 days) and low capital expenditure due to prudent capital expenditure policy and would continue to maintain healthy OCF/FCF. In our view, these attributes would continue to support high PE multiples for PRJ.

Key Risks and mitigating factors

Jump in commodity prices may lead to margin pressures

PRJ's business model exposes itself to fluctuations in commodity prices (read SS) given its order book is on fixed price contract. Therefore, as witnessed in FY21/22, any unprecedented jump in commodity prices may affect their margins. However, it is pertinent to note that PRJ mitigates this risk with higher customer advances (sourcing material) and back to back subcontracting.

Higher blending of ethanol leads to loss of revenue for central government

While petrol is subject to excise duty, GST is levied on ethanol. While GST would be in the range of Rs2.28/litre to Rs3.13/litre of ethanol based on an ex-mill price in the range of Rs45.69/litre to Rs62.65/litre, excise duty on petrol is Rs32.98/litre. Considering total current national ethanol blending volumes of 425cr litres, revenue loss to the central government due to replacement of petrol by ethanol amounts to Rs10,950cr per annum. However, given the all-round benefits in developing a domestic Bio-economy, we don't foresee any policy change impacting the long-term goals for the country.

Slowdown in EBP implementation

PRJ being a market leader in Bio-energy space enjoys maximum orders flowing to it due to expansion in ethanol production facilities under EBP. Also, bioenergy segment of PRJ contributes more than 70% of net revenues/order booking for PRJ – forming a lion's share in overall scheme of things. Therefore, any delay in EBP or any slowdown in offtake of OMCs of ethanol can lead to decline in expansion of ethanol production and resultant shrinking in TAM for PRJ. However, given the track record of the EBP since its conception, achieving target of E10 (which was preponed from ESY25 to ESY22) before schedule by nearly 6 months and ensuing benefits from EBP we do not assign much probability of this happening.

Company background

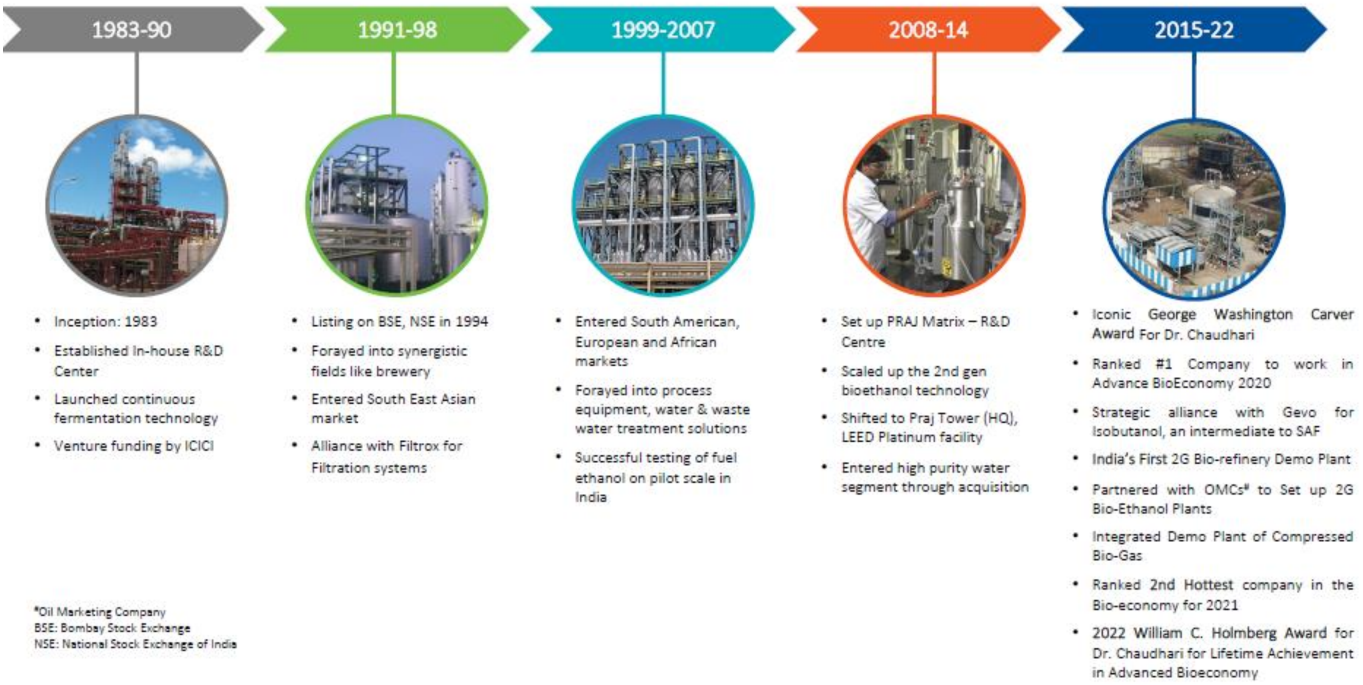
PRJ and Indian Oil Corporation Limited (IndianOil) have signed a Memorandum of Understanding to investigate prospects in the Biofuels business, including the production of Alcohol to Jet (ATJ) fuels, 1G and 2G ethanol, Compressed Bio-Gas (CBG), and other associated opportunities

