

MANAGEMENT'S DISCUSSION AND ANALYSIS

FORWARD-LOOKING STATEMENT

The report contains forward-looking statements, identified by words like 'plans', 'expects', 'will', 'anticipates', 'believes', 'intends', 'projects', 'estimates' and so on. All statements that address expectations or projections about the future, but not limited to the Company's strategy for growth, product development, market position, expenditures and financial results, are forward-looking statements. Since these are based on certain assumptions and expectations of future events, the Company cannot guarantee that these are accurate or will be realised. The Company's actual results, performance or achievements could thus differ from those projected in any forward-looking statements. The Company assumes no responsibility to publicly amend, modify or revise any such statements on the basis of subsequent developments, information or events.

OVERVIEW

The global economy in FY 2014-15 witnessed divergent trends among major economies and stress on major oil producing countries as a direct result of sharp decline in energy prices, especially in the second half of the year.

Strong growth in oil output from non-OPEC (Organisation of the Petroleum Exporting Countries) producers, coupled with weak demand in some key consumption economies led to an oversupplied oil market, precipitating a sharp decline in oil prices, during the year. The decline in oil prices was further accentuated by OPEC's decision not to cut back production in their respective countries. A sustained lower oil price environment will benefit commodity importing countries, such as India. Falling energy prices have significantly improved India's overall fiscal landscape, and augur well for growth in domestic consumption.

Despite unpredictable headwinds, the global economic recovery is gaining momentum. These winds of positive change have masked the growth divergence among major economies.

Specifically, the recovery in United States was stronger than expected, while performance in Japan and Eurozone has fallen short of expectations. This has resulted in the dollar appreciating vis-à-vis other G7 currencies. The currencies of commodity exporting countries weakened due to fiscal and trade imbalances.

India's economy is poised to return to its high-growth path, thanks to lower fiscal and current account deficits, falling inflation, benign commodity prices, and structural reforms to boost investments. Monetary policy is also likely to be supportive with the Reserve Bank of India (RBI) having moved to flexible inflation targeting. The manufacturing sector is likely to benefit from lower

interest rates. The share of investments in Gross Domestic Product (GDP) is at 29% (compared to 33% in 2007) and is expected to pick up. However, productivity and capital efficiency improvement are likely to drive near-term growth.

Despite the significant decline in commodity prices, Reliance Industries Limited (RIL) delivered a robust financial performance, led by record earnings from the refining business. The dramatic fall in crude oil prices impacted RIL's upstream business, and resulted in lower revenues and stock values for the refining and petrochemical businesses. However, the benefits from demand revival, strong product margins and lower energy costs outweighed inventory effects, and both refining and petrochemical businesses ended the year on a strong note. In FY 2014-15, Reliance (consolidated RIL) achieved:

- Highest ever consolidated net profit of ₹ 23,566 crore (\$ 3.8 billion)
- Record Refining EBIT of ₹ 15,827 crore (\$ 2.5 billion), Gross Refining Margins (GRM) of \$ 8.6/barrel (bbl)
- Dividend of 100%, payout of ₹ 3,559 crore (\$ 569 million)

Operationally, RIL continues to optimally utilise its best-in-class downstream assets, with near full utilisation levels in most petrochemical units. RIL processed 67.9 million metric tonnes (MMT) of crude oil at its Jamnagar refinery complex, achieving 110% operating rate. Continuing its emphasis on processing challenging and most advantageous crudes, RIL processed 13 new crudes during the year. The crude sourcing strategy was driven by continuous adjustment of sourcing pattern based on relative economics. The ability to operate at high utilisation levels and switch product slate to suit market conditions enable RIL to capture margin optimisation opportunities in the market.

RIL ranked 114th in the Fortune Global 500 list of the World's Largest Corporations in terms of revenues, and was



Processed 67.9 MMT of crude oil at Jamnagar refinery

ranked 155th in terms of profits. This is the 11th consecutive year that RIL has featured in the Fortune Global 500 list.

HIGHLIGHTS AND KEY EVENTS

Reliance delivered an industry-leading performance across its refining and petrochemicals business, despite a challenging crude market environment. Its international upstream business demonstrated strong volume growth, whilst domestic Exploration and Production (E&P) business witnessed lower production due to geological complexities and natural decline in the fields. Reliance also made substantial progress on various projects in the refining and petrochemicals business during the year. These initiatives are expected to create significant value for its stakeholders. Furthermore, strong growth momentum was maintained in its consumer-facing retail business.

Refining and Marketing – Record earnings

The refining business delivered record earnings, driven by strong underlying business performance. Refining margins were robust on the back of healthy product cracks and lower energy costs. The year's key highlight was the dramatic decline in crude prices. Continuous non-OPEC crude oil production growth, led by the US, partial return of Libyan barrels, muted oil demand growth resulted in an oversupplied crude market, leading to a sharp decline in crude oil prices. The fall of oil price was further accentuated by OPEC's decision not to cut back production in their respective countries. RIL's refining margins at \$ 8.6/bbl significantly outperformed regional benchmarks as the superior configuration of its refineries enabled it to benefit from strong light product cracks, favourable crude differentials and stable middle distillate cracks.

Petrochemicals – Focus on capacity creation

Petrochemical business EBIT margins improved to 8.6% from 8.1% in the previous year. The improvement in EBIT margins were aided by firm polymer and polyester deltas, partly offset by weak fibre intermediates deltas.

RIL successfully stabilised the production at its new Polyester Filament Yarn (PFY) facility at Silvassa, which had started production towards the end of the last financial year. This expansion has further strengthened RIL's position among the world's largest producers of polyester fibre and yarn. The new PFY plant at Silvassa is the most automated and one of the most environment-friendly plants globally.

During the year, RIL also started production at its new 150 kilo tonnes per annum (KTPA) capacity Styrene Butadiene Rubber (SBR) plant at Hazira, which is also India's largest plant. The plant has capability to produce an entire range of dry as well as oil extended grades of emulsion SBR. With this, RIL has reaffirmed its leadership in synthetic rubbers in the Indian market.

During FY 2014-15, RIL also expanded its Poly-Butadiene Rubber (PBR) capacity. With the start-up of new PBR capacity at Hazira, RIL is expected to increase its domestic market share as substantial portion of production from new line will be placed in the domestic market.

RIL has also started new Polyethylene Terephthalate (PET) resin facility at Dahej, Gujarat. The plant consists of two lines with a combined manufacturing capacity of 650 KTPA. This is one of the largest bottle-grade PET resin capacity at a single location globally. This will consolidate RIL's position as a leading PET resin producer with a global capacity of 1.15 million metric tonnes per annum (MMTPA).

RIL also started new Purified Terephthalic Acid (PTA) plant at Dahej, Gujarat. The plant with a capacity of 1150 KTPA is built with 'Invista technology'. This state-of-the-art facility is highly energy efficient and environment friendly. With this facility, RIL's total PTA capacity will increase to 3.2 MMTPA and global capacity share to 4%.

RIL announced a project to source 1.5 MMTPA of ethane from the US to feed its crackers in India. RIL executed storage and capacity agreements for liquefaction and export of ethane with a North American terminal, which is expected to commence operations in the second half of 2016. RIL also placed orders for building of Very Large Ethane Carriers (VLECs) in a Korean yard and entered into a shipping management agreement to ensure end-to-end integration. RIL has initiated discussions with major ethane suppliers in North America for long term sourcing arrangements. The project is expected to significantly improve the long term competitiveness of its cracker portfolio through dedicated feedstock, enhanced margins and higher capacity.

Oil and Gas Exploration and Production - Sustained performance

International - Growth in Shale gas business

The US shale gas business witnessed macro headwinds, with a sharp downturn in commodity prices, especially in the case of oil. But operationally, the business continued its strong performance, with production at record levels. During the Calendar Year (CY) 2014, gross JV production averaged at ~1.2 Billion Cubic Feet equivalent per day (BCFe/d), reflecting 26% y-o-y growth. The US shale business delivered EBIT of \$ 402 million, an increase of 36.3% on y-o-y basis.

During the year, RIL and Myanma Oil & Gas Enterprise (MOGE), an enterprise of the Government of Myanmar signed a production sharing contract for two offshore blocks (M17 and M18) in the Tanintharyi basin of Myanmar. RIL will be the operator of the blocks with a 96% participating interest. The United National Resources Development Services Co. Ltd. (UNRD), a Myanmar company, will hold the remaining interest in the block.

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

Domestic

Gas production from the KG-D6 field declined by 12% to 157.6 Billion Cubic Feet (BCF) in FY 2014-15. Efforts by RIL and its JV partners to augment production from the field through interventions like side-track wells and onshore terminal booster compressor helped partly offset the natural decline in the field.

During the year, RIL made significant progress towards development of two Coal Bed Methane (CBM) blocks, Sohagpur East and Sohagpur West. Detailed engineering and construction activities have been completed. RIL expects first gas production from these blocks during FY 2015-16.

In October 2014, Government of India (GoI) notified the New Domestic Natural Gas Guidelines, 2014. Based on the new guidelines, domestic gas prices in the period from November 2014 to March 2015 were set at \$ 5.05/ Million British Thermal Units (MMBTU) on Gross Calorific Value basis.

Retail Business – Gaining growth momentum

Reliance Retail continued its growth momentum, despite a challenging macroeconomic environment. Its revenues for FY 2014-15 increased by 21.2% to ₹ 17,640 crore, while EBIT was at ₹ 417 crore. The retail business achieved several new milestones during the year. The Company enhanced its presence across various format sectors. Reliance Retail now operates 2,621 stores across 200 cities, with over 12.5 million square feet of space. Reliance Trends now operates over 200 stores and sells over 1,50,000 pieces of garments per day. Reliance Digital operates over 1,100 stores and the Digital Express Mini format has established itself as the country's largest mobile phone retail chain. Reliance Market further consolidated its position as the largest cash-and-carry operator in the country, with 43 operational stores and patronage of more than 1.5 million registered members.

Jio Infocomm– Building infrastructure to roll out digital services

Reliance Jio Infocomm Limited (RJIL), a subsidiary of RIL, is setting up a pan-India telecom network to cater to the highly underserved Indian market, reliable high speed internet connectivity (4th generation), rich communication services and various digital services in key domains, such as education, healthcare, security, financial services, government-citizen interfaces and entertainment. RJIL aims to provide anytime, anywhere access to innovative and empowering digital content, applications and services, thereby propelling India into global leadership in digital economy.

RJIL has made significant progress in building its 4G-LTE (Long Term Evolution) business, including physical network infrastructure, systems and processes, sales and distribution network, applications and services and content, among others. It is working with strategic partners who have committed significant resources,

knowhow and global talent to support deployment and testing activities currently underway.

During the year, RJIL successfully acquired the right to use spectrum in 800 MHz band or 1800 MHz band or both in 13 key circles across India in the spectrum auction conducted by Department of Telecommunication (DoT), GoI. RJIL plans to provide seamless 4G services, using LTE technology in 800 MHz, 1800 MHz and 2300 MHz bands through an integrated ecosystem. With this new spectrum, in addition to the pan-India 2300 MHz spectrum, RJIL has spectrum in either 800 MHz or 1800 MHz or both in 20 out of total 22 circles in the country. This combined spectrum footprint across frequency bands provides significant network capacity and deep coverage.

Media and Entertainment

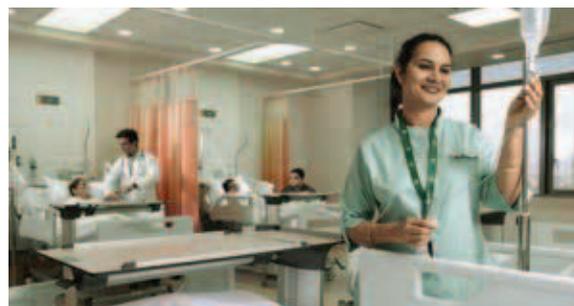
During the year, Independent Media Trust (IMT) of which RIL is the sole beneficiary, acquired the control of Network18 Media & Investments Limited (Network18) including its subsidiary TV18 Broadcast Limited (TV18). This acquisition will differentiate Reliance's Jio business by providing a unique amalgamation at the intersect of telecom, web and digital commerce via a suite of premier digital properties.

Other Corporate Highlights

During FY 2014-15, RIL issued Rule 144A/Regulation S Senior Unsecured Notes of \$ 1.0 billion for a tenure of 10 years and \$ 750 million for 30 years. The 10-year Notes were the lowest coupon Notes ever issued by RIL. The 30 year Notes were issued at the lowest coupon ever achieved by an Asian private corporate issuer for a 30-year issuance. The 10-year Note issuance was the largest private sector oil and gas deal out of Asia (ex-Japan) since the last RIL guaranteed bond issued in 2012. RIL continues to be the only Rule 144A/Regulation S 30-year private corporate issuer out of Asia since 2003.

Corporate Social Responsibility

During the year, RIL has contributed ₹ 761 crore (previous year ₹ 712 crore) towards Corporate Social Responsibility (CSR) which is 3.35% (previous year 3.24%) of profit after tax for the year.



CSR spend during the year amounted to ₹ 761 crore

FINANCIAL PERFORMANCE AND REVIEW

Financial Information – Consolidated and Standalone

Particulars	Consolidated			Standalone		
	FY 2014-15		FY 2013-14	FY 2014-15		FY 2013-14
	₹ in crore	\$ in billion	₹ in crore	₹ in crore	\$ in billion	₹ in crore
Revenue from Operations	3,88,494	62.2	4,46,339	3,40,814	54.5	4,01,302
PBDIT	45,977	7.4	43,800	40,323	6.5	39,813
Cash Profit	36,291	5.8	33,980	31,832	5.1	30,795
Net Profit	23,566	3.8	22,493	22,719	3.6	21,984
Cash and Marketable Securities	84,472	13.5	90,637	78,291	12.5	88,190
Fixed Assets	3,18,523	51.0	2,32,911	1,90,316	30.5	1,51,122
Gross Debt	1,60,860	25.7	1,38,761	97,617	15.6	89,968

Reliance delivered superior financial performance on a consolidated basis, with improvements across key parameters.

Reliance achieved a **turnover** of ₹ 3,88,494 crore (\$ 62.2 billion) for the year ended 31st March, 2015, a decrease of 13.0%, as compared to ₹ 4,46,339 crore in the previous year. The decline in turnover reflects sharp fall in crude oil prices during the second half of the year. Crude oil price averaged at \$ 85.4/bbl for the year, a fall of 21% on y-o-y basis. With decrease in oil and product prices, exports from India were lower by 17.1% at ₹ 2,28,651 crore (\$ 36.6 billion) as against ₹ 2,75,825 crore in the previous year.

- Refining segment contributed 71% of revenues (including inter-divisional transfers). Refining segment revenues were lower by 16% on y-o-y basis reflecting lower average crude oil and product prices.
- Petrochemicals business accounted for 20% of revenues, lower by 7% on y-o-y basis as product prices declined along with sharp fall in feedstock and crude oil prices.
- Oil & Gas business revenue grew by 6%, compared to previous year primarily on account of 27% increase in shale gas production which was partially offset by lower production from Panna-Mukta, Tapti and KG-D6 block in India.

Operating profit before other income and depreciation increased by 7.3% on a y-o-y basis from ₹ 34,799 crore to ₹ 37,364 crore (\$ 6.0 billion).

Strong operating performance from the refining business and stable petrochemicals business performance led to higher operating profits. Refining segment EBIT recorded a robust 18% growth on y-o-y basis to ₹ 15,827 crore (\$ 2.5 billion) with strong GRM and lower energy cost. Petrochemical segment EBIT remained stable at ₹ 8,291 crore (\$ 1.3 billion), with strong polymer deltas

compensating for weaker fibre intermediates deltas. Oil & Gas segment EBIT grew by 13% to ₹ 3,181 crore, led by strong growth in US shale volumes.

Other income was lower at ₹ 8,495 crore (\$ 1.4 billion) as against ₹ 8,911 crore in the previous year, primarily on account of lower average investments. Other income includes interest income of ₹ 4,513 crore and investment income of ₹ 3,516 crore.

Interest cost was lower at ₹ 3,316 crore (\$ 531 million) as against ₹ 3,836 crore in FY 2013-14. Interest capitalised was higher at ₹ 4,409 crore (\$ 705 million) as against ₹ 1,758 crore last year, on account of ongoing expansion projects in the petrochemicals, refining, US shale gas business and also broadband access project.

Depreciation (including depletion and amortisation) was marginally higher at ₹ 11,547 crore (\$ 1.8 billion) as against ₹ 11,201 crore in FY 2013-14. This was primarily on account of higher depletion charges in US shale gas business, which was in line with increase in production.

Profit after tax for the year was at ₹ 23,566 crore (\$ 3.8 billion), an increase of 4.8% over ₹ 22,493 crore in the previous year. Growth in net profit was led by higher operating income from the refining and US shale gas business.

Operating profit before other income and depreciation

₹ 37,364 crore

7.3% increase as compared to previous year

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

The **basic and diluted EPS** for the year was ₹ 80.1 per share as compared to ₹ 76.5 per share in FY 2013-14, registering 4.7 % growth.

The Board of Directors have recommended, subject to approval of shareholders, a **dividend** of 100 % amounting to ₹ 3,559 crore (\$ 569 million), including dividend distribution tax. This shall be the highest payout ever by RIL even though capex commitments are significantly higher.

Key subsidiaries which contributed to incremental revenues and profits were the US shale operations and domestic retail business.

Key subsidiaries

	(₹ in crore)		
	Revenue from Operation	PBDIT	Profit/(Loss) after Tax
Reliance Retail Ventures Limited*	17,640	784	193
GAPCO*	14,006	179	72
Recron Malaysia Sdn Bhd	6,795	(223)	(279)
Reliance Holding USA Inc. (Shale)*	6,010	4,232	756

* consolidated

Capital expenditure for the year was ₹ 1,00,247 crore (\$ 16.0 billion) including exchange rate difference capitalisation. Capital expenditure was principally on account of on-going expansion projects in the petrochemicals and refining business (Jamnagar, Dahej and Hazira), as well as in US shale business and broadband access project.



Capital expenditure during the year amounted to ₹ 1,00,247 crore

Reliance's **fixed assets** stood at ₹ 3,18,523 crore (\$ 51.0 billion) as on 31st March, 2015. This includes fixed assets of ₹ 1,28,207 crore of its subsidiaries mainly in Reliance Jio Infocomm, Reliance Holding USA and Reliance Retail.

Reliance's **gross debt** was at ₹ 1,60,860 crore (\$ 25.7 billion). This includes standalone gross debt of ₹ 97,617

crore and subsidiary debt mainly raised by Reliance Holding USA (₹ 36,359 crore), Reliance Jio Infocomm (₹ 22,305 crore), Recron Malaysia (₹ 1,481 crore), Reliance Retail (₹ 1,682 crore) and Independent Media Trust Group (₹ 1,001 crore).

Cash and marketable securities were at ₹ 84,472 crore (\$ 13.5 billion), resulting in consolidated net debt of ₹ 76,388 crore (\$ 12.2 billion).

RIL's **standalone revenue from operations** for FY 2014-15 was ₹ 3,40,814 crore (\$ 54.5 billion), a decrease of 15.1% on y-o-y basis. **Standalone profit after tax** was at ₹ 22,719 crore (\$ 3.6 billion), an increase of 3.3% against ₹ 21,984 crore in the previous year. EPS on standalone basis for the year was at ₹ 70.2 as against ₹ 68.0 in the previous year.

BUSINESS PERFORMANCE

REFINING AND MARKETING

Refining & Marketing (R&M) business segment sources crude and feedstock from the international markets, processes it at Jamnagar refinery complex and sells high value petroleum products globally. RIL generates value by processing the most advantaged crudes, optimally utilising refinery assets and placing products in the highest net-back markets. RIL manages high quality refining assets with advantaged design capacity for processing 1.24 million barrels per day (MMBPD) of crude, fully utilising the range of options and flexibility that is built into them. Reliance's global footprint includes international trading locations (in US, London and Singapore), international tankages and presence in East Africa through GAPCO.

During FY 2014-15, R&M business posted record earnings, despite volatile market conditions, driven primarily by good product price realisations, lower energy costs, superior configuration, asset optimisation and trading capabilities.

Market environment - Global

Second half oil demand recovery with fall in oil prices

OECD demand reduced by 0.5 MMBPD due to lower consumption in Europe and Japan, non-OECD demand grew by 1.1 MMBPD. Sluggish Chinese demand and improved energy efficiency in non-OECD countries have led to the slowdown in demand growth. This year's oil demand growth is marked by two contrasting halves. Sluggish Chinese demand, improving efficiency standards, especially in the OECD economies led to a marginal decline in oil demand in the first half of 2014.

The steep fall in oil prices has had a significant macro-economic impact on oil producers and consumers. It benefited oil importers with higher disposable income

■ Management's Discussion and Analysis

for consumers and lower costs in the production of final goods. For many importers, the boost from lower oil prices, while sizable, is somewhat muted by the recent currency depreciation against the US dollar. This implies a smaller oil price decline in domestic currency. On the other hand, oil exporters' real incomes and profits have generally decreased.

But overall the sharp decline in oil prices boosted consumption leading to a strong growth in the second half of 2014. In 2014, average oil demand grew by 0.7 MMBPD to 92.5 MMBPD.

Oil markets remained oversupplied, dominated by non-OPEC supply

On the supply side, overall crude oil supply increased by 2.0 MMBPD in 2014, driven entirely by non-OPEC supply, leaving OPEC production more or less flat.

Geo-political tension and social unrest in several major oil exporting countries in the Middle East and Africa was overshadowed by persistent oversupply in the oil market.

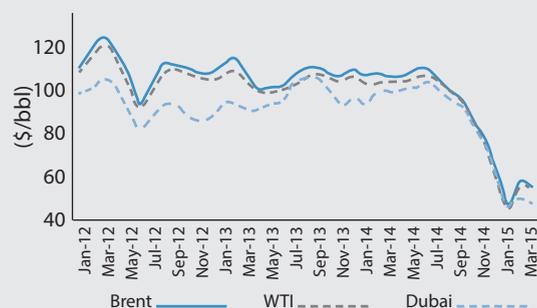
The main feature was the growth in US oil production which surged by 1.6 MMBPD in 2014. Significant production increase in Iraq (0.25 MMBPD), Canada (0.25 MMBPD) and Brazil (0.19 MMBPD) also contributed to overall supply. Post the steep oil price drop in the second half of 2014, most upstream players in the US have announced very significant cut in their capex programme. This may restrict growth in US shale oil production from the second half of 2015.

Oil prices collapsed by over 50%, after remaining range-bound for nearly 3 years

This gap between supply growth of 2.0 MMBPD and demand of less than 1 MMBPD had put pressure on OPEC to cut production. Oil prices had traded in a range of \$100 – \$115/bbl from 2010 until around mid-June of 2014. The average Brent price was \$ 109/bbl from January to June in 2014, but then started to drift down and then by September moved sharply lower. This was triggered by Saudi Arabia clearly signalling its unwillingness to absorb the excess supply, so prices had to fall to make storage economics work in the near term and in the medium term trigger the actions to balance supply and demand.

The steep fall in crude prices has led to a reduction in planned upstream investments. This is expected to have short-term and long-term effects. The decline in investments in the US shale oil may have an early impact on reduction in oil production, while decline in other high cost E&P investments by oil majors could have long-term consequences on future crude supplies.

Oil Prices



Brent Average

FY 2013-14: \$ 108/bbl

FY 2014-15: \$ 85/bbl

Refining margins supported by lower fuel costs and higher product cracks specially Light ends

Lower fuel costs on the back of low oil prices, frequent unplanned outages and delays in new refinery start-ups, supported the margins. New refinery additions and expansions in existing refineries were partly offset by closures in the US, Europe and Japan, leading to a net capacity addition of about 0.6 MMBPD, compared to demand growth of 0.7 MMBPD. Lower oil prices and higher margins led to an increase in average refinery utilisation rates in North America (86.9% in FY 2014-15 compared to 85.1% in FY 2013-14) and Europe (80.7% in FY 2014-15 compared to 78.2% in FY 2013-14). In Asia, operating rates were almost flat at 83.5% in FY 2014-15.

Product Cracks

Asian Cracks - \$/bbl	1Q	2Q	3Q	4Q	FY 2014-15	FY 2013-14
Naphtha	-1.0	-1.6	-5.1	1.5	-1.5	-4.3
Gasoline	16.1	13.2	13.4	15.4	14.5	12.7
Jet	14.3	14.5	17.7	17.1	15.9	16.7
Gasoil	16.0	14.4	16.0	16.2	15.7	17.4
Fuel Oil	-12.8	-10.5	-7.2	-3.0	-8.4	-10.5

Source: Platts

Light distillates

Light ends exhibited strength throughout the year. Gasoline cracks remained supported on robust demand growth in the US, China and India. In the US, falling pump prices pushed gasoline demand particularly in the last few months of the year. Chinese passenger car sales continued to grow, even though at a lower rate, compared to the previous year. In India, narrowing of gasoline – diesel price differential, supported demand for more gasoline cars through the year. Naphtha cracks held relatively stronger during the first half of FY 2014-15, amid a demand escalation from Asian petrochemical sector and

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

some unplanned outages. Naphtha strength continued in the last quarter supported by both petrochemicals and gasoline demand.

Middle distillates

Middle distillates (both diesel and jet/kerosene) weakened when compared to last year, mostly on slow demand growth in major consuming countries like China, India and Indonesia. Cracks got some support due to falling crude prices. Gasoil cracks gained some strength in the last quarter as China's effort to stimulate its economy by cutting interest rates supported demand, and low pump prices in India aided a demand recovery especially during the last quarter of the year.

Jet cracks were weak during the first half of the year; however bounced back in the second half on improved air travel demand and maintenance/unplanned outages in Europe and the US, which tightened the supplies.

Fuel oil

Fuel Oil (FO) cracks were weak at the beginning of the year on tepid bunker demand, but picked up in the second half on low outright prices and improving bunker demand.

Crude differentials

Arab Light – Heavy crude differentials widened marginally to \$ 4.3/bbl in FY 2014-15 as compared to \$ 4.2/bbl in the previous year. Heavier crudes, particularly from Latin American sources continue to be available with incremental light oil supply in North America. While new refineries getting built are increasingly complex and require heavy crudes as feedstock, crude production increase is more on the lighter side over the next few years leading to possibly narrowing of Light-Heavy differentials in the medium term.

RIL continued to outperform regional benchmarks

RIL refining margins outperformed Singapore benchmark yet again, with a premium of \$ 2.3/bbl over the benchmark during FY 2014-15. Relative performance versus benchmarks was built on advantaged configuration to secure higher value product yields, wider selection of crudes, operational efficiency and record throughputs.



Jetty at Jamnagar

Strong margins in the second half of the year and lower energy costs were the key drivers for record earnings. However, fall in oil prices impacted the value of the inventories, as seen in lower margins for the third quarter.

Gross Refining Margins

Regional Margins (\$/bbl)	1Q	2Q	3Q	4Q	FY 2014-15	FY 2013-14
Singapore Complex	5.8	4.8	6.3	8.6	6.3	5.9
RIL GRM	8.7	8.3	7.3	10.1	8.6	8.1
Rotterdam (Brent)	2.5	5.6	5.9	7.5	5.4	3.9
USGC (WTI)	8.9	11.0	9.4	19.4	12.2	10.6

Source: Reuters

Strategic advantages and competitive strength

Refinery configuration: RIL's refinery at Jamnagar is among the largest and most complex refining assets globally, with a Nelson Complexity Index of 12.7. The refinery's superior configuration gives RIL the ability to process a wide variety of crudes and meet differentiated and stringent product specifications. Additionally, RIL has significant flexibility to alter the product mix, thereby capturing opportunities arising due to the evolving market dynamics.

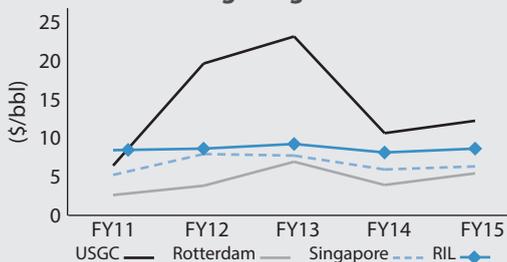
Crude selection and sourcing: RIL's asset flexibility and logistics infrastructure allows optimisation of crude portfolio to suit the changing market conditions. With inherent design flexibility, RIL optimises the crude diet, sourcing the most advantageous crude globally. During FY 2014-15, many new initiatives were launched to enhance the flexibility of RIL's assets and enable them to process even heavier and higher contaminant content crudes. Crude slate processed in FY 2014-15 was one of the most challenging slates, processed by only a few refineries in the world. During the year, RIL processed 13 new crudes grades. RIL has been regularly processing challenging crude grades with sulphur content of over 5%, Total Acid Number (TAN) of 5 milligram per potassium hydroxide (mg/KOH), Viscosity of ~ 5000 cst and an API as low as 10.

Market access: RIL's global outreach, including trading offices at key locations like Houston, London, Singapore and Mumbai, gives it a broad coverage for crude supplies and product sinks. Tankages at major trading hubs allow RIL to move its selling point closer to consumption hubs and improve responsiveness to market needs.

Logistics and supply-chain: RIL's state-of-the-art refineries are supported by a world-class dedicated logistics infrastructure, including a marine facility, giving access to the world's largest crude and product vessels. This facility allows berthing of ships ranging from small chemical carriers to VLCCs, thus allowing it to benefit from strong crude and product freight economics and enhanced cost competitiveness.

■ Management's Discussion and Analysis

RIL's Gross Refining Margin

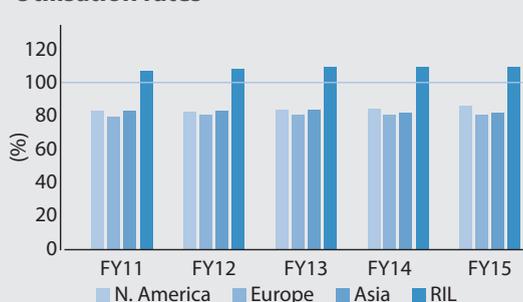


Outperformed

Singapore benchmark by \$ 2.3/bbl

Operational excellence: RIL excels in managing and utilising its assets most efficiently to generate superior returns. While maintaining highest standards of safety, RIL ensures high on-stream factor with focus on improving energy efficiency and reducing operating and maintenance cost.

Utilisation rates



Consistently surpassing

regional and global benchmarks in asset optimisation and utilisation

Several initiatives focusing on debottlenecking, capacity enhancement and yield improvement, are regularly undertaken to enhance RIL's competitive strengths. Some examples are:

- An investment to boost yield of diesel
- Developed ULSD production capabilities in DTA refinery
- A revamp of logistics to allow managing of more grades of middle distillates and faster unloading of high pour point crudes



Heater of Aromatics complex at Jamnagar refinery

Energy efficiency: RIL continues to invest in improving the energy efficiency of its assets and is focused on retaining the pacesetter position in the industry on energy efficiency. Several energy conservation plans were initiated during FY 2014-15, which are currently under implementation and can reduce the energy consumption of refinery assets by about 8% in next 3 years.

Operations and Financial Performance

Financial performance*

	FY 2014-15 (₹ in crore)	FY 2014-15 (\$ in billion)	FY 2013-14 (₹ in crore)	% change
Revenues	3,39,890	54.4	4,05,852	(16.3%)
EBIT	15,827	2.5	13,392	18.2%
EBIT (%)	4.7%		3.3%	

*Consolidated basis

FY 2014-15 revenue from the R&M segment decreased by 16.3% y-o-y to ₹ 3,39,890 crore (\$ 54.4 billion), reflecting lower average crude oil prices during the year. Refining EBIT increased by 18.2% y-o-y to a record level of ₹ 15,827 crore, supported by low energy prices, strong light product cracks, favourable crude differentials and stable middle distillates. RIL's GRM for the year stood at \$ 8.6/bbl as against \$ 8.1/bbl in the previous year. During the year, RIL Jamnagar refineries processed 67.9 MMT of crude, achieving an average utilisation rate of 110%. Total exports of refined products reached \$ 32.5 billion this year, compared to \$ 41.1 billion for the previous year.

RIL was able to fully capitalise on the market conditions, through its operational excellence, higher efficiency and well executed strategies around crude sourcing and product placement. Continuing its emphasis on processing challenging and most advantageous crudes, RIL processed 13 new crudes this year. The crude sourcing strategy was driven by continuous adjustment of sourcing pattern based on relative economics. The ability to operate at high utilisation levels and switch product slate to suit market conditions enabled RIL to capture margin optimisation opportunities in the market.

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

Overall, effective utilisation of secondary processing units, innovative approach to optimise logistics cost and utilisation, production flexibility to swing to higher net-back products and sourcing of best value feed stock enabled RIL to sustain its performance even in a challenging margin environment.

Global and Domestic Retail

GAPCO

GAPCO group owns and operates large storage facilities and retail distribution network in Tanzania, Uganda and Kenya.

GAPCO has significantly improved its standing in the East African market and has emerged as a key supplier to the neighbouring countries.

During 2014, GAPCO sold 2.8 million kilo Litres (mkLs) of petroleum products. This was lower compared to previous year due to change in sales mix to enhance profitability.

GAPCO successfully launched the first loyalty card scheme in Africa called "Safari". The scheme is targeted to further enhance the customer fuelling experience, and offers tailor-made solutions to personal, corporate and commercial vehicle owners.

With deep market insight and improved operational processes, GAPCO is now poised to explore new growth opportunities, especially in retail sales, LPG, jet, lubes and wholesale business.

Domestic-Market environment, operating strategy and value proposition

In October 2014, Gol announced deregulation of High Speed Diesel (HSD) prices leading to re-opening of fuel retailing outlets by the private sector. Post announcement of deregulation, prices of Motor Spirit (MS) and HSD are being changed in-line with international prices. This has presented an opportunity for RIL to re-enter the domestic retail market and ramp-up volumes to compete with local players.

Between 2006 and now, industry volumes have doubled from 40 MMTPA in 2006 to 80 MMTPA. Demand for transportation fuels is expected to grow in line with growth in the country's GDP. The retail network has increased from 31,000 in 2006 to over 53,000 outlets with majority owned by public sector units.

Reliance's operating strategy and value proposition

Reliance plans to re-commission the entire network of 1,400 outlets by the end of FY 2015-16. As on 31st March, 2015, over 300 outlets are operational.

Aggressive communication campaigns and instant reward schemes have been launched to help create a market buzz and quick ramp-up of volumes. Reliance's key differentiator, a unique fleet management programme,

Trans-Connect, will also be re-launched with a host of value-added services. Focus is to ensure consistent and superior customer experience through technology-enabled initiatives.

Reliance fuels undergo stringent quality checks at various stages of product movement up to the feeding terminals. Entire Reliance network is connected on a real time basis ensuring online monitoring and a central control of activities.

The combination of latest technology, well-defined processes, value propositions with right channel partners and manpower ensures consistent delivery of superior customer experience. Trans-Connect is the backbone of the Company's value proposition to fleet owners and provides fleet management solution aimed at revolutionising the way commercial vehicle owners operate. This provides tangible benefits to the fleet owners by reducing the working capital expenses, complete control over the fuel and non-fuel expenses of their entire fleet and smart analysis supporting better decision making.

Reliance is aggressively investing in restart of entire network with a focus on quickly regaining market share.

Capex and growth plan

Major Projects – Petcoke Gasification

Petcoke gasification project is designed to convert low-value petroleum coke into high value syngas for further use as fuels and for hydrogen and chemicals production.

This project would not only cause a steep reduction in LNG imports thus increasing self-sufficiency in energy at Jamnagar, but would also allow to manufacture various other value-added chemicals, such as acetic acid by chemical conversion of syngas which is produced by gasification of petroleum coke.

The gasification project, being based on the 'E-gas technology' (owned by CB&I) and having operational flexibility to use coal and petcoke as feed stock, is expected to enhance the profitability of the refinery complex significantly.



Coke dome with Stacker and Re-claimer

With engineering and procurement activities being nearly complete, full focus is now on construction activities at Jamnagar, which are progressing well to meet the project timelines. Several systems like Stacker / Re-claimer, ETP, Flare stack, Cooling towers are nearing completion. Construction resources are at peak levels with focus on commissioning of other critical systems like ASU, SRU and Super Heater.

RIL is looking at an accelerated commissioning of the project which is set to deliver a quantum, reduction in the energy costs.

PETROCHEMICALS

RIL is among the world's largest producers of petrochemicals with global scale capacities across the polymer and polyester chain. Vertical integration from oil & gas to refining and downstream petrochemical products is among RIL's key competitive advantage. This provides RIL feedstock security, scalability and economies of scale. RIL is the pre-eminent petrochemical company in India with a product portfolio spanning across polymers, polyester, fibre intermediates, elastomers and chemicals.

The deep integration within each chain helps RIL mitigate the impact of price volatility in the global energy and chemical industry. RIL also has a diversified feedstock slate, with both naphtha and gas based crackers, which helps to mitigate risk involved with different feedstock cycles. World-scale capacities and integration help RIL in achieving industry-leading profitability with enhanced stability.

RIL constantly focuses on technology, cost improvements and safe practices, while continuing to invest in new growth opportunities. RIL believes that this strategy is also important in maintaining domestic market leadership in its major product lines and is a source of competitive advantage.

Market environment and outlook

FY 2014-15 provided the petrochemical industry with both challenges and opportunities. The steep decline in global energy prices during the second half of the year was compounded by increased supply from the US markets, leading to a sharp decline in petrochemical feedstock and product prices. The impact of the steep drop in commodity petrochemical prices was felt across the petrochemical chain and resulted in significant destocking for the industry in 3Q FY 2014-15. However, stabilisation of product prices at lower levels is likely to aid a faster revival of demand growth. Petrochemical consumption is correlated to global economic growth. Improving macro-economic activity levels is likely to drive demand for petrochemical end uses that encompass most consumer goods, such as appliances, electronics and automobiles; construction or industrial uses as solvents, coatings as well as packaging.

Olefins and Polymers

Ethylene and propylene are the key petrochemical raw materials used in manufacturing of polymers, like Polypropylene (PP), Polyethylene (PE), Polyvinyl chloride (PVC) and chemicals like ethylene oxide and ethylene glycols.

Global demand for ethylene increased by 3.2% y-o-y to 137 MMT in 2014. Global ethylene operating rates, which are indicative of the margin environment, improved marginally on a y-o-y basis to 87.8% in 2014, sustaining above the five-year average of 86.7%.

Global ethylene supply/demand 2014

Production by feedstock		Demand by end use	
Production : 137 MMT		Demand : 137 MMT	
Naphtha	46%	PE	61%
Ethane	35%	Ethylene Oxide	15%
Propane	9%	EDC	10%
Butane	5%	EBZ	6%
Others	5%	Others	8%

Source: IHS

Northeast Asia and North America remain the world's largest ethylene producing regions. However, recent large investments in the Middle East have propelled this region into the group of the largest-producing regions, and it has now surpassed West Europe in respect to ethylene production. The low cost position of the US Gulf Coast, due to the ethane advantage that has developed over the past several years, with increasing shale gas production, is resulting in new grassroots steam cracker investments.

Mostly, propylene is produced as a co-product in steam crackers or a by-product in refineries. Feedstock changes and/or utilisation rate changes impacts propylene production. RIL produces a large part of propylene as a by-product of refinery, which helps the Company to take full advantage from refinery integration. Propylene demand is dominated by polypropylene production. Polypropylene is expected to remain the largest propylene derivative, and has historically grown at very high rates due to its low cost and versatility.



Methyl Ethylene Glycol plant at Hazira

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

Asian cracker operating rates were higher in FY 2014-15 with an improvement in naphtha cracking fundamentals and a healthy demand environment.

Lower crude oil prices impacted the ethylene cash cost curve as naphtha prices tracked crude lower during the second half of FY 2014-15. This improved the cash cost economics of liquid based crackers, as against crackers based on other feedstock, resulting in a flattening of the global ethylene cash cost curve. Lower crude prices are also impacting the competitiveness of coal-to-chemicals plants with erosion of the spread between coal and oil prices. While North American gas cracking is still at the low end of the cost curve, the reduced margins could lead to a more evenly distributed build-out of ethane based crackers with some already announced (but not yet under construction) projects being pushed out.

Global thermoplastics market in 2014 was estimated at 224 MMT. PE accounted for 38%, PP 26% and PVC 18%, of the market. Demand for these polymers (PE, PP, PVC) grew by 3.8% during 2014 driven by Indian subcontinent, North East Asia (NEA), South East Asia (SEA) and the Middle East. The demand for these polymer products is likely to grow at a CAGR of 4% over 2014-19 period.

Global polyolefin and PVC demand

(In MMT)	2014	2013	% growth
PE	85	82	4%
PP	59	56	4%
PVC	40	39	3%
Ethylene	137	133	3%
Propylene	89	86	4%

Source: IHS

Price and delta environment

Polymers:

The year witnessed a sharp decline in feedstock and product prices. Year-end prices of naphtha and olefins were down 12-43%, compared to prices at the beginning of the year. Polymer prices also declined on an absolute basis, with year-end prices 15-19% lower than prices at the beginning of the year.

Entry and Exit prices for FY 2014-15

\$/MT	Entry price		Exit price	%
	01 st April, 2014	31 st March, 2015		
Oil - Dubai (\$/bbl)	104	53		-49%
Naphtha	914	519		-43%
Ethylene	1,430	1,260		-12%
Propylene	1,320	990		-25%
EDC	490	300		-39%
PE	1,535	1,250		-19%
PP	1,515	1,245		-18%
PVC	1,020	870		-15%

Source: Platts

The low crude oil prices resulted in flattening of ethylene cash cost curve benefiting naphtha-based producers and

reducing margins for gas based producers from the US and the Middle East. Globally, propane prices were also under pressure this year due to increased exports from the US with start-up of new propane export terminals.

Average naphtha prices in Asia were lower in FY 2014-15 due to ample supply and drop in crude oil prices. However, from 2Q FY 2014-15 naphtha prices firmed up due to higher gasoline cracks, increased demand from NEA/SEA and refinery turnarounds. On a y-o-y basis ethylene prices were down by 5% and lagged the decline in feedstock naphtha prices, which was down 18% during the same period. Ethylene prices rebounded in 4Q FY 2014-15, due to supply constraints and improved demand. Ethylene supply in Asia is likely to stay tight due to limited incremental supplies.

South East Asia polymers deltas

(\$/MT)	FY 2014-15	FY 2013-14
HDPE-Naphtha	694	574
PP-Propylene	277	149
PVC-EDC-Naphtha	453	463

Source: Platts

Polymer deltas remained healthy during FY 2014-15, as feedstock prices declined sharply and demand remained stable. On a y-o-y basis, PP deltas improved sharply as decline in propylene prices (with lower downstream activity in China in a well-supplied market) was sharper than the decline in polypropylene prices, which were supported by firm demand. PE delta also remained strong on a y-o-y basis as feedstock prices tracked falling crude oil price. Relatively higher ethylene prices compared to naphtha helped in supporting High Density Poly Ethylene (HDPE) prices, resulting in high HDPE-Naphtha deltas.

Polyester and Fibre Intermediates

Polyester: Polyester markets faced challenges during the year as feedstock volatility was accentuated by capacity additions, which were significantly ahead of demand growth. As with other hydrocarbon chains, prices for feedstock and final products witnessed a steep decline during the year, with price declines ranging from 12-41%.

Entry and Exit prices for FY 2014-15

\$/MT	Entry price		Exit price	%
	01 st April, 2014	31 st March, 2015		
PX	1,206	822		-32%
BZ	1,263	750		-41%
PTA	936	642		-31%
MEG	940	829		-12%
POY	1,350	1,090		-19%
PSF	1,310	1,025		-22%
PET	1,301	971		-25%

Source: Platts and ICIS

Polyester fibre and yarn markets started the year amid uncertain feedstock price trends, leading to a conservative (need-based buying) approach by downstream units. The year 2014 witnessed filament capacity growth of

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2.2 MMT compared to a demand growth of under 2.0 MMT. In addition to the overcapacity in the filament yarn segment, higher raw material cost and consequent declining margins during the first half forced producers to rationalise operations. During the third quarter, raw material costs saw a decline with the steep drop in energy prices. While polyester fibre and yarn prices were also lower by ~25% from their peak in June 2014, the lag in price drops supported polyester deltas. FY 2014-15 margins of Partially Oriented Yarn (POY) and Polyester Staple Fibre (PSF) were higher by 20% on y-o-y basis.

Cotton production of 26.3 MMT in FY 2014-15 remained higher than consumption for the fifth consecutive season. Along with this, the Chinese policy of limiting cotton purchases for the year weighed on prices which ended 23% lower than last year. However, with the steep drop in polyester prices towards the later part of the year, polyester v/s cotton price difference stayed above long-term levels, at \$ 500/MT, mitigating the threat of substitution in blends.

The outlook for the coming year is favourable for polyester as the declining cotton prices globally has discouraged cotton farming in major cotton growing countries, leading to a lower cotton acreage for the next season. This could lead to production falling below consumption for the first time in five years and support cotton prices. Indian polyester demand is expected to reach a level of around 6 MMT, at a CAGR of around 8 % by end of 2020.

Global PET markets witnessed a series of new capacity additions during the year amounting to 1.5 MMT, compared to lower demand growth of 0.6 MMT. Overall market balance weakened even though some capacities were taken off for extended periods especially in China. Prices during the year declined steadily apart from a short spurt during second quarter, average prices for the year were 15% lower than last year. Margins however improved in the second half of the year amid the drop in feedstock costs and ended the year 5% higher on a y-o-y basis. In most emerging markets, demand was strong reflecting better consumer spending. Several countries started anti-dumping investigations against China. Europe withdrew



Polyester Bobbins at Silvassa

an agreement with Indian producers, resulting in higher anti-dumping and anti-subsidy duties from India. The use of food grade Recycled PET (RPET) increased in the US and Europe, amid new capacity addition. But with prices of virgin PET dropping, the use of recycled content as a choice becomes difficult.

Fibre intermediates: During the year, overcapacity in the fibre intermediate markets led to a decline in prices and margins. Paraxylene (PX) demand uncertainty, along with capacity anticipations, kept markets cautious and contract prices remained unsettled for most part of the year. Deltas continued to be above break-even levels though they were 27% lower than previous year. PX witnessed a bunching up of capacity additions during the second half of the year, with 4.7 MMT total additions during the year compared to demand growth of 1.4 MMTPA.

The Chinese PTA markets have witnessed large capacity addition during the past years, changing market dynamics significantly. Poor margins forced producers to shut down unviable plants or implement production rationalisation. The average PTA prices during the year declined by 20% from that of last year. Delta continued to be under pressure due to the overcapacity and averaged at \$ 108/MT as against \$ 117/MT in the previous year.

Mono-Ethylene Glycol (MEG) markets were largely guided by the upstream markets and co-feedstock PTA demand patterns. The average MEG prices during the year declined by 13% from that of last year and average deltas were lower by 6% on a year on year basis.

Polyester and fibre intermediates deltas

(\$/MT)	FY 2014-15	FY 2013-14
POY	401	337
PSF	214	179
PET	155	148
PX	354	486
PTA	108	117
MEG	384	408

Source: Platts and ICIS

Chemicals and Elastomers

Benzene: The expected oversupply of benzene at the beginning of the year in the Asian region was pushed back due to delays in commissioning of plants in Korea, Singapore and India. However, as the year progressed start-up of new capacities during the third quarter resulted in bunching of new supplies, along with the declining global energy markets resulted in price and margin decline during the year.

Linear Alkyl Benzene (LAB): LAB markets were weighed down by the continuous uncertainty in the upstream markets which was coupled with overcapacity. In the absence of adequate Chinese domestic demand, most producers opted for exports resulting in price competition,

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

affecting the overall industry profitability. Continuing volatility and declining feedstock prices led to cautious buying.

Butadiene: During 2014, the global capacity of butadiene was at 14.5 MMTPA with 76.4% operating rate. Demand saw subdued growth of 5.2% y-o-y, driven by synthetic rubber demand primarily catering to the automobile industry. SBR and PBR markets in Asia were weak in 2014 and demand is yet to recover. Most butadiene consuming plants in Asia, especially China have been operating at reduced rates due to weaker downstream demand. This has put pressure on butadiene prices, resulting in severe margin erosion for butadiene manufacturers towards the end of the year.

PBR: Demand for PBR is largely driven by growth in the automobile sector. The global automobile industry grew by 3% to reach 86.9 million units in 2014. Global PBR consumption for FY 2014-15 remained weak and is expected to grow at 5% in 2015. Significant capacity addition in China during 2014, coupled with the slowdown in global economy kept the operating rates of PBR plants at lower levels (~67%). Major manufacturers in China and Korea, operated plants at lower rates of 40-50% due to weak regional demand.

Domestic Scenario

Polymers: India's polymer market growth enjoys high correlation with the country's GDP growth. In the last five years, the country's per capita plastic consumption has outpaced its GDP growth, making India among the world's fastest growing polymer markets with a five-year CAGR of 7.1% (2009-2014). Despite strong growth over the last few decades, the domestic market remains under-penetrated compared to other Asian developing countries.

In India, polymer demand continued to be healthy during FY 2014-15, also supported by lower absolute prices towards the end of the year. During FY 2014-15, India's polymer demand was higher by 6.7%. PP demand grew by 8.1% y-o-y with improved demand from raffia packaging, nonwoven, multi filament, automotive, hygiene applications and appliances sector. PE demand was higher by 6.3% due to firm demand from film packaging, moulded products (i.e. FMCG, pharma and food packaging), and paper/woven sacks lamination packaging sector. PVC domestic demand was higher by 5.4% with higher demand from pipe and fitting sector. Overall, with improving business sentiment and a revival in investment cycle, demand is likely to see higher growth in the medium term.

Polyester and Fibre Intermediates: Feedstock fluctuations in the international markets and the steep drop in the latter part of the year led to cautious buying behaviour by the industry. In addition, severe cash crunch and longer cash cycles resulted in need-based buying. Overall

polyester demand increased by 7% during the year, led by Fully Drawn Yarn (FDY) and PET. Overall growth was constrained by high volatility of prices and reduced liquidity with customers.

FDY witnessed healthy growth from warp knitting segments, while PET witnessed stable growth owing to delayed monsoons during the first half. Shipments during the second half were limited on account of the price volatility and lean season.

Domestic cotton production increased during the seasonal year, owing to higher acreage, making India the largest producer globally. The high production has resulted in prices dropping by 20% during the year, as the exports to China also declined.

Indian polyester industry will be in advantageous position with growth of consumer demand and strong manufacturing base enabling India to serve as regional polyester manufacturing hub.

Elastomers

Indian butadiene demand grew by ~43% to 171 KTPA as against an installed capacity of 435 KTPA, making it a net exporter in the global markets. Domestic demand growth increase was primarily driven by additional capacities in downstream synthetic rubber plants.

India's demand for PBR in 2014 is around 191 KT and is expected to grow at 8% annually in the medium term. India is a net importer of PBR and is likely to remain an importer even after start-up of announced capacity addition in 2017-18. RIL has successfully commercialised its new PBR plant, effectively reducing imports and increasing its domestic market share.

India's demand for SBR is estimated at 250 KT and is likely to grow at 6-8% annually in the medium term. India is currently a net importer of SBR. RIL has started 150 KTPA SBR plant at Hazira and expects to stabilise the same in the coming months.

Operations and Financial performance

Financial performance*

	FY 2014-15 (₹ in crore)	FY 2014-15 (\$ in billion)	FY 2013-14 (₹ in crore)	% change
Revenues	96,804	15.5	104,018	(6.9%)
EBIT	8,291	1.3	8,403	(1.3%)
EBIT (%)	8.6%		8.1%	

*Consolidated basis

FY 2014-15 revenue from the Petrochemicals segment decreased by 6.9% y-o-y to ₹ 96,804 crore (\$ 15.5 billion), reflecting lower product prices resulting from sharp decline in crude and feedstock prices. Petrochemicals segment EBIT was marginally lower at ₹ 8,291 crore (\$ 1.3 billion), as strong polymer deltas were offset by sharp decline in PX deltas and weak PTA / MEG deltas. Petrochemicals EBIT

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margins were higher at 8.6% as product deltas held up well despite lower absolute product prices.

During the year, product prices were lower by around 8% on y-o-y basis. The steep decline witnessed during the second half of the year continued to weigh on the overall sentiments and markets remained cautious and highly sensitive to even minor moves in crude oil price.

The sharp meltdown in the global hydrocarbon prices last year impacted buyer's behaviour, leading to destocking by downstream players. Stability in prices is expected to support demand revival. Continued lower band of energy prices should also be supportive of demand due to price elasticity.

RIL's overall petrochemicals production in India during FY 2014-15 was 22 MMT.

Polymer production

(Production in KT)	FY 2014-15	FY 2013-14
PP	2,685	2,805
PE	969	1,018
PVC	649	671

RIL has an overall market share of 38% in the Indian Polymer market. RIL is the world's sixth largest producer of PP. During FY 2014-15, the Company produced 2.7 MMT of PP. RIL has a pre-eminent position in the domestic PP market with 58% share. During the year, RIL achieved highest ever domestic market sales of over 2 MMT of PP. RIL produced total PE of 0.97 MMT during the year and has market shares of 18% in HDPE, 34% in Linear Low Density Poly Ethylene (LLDPE) and 37% in Low Density Poly Ethylene (LDPE). With 27% market share in the overall PE market, RIL is the leading PE producer in India. RIL's total PVC production was at 0.65 MMT and it has 27% market share in the domestic market. RIL placed significant volumes of PP in the international market while PE and PVC are largely sold in the domestic market.



PP Plant at Jamnagar

RIL took a planned turnaround at its Hazira manufacturing site. This opportunity was utilised to carry out other

routine maintenance and turnaround activities to increase productivity. With advance planning and inventory management, impact on external sales was minimal. RIL also took a planned turnaround at its Nagothane manufacturing site. The cracker and some of the downstream units were shut for four weeks during the last quarter of the year.

Polyester production

(Production in KT)	FY 2014-15	FY 2013-14
PFY	852	671
PSF	621	630
PET	374	347

RIL's polyester production during the year increased by 13% y-o-y with significant gains in filament yarn and PET. Start-up of the new PFY plant at Silvassa has helped production gain and improvement in market share. Overall market share increased to 37% from 34% with gains in filament yarns to 26% from 21% in the previous year.

Fibre intermediates production

(Production in KT)	FY 2014-15	FY 2013-14
PX	2,169	1,989
PTA	2,074	2,045
MEG	635	675

RIL's overall fibre intermediates production remained stable during the year. PX production was higher on a y-o-y basis as there was a planned turnaround in the previous year.

Elastomer / chemicals production

(Production in KT)	FY 2014-15	FY 2013-14
PBR	101	81
Benzene	688	714
LAB	168	164

PBR production increased by 25% on a y-o-y basis with the start-up of new plant at Hazira.

New Product Developments

RIL has continued to add products to its range of deliverables to the customers, thus upholding a spirit of innovation, excellence and better customer satisfaction.

Polymers: The PP business has carried forward its efforts in acceptance and awareness of its pioneered effort "Flexible Intermediate Bulk Container (FIBC)" for silage storage. In the process of continual improvement, RIL has conceptualised anti-rodent bags and laminated bags.

PP nonwoven crop-cover/fruit-cover has been successfully tested on various fruits and vegetables like litchi, grapes, mango, brinjal, tomato, pomegranate. As a part of 'Make-in-India' mission, RIL is providing inputs on specifications of

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

PP Nonwoven Agro textiles to be included in BIS standards to encourage acceptance of domestically produced PP Nonwoven and in-turn facilitate import-substitution.

Geo-synthetics are man-made products, used to stabilise terrain and solve civil engineering problems. Impact of geo-synthetics includes increase in service life of the structure, reduction in maintenance cost and conservation of natural resources.

RIL polyethylene team is working on concept promotion of flexible silos made up of multilayer PE films for food grain storage. These silos provide ease of handling, installation and cost effective storage systems against the constructed warehouses. These silos have huge potential in reducing the food grain wastage across the country.

Polyesters: Reliance is committed for a greener world and continuously strives to make products, which save natural resources and reduce carbon footprint. Reliance has introduced Recron Green Gold using recycled feedstock.

During the year, Reliance added various products in apparel fibre and yarn segment as;

- Recron® Lite – Imparts better bounce, used for extra-light dress materials
- Recron® Lnlyk and Recron® Linen – Special textured and FDY for imparting linen like look and used for variety of fabrics
- Recron® Sparkle – Additional shiny appearance for rugs, fancy yarn and hand knitting
- Recron® Recro Bulk Sparkle – Additional bulk and shine for rugs, fancy yarn and hand knitting
- Recron® Fancy Effect fibre – Small cut length fibres – 6mm,12mm,18mm and are used for fancy effect in yarns, fabric and garments

Reliance under its Recron Certified Product range has launched a variety of products as;

- SleepTunes – India's first music pillow with embedded speakers, which allows users to enjoy their favourite music while sleeping
- Ergo Pillow – It is a unique combination of memory foam and micro fibre and provides an ergonomical sleep design

Reliance developed 2 litre PET bottles with pinch grip for mustard oil for export markets. Reliance has collaborated with one of the largest dairy producers in India to pioneer the introduction of PET bottles in the dairy segment.

Elastomers: In elastomers, development is considered an essential growth factor. This was the stimulus behind setting up of world class Elastomer Customer Support Centre (ECSC), as a platform to invite customers for collaborative efforts, and joint projects to develop new applications for synthetic rubber in Vadodara.

Capex and growth plans

RIL started phase-1 PTA capacity of 1150 KTPA and 650 KTPA of PET capacity at Dahej. Both these plants are expected to stabilise operations in the coming months and will be advantageously positioned to reap the benefits of integration.

RIL has successfully commissioned its new PBR plant. RIL has started 150 KTPA of SBR plant during the year which is expected to stabilise in the coming months. Additionally, RIL has broken ground for its 100 KTPA butyl rubber facility in partnership with Sibur at Jamnagar. During the year, RIL successfully debottlenecked PVC capacity at Dahej, adding 100 KTPA to PVC capacity.

Refinery Off-Gas Cracker (ROGC): India's PE demand in 2014 was 3.8 MMT and expected to grow by 8-10% in the medium term. The market remains supply-constrained; higher domestic availability and new applications are expected to augment demand. To meet the increasing domestic demand, RIL is setting up a new 1.4 MMTPA ethylene cracker (ROGC) along with downstream PE capacity of 1 MMTPA at Jamnagar. The cracker will use refinery off gases as feedstock which will provide competitive cost advantage and feedstock flexibility to the petrochemicals business. The new ROGC cracker is also integrated with downstream MEG to have chain margin advantage of its in-house consumption in polyester chain.

The new cracker is likely to be among the world's largest ethylene crackers and will secure the benefits of economies of scale. This is the first cracker based entirely on refinery off gases, leveraging the scale of RIL's refining complex at Jamnagar, and as such is not replicable. ROGC will have one of the largest ethylene derivative plants including swing polyethylene (with metallocene capability), LDPE and MEG.

Additionally, by virtue of integration with Company's existing refineries at the same site, the plant will be in the top decile in terms of global cost competitiveness on an integrated basis and for all new capacity being built. Currently, ROGC project is in an advanced stage of execution. Renowned EPC companies with global



1.4 MMTPA refinery off-gas cracker to be among the world's largest ethylene crackers

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reach including Fluor, Bechtel, Technip, Tecnimont, Foster Wheeler, Linde, Jacobs and Aker are executing engineering and construction from various locations. Majority of engineering deliverables for procurement and construction have been issued. RIL is also undertaking debottlenecking activities for PP at Jamnagar which is likely to augment capacity by 60 KTPA.

As a part of providing feedstock flexibility and long-term supply security to existing crackers, RIL initiated projects for imports of ethane from the US. This will ensure long-term feedstock competitiveness. RIL is implementing a project to source 1.5 MMTPA of Ethane from US to feed its crackers in India. It has executed storage and capacity agreements for liquefaction and export of ethane with a North American Terminal. RIL has ordered six state-of-the-art Very Large Ethane Carriers (VLECs) which will be the largest vessels ever built in the world. For construction supervision, RIL has entered into agreements with one of the world's largest and reputed shipping companies Mitsui O.S.K. Lines, Ltd (MOL). The ships are expected to be delivered starting last quarter of 2016.

MOL will also operate and manage the vessels after they built and deliver. Ethane import from the US will start from the first quarter of 2017.

RIL's petrochemical capacity additions are aimed at serving growing Indian consumption and will further strengthen its leadership position in the large growing domestic market.

Post completion of petrochemical expansion plans, RIL is likely to be among the top 10 global petrochemical producers by capacity and earnings potential.

The expansions are world-scale and use state-of-the-art technology, which ensures advantageous cost of operations alongside savings in packing and logistic costs. Being strategically located close to the consumption centres, allows for easy access and benefits the targeted markets with an economical and reliable source of raw materials.

OIL AND GAS EXPLORATION AND PRODUCTION

Reliance's upstream business encompasses the complete chain of activity from acquisition to exploration, development and production of hydrocarbons. Reliance has an advantageous position in offshore (deep-water) capabilities, coupled with the knowledge of operations in unconventional areas such as CBM and shale gas. More specifically it:

- Has strong offshore capabilities in India
- Has a strategic partnership with BP in the domestic upstream business
- Can leverage existing infrastructure, knowledge and experience
- Has achieved materiality in the unconventional shale gas business
- Has a balanced portfolio with growth potential

Market environment and outlook

With the fall in oil prices, many US producers have responded to the situation by cutting back on drilling activity and rig counts have dropped by nearly 50%, since their peak in October 2014. The fall in rig count will, however, start impacting the US oil production only from the second half of 2015.

For the US gas markets, FY 2014-15 started with strong gas prices on the strength of record low gas inventories. This was followed by a milder-than-expected summer and continuously increasing production levels resulting in record injection to the storage. This period also witnessed new infrastructure coming on line, particularly in Marcellus and Utica region, and thus, the US gas production reached a record high of 73.5 BCF/D in December 2014, a 5 BCF/D y-o-y increase. This resulted in softening of gas prices towards the end of the year. However, the long-term fundamentals of gas market remain intact. Over 22 BCF/D of take-away capacities are being planned that would help gas off-take. Gulf Coast demand remains strong and is expected to go further up with commencement of Liquefied Natural Gas (LNG) exports and other industrial facilities, along with higher gas export to Mexico. In addition, capex cut by producers, will also cut some of the associated gas production. These are likely to have favourable impact on long term gas prices.

According to research estimates, nearly 3 billion barrels of global oil reserves remain challenged if oil price remains below \$ 70/bbl. The projects most at risk are in oil sands, deep water, ultra-deep water, arctic and some shale oil plays. Estimates of global exploration and production capital expenditure show a fall from \$ 870 billion in 2014 to nearly \$ 680 billion in 2015, about 22% decline. The steepest fall is being experienced in North America, where the capital expenditure programme has fallen by 34%.

Of the \$ 680 billion spend on upstream development, IHS CERA estimates that offshore capex plans will be lower by 10% and are likely to touch \$ 180 billion globally by 2015. Deep and ultra-deep projects account for nearly a 22% of total global costs and deep-water day rates are declining with lower fleet utilisation levels and idle rigs. Typically, there is a 15-18 months lag before costs fully respond.

The share of gas in India's energy mix as per the BP statistical review is 8%. This is modest by international norms since the global average mix is about 23%. India's future gas demand is expected to touch 224 Million Metric Standard Cubic Meter per Day (MMSCMD) by 2020. (Source: IEA's WEO 2014 publication)

In October, 2014 the Government notified the New Domestic Natural Gas Price Guidelines, 2014. The new pricing guideline applicable to most of the natural gas produced in India uses a formula consisting of US Henry Hub, UK National Balancing Point, Canadian Alberta and Russian gas prices to arrive at the domestic gas price.

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

Based on this formula, domestic gas prices in the period from November 2014 to March 2015 were set at \$ 5.05/MMBTU on Gross Calorific Value basis.

Business and Competitive position

The Company's assets include KG-D6, Panna-Mukta, Tapti and two CBM blocks in addition to several domestic and international blocks. RIL also has three joint ventures in North American shale plays with Pioneer Natural Resources, Chevron and Carrizo.

Oil & Gas Portfolio

Block	Country	Partners	RIL Stake	JV Acreage (in acres)
Conventional*				
KG-DWN-98/3	India	NIKO - 10 %, BP - 30%	60%	5,62,906
Panna Mukta	India	BG - 30% ; ONGC - 40%	30%	2,98,256
Mid and South Tapti	India	BG - 30% ; ONGC - 40%	30%	3,63,492
Other Blocks				
NEC-OSN-97/2	India	NIKO - 10 %, BP - 30%	60%	10,23,016
CY-DWN-2001/2	India	BP - 30%	70%	16,95,142
CB-ONN-2003/1	India	BP - 30%	70%	1,17,622
GS-OSN-2000/1	India	Hardy - 10 %	90%	1,48,263
International				
Block 34	Yemen	Hood Energy - 30%	70%	17,33,691
Block 37	Yemen	Hood Energy - 30%	70%	17,03,544
Block 39	Peru	Perenco - 55%, PetroVietnam -35%	10%	18,41,182
M17	Myanmar	UNRD 4%	96%	35,01,976
M18	Myanmar	UNRD 4%	96%	32,92,159
CBM*				
SP(East)-CBM-2001/1	India	-	100%	1,22,317
SP(West)-CBM-2001/1	India	-	100%	1,23,552
Shale				
Pioneer JV	USA	Pioneer – 46.4%, Newpek – 8.6%	45%	1,55,767
Chevron JV	USA	Chevron – 60%	40%	2,30,822
Carrizo JV	USA	Carrizo – 40%	60%	48,393

* Conventional and CBM acreage converted into acres using 1sq. km. = 247.1053 acres

During the year, RIL opted to relinquish two blocks KG-DWN-2003/1 and CY-PR-DWN-2001/3 as part of the ongoing effort to high grade its upstream asset portfolio.

In KG-DWN-2003/1 further progress in petroleum operations were impeded by defence restrictions imposed in October 2012. Since then the JV had continued to seek unrestricted access to the block without success. RIL and its JV partners finally decided to relinquish the block in line with Government's policy. The decision was approved by the Management Committee (MC) in the meeting held in December 2014. CY-PR-DWN-2001/3 was relinquished as prospectivity was not commensurate with the high geological risk involved.

Operations and Financial performance

Financial performance- Domestic

	FY 2014-15 (₹ in crore)	FY 2014-15 (\$ in billion)	FY 2013-14 (₹ in crore)	% change
Revenues	5,507	0.9	6,068	(9.2%)
EBIT	1,250	0.2	1,626	(23.1%)
EBIT (%)	22.7%		26.8%	

Revenues for the domestic oil and gas operations for the year were at ₹ 5,507 crore, a decline of 9.2%. This was largely on account of decline in production and lower crude oil price realisation. EBIT for the year declined by 23.1% on y-o-y basis to ₹ 1,250 crore on account of the lower realisations with no commensurate reduction in cost.

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Production Performance

	Units of measurement	FY 2014-15	FY 2013-14
KG-D6			
Oil	MMBBL	2.0	2.0
Gas	BCF	157.6	178.3
Condensate	MMBBL	0.3	0.3
Panna- Mukta			
Oil	MMBBL	7.2	7.4
Gas	BCF	70.7	65.4
Tapti			
Gas	BCF	14.3	27.3
Condensate	MMBBL	0.2	0.3

RIL's share of production in India during the FY 2014-15 was 142 BCFe.

KG-D6 gas production declined by 12% for the year to 157.6 BCF. Fall in production was mainly due to natural decline in the fields coupled with partial shutdown of MA field due to Hudhud cyclone and the fire in East-West pipeline during the year. This was partly offset by incremental production from side tracks in well MA6H and MA5H.

In FY 2014-15, Panna-Mukta fields produced 7.2 MMBBL of crude, a reduction of 2% on y-o-y basis and 70.7 BCF of natural gas, a growth of 8.1% on y-o-y basis. The increase in production was on account of incremental gains from existing wells and effective well intervention activities. This was partly offset by a decrease in production due to unplanned shutdowns during the year, including the shutdown in July 2014 on account of integrity issue with South Bassein Hazira Trunk (SBHT) coupled with natural decline.

Gas production at the Tapti fields declined by 48% on a y-o-y basis. The decrease is due to natural decline, and field is progressing towards cessation of production.

International business

Reliance's E&P strategy is to balance the portfolio by expanding its international asset base and investing in regimes having attractive internationally competitive terms. A number of opportunities are under review.

Updates:

- RIL and Myanma Oil & Gas Enterprise (MOGE), an enterprise of the Government of Myanmar, have signed production sharing contracts for two offshore blocks (M17 and M18). RIL won both the offshore blocks, after its bids in Myanmar offshore block bidding round – 2013 were declared successful by the Ministry of Energy (MoE) of the Republic of the Union of Myanmar.

- RIL signed a MoU with Petroleos Mexicanos (PEMEX) to co-operate for assessment of potential upstream oil and gas business opportunities in Mexico and jointly evaluate value-added opportunities in international markets.

North American Shale Gas Operations

Background

The shale gas industry in the US has emerged as one of the most cost competitive and agile among upstream basins using state-of-the-art technology to continuously improve productivity and reduce cost. As a result, the sector has consistently seen the entry of new players and production has continued to grow at a steady pace. North America remains market friendly with cutting-edge technology and nimbleness to respond to market challenges with innovative technical and business solutions.

Reliance has partnerships with strong operators who have a proven track record and so far has invested \$ 7.9 billion of Capex in its joint ventures with Pioneer Natural Resources, Carrizo and Chevron including investments in EFS midstream.

Operations and financial performance

Financial Performance

	\$ in million		
	CY 2014	CY 2013	% change
Revenues	984	819	20.1%
EBIT	402	295	36.3%
EBIT (%)	40.9%	36.0%	

Reliance's shale gas business continued on its growth trajectory with revenues and EBIT increasing 20.1% and 36.3%, respectively, despite a challenging price environment. Reliance's share of net sales volume was at 168 BCFe, compared to 131 BCFe in 2013. EBITDA of \$775.1 million in 2014 was up 26% y-o-y. Business gained materiality in terms of production, revenue and EBITDA.

The shale gas business effectively managed the sharp downturn in commodity prices, and high gas differentials, particularly in Marcellus region. WTI oil prices dropped 40% from \$ 90/bbl at the beginning of the year to \$ 53/bbl by the end of the year. Henry Hub gas prices remained higher at \$ 4.43/MMBTU during CY 2014, compared to the average of \$ 3.65/MMBTU in CY 2013, though declined during the year's second half.

Operationally, the business continued its strong performance during CY 2014, with production reaching record levels across JVs. Reliance's share of production in US shale operations was 195 BCFe. Gross JV production averaged at ~1.2 BCFe/d, reflecting a growth of 26% over the levels achieved in CY 2013. Development growth momentum remained strong and performance of its wells continued to be encouraging. All three

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

JVs successfully implemented various value creation initiatives that resulted in increased well count, improved well productivity and reduced well costs. These initiatives significantly add to the long-term profitability and sustainability of the business. The business has reached an overall development maturity (with a significant part of the acreages held by production) and this provides adequate investment flexibility in managing the low price environment through prioritising well capex in the most prolific areas.

Gross JV Production average at

~1.2 BCFe/d

reflecting a growth of 26% over CY 2013

Eagle Ford shale remains one of the most competitive liquid shale plays in the US and is better positioned to remain competitive even in a volatile price environment. Pioneer JV continued implementation of better completion technologies, which has demonstrated improved well performance. Similarly, down spacing efforts progressed well and is improving the potential well count for the JV. Further, the Pioneer JV successfully decreased Drilling & Completion (D&C) costs through initiatives like use of 2-string casing design and efficient pad operations. This improved efficiency, greatly helped managing the depressed oil price environment.

The Marcellus shale area continued to see sustained growth in production with some of the best-in-class gas wells, and continued to contribute significantly to the gas production growth of the US. This growth also resulted in some pricing pressure leading to increased gas price differentials. Carrizo and Chevron, the two Marcellus JVs, remained focused on maintaining competitive cost structure and worked on reducing well costs and lease operating expenses.

All three JVs actively pursued opex and capex reduction initiatives in the current commodity price downturn.

The overall capex during the year was \$ 1.2 billion, lower by 14% over the previous year on account of moderated development pace at Marcellus, and cost efficiency achieved in drilling and completion activities across the JVs. With NEPA initial development maturing there was slow capex momentum. Cumulative capex across all JVs including investment in EFS Midstream LLC stood at \$ 7.9 billion. Substantial part of Pioneer JV capex was met through cash from JV operations, while Carrizo JV was cash positive from operations in 2014. Chevron JV continued to account for most of the ongoing capex and funding needs.

In 2014, the joint ventures drilled 211 wells and put 225 wells on production, taking the cumulative number of producing wells to 838 at the end of the year. Improvement in efficiencies, improving well recovery and cost reductions in development activities for 2014 over the previous year was a key success area during the year.

Reliance's share in gross JV production



27% Growth y-o-y

The Reliance-Shale Gas Operations (Reliance-SGO) share of gross JV production was 195 BCFe in 2014, reflecting a growth of about 27% over 2013 production.

In CY 2014, year-end proved reserves stood at 2.95 Trillion Cubic Feet equivalent (TCFe) for Reliance-SGO reflecting 11% growth in reserve accretion over CY 2013. These proved reserves are about 33% of total resource base. Reserves were positively impacted by benefits of additional well locations in Pioneer and Carrizo joint ventures, marking development upside.

Pioneer Upstream JV

JV successfully pursued further high-value growth. Producing well count increased from 371 at year-end 2013 to 499 at year-end 2014, which was a major factor in the growth in production volumes. The JV produced 250 BCFe of products through the year (gross) and achieved net sales of 98.3 BCFe. The share of liquids increased to 68% in 2014, reflecting growth in activity in oil-rich acreage. Ongoing development thrust on infill drilling and down spaced wells in Lower Eagle Ford and Middle Eagle Ford provided for additional potential locations leading to growth in proved reserves by 12% at year-end 2014.

Chevron Upstream JV

The JV production stood at 122 BCFe, reflecting growth of over 25% from the previous year and achieved net sales of 42.2 BCFe. Growth of 13% also witnessed in proved reserves from year-end 2013 to year-end 2014. JV is pursuing paced development in view of the challenging pricing environment, while working on various operational and cost efficiency improvement initiatives to maximise well recovery and decrease well cost.

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Carrizo Upstream JV

In view of a challenging price differential environment, Carrizo JV deferred bringing some wells online as per original schedule and also decided to curtail production to produce only at optimal levels (for operational considerations). The JV production of 56 BCFe reflected a 39% increase over the previous year with net sales volume of 27.1 BCFe for 2014. Carrizo JV opted for deferment of drilling activities to CY 2016, considering the price environment. While year-end 2014 reserves were largely unchanged, Carrizo added potential well locations due to Upper Marcellus development plan down spacing.

Capex and growth plans

KG-D6

Appraisal of MJ1 discovery

RIL along with JV partners made a significant hydrocarbon discovery in FY 2013-14, called 'D-55' in well MJ1 drilled in the block KG-D6 situated in the Krishna Godavari basin.

As a part of the appraisal programme, three appraisal wells have been drilled to date, of which two appraisal wells were drilled in FY 2014-15. All the appraisal wells have provided vital information on the extent and potential of the reservoir.

In addition, enhanced imaging for reservoir characterisation is underway and the first phase of conceptual engineering has been completed. This will be followed by further engineering to develop a robust scheme of exploitation. Based on these appraisal efforts the JV expects to submit the Declaration of Commerciality (DoC) in the second half of FY 2015-16.

R-Cluster Development

The Field Development Plan (FDP) for the R-Cluster discoveries was submitted in January 2013 and it was approved by the MC in August 2013. Since the approval of the FDP, the KG-D6 JV has made significant progress towards development of the discovery. This includes:

- Front End Engineering Design (FEED) for facilities completed



Gas dehydration units at Gadimoga onshore terminal

- Detailed engineering for Onshore Terminal (OT) modification works required to handle multiple pressure regimes completed; construction work-in-progress
- Geo-mechanical (compaction and subsidence) studies have been completed
- Well completion design study at final stages
- Procurement activities advanced for subsea long leads and installation contract for facilities
- Procurement activities advanced for rig, tangibles and services

There is continued engagement with suppliers and contractors in order to optimise the projects in light of falling, but lagged supply chain response.

Production augmentation efforts in existing producing fields (D1, D3 and D26)

- D1-D3 field continues to produce from eight wells. To maximise the recovery from the field, well intervention jobs were planned for execution in phases. In the initial phase, Water Shut-off (WSO) jobs in three wells were attempted. Although, the outcome of these jobs did not meet expectations, the data acquired from these wells and the lessons learnt have been incorporated in designing the side track jobs in the next phase of well intervention jobs
- Reservoir top-set drilling of a substitute well has been completed, and further drilling, completions and connections are planned to be undertaken during FY 2015-16. Besides, side track activities are planned and well options have been prioritised to undertake these jobs
- Meanwhile, as part of the Onshore Terminal Booster Compressor (OTBC) project, two compressors have been successfully commissioned, with the third compressor expected to be commissioned in first half of FY 2015-16. As an outcome of this effort, augmentation of production in terms of improved recovery from the field is expected to be achieved
- In D26 field, well MA6H and MA5H side track have been completed successfully and put on production

Panna-Mukta

The Panna-Mukta JV has successfully completed 20 years of operation and is entering into the last five years of its contract period. The field is still contributing significantly to the E&P revenue and profitability. During the year, the following activities were carried out to sustain production from this field:

- Intermediate stage compressor piping modification to enhance gas processing capability
- Successful migration of Panna emergency shutdown system from pneumatic system to a more reliable electronic shutdown system
- PMT JV is also in the process of expanding the existing gas lift pipeline network to enhance oil production

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

- Mobilisation of rig for work-over of 15 wells (of which five wells completed) and for drilling of six development wells at Mukta-B

Mukta-B development project is at an advanced stage of completion. Scheduled completion of facilities is expected in the first quarter of FY 2015-16. Drilling of six development wells is scheduled to commence during the first quarter of FY 2015-16 and first oil is expected in the subsequent quarter.

Tapti

Tapti JV production level has steadily declined this year as it is nearing the end of its economic life. The field is currently producing around 1 MMSCMD of gas. The cessation of production is likely to happen during the second half of FY 2015-16.

In line with the production sharing contract, RIL along with its partners have issued an abandonment notice to the Government in December 2013 and started allocating funds for site restoration activity.

Post cessation of production, ONGC as a Government nominee will take over the process facilities and the export pipelines for its Daman development project. As part of the site restoration of Tapti block, Tapti JV will commence necessary decommissioning and abandonment activities (the first of its kind in India's E&P industry) for the balance of the facilities in the coming year.

Other NELP Blocks

NEC-25

No significant development has taken place in this block during the year. RIL continues to wait for the approval of its Integrated Block Development Plan for the discoveries (D32, D40) and approval of proposal for conducting Drill Stem Testing (DST) for D32 and D40 from the regulator.

CY-D5

Post notification of discovery of S1 well (D56), the appraisal programme has been reviewed by MC. The period of appraisal programme is valid up to August 2016. Subsequent to completion of exploration phase II, RIL along with its partner has opted not to enter the phase-III of exploration and also decided not to submit a development plan for discovery D35, for which the DoC has been reviewed earlier.

CB-10

The block was awarded under the NELP-V licensing round and is the only conventional on-land block operated by RIL. Post completion of phase-1 of the exploration period, wherein RIL made eight discoveries out of 18 wells drilled in this block, the Government has approved RIL and its partner to enter into phase-II of the exploration in January 2015. RIL has extensive plans towards drilling to explore and augment additional resources.

During the year, the DoC of eight discoveries was reviewed by the MC. RIL along with its JV partner is actively engaged in preparation of development plan for submission by mid of FY 2015-16.

CBM (Sohagpur East and Sohagpur West)

Development Project

Based on extensive exploration activity, the development plan was submitted to DGH for both blocks and approved by DGH in November 2007. The development plan envisages 1,000 wells to be executed in a phased manner over the contract period.

Development activities have commenced in the two CBM blocks (Sohagpur East and West) with all requisite approvals required for the development stage in place.

As a part of the project scope, RIL is drilling more than 200 wells and setting up two gas gathering stations and eight water gathering stations in phase-I. The land acquisition for phase-I wells and facilities is near completion. Out of phase-I scope, RIL has drilled 168 surface holes, 153 production holes and completed hydro fracturing jobs for 120 wells. Detailed engineering and procurement for sub-surface and surface facilities are completed. Installation and erection of most of the equipment is nearing completion. Installation of well-site facilities is completed for two trunk lines. Laying of gas gathering and water gathering network is under progress. The first gas production is expected in the second half of FY 2015-16.

Shahdol – Phulpur gas pipeline project

Reliance Gas Pipeline Limited, a subsidiary of RIL, is building a natural gas pipeline from Shahdol in Madhya Pradesh to Phulpur in Uttar Pradesh (hook-up point with GAIL's HVJ pipeline), to transport gas from its CBM blocks.

Land acquisition has been completed for all critical installations. Right to Use (RoU) for 261 km out of 302 km is handed over to pipeline construction contractors. Basic engineering (FEED) and detailed engineering are completed. Ordering for all long lead and other items has been completed. Overall project progress of 72% was achieved by the year end and RIL is fully geared up for completing the pipeline work by second half of FY 2015-16.

Update on domestic gas pricing, arbitration and other legal issues

Domestic Gas Pricing

In October 2013, Cabinet Committee on Economic Affairs (CCEA) approved a new gas pricing formula for a period of five years based on the recommendation of the Rangarajan Committee Report on 'The Production Sharing Contract Mechanism in Petroleum Industry'. The Domestic Natural Gas Pricing Guideline, 2014 were notified by the Government on 10th January, 2014. The price under the

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new formula was to be applicable from 1st April, 2014, including the gas produced from block KG-DWN-98/3 ('KG-D6 Block') where the previous approved price expired on 31st March, 2014. The gas price under these guidelines was to be notified by the Government by March 2014.

There was continued delay on the part of the Government in notifying the price in accordance with the approved formula. RIL, BP and NIKO issued a Notice of Arbitration on 9th May, 2014 to the Government of India, seeking the implementation of the 'Domestic Natural Gas Pricing Guideline 2014' notified on 10th January, 2014, while preserving their rights to claim an arms-length market price as required under the Production Sharing Contract (PSC).

On 18th October, 2014, in supersession of its earlier notification of 10th January, 2014, the Government notified the New Domestic Natural Gas Price Guidelines 2014. In view of RIL, the methodology used for valuation of gas under these guidelines, does not reflect true arms-length market price of gas in India as required under the production sharing contract signed with the Government. Without prejudice to any of its rights and contentions, RIL is complying with the guidelines.

KG-D6 Arbitration and other legal issues

RIL sought Government's confirmation that no action was being planned following news reports that the Government may curtail the Company's entitlement to recover its costs on the basis of there being a shortfall in production from levels specified in the development plan. According to the Company the PSC permits full 'cost recovery' of its costs of exploration, development and production from the value of petroleum produced from the KG-D6 Block.

RIL on behalf of all contractor constituents - namely Niko (NECO) Limited (NIKO) and BP Exploration Alpha Limited ('BP') (together, the 'Claimants') served an arbitration notice on the Government on 23rd November, 2011 ('Cost Recovery Arbitration'). Both the Claimants and the Government have appointed arbitrators and on 23rd September, 2014, the Supreme Court nominated Hon'ble Michael Kirby AC CMG as the presiding third arbitrator. Justice Kirby is corresponding with the parties.

Three public interest litigations have been filed before the Supreme Court of India against the Company in relation to the production sharing contract for KG-D6 Block seeking substantially similar reliefs in the nature of; (i) disallowance of cost recovery under the production sharing contract for KG-D6 Block; (ii) quashing the Government's decision to approve the certain gas price formula, and (iii) termination of production sharing contract for KG-D6 Block on the basis that the Company has not achieved the committed production. In the views of both the Company and the Government, point (ii) in the public interest litigation no

longer survives in view of the revised pricing guidelines issued by the government on 1st November, 2014 and being a matter of arbitration. Petitioners have also requested the Supreme Court to stay the Cost Recovery Arbitration. The Company has submitted that the underlying issues which have been flagged by the Petitioners are already subject matter of Cost Recovery Arbitration and the Gas Price Arbitration and the same need to be heard by the arbitral tribunal.

PMT Arbitration

In December 2010, the Company and BG Exploration and Production India Limited (together, the 'Claimants') referred a number of disputes, differences and claims arising under two Production Sharing Contracts entered into in 1994 among the Claimants, Oil & Natural Gas Corporation Limited (ONGC) and the Government (the 'PSCs') to arbitration. The disputes relate to, among other things, the limits of cost recovery, profit sharing and audit and accounting provisions of the PSCs. The value of the Claimants' claims exceeds \$ 500 million. The Government's defence dated 31st January 2012 raised certain jurisdictional objections and asserted a number of substantial counterclaims, including claims for underpayment of profits and failure to complete agreed work programmes.

The parties agreed by consent that the juridical seat of the arbitration would be London, England.

Following an initial merits hearing in May 2012, the Tribunal passed a number of final partial awards, largely in the Claimants' favour. The Government challenged the Tribunal's awards/determinations under Part I of the Indian Arbitration and Conciliation Act 1996 before the Hon'ble Delhi High Court. These challenges were ultimately dismissed after the Claimants prevailed in a Special Leave Petition (SLP) before the Hon'ble Supreme Court on 28th May 2014. The Government filed a Review Petition before the Supreme Court against this judgement, which was unsuccessful, and also filed a Curative Petition before the Supreme Court seeking reconsideration of the judgment which was also dismissed. ONGC, another constituent of Contractor under the PSCs but is not a party to the arbitration (as ONGC was directed by the Government of India at the inception to be bound by any award and not to participate in the arbitration) has now filed an intervention application in the disposed off Government SLP on the basis that there are certain factual and legal errors in the judgement and ONGC needs to present its position before the court. The matter is presently sub-judice. Government has filed another SLP, copy of which is yet to be served upon the Company.

The Tribunal is yet to set a date to hear the parties' closing submissions, which was deferred due to the illness of Government nominated Arbitrator.

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

Yemen Arbitration

Considering the deteriorating security situation in Yemen, consortium has declared Force Majeure thereby suspending its obligations under the PSAs for the Yemen blocks 34 and 37. RIL and Reliance Exploration & Production DMCC have obtained injunction from Hon'ble Bombay High Court for restraining bankers from honouring any demand of Yemen Government under the LCs during Force Majeure period and have also initiated Arbitration proceedings against Yemen Government under the terms of the PSAs.

RETAIL BUSINESS

Market environment and outlook

Twenty-first century India reflects the potential to withstand challenges and emerge as a significant contributor to the global economy. Aspirations and capabilities of over a billion people are creating a huge market for both domestic and global investment.

India is the world's fifth largest retail market (Source: Retailing-Sector-Analysis-Report by Equity Master November 2014). There are several favourable factors at an interplay, which are driving consumption boom in the Indian market. Favourable demographics, urbanisation and rising education levels are affecting growth in incomes, and increasing spending power is translating further into increasing household consumption. As incomes rise, the shape of the country's income pyramid is also getting transformed. The cascading effect of wealthier households, wanting to live an aspirational lifestyle would further drive India's consumption boom.

Overall India's retail business is projected to nearly double to \$ 1 trillion by 2020 from \$ 600 billion in 2015. The retail market is expected to grow by 12% in line with historical trends. (Source: Retail 2020: Retrospect, Reinvent, Rewrite by BCG and RAI, 2015)

Modern trade is expected to grow three times to \$ 180 billion by 2020 from \$ 60 billion in 2015. Traditional trade is projected to grow at 10% annually, while modern trade is projected to grow at almost twice this pace.

India's e-commerce market is expected to grow exponentially over the next five years. Internet users are expected to increase three times from ~200 million in 2014 to ~600 million by 2020, due to increased proliferation of smartphones, lower cost of connectivity and improved quality and expanded reach in lower tier cities.

Even though, India continues on its current high-growth path for the long term, the economy is prone to headwinds in the short run. The growth path began slowing down in the last few years, because of low level of macro-economic activity, caused by high interest rates, rising inflation and investor pessimism.

Amid escalating food prices, high borrowing rates and marginal real wage growth, consumers tend to postpone discretionary spend.

Going forward, the Indian economy is expected to maintain its growth momentum aided by stronger growth enabling factors like stress on improved governance, reforms towards more competitive and market oriented policies, restructuring of welfare measures aimed at improving end level benefits.

India's organised retail would continue to surge as customers look for an aspirational lifestyle, and are willing to pay for superior shopping experience and better quality products at attractive prices.

Retail business and competitive position

Operating strategy

Reliance Retail is the retail initiative of the group and is central to Reliance's consumer facing businesses. Reliance Retail leads group's efforts in enabling inclusion, growth, opportunity and building sustainable societal value for millions of Indians.

- **Leadership:** Over the years, Reliance Retail has aimed to create an operating model that can provide scalability and sustainable value. In its short but meaningful journey, it has attained leadership position in key format sectors. It continues to make investments in building retail infrastructure that is aimed at improving the shopping experience for millions of consumers and improving the lives of kiranas and small shopkeepers.
- **Innovation:** The intrinsic strategy of Reliance Retail remains in its ability to respond to evolving consumer demands and provide innovative products and services that enhance their shopping experience. It has embraced technology to innovate customer experience in the stores. 3D rendering of Mock Shop Planogram for in-store execution, analytics to slice and dice millions of transactions to understand what customers buy and how their experience can be further improved, introduction of innovative merchandise through own brands and 'Reliance One' loyalty programme across multiple formats are examples of innovation and uniqueness which give Reliance Retail a competitive advantage.
- **Operational Excellence:** Reliance Retail is committed to achieving the highest levels of operating efficiencies and effectiveness across all business activities, both customer facing and internal. Efficient planning, superior processes supported by automation and meticulous execution driven by operating discipline forms the bedrock of all operations.

■ Management's Discussion and Analysis

Sector overview

Reliance Retail operates in five core format sectors viz., Value Formats and others, Fashion and Lifestyle, Digital, Brands and Jewellery.

Value formats and others

Food and grocery constitutes the largest category in the consumption basket and is estimated at around 60% of consumer spending (Source: Deloitte – Indian Retail Market Opening More Doors, January 2013). The penetration of organised retail is among the lowest in this category, which creates an unprecedented opportunity for growth of modern retail.

Value formats offer a comprehensive range of products ranging from fresh produce, dairy, staples, processed food, food/non-food FMCG products and much more to delight customers. Value formats operate the largest chain of full service convenience stores, supermarkets and hypermarkets on a highly integrated supply chain model.

The linkages with the farm has brought about transformational changes in the quality of life of farmers, also enhancing the quality of produce, reducing wastage by shortening the time to move fresh produce and reducing intermediaries in the value chain, thereby benefiting all.

Modern grocery retail has evolved in India and so have the customers. To remain relevant to weekly and monthly shopping missions of a household, value formats have successfully maintained a fine balance of serving local tastes by offering small brands, as well as national and international brands.

Value formats have been focusing on own label products that stand true to the tag-line of **'Trusted Quality, Reliance Price'**. Several new products and categories were added to the strong own label portfolio. During the year, the business recorded a participation of up to 25% from own label brands in key categories, such as Home Personal Care and Dairy. With a broad selection of own label products, complemented by well-known brands, value formats optimally meet the diverse needs of Indian consumers.

Value formats also launched the e-commerce channel through www.reliancefreshdirect.com. The site has received overwhelming response and is still under pilot. The online channel provides the convenience of delivery of fresh produce, dairy, packaged food and much more at the door step.

Reliance Fresh has been included in the list of 'Most Trusted' service brands in India by Brand Equity, The Economic Times and continues to improve its position year after year. This represents the faith of consumers in patronising the chain, which continues to remain as India's largest grocery retailer.

Traditional retail is characterised by the presence of over 12 million kirana shops in the country. These kirana shops operate their retail business on a fragmented distribution network, with presence of a number of intermediaries. Reliance Market, the wholesale cash-and-carry format aims at supporting their growth and providing them with a modern distribution system.

Reliance Market serves traditional kiranas, hotel, restaurant and catering (HORECA), small and medium institutions, thereby generating sustained social value.

Reliance Market serves deliveries to kiranas to ensure that they focus on their business, while it empowers them with the right merchandise on a timely basis. In a short duration, thousands of kiranas have benefited from this programme and the business continues to enroll and engage with newer kirana members each day.

Reliance Market has established leadership in wholesale cash-and-carry segment in the country with 43 operational stores and enjoys patronage of more than 1.5 million registered members.

Fashion and lifestyle

India's apparel market is worth around ₹ 2.3 lakh crore (Source: Deloitte – Indian Retail Market Opening More Doors, January 2013), of which the organised sector accounts for 24% of the overall pie. The entire market is growing at a CAGR of 9% with women's wear and kids' wear being the fastest growing categories.



Reliance Trends Store

With rising disposable income, exposure to western broadcast media, access to better education and younger demographics, the fashion and lifestyle sector is poised for robust growth.

Reliance Trends, the apparel and accessories specialty format, is a fashion destination for young at heart, value conscious style seeking men and women. The format offers an extensive range of own labels, apart from other national and international brands. Over the years, it has successfully democratised fashion by making 'fast fashion' accessible to the young and aspirational customers.

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

Reliance Trends sells over 1,50,000 pieces of garments per day across its stores with a portfolio of over 20 private label brands (targeting different customer segments), which account for 70% of its turnover. Through its private brands, Trends has been able to establish a unique differentiated offering to its customers.

Reliance Trends is the largest apparel retailer in the country with largest geographical footprint. Reliance Trends has continued on its growth trajectory in the period and has opened 45 new stores taking the total store count to 200 across 100 cities.

With an eye on offering the most fashionable clothes to its customers, Reliance Trends operates a state-of-the-art design studio, fully integrated with a sampling and quality testing facility. With quality and comfort in mind, Trends offers to its customer's affordable fashion that is designed to meet everyday fashion desires.

Trends continues to leverage its international sourcing capabilities to source the best of fabric and product technology from around the world. International sourcing offices as well as its existing regional sourcing offices across India aid in converting the fabric to the finished product at best prices, while ensuring the highest adherence to quality.

Reliance Footprint, the specialty footwear format is offering footwear and accessories through a range of own, national and international brands. The format attained a milestone of opening 200th store during the year, making it a leading national multi-brand footwear chain.

Own brands contribute 15% of turnover and gives it a competitive edge, so that the format is able to offer superior designed products at great value.

Payless ShoeSource, which runs the largest family footwear store chain in western hemisphere was launched in India in an exclusive partnership with Reliance Retail during the year. In a short period, the chain has expanded to over 14 stores and is witnessing great enthusiasm from customers for innovative designs at affordable prices.

The successful partnership with Marks & Spencer (M&S) continued to grow with strong same store sales growth, as well as roll out of new stores during the year. During the year, the business opened 12 stores, including launching the first M&S standalone beauty and lingerie store and men's only M&S store in India. The business continues to maintain thrust on innovation and focuses on several meaningful innovations, like providing an anti-bacterial finish in all shirt packs, quick dry swimwear products, sleek and sculpt body shaping innerwear among several other product innovations.

Digital

Consumer Durables and Information Technology (CDIT) is one of the major categories in the consumption basket that reflects the aspirational lifestyle of India's consumers.

The sector has been hit by industry slowdown. To add to the pain, high interest rates have compelled consumers to postpone spending on large ticket items to restrict their family budgets.

The sluggish consumption pattern of digital products is expected to be a transient phenomenon, as younger demographic population supported by new job creation and aspirational lifestyle is likely to bring back industry demand.

Unabated by the industry impact, Reliance Retail continued its growth in the digital sector during the year. Reliance Digital operates multiple formats, offering consumer electronics, home appliances, IT and telecom products.

Reliance Digital, the CDIT products retailing format, has established itself as a complete destination store that offers comprehensive assortment of top brands, a large selection of innovative products, attractive pricing and best-in-class service.



Reliance Digital Express Store

Digital Express Mini is a smaller store format catering to mobility and communication needs of the consumers. The rate of opening stores during the year has been on an accelerated path for Digital Express Mini format. In a short period, the format has established itself as the country's largest mobile phone retail chain. The format is increasingly becoming a distribution platform for most of the national and international brands as it offers tremendous reach to over 150 cities in India, with further plans to take the format to over 800 cities.

ResQ, the service arm of digital continues to expand and strengthen its capabilities. It is a full-fledged service organisation and is India's first multi-product, multi-brand and multi-location service network that provides solutions encompassing end-to-end product life cycle requirements for the entire range of CDIT products and other value-added services.

■ Management's Discussion and Analysis

Reliance Digital offers cutting-edge, aesthetically designed, high value products through the own-label brand 'ReConnect'. ReConnect products are offered in over 100 products across all core product categories ranging from Tablets, TVs to accessories. ReConnect contributed up to 18% penetration for several CDIT product categories representing steady increase in the own label penetration.

Digital format sector continued its rapid expansion during the year. It added 912 stores to its tally of 284 stores at the beginning of the year and built upon its leadership position and achieved a distinction of crossing the 1,100 stores mark.

Built around the central theme of providing cutting-edge technology solutions, the Digital Express format offers a wide range of products and helps customers connect with their world from anywhere at any time.

Brands

Reliance Brands has a portfolio of 40 brands that span across the entire spectrum of luxury, bridge to luxury, high-premium and high-street lifestyle space. Reliance Brands continue to partner with new and revered international brands. During the year, Reliance Brands announced partnership with ABG Juicy Couture, LLC for a distribution agreement for the Brand, Juicy Couture in India. Reliance Brands also partnered with BCBG MAX Azria Group, Inc. to bring in India, an international women's wear brand known for its contemporary fashion sensibilities.

Reliance Brands now operates 107 stores for international brands. The strong partner portfolio reassures that Reliance Brands is seen as a partner of choice for international brands.



Hamleys store in Mumbai

Jewellery

During the year, jewellery demand remained sluggish owing to weak macro environment. Regulatory changes severely curtailed gold imports, resulting in scarcity and spiralling cost of imported gold. The inevitable outcome was higher gold prices and weak consumer demand.

Reliance Jewels was focused on undertaking several process improvement initiatives to augment the customer experience in the stores. These initiatives included introduction of technology solutions catering to jewellery retail, setting up of centralised distribution centre for faster delivery of goods to stores, training of store staff to improve better service to customers and others.

There is also an added focus on building in-house designs so that customers can get most exquisite designs, which are uniquely available at Reliance Jewels store.

With the Government relaxing import restriction recently, better availability of bullion and stabilising of gold prices, the business growth should return in the sector in the near future.

Operations and Financial performance

Financial Performance

	FY 2014-15 (₹ in crore)	FY 2014-15 (\$ in billion)	FY 2013-14 (₹ in crore)	% change
Revenues	17,640	2.8	14,556	21.2%
EBIT	417	0.1	118	253.4%
EBIT (%)	2.4%		0.8%	

Reliance Retail business grew by 21.2% to reach revenue of ₹ 17,640 crore as against ₹ 14,556 crore registered in the previous financial year. EBIT for the year grew by 3.5x to ₹ 417 crore.

It continued to grow profitably, achieving earnings before depreciation, finance cost and tax expense (EBDITA) of ₹ 784 crore, up 116% on y-o-y basis. The format sectors collectively witnessed a five-year CAGR of 31% in revenues.

Reliance Retail witnessed strong same store sales growth up to 17% across format sectors over the last year. Continued focus on providing better shopping experience, coupled with strong store operations and utilisation of back-end infrastructure efficiencies, has resulted in this year's strong performance.

During the year, Reliance Retail consolidated its market leadership in all of the focus sectors of digital, lifestyle and value sectors. During the year, Reliance Retail undertook an unprecedented store opening plan on an accelerated pace and added a net total of 930 stores to further increase its reach in the underserved markets. A total of 0.9 million square feet area was added during the year.

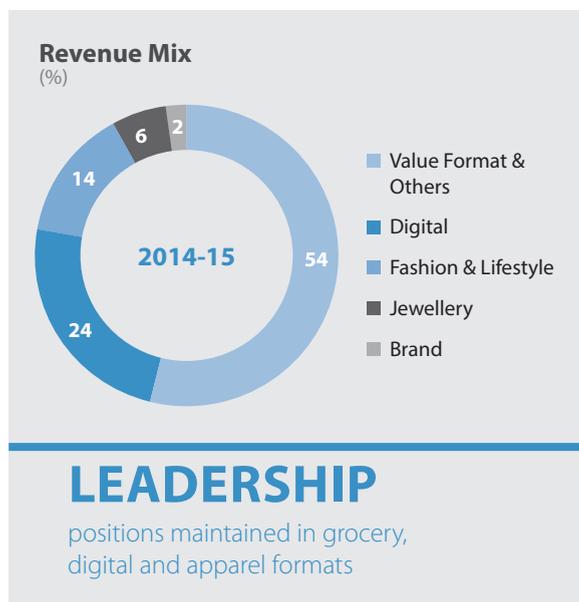
As on 31st March 2015, Reliance Retail operated 2,621 stores, covering an area of over 12.5 million square feet across 200 cities.

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

The performance of various format sectors during the year is detailed below.

Store Count and Additions

Format Sector	Area in Million Square Feet	Store Count	Store
		As on 31 st March, 2015	Additions FY 2014-15
Value and Others	5.42	616	-102
Fashion & Lifestyle	4.04	649	116
Digital	2.53	1,196	912
Brands	0.32	107	5
Jewellery	0.20	53	-1
TOTAL STORE	12.51	2,621	930



Growth plans

Reliance Retail has launched the first of its online channel initiatives through www.reliancefreshdirect.com. The site is currently under pilot and process improvements are being implemented. It will further improve the end customer experience. The operations would be expanded to newer geographies in a phased manner.

Reliance Retail is poised to launch multi-channel shopping for other format sectors as well. The potential of e-commerce combined with the network of physical store locations will offer tremendous choice and convenience at a great value to the consumer. The opportunity is to integrate an 'offline-online' model, which can truly differentiate the customer experience.

Reliance Market remains a priority for network expansion as it continues to empower kiranas and helps farmers and small manufacturers to benefit from the modern distribution system.

Digital sector remains one of the growth verticals for the coming year. The Digital Express Mini format enables

consumers to experience and benefit from the interplay of communication and technology. Expansion of Digital Express Mini format would continue this year to newer geographies, supported by further strengthening of ResQ, the service organisation.

JIO INFOCOMM

Market environment

With more than 961 million mobile users as of February 2015 (Source: TRAI), India has achieved a tele-density of more than 76%. However, the growth in broadband connections has not been commensurate with the enormous growth of India's telecommunication industry. India has only around 18.7 million broadband connections as of September, 2014 (Source: TRAI), excluding internet access by wireless phone subscribers, which is comparatively lower than other countries.

LTE, a fourth generation wireless technology that offers higher speed, is likely to alter the contours of the Indian wireless industry and drive the 'Digital India' movement. LTE rollouts will not only accelerate data adoption (user base and usage) in India, but will also cause a dramatic shift for 4G services.

RIL's subsidiary RJIL has made significant progress in building its LTE business, including physical network infrastructure, systems and processes, sales and distribution network, applications and services, content and many others. It is working with strategic partners who have committed significant resources, know-how and global talent to support the deployment and testing activities currently underway.

Spectrum acquisition and infrastructure tie-ups

RJIL is the only private player with Broadband Wireless Access (BWA) spectrum in all the 22 telecom circles of India. It plans to provide reliable fast internet connectivity through the 20 MHz, contiguous, pan-India BWA spectrum. RJIL has also successfully acquired 1800 MHz spectrum across 14 key circles in February, 2014.

In March 2015, RJIL successfully acquired the right to use spectrum in 800 MHz band or 1800 MHz band or both in 13 key circles across India in the spectrum auction conducted by DoT, GoI. With this acquisition, in addition to the pan-India 2300 MHz spectrum, RJIL has spectrum in either 800 MHz or 1800 MHz or both, in 20 out of the total 22 circles in the country. RJIL's total equivalent spectrum footprint has increased from 597.6 MHz to 751.1 MHz (including uplink and downlink), strengthening its position as the largest holder of liberalised spectrum.

Frequency	800 MHz	1800 MHz	2300 MHz
No. of circles	10	18	22
Spectrum in MHz (Uplink & Downlink)	97.5	213.6	440.0

■ Management's Discussion and Analysis

This combined spectrum footprint across frequency bands provides significant network capacity and deep in-building coverage. RJIL plans to provide seamless 4G services using LTE in 800 MHz, 1800 MHz and 2300 MHz through an integrated ecosystem.

RJIL is working aggressively in achieving the minimum rollout obligations as specified in the notice inviting application for the spectrum auction in 2010, as per the Test Schedule Test Procedure (TSTP) issued by DoT in March, 2015. RJIL was allotted Mobile Switching Centre Code (MSC), Mobile Country Code (MCC) and Mobile Network Code (MNC) for mobile access services across all 22 circles by the DoT, hence providing it with about 22 million mobile phone numbers across India to provide mobile access services. Apart from the above, RJIL has been allotted crucial Signalling Point (SP) codes by DoT for launching National Long Distance (NLD) and International Long Distance (ILD) services. RJIL has also received clearances to set up international internet gateways by Centre for Development of Telematics (C-DoT) and DoT.

RJIL has adopted a partnership based model for telecom infrastructure for 4G wireless and fibre based high speed broadband services. In line with this strategic intent, RJIL and its wholly owned subsidiaries have finalised the following partnerships, among others, for infrastructure sharing:

- An agreement with Indus Towers, for more than 1,13,490 towers across 15 telecom circles in India
- An agreement with GTL Infra, for more than 27,800 towers across India
- An agreement with Ascend Telecom, for more than 4,500 towers across India
- An agreement with Tower Vision, for 8,400 towers across India
- An agreement with ATC India, for 11,000 towers across India
- Agreements with Reliance Communications Limited (RCOM) for sharing of RCOM's extensive intercity and intra-city optic fibre infrastructure of nearly 1,20,000 fibre-pair kilometres of optic fibre and 5,00,000 fibre-pair kilometres respectively, and 45,000 towers

Technology framework

LTE

LTE has globally emerged as the technology of choice to deploy next generation mobile networks. Global operators are deploying mobile networks using LTE to meet the explosive demand for mobile data services. It offers superior performance at lower cost per megabyte of data, compared to 3G, and also has more evolved ecosystem and compatibility with 2G and 3G.

RJIL is deploying an enhanced packet core network to create a futuristic, high capacity infrastructure, to handle huge demand for data, video and voice services. In

addition to LTE and its future versions, it will continue to evaluate and deploy other technologies, both wireless and wire-line, to offer comprehensive broadband solutions to consumers, small businesses, enterprises, government and other entities.

Voice over LTE (VoLTE)

RJIL plans to provide advanced 4G voice calling using VoLTE, a technology to offer high quality voice calls over its 4G network. The quality of voice services on VoLTE is superior compared to 2G/3G voice services. VoLTE also allows video-calling, and RJIL has showcased LTE- Time Division Duplex (LTE-TDD) inter-operability use case with China Mobile at Mobile World Congress 2014 (MWC) in Barcelona. In addition to high speed data, the 4G network will provide voice services from and to non-RJIL networks.

High speed broadband over Fibre to the x (FTTx)

In addition to 4G wireless services, RJIL is planning to roll out high speed internet services via FTTx. The high speed fibre connectivity will enable RJIL to provide a wide gamut of digital services across various sectors.

RJIL has all the key agreements in place with its technology partners, service providers, infrastructure providers, application partners, device manufacturers and other strategic partners for the project. It is in the process of implementation of the detailed plans for the infrastructure needed in few selected markets and has also started field operations on a pilot basis.

Devices

LTE ecosystem is gaining traction worldwide as more devices across various price points are being launched to strengthen the device ecosystem across the globe including India. Recent device launches from various Original Equipment Manufacturers (OEMs), with various device capabilities, is only a beginning. The global handset ecosystem is rapidly evolving, and multiband, multimode handsets shall soon become the default offering.

RJIL has been actively involved in developing the ecosystem for India's LTE phones, working with renowned OEMs, Original Design Manufacturers (ODMs) and chipset vendors on end-to-end device design and engineering. RJIL is ensuring the tight integration of these devices with Jio's network infrastructure, platforms and applications portfolio to ensure seamless experience to customers.

Developments during the year

RJIL has demonstrated Lawful Intercept and Monitoring (LIM) system in few circles with DoT and has been granted approval. RJIL has also demonstrated its capabilities of Aadhaar based e-KYC, for paperless activations as per the directives of DoT.

RJIL is currently conducting extensive field tests in Navi Mumbai, Jamnagar and other locations on integration

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

of devices with its network, platform and services, to provide uninterrupted service to customers. RJIL has finalised or is in the process of finalising agreements with OEMs and ODMs for LTE devices, and is working with its partners on certification, validation and quality assurance. RJIL is committed on innovation, design and providing technologically advanced devices at affordable prices.

RJIL has exhibited trial 4G services at various techfest, college events, trade shows etc., and has offered high-speed Wi-Fi broadband services to various participants. Participants were able to experience benefit of high speed wireless connectivity for hand-held devices (smartphones and tablets) over a blend of LTE and Wi-Fi networks. Participants were also provided a glimpse of various products RJIL is working on, including gaming, e-payment through mobile phone, video conferencing, TV programmes, video on demand and many more.

RJIL has launched trial Wi-Fi hot spots across India and is in the process of entering agreements with various State and Local Authorities to provide Wi-Fi services.

RJIL continues to attract the best talent in the industry and is focusing on building a high performance team. The key leadership talent, required for setting up of the business at Headquarters and respective geographies, are in place, and are currently getting ready for the launch phase.

RJIL is actively involved in setting up of robust sales and distribution network through a chain of distributors and retailers across the country. RJIL is already working on creating a world-class customer support experience.

RJIL is rolling out physical office infrastructure across 880 cities/towns across India. RJIL continues to hire talent for various positions across all locations, who are actively working towards the launch of services.

MEDIA AND ENTERTAINMENT

During the year, Independent Media Trust (IMT), of which RIL is the sole beneficiary, acquired the control of Network18 Media & Investments Limited (Network18), including its subsidiary TV18 Broadcast Limited (TV18). This acquisition will differentiate Reliance's Jio Infocomm business by providing a unique amalgamation at the intersect of telecom, web and digital commerce via a suite of premier digital properties.

India's media and entertainment industry is on the cusp of entering a new era of growth, riding the digitization of television distribution, steady growth of regional media and fast emerging new media businesses. Network18, with its multi-platform portfolio is geared to unlock these opportunities by leveraging technological innovation and harnessing emerging trends.

Network18 has interests in television, digital content, filmed entertainment, digital commerce, magazines,

mobile content and allied businesses. Network18, through its group companies, operates a combined bouquet of over 30 channels. These channels include general news channels in English, Hindi and regional languages, business news channels in Hindi, English and Gujarati, national and regional entertainment channels, music channels, kids channels and infotainment channels. Network18 operates a number of digital and mobile properties offering digital content and commerce, including home shopping and online ticketing. It also publishes special interest magazines and has a presence in film production and distribution.

Network18's operating model is driven by its zeal to provide consumers with the best-in-class media and entertainment products, that set new benchmarks in creative excellence, fair journalism and audience engagement. It adds value and differentiates itself through 5 key elements - consumer engagement across platforms, creative excellence/innovation, thought leadership, network synergy and strategic collaborations. At Network18, there is a focus on driving the highest standards of creative excellence by fostering a culture of innovation to build new content formats across platforms. Further, at Network 18, it is believed that leadership is derived not only through consumption numbers, but also by providing a platform to new ideas. Network18 constantly strives to host thought leadership – on air, online and on ground. Network18's synergy across its varied and vast portfolio facilitates cross-pollination of content. Network18 has strategic alliances with leading international players including Viacom, CNN, CNBC, Forbes and A+E Networks.

During the year, Network18 reached out to over 228 million television viewers (*Source: TAM | All India | CS 4+ | 1st April, 2014 to 28th March, 2015 | All days, 24 hours | Avg. Monthly Reach*) and an average of 24.5 million (*Source: Independent Industry data sources*) unique digital visitors per month.

From the date of acquisition of control till 31st March, 2015, Network18's operating revenue stood at ₹ 2,747 crore and EBIT at ₹ 135 crore, on a consolidated basis.

MODEL ECONOMIC TOWNSHIP LIMITED (Erstwhile Reliance Haryana SEZ Ltd)

In line with the objective of developing a world-class township at Jhajjar, Haryana namely Model Economic Township (MET) and creating a distinct identity, the name of the Company Reliance Haryana SEZ Ltd (RHSL), has been changed to Model Economic Township Limited (METL).

The Company has returned 1,383.68 acres of land to Haryana State Industrial and Investment Development Corporation Limited (HSIIDC). HSIIDC and Infrastructure

■ Management's Discussion and Analysis

Leasing and Financial Services Limited (IL&FS) have since exited the venture. It has now become a wholly owned subsidiary of RIL.

METL commenced development of the phase I of the Model Economic Township and units of Panasonic and Denso are already operational. The Company has sought license for additional land parcel of approx 400 acres which is expected by June, 2015. Besides, it plans to start development thereafter and apply for license for an additional area of 600 acres of land. To mitigate the challenge of land consolidation, it has been making self-efforts to achieve consolidation of its existing land parcels primarily through land exchange scheme.

METL has engaged itself in various CSR activities in the field of healthcare by providing mobile health services to 18 villages, free eye care and dental camps, women empowerment and employability training, technical education and skills development and creation of village infrastructure in its project area.

LIQUIDITY AND CAPITAL RESOURCE

Financing strategy

Reliance endeavours to diversify its funding sources across instrument classes, financing products, financial markets and investor classes. Its superior credit profile and strong relationship with lenders, which include over 100 banks and financial institutions, allows it to flexibly tie up optimal financing mix at competitive costs.

Reliance also strives to manage its debt portfolio, by actively exploring opportunities to reduce cost of existing long-term debt, as well as to extend the average maturity of its portfolio to optimal level.

Reliance calibrates its financing strategy continuously, in order to maximise long-term value growth for its stakeholders, while maintaining a secure financial base.

Facilities from Export Credit Agencies (ECAs)

During FY 2014-15, RIL signed ~ \$ 1.3 billion equivalent facilities backed by 6 ECAs.

Name of ECA	Amount
1. Japan International Bank for Cooperation (JBIC)	\$ 550 million
2. Nippon Export and Investment Insurance (NEXI)	
3. Export Development Canada (EDC)	\$ 500 million
4. Swiss Export Risk Insurance (SERV), 5. Oesterreichische Kontrollbank AG (OeKB) 6. Office national du Ducroire/Nationale Delcrederedienst (ONDD)	€ 175 million

These facilities will be drawn over the next one to two years, as the projects progress and will have a door-to-

door tenor between 11 and 13 years. These deals were accorded 'Better than Sovereign' rating by all these ECAs. This was the first time, these agencies accorded such a rating to any corporate in their history, re-emphasising RIL's creditworthiness in international debt markets.

RIL also re-priced \$ 900 million of existing ECA facilities to reduce its cost of debt. It includes \$ 500 million equivalent facility supported by KSURE (South Korea) and \$400 million facility supported by SACE (Italy). This was the first time that facilities covered by either of these ECAs have been re-priced.

For the \$ 550 million facility backed by JBIC & NEXI and € 175 million facility supported by SERV, OeKB and DUCROIRE, RIL has received the 'Deals of the Year 2014' award from Trade Finance Magazine, a Euromoney publication.

US bond issuance - Rule 144A/Regulation S Offerings

During FY 2014-15, RIL priced rule 144A/Regulation S offering of \$ 1 billion 4.125% Senior Unsecured Notes due 2025. This was the first 10 year issuance in the oil and gas sector out of Asia (ex-Japan) since July, 2014 and the largest private sector oil and gas deal out of Asia (ex-Japan) since the last RIL guaranteed bond in 2012. This was RIL's lowest cost US\$ bond issuance and also the lowest coupon ever achieved by an Asia (ex-Japan) corporate issuer in the BBB category, for a 10 year issuance with a size of \$1 billion or more. These Notes were over-subscribed 4.5 times across 272 accounts.

During FY 2014-15, RIL also priced rule 144A/Regulation S offering of \$ 750 million 4.875% Senior Unsecured Notes due 2045. With this issuance, RIL continues to be the only Regulation S / 144A private corporate issuer for a 30 year issuance out of Asia, since 2003. This deal achieved the lowest coupon ever achieved by an Asian private corporate issuer for a 30 year issuance, and also was the first ever single tranche 30 year deal by a private corporate issuer out of Asia. These Notes were over-subscribed 3.07 times across 167 accounts.

Financing in Subsidiaries

During FY 2014-15, RJIL raised foreign currency financing from banks and other institutions aggregating over \$ 2.25 billion, to part finance the capital expenditure. This

Awarded

'Deals of the Year 2014'

from Trade Finance Magazine,
a Euromoney publication

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

included \$ 750 million ECA financing supported by The Export-Import Bank of Korea (K-EXIM). This facility will be drawn over the next one to two years as the projects progress and will have a door-to-door tenor of 12 years. This transaction was the first and largest long-term telecom equipment and services, financing globally till date by a Korean ECA and also the largest deal in India till date by K-EXIM.

The K-EXIM deal has been awarded 'Best Asia-Pacific ECA Finance Deals of the Year' by Trade and Export Finance (TXF) as part of their perfect 10 awards, which recognise only 10 deals globally within Export & Project finance for 2014. This deal has also been awarded as 'Deals of the Year 2014' by Trade Finance Magazine, a Euromoney publication.

RJIL also signed syndicated term loan facilities aggregating to \$ 1.5 billion to refinance the syndicated term loan facilities aggregating to \$ 1.5 billion tied up in 2010, significantly extending maturity at a lower cost. These facilities comprised \$ 1 billion facility with a total maturity of 5.5 years and the \$ 500 million facility which had a total maturity of 7 years. The \$ 500 million facility had the longest average maturity for an unsecured syndicated loan of similar size in Asia this year. These facilities had participation from a total of 26 banks and raised over \$ 400 million in syndication.

In addition to the foreign currency financing, RJIL issued long-term INR debentures aggregating to ₹ 5,000 crore comprising ₹ 1,500 crore debentures with maturity of five year and ₹ 3,500 crore debenture with maturity of 10 years. RJIL also tied up INR secured loans of ₹ 2,400 crore with total maturity of 7.5 years.

Credit Rating

RIL's financial discipline and prudence is reflected in the strong credit ratings ascribed by rating agencies. The below table depicts RIL credit ratings profile in a nutshell:

Instrument	Rating Agency	Rating	Outlook	Remarks
International debt	S&P	BBB+	Stable	Two notches above India's sovereign rating
International debt	Moody's	Baa2	Stable	One notch above India's sovereign rating
Long term debt	CRISIL	AAA	Stable	Highest rating awarded by CRISIL
Long term debt	Fitch	Ind AAA	Stable	Highest rating awarded by Fitch

Ratings Definitions

S&P BBB+: An obligation rated 'BBB' exhibits adequate protection parameters. However, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity of the obligor to meet its financial commitment on the obligation.

Moody's Baa2: Obligations rated Baa are judged to be medium-grade and subject to moderate credit risk and as such may possess certain speculative characteristics.

CRISIL AAA: Instruments with this rating are considered to have the highest degree of safety regarding timely servicing of financial obligations. Such instruments carry lowest credit risk.

Fitch Ind AAA: 'AAA' national ratings denote the highest rating assigned in its national rating scale. This rating is assigned to the 'best' credit risk relative to all other issuers or issues in the country.

S&P rated RIL two notches above India's sovereign rating with Stable Outlook

Capital Resources

During FY 2014-15, RIL and its subsidiaries tied up long-term facilities of ~ \$ 6.50 billion equivalent across various financing products and maturities. The below table shows debt levels and related ratios for the year ended 31st March, 2015 and 31st March, 2014 for Reliance on a consolidated basis.

Particulars	31 st March, 2015	31 st March, 2014
Cash and marketable securities (₹ in crore)	84,472	90,637
Gross debt (₹ in crore)	1,60,860	1,38,761
Net debt (₹ in crore)	76,388	48,124
Gross debt to equity ratio	0.74	0.70
Net debt to equity ratio	0.35	0.24
Net gearing (%)	24.6 %	18.4 %

Reliance's consolidated net debt level has increased during the year, as it drew down on funding to finance the ongoing expansion of its petrochemical capacities, new gasification plant and refinery off-gas cracker.

Liquidity and Treasury Management

Reliance manages its working capital efficiently by optimising the cash-to-cash cycle through active financing of receivables and extending maturities of payables.

Reliance effectively manages its cash and cash equivalents and cash generated from operations through diversified investment portfolio. Reliance's investment portfolio consists of wide ranging financial instruments viz., liquid and highly rated securities, bank fixed deposits, CDs, government securities, corporate bonds and mutual funds. The diversification across instruments and counterparties enables Reliance to avoid concentration risk.

With its robust Risk Management Framework, Reliance has the ability to monitor and adjust its investment portfolios in the light of a dynamic market environment and mitigate consequent risks.

During the FY 2014-15, RIL won the award for 'Best Hedging Strategy 2014' from Corporate Treasurer, a leading treasury publication in Asia Pacific.

RIL also bagged 'Asia Champion Award' and 'Treasury Team of the Year' from 'The Asset AAA' recognising its excellence in the industry across Asia.

SUSTAINABLE GROWTH AT RELIANCE

The way Reliance conducts its business has evolved over the decades both at the individual and group level. Reliance has reached up to this scale on the strength of 4 enablers, which would also enable it to sustain its growth momentum, reinforcing Reliance's fundamental philosophy - 'Growth is Life'. These enablers are:

- A) A Strategic Framework which ensures that the business model meets the objectives of all stakeholders
- B) Focus on 4P's (Planet, People, Products & Processes and Profit) which ensures an all-inclusive growth
- C) An Enterprise Risk Management Framework which ensures mitigation of risk while seamlessly governing the execution of operations
- D) Smart Transformation at Reliance (STAR) which ensures the institutionalisation of Reliance's DNA through continuous reinvention, for the next level of growth

A) STRATEGIC FRAMEWORK AT RELIANCE

Reliance's group strategic framework sets out its strategy, financial framework and how the Reliance manages risk.

Group Strategic Framework establishes the goals of Reliance. It also describes the strategic intent of Reliance and the expectations and boundaries within which each of its businesses must operate. It

provides guidance for each of the businesses - both established and emerging.

The Group Strategic Framework ensures that the business model, business strategy, and operating models comprehensively address each component of the Reliance's Group Strategy and remain bound by it. It improves alignment between each of the businesses and the group.

Refer page no. 18 of the Corporate Overview for the quick view into the strategic framework of Reliance.

B) DIMENSIONS OF SUSTAINABLE GROWTH- 4 P's (PLANET, PEOPLE, PRODUCT & PROCESSES AND PROFIT)

1. Planet

RIL continues to meet the growing energy demand, while working towards minimising the environmental footprint of its ongoing operations, as well as all future projects. This is done, among others, by setting environmental targets and investing in green projects.

Continuous Improvement - Minimising Environmental Footprint

RIL in its journey towards excellence in environmental management has started further strengthening its compliance processes and systems to reach compliance plus level. This is being done by institutionalising a rigorous analysis and audit processes. A dedicated 'Environmental Compliance Review Committee' has been created at each manufacturing site.

Environmental Management System in conformance to ISO-14001, is followed at all its manufacturing sites. All major sites have adopted 'Integrated Management System' combining Environment (ISO-14001), Quality (ISO-9001) and Occupational Health & Safety Management System (OHSAS-18001).



Green belt at Jamnagar

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

As a part of continuous improvement, various initiatives were undertaken during the year like;

- Recovering product gasoline heat, by heating effluent exchanger inlet stream devised by Pinch Technology, using super target software resulting in fuel savings of **4.81 Gigacalorie per hour (Gcal/hr)**
- An initiative to reduce compressor's power consumption in Parex trains, by operating at lower H₂/HC ratio resulting in saving of **0.44 Gcal** energy

Numerous of such initiatives at the manufacturing locations led to an aggregated energy saving of **4.33 million Gigajoule (GJ)** thereby reducing Greenhouse Gas (GHG) emission.

RIL has been publishing annual sustainability reports since FY 2004-05 as per the Global Reporting Initiative (GRI) guidelines. The reports were externally assured with an A+ rating indicating highest level of comprehensive disclosures. The sustainability reports are available at <http://www.ril.com/Sustainability/CorporateSustainability.aspx>.

Most of the sustainability indicators have shown improvement over the years. During the year, further steps have been initiated to strengthen the sustainability governance framework. The focus during the year was on energy conservation, renewable energy, GHG emission reduction, reduction of air pollutant emissions like Sulphur Oxides (SO_x), Nitrogen Oxides (NO_x) and waste recycling. Significant efforts in this direction have resulted in improved performance in the key areas identified as indicated below. The parameters indicate percentage changes in absolute total values at the manufacturing locations, compared to the previous year.

Continuous Improvement

- Reduction of direct GHG emission by 3.14 %
- Reduction of SO_x emission by 11.71 %
- Reduction of NO_x emission by 4.46 %
- Increase in renewable energy consumption by 2.47 %
- Increase in material recycled by 4.11 %

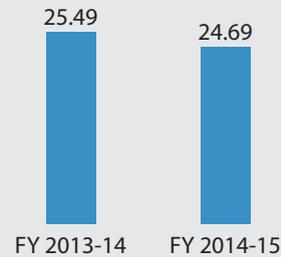
Across RIL, as a part of awareness, it celebrates 'World Environment Day', 'Earth Day', 'International Day for the Preservation of the Ozone Layer' and 'World Wetland Day'.

Inculcate 'care for environment among stakeholders'

RIL undertakes due diligence, auditing for Health Safety and Environment (HSE), and plant procedures at suppliers' manufacturing plants. Audit certifications of suppliers' facilities for safe and healthy working conditions, environmental procedures and systems, are carried out drawing attention to unsafe work practices.

Direct GHG emissions at manufacturing locations

(millions tco₂e)

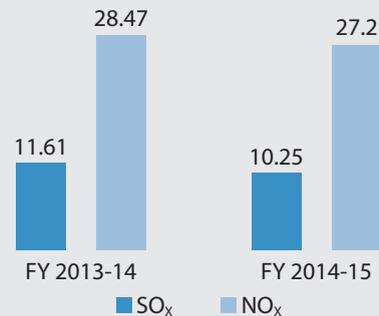


3.14%

Reduction in Direct GHG Emissions

SO_x and NO_x emissions at manufacturing locations

(000' tonnes)



11.71% & 4.46%

Reduction in SO_x and NO_x emissions



Biogas plant installed at RCP

■ Management's Discussion and Analysis

Renewable energy consumption at manufacturing locations

(000' GJ)

**2.47%**

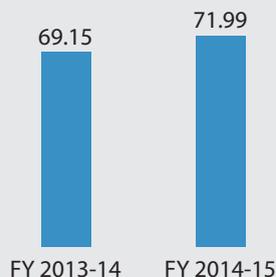
Increase in renewable energy consumption

Few suppliers were, thus visited multiple times, to ensure that corrective actions on clean, safe and healthy working environment are taken. This was made mandatory for continuing business with RIL.

RIL's sourcing practices integrate requirements, specifications and criteria that are compatible and in favour of protecting the environment, social progress and supporting India's economic development. RIL's sustainable sourcing procedures focus on: world class supplier base, contractor care, responsible care, development of India's engineering talent, innovation through supplier collaboration, green packaging and managing human rights across the supply chain.

Total recycled materials at manufacturing locations

(000' tonnes)

**4.11%**

Increase in recycled material utilisation

Promoting use of eco-friendly fuels

RIL continues to work towards the development and implementation of climate change mitigation projects. This is primarily done through energy efficiency initiatives at all manufacturing sites (as listed in the Director's report page no 175), where use of cleaner fuels and renewable energy has been adopted. During the year, RIL has taken up various initiatives for the deployment of renewable energy, like rooftop solar photovoltaic projects, biogas generation project, and carrying out wind resource assessment for exploring possibility of installation of wind turbines.

Clean Development Mechanism (CDM)

RIL has built in-house capacity to develop CDM projects, and obtain the registration and issuance of the same in the form of Certified Emission Reductions (CERs) from the United Nations Framework Convention on Climate Change (UNFCCC).

As on 31st March, 2015 following CDM projects at RIL are registered at UNFCCC.

Site Name	CDM projects
Jamnagar	Reduction in steam consumption in stripper re-boiler through process optimisation
Hazira	Energy efficiency through steam optimisation
Vadodara	Energy efficiency through heat recovery
Barabanki	Biomass based process steam generation
Khinwsar	Solar power generation
Dahej	Demand side energy conservation and reduction
Patalganga	Demand side energy efficiency projects
Allahabad	Improvement in energy efficiency of steam generation and power consumption

Spill Prevention

RIL has strong processes and procedures to prevent operational spills. There were no significant spills or leaks at RIL facilities during the FY 2014-15.



Solar Photovoltaic system installed at RCP

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

2. People

Human Resource (HR) transformation

RIL HR has earmarked a dedicated team reporting to Group Chief Human Resource Officer (CHRO), under the newly formed role of 'Governance, Integration, Risk & Assurance' to drive the 'Reliance Management System (RMS)' journey for RIL HR. As a result, RIL HR function has strengthened its impact in its day-to-day functioning, and is raising its bar of excellence to ensure timely availability of necessary talent and capabilities and engage and help talent to perform sustainably.

During FY 2014-15, RIL has implemented three of the four '**waves**' of the R-HR Transformation process, which included:

- Rolled out 'Our Values & Behaviours', to guide it through its mission and vision in the coming years
- Unification of RIL's position grading across the Company
- Performance management that balances long term and short term goals, as well as delivery and behaviours
- Annual cash bonus alignment to market rates and linked to performance outcomes
- Consistent delegation of authority to empower managers to make decision on people related matters
- Best-in-class talent management and succession planning practices for building RIL's leadership pipeline
- Career Acceleration Programme (CAP) for young and high potential employees
- Alignment of internal and external job markets, underpinned by a standard recruitment process
- Five-day working week

Wave 4 of R-HR Transformation, comprising Leadership Development and Learning, is expected to be rolled out by July, 2015.

Health and Wellbeing

RIL is driven by the philosophy of '**One Reliance. