



# Indian Oil Corporation Limited

JP Morgan  
Indian Investor Summit 2017

September 2017

# Indian Oil Corporation: The Future of India Energy



**Strong Support from the Government of India**

- Maharatna Company; Gol Control: 57.34%
- Government nominated Directors on IOC Board
- Contribution to exchequer of INR 1790 bn in FY17

**Largest Refiner in the Country**

- 11 refineries with 81.20 MMTPA Capacity
- 35% of Domestic Refining Capacity

**Pan-India Pipeline Infrastructure**

- 12,700+ km pipelines for crude oil and products with a total capacity of 93.7 MMTPA
- 48% share in crude and product pipeline (by length)

**Leading Market Share Across Portfolio**

- 45.1% petroleum market share in FY17 with over 46,500 touch points

**Integrated Operations Across the entire Energy Value Chain**

- 2nd largest domestic player in Petrochemicals
- E&P: 8 domestic and 9 overseas blocks

**Strong Focus on Innovation Through R&D and Alternate Energy Sources**

- 554 active patents as on 31.03.2017
- New focus on Alternate and Renewable Energy (Wind, Solar, Biofuels, Nuclear)

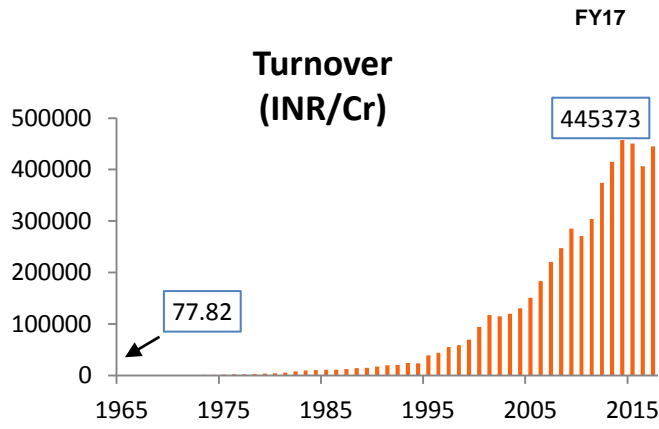
**Driven by a Management Team That has Delivered Results**

- Consistent growth
  - FY11-FY17 Revenue CAGR: 6.59%

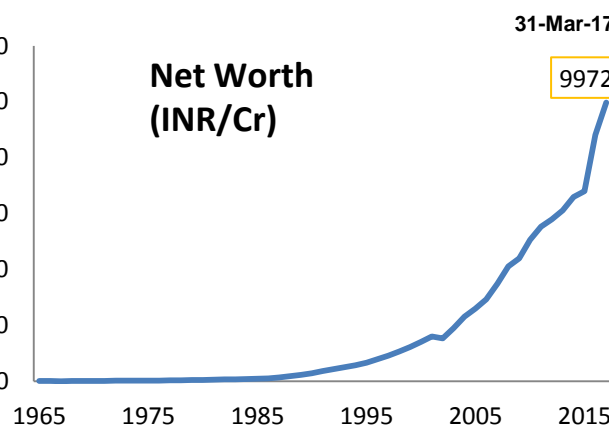


# Our Journey at a Glance

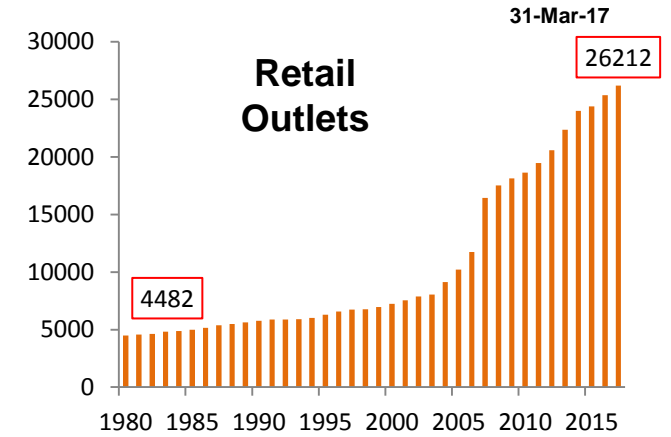
From a humble beginning to an Oil Giant



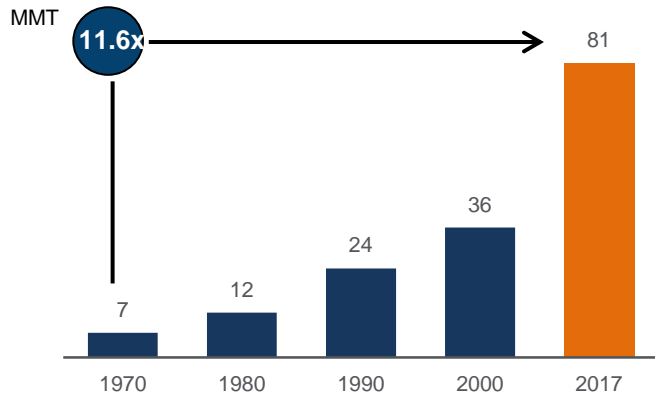
Source: Company Filings



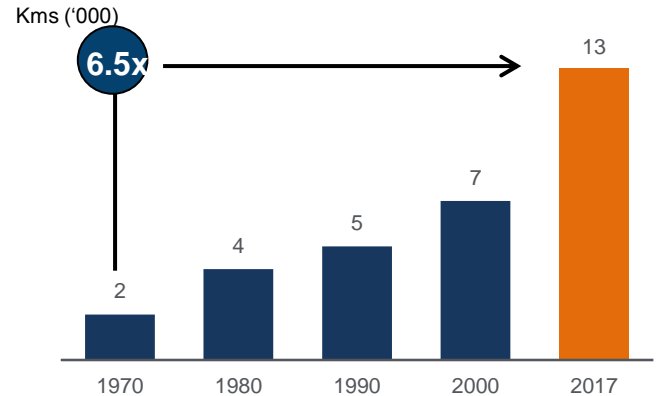
Source: Company Filings



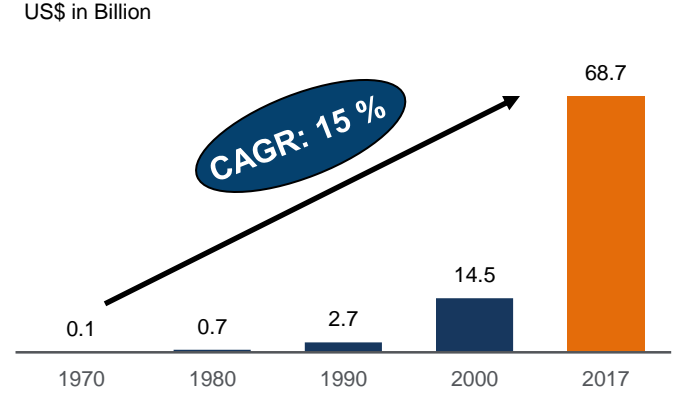
## Refining Capacity



## Pipeline Network



## Turnover



Note: IOC is ranked 14<sup>th</sup> as per Platt Global Energy Company Rankings 2016. IOC is ranked 161 amongst Fortune Global 500 Companies in 2016.

# Well Poised to Leverage Strong Industry Dynamics

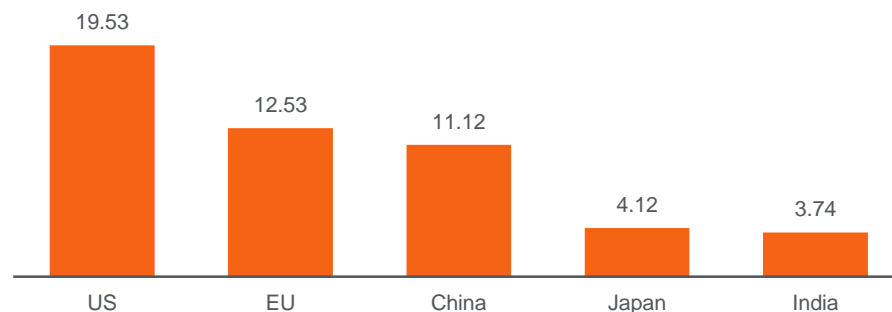
## India is Among the World's Fastest Growing Economies

GDP Growth	2015	2016	2017 P	2018 P
India	7.3%	7.5%	7.5%	7.6%
China	6.9%	6.5%	6.2%	6.0%
ASEAN-5	4.8%	4.8%	5.1%	5.2%
Brazil	(3.8%)	(3.8%)	0.0%	1.1%
Russia	(3.7%)	(1.8%)	0.8%	1.0%

Source: IMF World Economic Outlook, April 2017 (GDP at constant Prices)  
 ASEAN-5: Indonesia, Malaysia, Philippines, Thailand & Vietnam

## Low per Capita Oil Consumption Represents an Underpenetrated Opportunity...

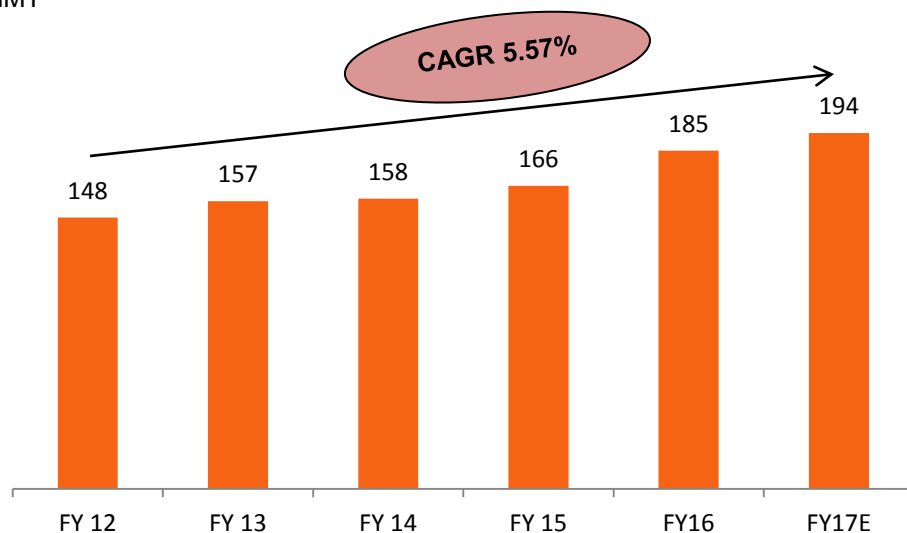
Consumption in million barrel per day



Source: CIA World Fact book (2014 & 2015 Est.).-as per website on 21 Aug 2017

## Oil Consumption Trends Have Been Rising Marginally...

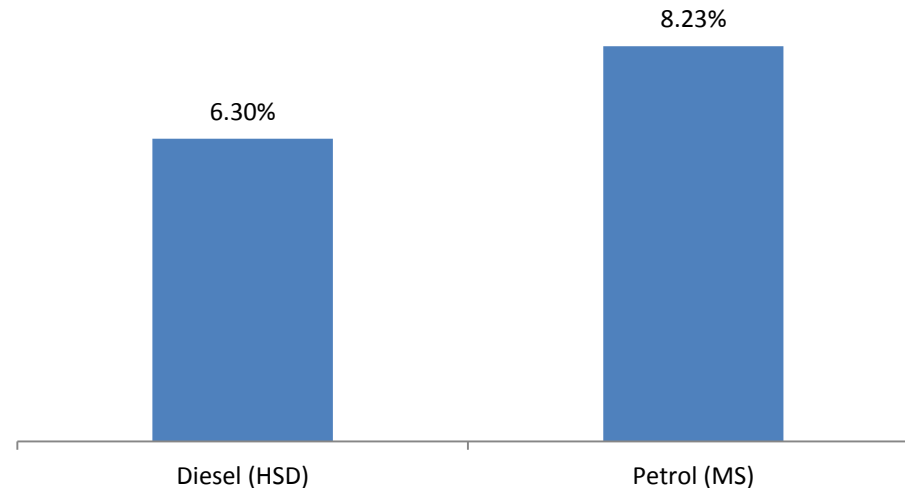
MMT



Source: Petroleum Planning and Analysis Cell, Ministry of Petroleum and Natural Gas, Govt. of India.

## ...With Strong Growth in Consumption Across Key Products

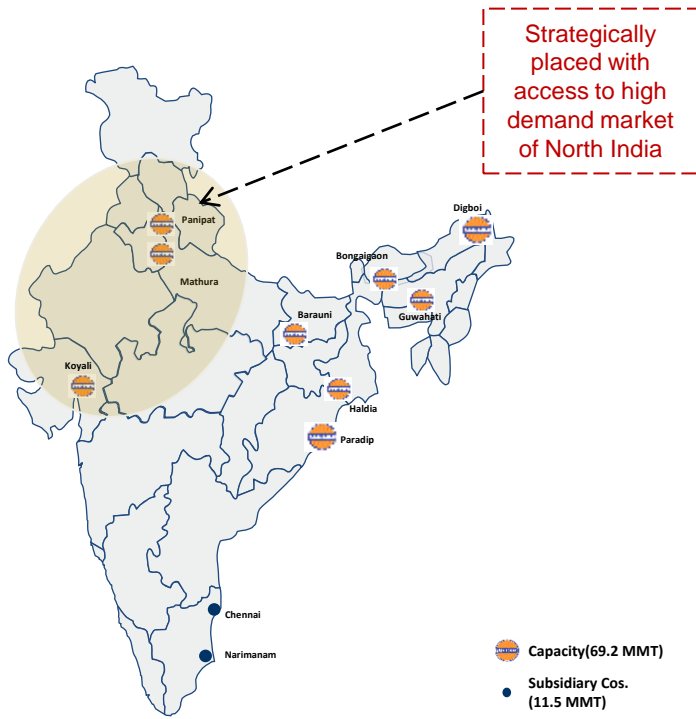
FY18 – FY22 E CAGR



Note: HSD: High Speed Diesel and MS: Motor Spirit  
 Source: Petroleum Planning and Analysis Cell

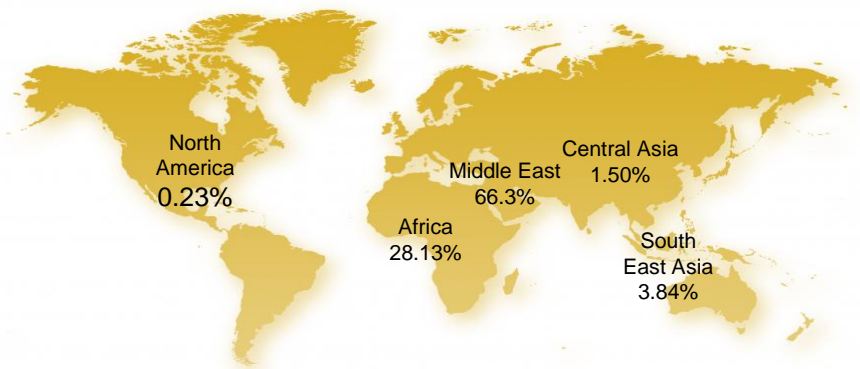
# IOC - The Largest Refiner in India

## Strategic Presence With Access to High Demand Markets



Note: Figures as of March 31, 2017

## Importing Crude from Across the Globe

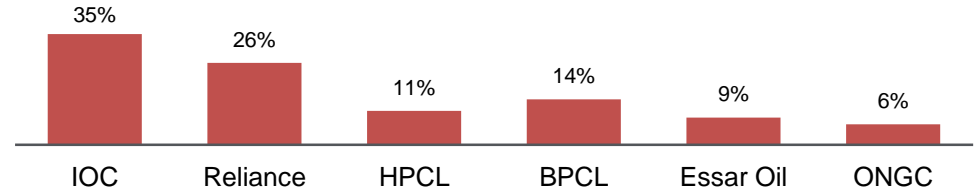


Total crude oil import : 63.79 MMT (including 7.74 MMT for CPCL)

Figures for FYE 2017

Source: Company Filing

## Leader in Refining Market Share<sup>(1)</sup>

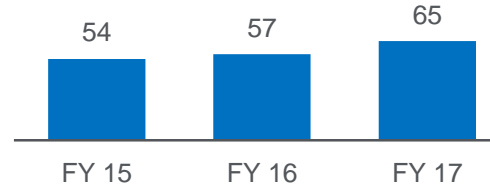


Note: Figures as of March 31, 2017.

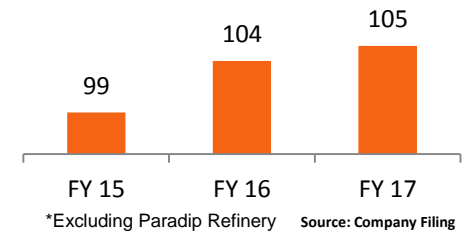
(1) Market share based on group Refining Capacity

Source: PPAC website

## Refinery Throughput (MMT)

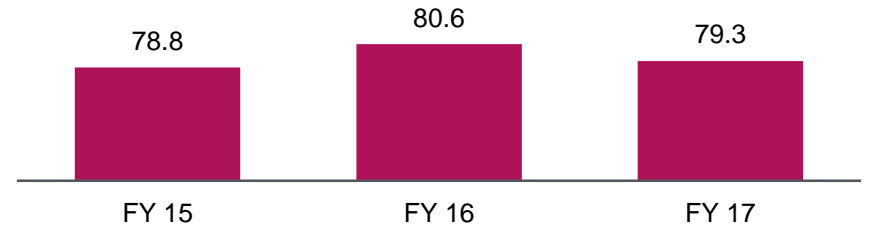


## Capacity Utilization\* (%)



\*Excluding Paradip Refinery Source: Company Filing

## Steady Distillate Yields\* (%)

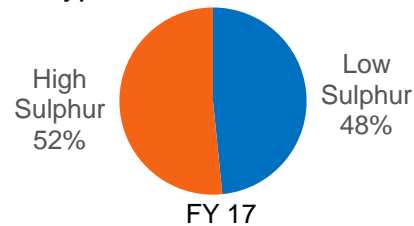


\*Excluding Paradip Refinery

Source: Company Filing

## Changing Crude Mix for Enhanced Profitability

### Type of Crude Oil Used



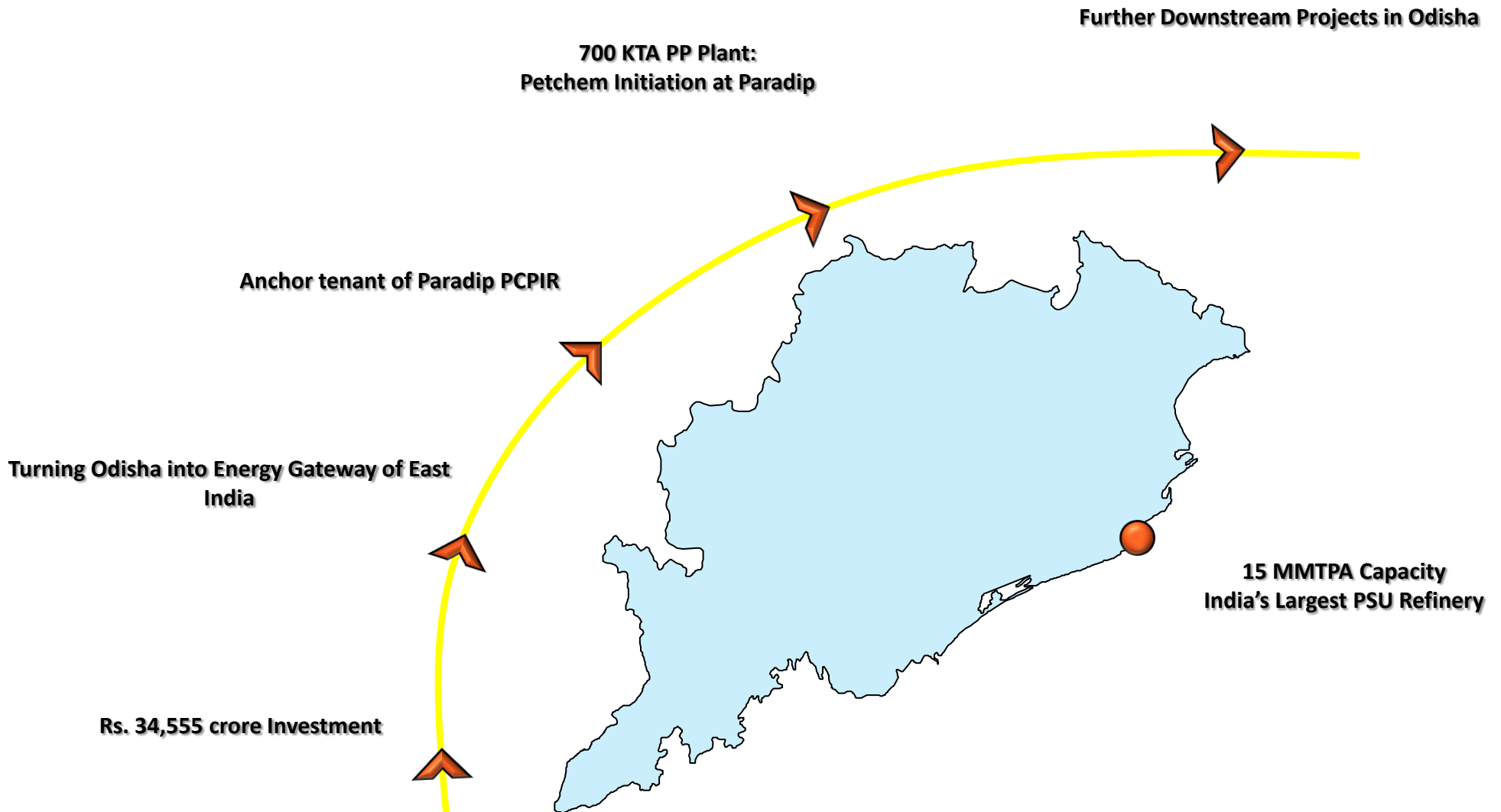
✓ Producing Euro IV grade fuels

✓ Preparing for Euro VI

Note: All figures for the year ended March 31 of the respective years.

Source: Company Filing

# Paradip Refinery – Modern Marvel



# Paradip Refinery– Salient Features

## Paradip Refinery: Augmenting IOC's Capacity

- **Capacity : 15 MMPTA**
  - Operating at 100% capacity from May'17 onwards
- **One of the most modern refineries:**
  - 100% HS including 40% Heavy
  - Nelson Complexity Factor – 12.2
  - Processed 99.99% Sour Crude in Q1 17-18
- **Product Slate :**
  - MS 25%, HSD 38%, ATF/SKO 13%, LPG 5%, Petcoke 8%
- **Distillate Yield – 80%**
  - For Q1 17-18
- **Improvising Opex**
  - 1.40 \$/bbl in Q1 17-18 against 2.05 \$/bbl in FY 16-17
- **Energy Index – 50 MBN**
  - Among the best in the industry

### INDMAX Unit

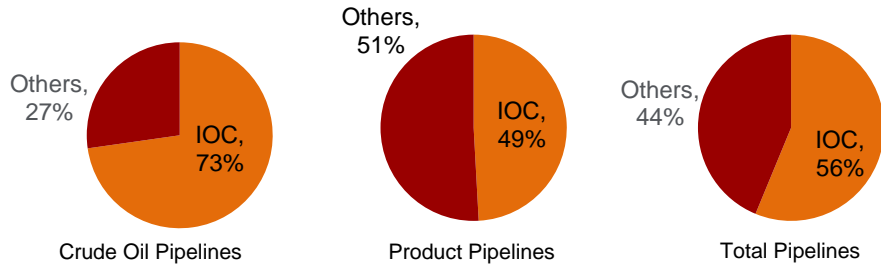
Product : LPG, PROPYLENE, MS &  
DIESEL COMPONENT

Licensor : IOC-R&D



# Unparalleled Network of Cross Country Pipelines

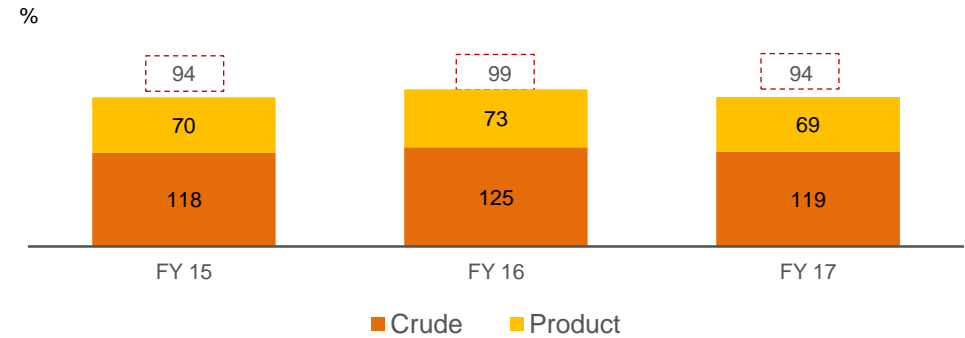
## Largest Pipeline Market Share - Downstream



Source: PPAC Website

Note: Figures as of March 31, 2017

## High Capacity Utilization

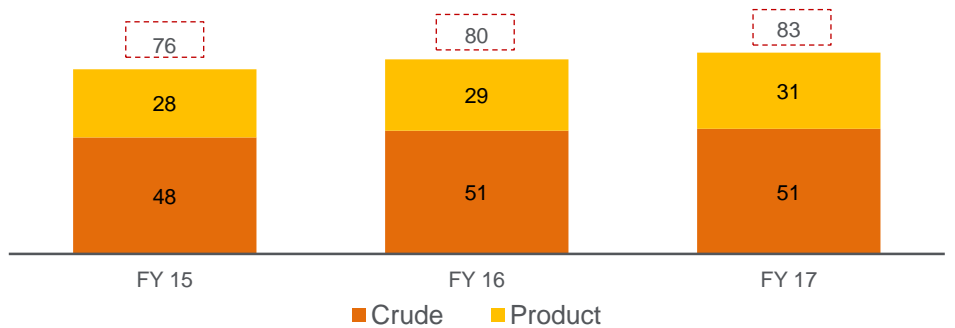


Source: Company Filing

Indicate Total Capacity Utilization

## Pipelines Throughput

MMT

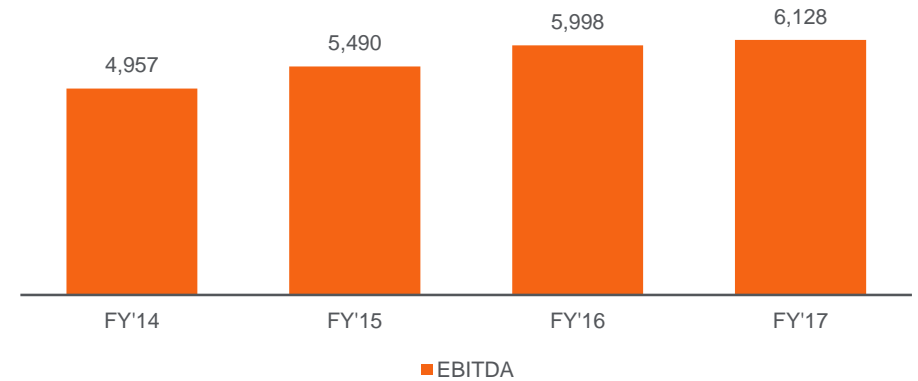


Indicate Total Throughput

Source: Company Filing

## Steady Revenue Stream with healthy EBITDA

In INR



All annual figures for the year ended March 31 of the respective years.



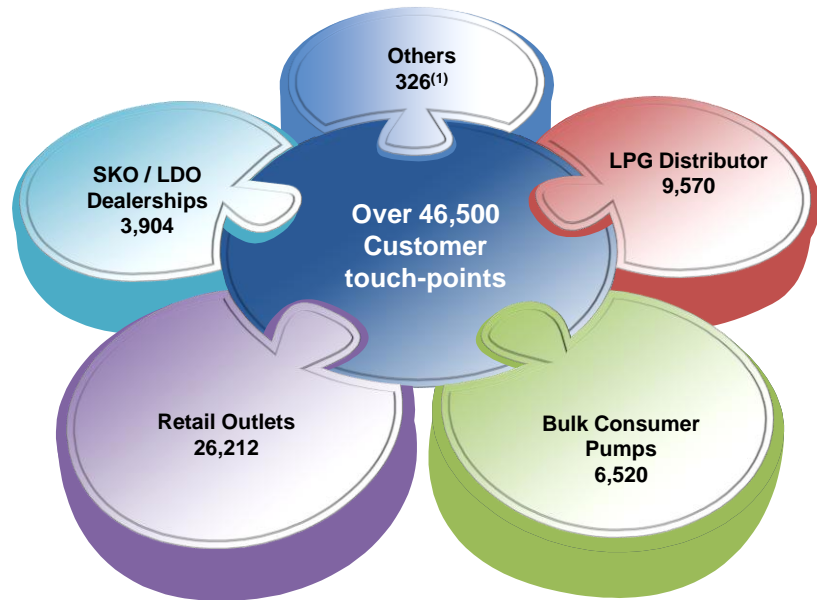
# Extensive Network of Cross Country Pipelines



As on July 31 2017

# Marketing: Reach in Every Part of the Country

## Pan India Presence with Multiple Consumer Touch Points



All figures for the year ended March 31, 2017

Source: Company Filing

## Other Key Highlights

- Rural Thrust and Penetration ✓ 7,051 Kisan Sevak Kendras (KSK)

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- LPG ✓ Supply to over 99 million households

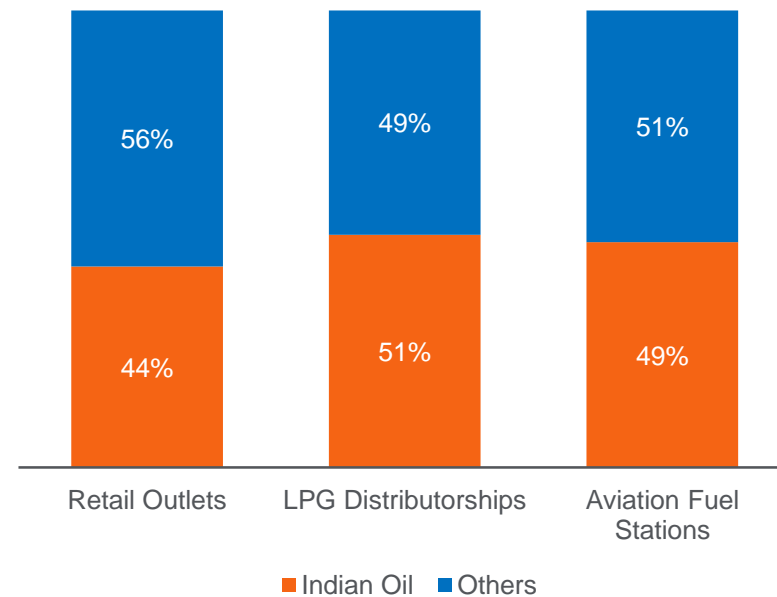
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- Petroleum Product Market Share** ✓ 45.1% share in petroleum products

Note: (1) Others includes Aviation Fuel Stations, Terminals, Depots and LPG Bottling Plants.

Source: Company Filing

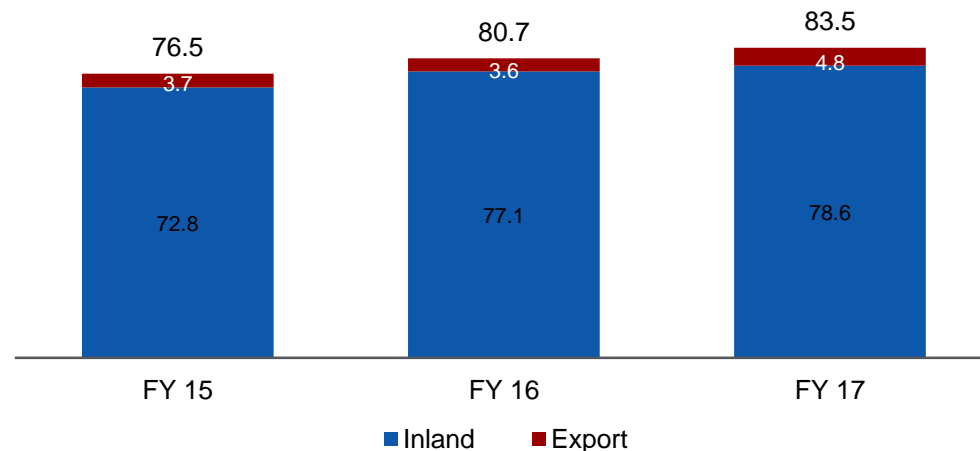
## Leader in Market Infrastructure



Source: Company Filing & PPAC Website

## Operating Highlights (Inland / Export Mix)

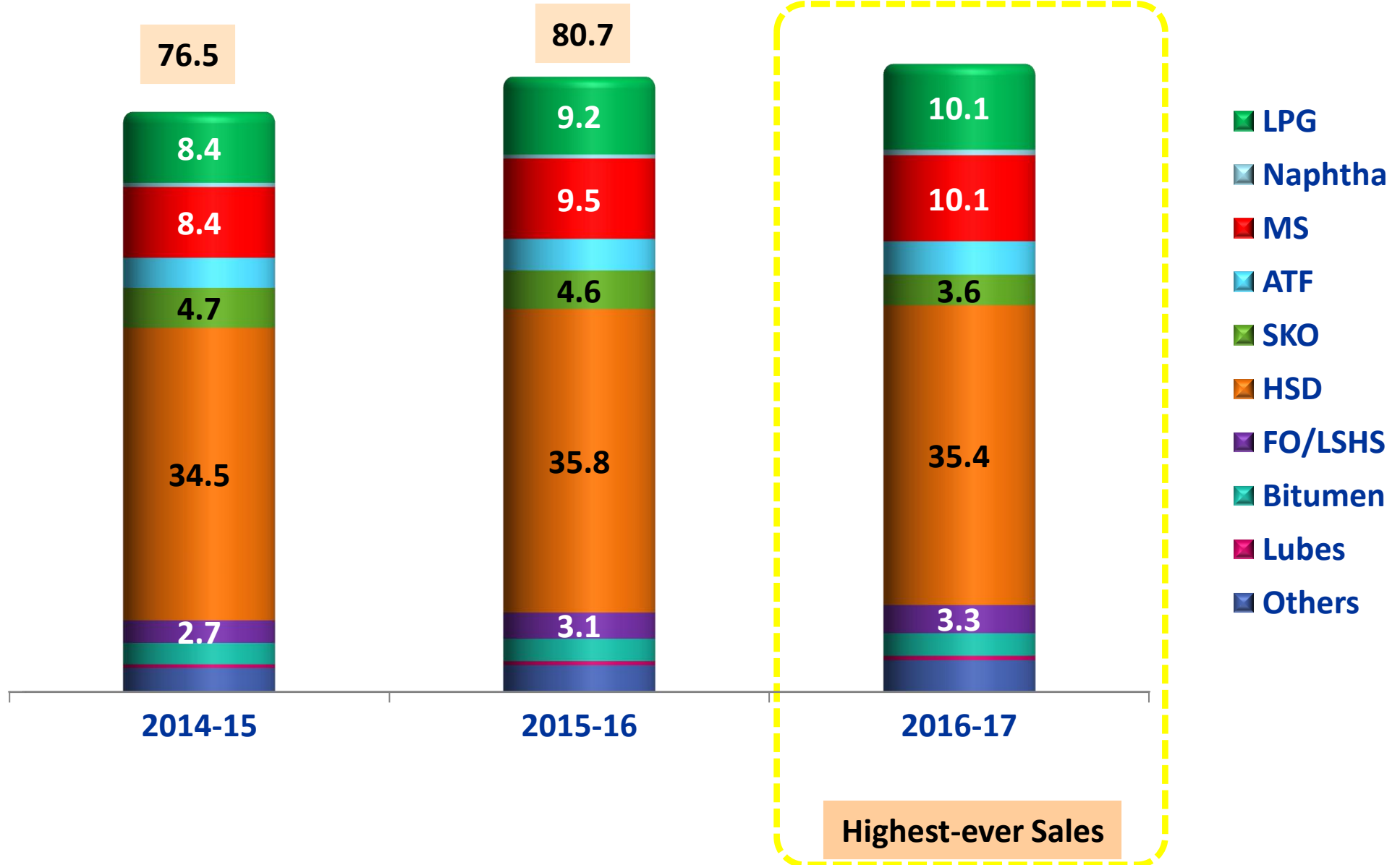
Sales (MMT)



Source: Company Filing

# Unparallel Sales

## Domestic POL Sales (MMT)



Maintaining Leadership with 45.1% Market Share

# Diversified Customer Base & Renowned Brands

## Diversified Products & Brands

### Branded Products



### Branded Services



*Kisan Seva Kendra outlets for extending rural reach*

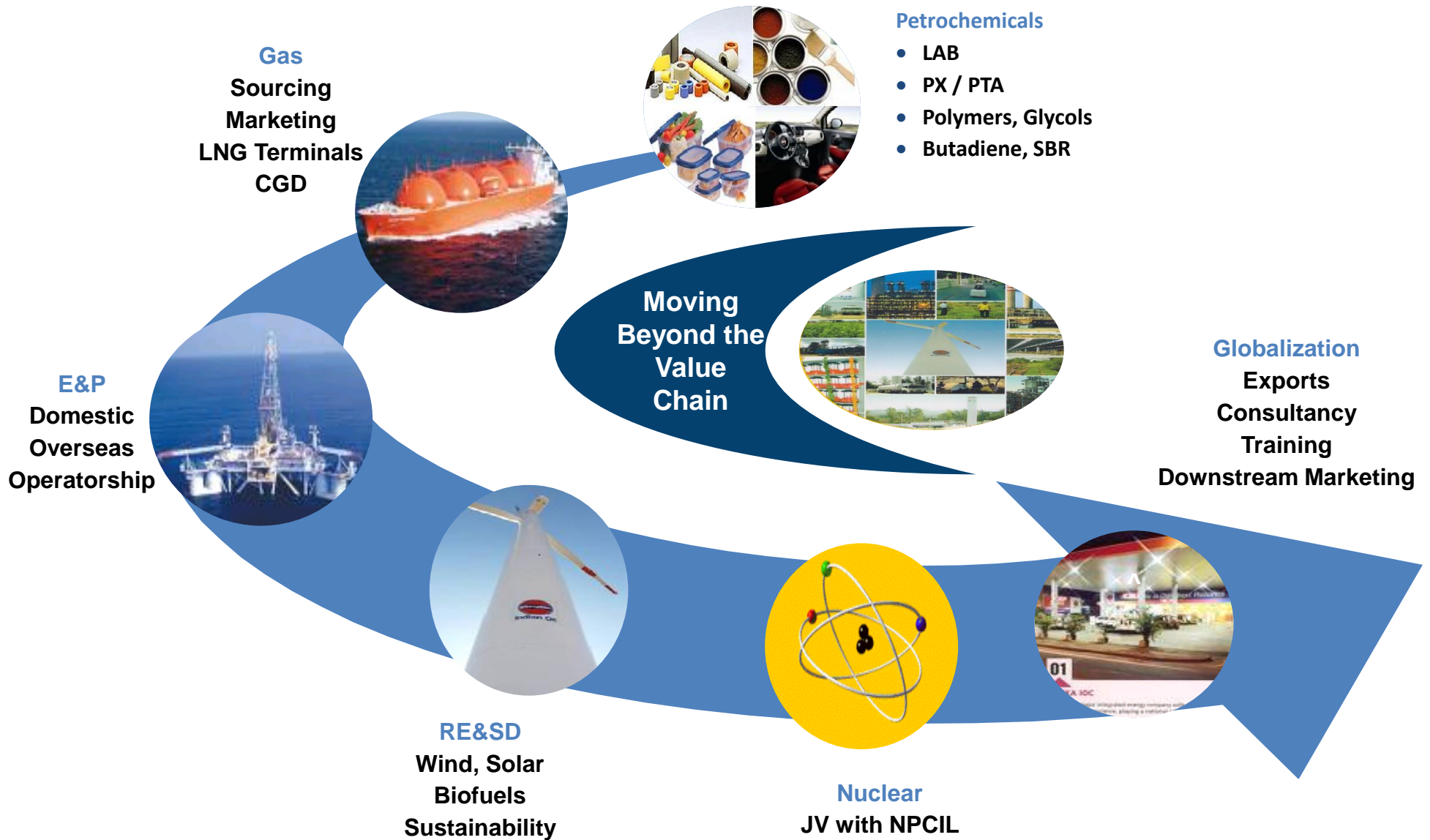
## Diversified Customer Base



*Retail Outlet at Boat house*

- The turnover growth is insulated from the cyclical demand fluctuations due to diversified customer base

# Moving Beyond the Traditional Value Chain



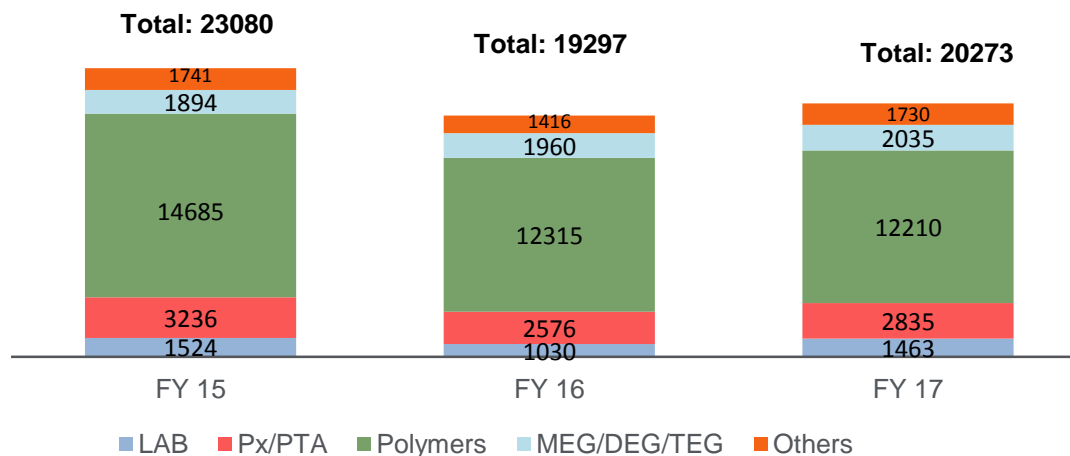
# One of the Leading Producer of Petrochemical Products

## Capacity

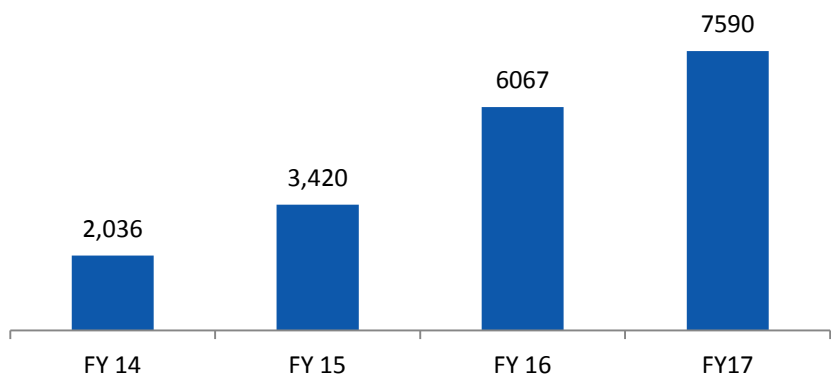
Project	Capacity (MT)	Capex (US\$m)
Guajarat LAB	120,000	175
Styrene Butadiene Rubber Plant	120 KTA	150
Panipat Px / PTA	553,000	508
Panipat Naphtha Cracker	1,460,000	2337

Source: Company Filing

## Sales Breakup (in INR/Cr)



## EBITDA (in INR/Cr)



Source: Company Filing

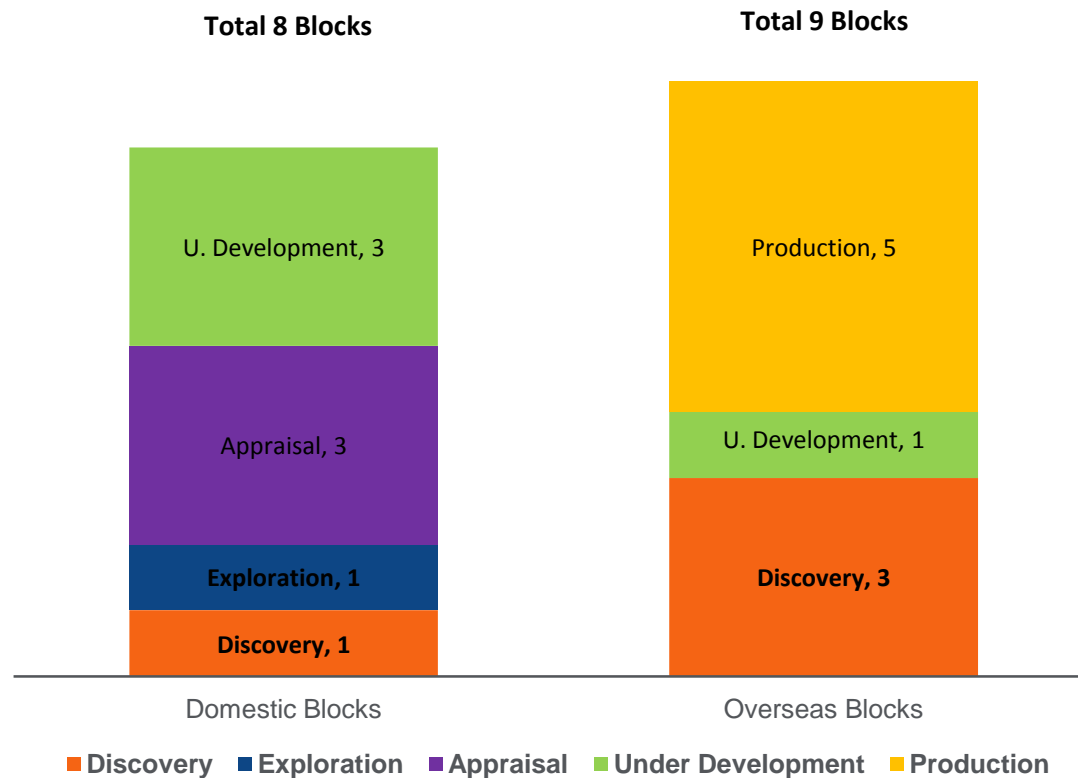


# Backward Integration Through E&P

## IOC: E&P Capabilities

- Stake in 17 exploration blocks
- 8 Domestic blocks
  - With ONGC / OIL / GAIL / GSPC
    - Including 2 Coal Bed Methane blocks with ONGC (20% participating interest)
- 9 International blocks
  - Libya (1), Yemen (1), Nigeria (1), Gabon (1), Venezuela (1), USA (1), Canada (1) and Russia (2)

## Status of Domestic and Overseas Blocks



All figures as on March 31, 2017

## Recent Developments on E&P

- Increasing Equity Oil and Gas Production.
- New Asset
  - Taken stakes in Vankor and Taas Yuryakh (Rosneft's Russian Assets). Both are producing Assets.



*A view of the drilling site at IOC Khambhat 1*

All figures as on March 31, 2017

# Russian Asset Acquisition

## Vankor: Today's Behemoth

Reserves	331 MMT
Production	21 MMTPA
Consortium Stake	23.9%
IndianOil Stake	8%

## Taas: Tomorrow's Star

Reserves	196 MMT
Production	1 MMTPA
Peak Envisaged	5 MMTPA
Consortium Stake	29.9%
IndianOil Stake	10%

Investment Approval for  
**\$1.23 billion**



## Vankor

US\$ 598 million invested  
(till 31.03.2017)

## Taas

US\$ 408 million invested  
(till 31.03.2017)



# Diversified Across Geographies and Energy Sources

## Geographical Diversification

**IndianOil Mauritius Ltd. (IOML) (100% Stake)**

- Aviation, terminal & retail business
- 24,000 MT Storage Terminal
- Market Share : 24%



**Lanka IOC Plc. (75.1% Stake)**

- Storage, terminal & retail business
- 200 retail outlets
- Market Share 43.5%



**IOC Middle East FZE (100% Stake)**

- Marketing of Lubes



## Diversification Across Sources

Gas



- JV for City Gas Distribution with presence in 9 Cities
- 5 MMTPA LNG import, storage and re-gassification terminal under construction at Ennore (Near Chennai)
- Ennore –Tuticorin Pipeline (1175 km)

Wind Power



- Wind – 167.60 installed capacity
- 47 MW plant at Gujarat;
- 48.3 MW plant at AP
- 72.3 MW plant at Rajasthan

Solar



- 6000+ Retail Outlets Solarised. Installed capacity 24 MW (Mar'17).
- Other Solar capacity is 20 MW

# Strong Focus on Research and Development

## Focus on Products & Technology

### INDMAX

- Technology developed to maximize light distillates from refinery residue

### Indane NANOCUT LPG

- Hi-therm LPG based metal cutting gas
- Improved efficiency and safety standards

### Diesel Hydro treating

- Commercialized 1.2 MMTPA grass-root DHDT facility in Bongaigaon

### Railroad Oils

- 1st in India to introduce multi-grade railroad oil to Indian Railways - significant fuel and oil savings

### Naphtha Isomerization

- Retrofitting of Bongaigaon refinery for producing Euro-III/IV motor spirit

### Marine Oils

- One of six companies to develop "OEM Approved Marine Technology Equipment"

### Fuel Efficient Engine Oils

- Commercialization of R&D developed fuel efficient engine oil for gasoline & diesel car

### Hot Rolling Oils

- Commercialization of R&D developed energy efficient hot rolling oil in association with RDCIS in steel plants

## Collaborations



Game-changing technology for Conversion of CO<sub>2</sub> to value added products

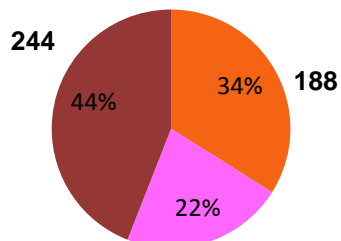


Conversion of Carbon dioxide to chemicals

## Active Patents Portfolio

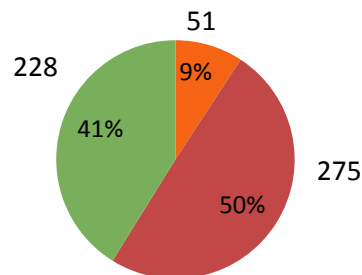
As on March 31, 2017

### By Geography



122  
India USA Others

### By Division



51  
228 275  
Lubes Refineries Others

Total Patents: 554

## Investments in Research & Development

**Indalin:** Technology for conversion of naphtha to light olefins, LPG & aromatic rich gasoline; feasibility under study

**Delayed Coking:** Thermal cracking technology for conversion of long/short residue to distillates. Partnership with Engineers India Limited

**Octamax:** Technology for dimerization of cracked C4 to high octane (RON) component for Euro IV/V gasoline

**FCC Catalyst Additives:** CO - Combustion promoter, Coke Reduction Additive, Residue Upgradation Additive for bottom Upgradation

**DHDS / DHDT Catalysts:** Demonstrated at CPCL for ULSD in 2009. Partnership with Sud-Chemie India Limited (SCIL)

**Vegetable Oil co-processing in DHDT:** Successful technology demonstrated in 2013 including demetallation of vegetable oil

## INDMAX: INDane MAXimization



IndianOil R&D's "Make In India"  
Initiative

Indigenously developed  
technology to bridge India's LPG  
Deficit

Over 2 times LPG yield over  
regular FCC

Flexibility to cater to Seasonal  
Demand: LPG/ MS/ HSD Mode

High Octane MS (97-98 RON)  
production

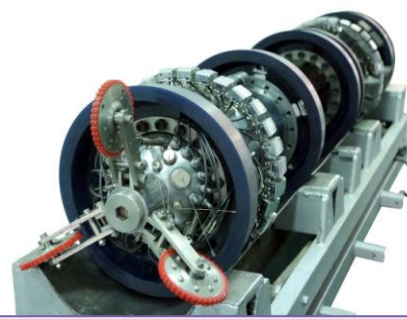
**INDMAX unit being installed at Bongaigaon refinery as well**

# R&D Prowess

- *Technology Commercialisation*



**35 TMTPA INDAdapt<sup>G</sup> Plant at Guwahati Refinery**

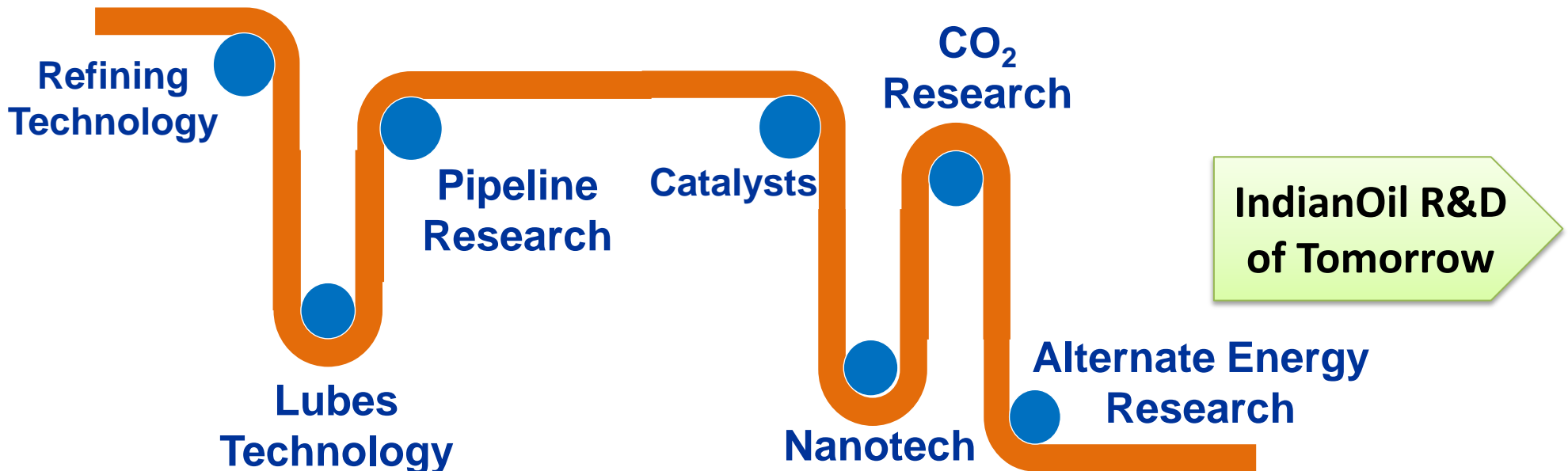


**Indigenous In-Line Pipeline Inspection Tool**



**Indigenously Developed Delayed Coker at Barauni**

- *2<sup>nd</sup> R&D Campus – Upscaling Thrust Areas*



**New generation of Lead Acid Battery trials underway**

# Investing In Future Growth

## Major Ongoing Projects

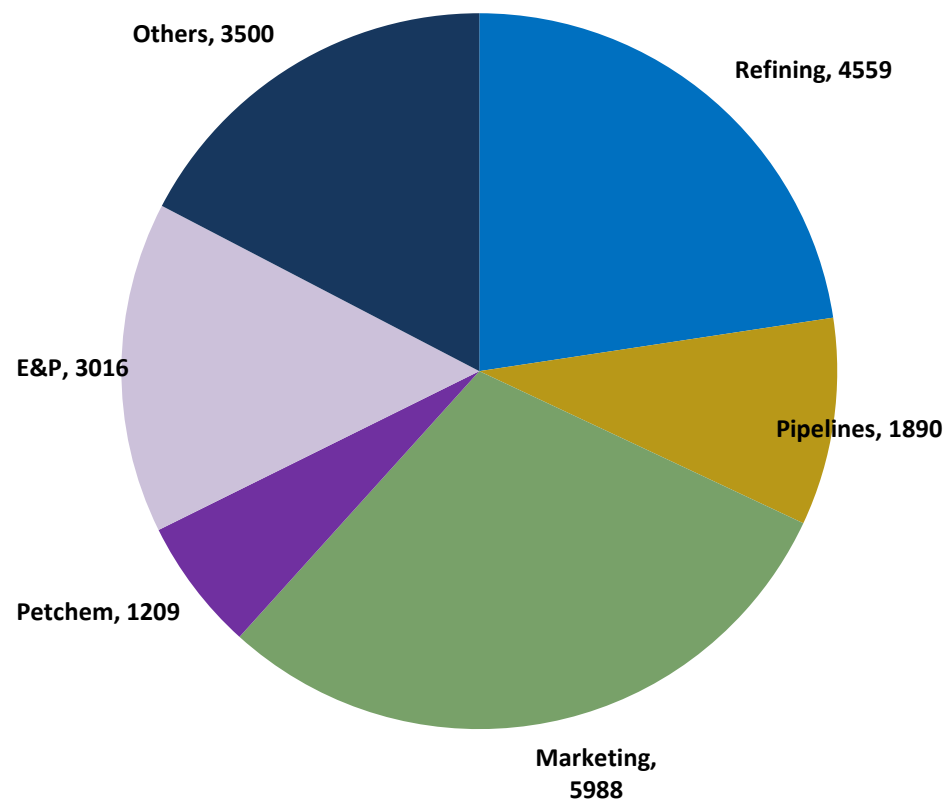
Project	Estimated Cost (INR/Cr)
Polypropylene unit at Paradip	3,150
Coker at Haldia	3,076
BS-VI Projects	15,411
INDMAX unit at Bongaigaon	2,582
Paradip-Hyderabad Pipeline (1150 km, 4.5 MMTPA)	2,321

## Major approved Capex Plans

Project	Estimated Cost (INR/Cr)
Ennore – Tuticorin Natural Gas Pipeline	4,497
Koyali – Ahmednagar – Solapur Pipeline	1,967
Phase – IV of Retail Automation	1,338
Haldia Barauni Product Pipeline	1,038

## Planned Capital Expenditure Outlay<sup>(1)</sup> (2017-18)

(INR/Cr.)



Capex planned for 2017-18, approx INR 20,162 Cr

# Experienced Management Team & GOI Ownership and Support

## Management Team



**Sanjiv Singh**  
*Chairman*  
35+ Year Experience

- Handled all aspects of Refining activities. Previously headed the Refinery Division. Also worked with centre for High technology and with Nigeria Petroleum National Company.
- Chemical engineer from IIT Roorkee



**A K Sharma**  
*Director (Finance)*  
32+ Year Experience

- Handled various assignments in finance functions. Was at the forefront of treasury operations to raise funds for IOC. Credited for issuing the first ever foreign currency bonds of IndianOil in the international market.
- Chartered Accountant (CA) by profession. Also possesses law degree.



**Verghese Cherian**  
*Director (HR)*  
32+ Year Experience

- Possesses a rich and comprehensive experience in human resource discipline in various positions at IndianOil. Also headed IIPM, an apex training centre of IndianOil
- Post graduate in Social Work (MSW).



**Anish Agarwal**  
*Director (Pipelines)*  
36+ Year Experience

- Has held various important portfolios in Pipelines, and has worked in various disciplines like operations, maintenance, engineering services, projects, etc.
- Electronics engineer from Punjab Engineering college and Executive MBA from MDI, Gurgaon.



**B S Canth**  
*Director (Marketing)*  
32+ Year Experience

- Has held several key portfolios including sales, operations, human resources etc. Has made significant contribution as a member of Retail Advisory Committee.
- PG in Personal Management & Industrial Relations and a Law graduate.



**G K Satish**  
*Director (Planning & Business Development)*  
30+ Year Experience

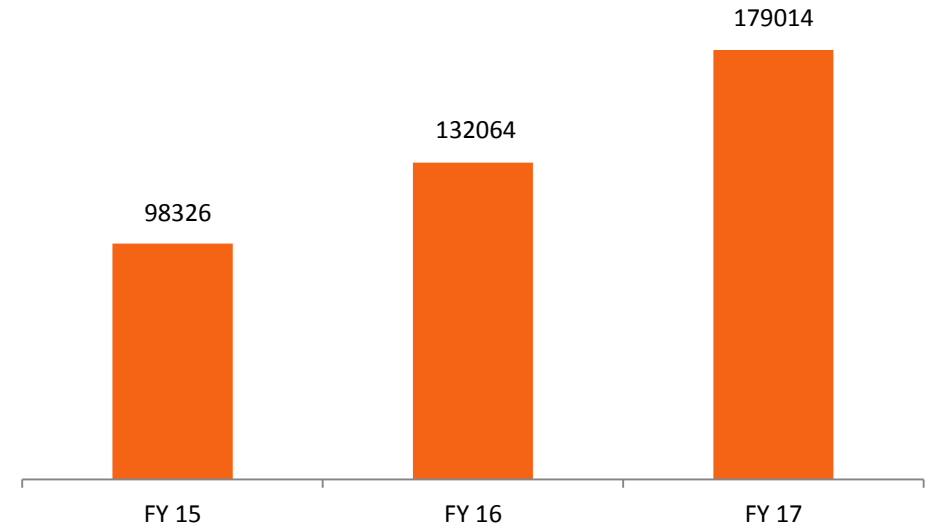
- Has experience in varied areas of business including International Trade, Business Development, Natural Gas, Marketing Operations, Logistics and Human Resources.
- A Graduate in Mechanical Engineering from the NIT Surat, and a Post-Graduate in Management from MDI, Gurgaon .



**Dr. SSV Ramakumar**  
*Director (R&D)*  
30+ Year Experience

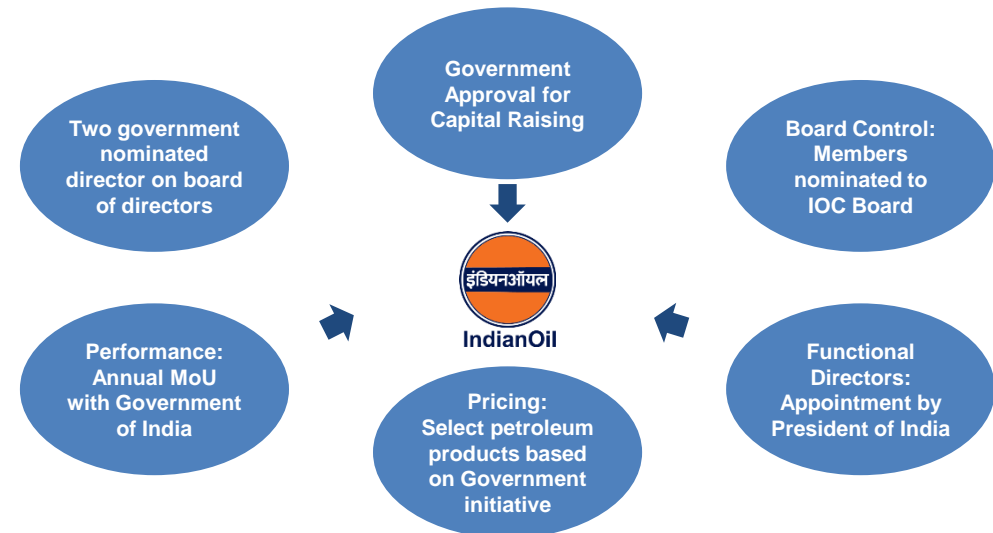
- Has three decades of R&D experience in downstream hydrocarbons sector, notably in the areas of refinery process research streams
- A doctorate in Chemistry from IIT-Roorkee

## Contribution to Exchequer (in INR/Cr)



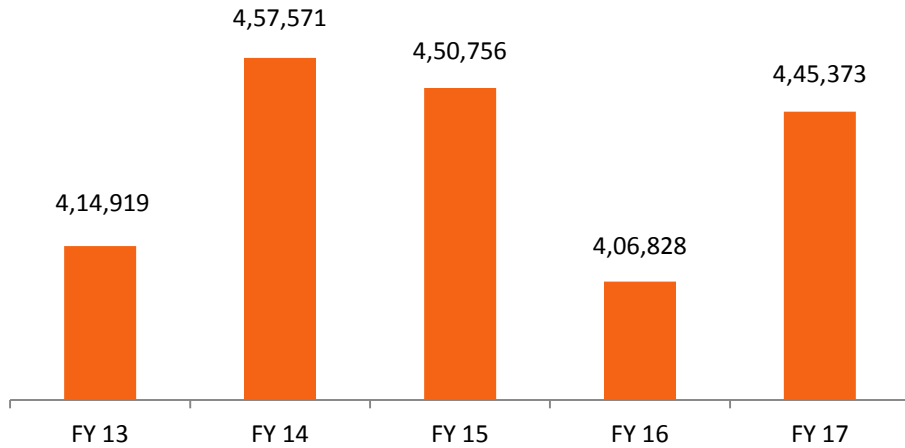
Source: Company Filing

## Strong Support From the Government of India

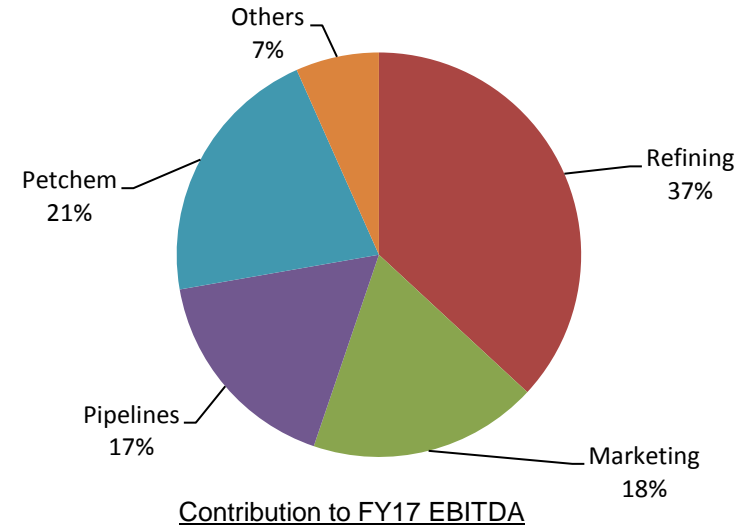


# Our Differentiators: Strong Financials

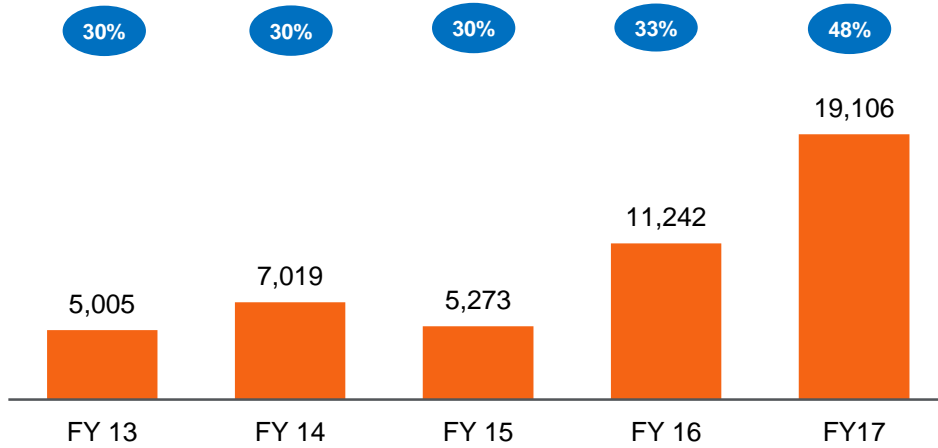
### Turnover (in INR/Cr)



### EBITDA (%)

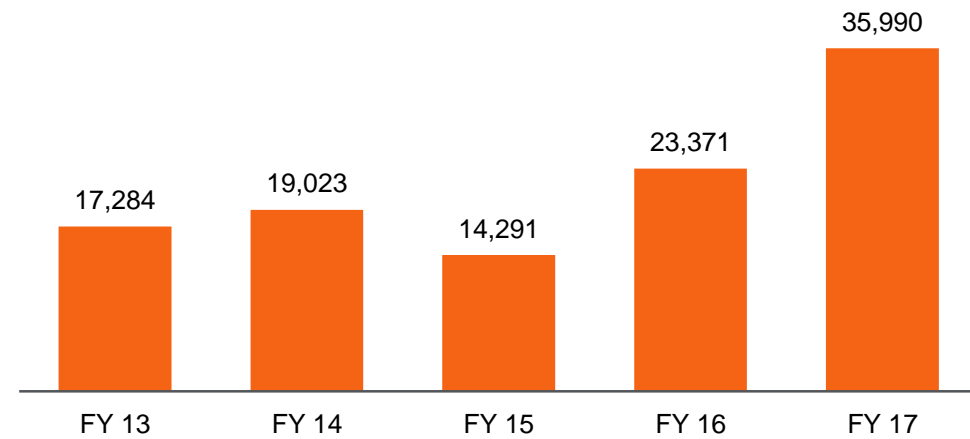


### Net Profit (in INR/Cr) and Dividends (%)



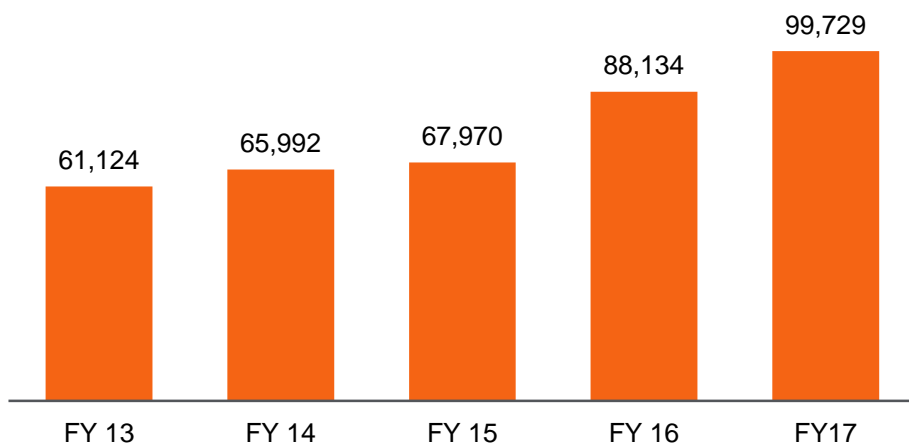
 Dividend Payout Ratio (% of PAT)

### EBITDA (in INR/Cr)

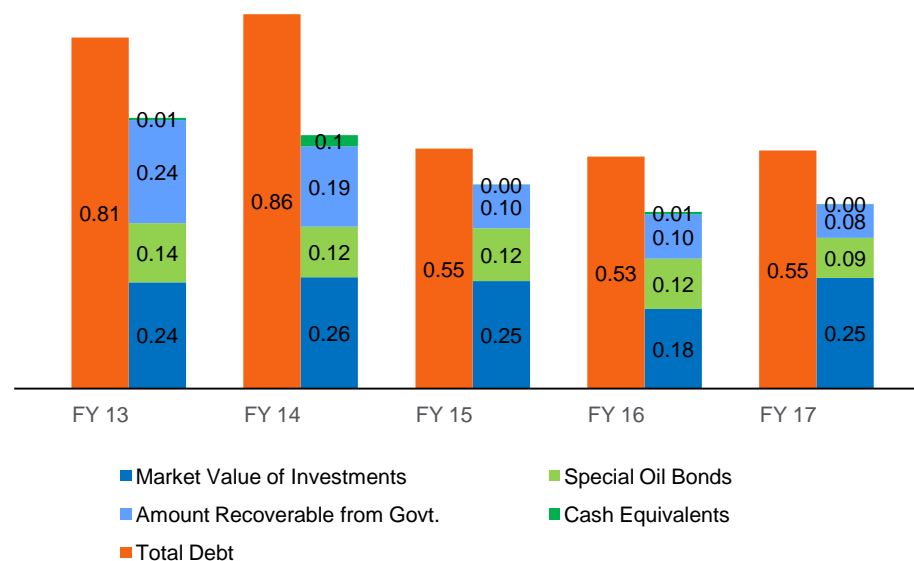


# Our Differentiators: Strong Financials

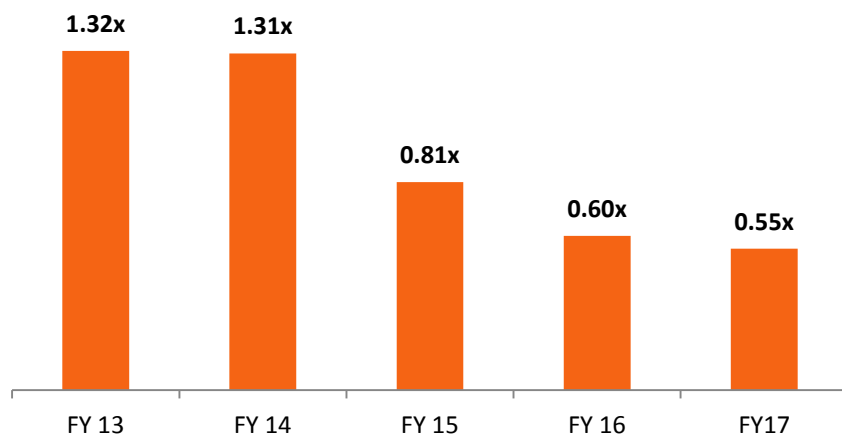
### Net Worth (in INR/Cr)



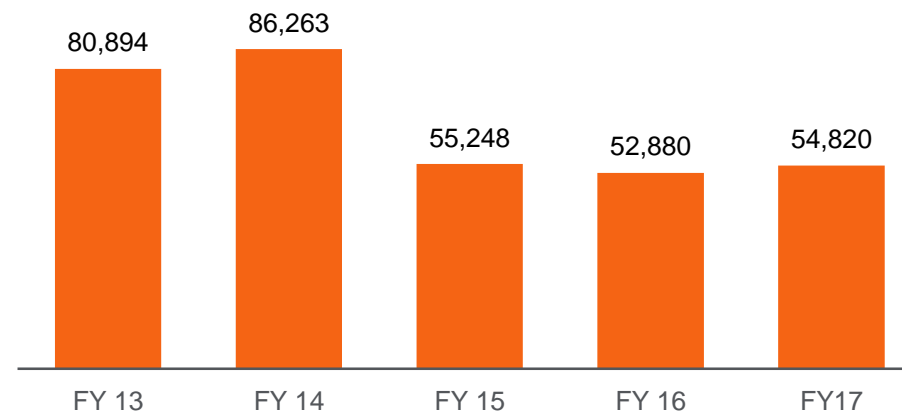
### Cash breakdown & Debt (in INR/Trillion)



### Debt / Equity



### Reduction in Debt Level (INR/Cr)



(1) Received from Government of India in lieu of compensation till the year FY 2009.  
 (2) Core Debt = Debt less cash receivable from Government



# Conclusion

**India's Largest Oil Company**

**...Focused on Creating Shareholder Value**

**1**

- Largest Refiner in the Country

**2**

- Pan-India Pipeline Infrastructure

**3**

- Leading Market Share Across the Portfolio

**4**

- Integrated Operations Across the entire Energy Value Chain

**5**

- Strong Focus on Innovation Through R&D and Alternate Energy Sources

**6**

- Driven by a Management Team That has Delivered Results

**7**

- With Strong Support from the Government of India

# Key Risk Factors

- Fluctuations in commodity prices (e.g. crude oil)

- Fluctuation in exchange rates (INR – US\$)

- Fluctuations in global petroleum product prices