Praj began as a small supplier of ethanol plants and has grown into a global leader in sustainable bioenergy, high purity water, critical process equipment, breweries, and industrial wastewater treatment solutions. What began as an entrepreneurial endeavour 39 years ago has grown into India's most successful bio-based technologies and engineering company, with a global presence under the visionary leadership of technocrat Dr. Pramod Chaudhury.

Praj strives to be a key participant in the environment, energy, and agricultural processing industries, offering creative, comprehensive solutions that include plant, equipment, and products that will improve people's standard of living. PRJ and Indian Oil Corporation Limited (IndianOil) have signed a Memorandum of Understanding to investigate prospects in the Biofuels business, including the production of Alcohol to Jet (ATJ) fuels, 1G and 2G ethanol, Compressed Bio-Gas (CBG), and other associated opportunities.

The company's manufacturing facility is in Hinjewadi, Pune (Maharastra). A multi-disciplinary engineering staff, four world-class production facilities, and good connectivity to ports and highways support the company's manufacturing capability. These are in Maharashtra's Sanaswadi, Urawade, and Wada, as well as Special Economic Zone (SEZ) of Kandla (Gujarat). Global multinational and EPC businesses have approved Sanswadi and Kandla facilities for the supply of equipment and skids. ASME U & U2, R Stamps, and NB Registrations have been granted to the facilities. Wada has an ASME BPE-compliant plant that services the pharmaceutical sector.

Exhibit 38: Key Milestones



Source: Company, Centrum Broking

The company specialises in the design, production, delivery, and commissioning of ethanol fermentation and distillation equipment, with over 60% market share in India and experience of installing projects in Africa and Southeast Asia. PRJ is based in Pune, India, and has offices spanning over five continents. The capacity of the wastewater treatment plant is 1 million litres per annum. As global leader in Biofuels Technology & Plants, PRJ has a strong track record in Renewable Gas Plants and over 40 industrial installations with capacities up to 1500 M3/Hr.

Exhibit 39: Manufacturing Facilities

Source: Company, Centrum Broking

Exhibit 40: 1000++ References in 100+ countries across all 5 continents…

Source: Company, Centrum Broking

P&L

YE Mar (Rs mn)	FY20A	FY21A	FY22A	FY23E	FY24E
Revenues	**11,024**	**13,047**	**23,333**	**33,196**	**39,121**
Operating Expense	10,243	11,923	21,395	29,794	35,131
Employee cost	1,640	1,722	2,176	3,087	3,795
Others	2,316	2,302	3,910	5,461	6,572
EBITDA	**781**	**1,123**	**1,938**	**3,403**	**3,990**
Depreciation & Amortisation	218	221	226	246	260
EBIT	**562**	**902**	**1,712**	**3,157**	**3,731**
Interest expenses	31	29	25	25	25
Other income	300	257	362	200	450
PBT	**831**	**1,131**	**2,049**	**3,332**	**4,156**
Taxes	127	320	546	839	1,046
Effective tax rate (%)	15.3	28.3	26.7	25.2	25.2
PAT	**704**	**811**	**1,502**	**2,493**	**3,110**
Minority/Associates	0	0	0	0	0
Recurring PAT	**704**	**811**	**1,502**	**2,493**	**3,110**
Extraordinary items	0	0	0	0	0
Reported PAT	**704**	**811**	**1,502**	**2,493**	**3,110**

Ratios

YE Mar	FY20A	FY21A	FY22A	FY23E	FY24E
Growth (%)					
Revenue	(3.4)	18.4	78.8	42.3	17.8
EBITDA	(1.5)	43.9	72.5	75.6	17.3
Adj. EPS	3.0	15.0	84.9	65.9	24.7
Margins (%)					
Gross	49.9	43.6	37.7	39.0	39.7
EBITDA	7.1	8.6	8.3	10.2	10.2
EBIT	5.1	6.9	7.3	9.5	9.5
Adjusted PAT	6.4	6.2	6.4	7.5	7.9
Returns (%)					
ROE	9.6	10.7	17.5	25.0	26.2
ROCE	10.1	10.9	17.5	24.8	26.0
ROIC	9.3	14.1	33.3	45.6	37.8
Turnover (days)					
Gross block turnover ratio (x)	2.0	2.3	3.9	5.3	5.8
Debtors	105	110	75	74	89
Inventory	78	60	59	63	61
Creditors	139	131	96	98	107
Net working capital	52	33	3	15	32
Solvency (x)					
Net debt-equity	(0.2)	(0.5)	(0.6)	(0.4)	(0.4)
Interest coverage ratio	25.2	39.3	77.2	135.6	159.0
Net debt/EBITDA	(2.2)	(3.8)	(2.9)	(1.3)	(1.2)
Per share (Rs)					
Adjusted EPS	3.8	4.4	8.2	13.6	16.9
BVPS	39.3	43.8	49.9	58.9	70.4
CEPS	5.0	5.6	9.4	14.9	18.3
DPS	2.7	2.2	4.2	4.5	5.5
Dividend payout (%)	70.2	48.8	51.3	33.1	32.5
Valuation (x)					
P/E	97.0	84.3	45.6	27.5	22.0
P/BV	9.5	8.5	7.5	6.3	5.3
EV/EBITDA	40.5	24.5	35.3	18.8	15.9
Dividend yield (%)	0.7	0.6	1.1	1.2	1.5

Source: Company, Centrum Broking

Balance sheet

YE Mar (Rs mn)	FY20A	FY21A	FY22A	FY23E	FY24E
Equity share capital	366	366	367	367	367
Reserves & surplus	6,826	7,652	8,790	10,457	12,556
Shareholders fund	7,192	8,018	9,157	10,824	12,923
Minority Interest	7	7	7	7	7
Total debt	0	0	0	0	0
Non Current Liabilities	152	113	148	148	148
Def tax liab. (net)	(181)	(104)	0	0	0
Total liabilities	**7,170**	**8,034**	**9,311**	**10,978**	**13,078**
Gross block	5,527	5,603	5,991	6,291	6,691
Less: acc. Depreciation	(2,726)	(2,904)	(3,130)	(3,376)	(3,636)
Net block	2,801	2,699	2,861	2,915	3,055
Capital WIP	21	6	21	21	21
Net fixed assets	2,822	2,705	2,882	2,936	3,076
Non Current Assets	132	89	124	124	124
Investments	535	535	791	830	872
Inventories	1,111	1,289	3,450	3,485	4,458
Sundry debtors	3,301	4,534	5,118	8,286	10,897
Cash & Cash Equivalents	1,730	4,275	5,529	4,404	4,877
Loans & advances	705	954	922	1,061	1,220
Other current assets	1,099	1,454	3,311	4,259	4,458
Trade payables	1,875	3,416	4,248	6,672	7,207
Other current liab.	2,146	3,960	8,058	7,226	9,188
Provisions	244	424	510	510	510
Net current assets	3,681	4,705	5,515	7,088	9,005
Total assets	**7,170**	**8,034**	**9,311**	**10,978**	**13,078**

Cashflow

YE Mar (Rs mn)	FY20A	FY21A	FY22A	FY23E	FY24E
Profit Before Tax	831	1,131	2,049	3,332	4,156
Depreciation & Amortisation	218	221	226	246	260
Net Interest	79	50	68	25	25
Net Change – WC	(763)	1,159	93	(2,698)	(1,445)
Direct taxes	(178)	(149)	(450)	(839)	(1,046)
Net cash from operations	**147**	**2,251**	**1,747**	**66**	**1,949**
Capital expenditure	(68)	(85)	(185)	(300)	(400)
Acquisitions, net	0	0	0	0	0
Investments	584	(1,628)	(1,170)	(238)	(459)
Others	105	70	87	0	0
Net cash from investing	**621**	**(1,643)**	**(1,268)**	**(538)**	**(859)**
FCF	**768**	**608**	**479**	**(472)**	**1,090**
Issue of share capital	0	0	0	0	0
Increase/(decrease) in debt	0	0	0	0	0
Dividend paid	(949)	(4)	(397)	(826)	(1,010)
Interest paid	(24)	(22)	(19)	(25)	(25)
Others	(6)	(37)	(27)	0	0
Net cash from financing	**(980)**	**(63)**	**(444)**	**(852)**	**(1,035)**
Net change in Cash	(212)	545	36	(1,324)	55

Source: Company, Centrum Broking

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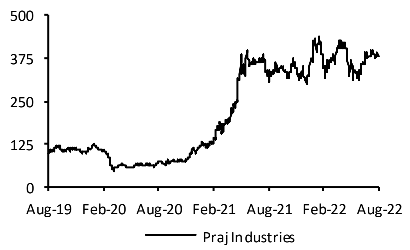
Praj Industries



Source: Bloomberg

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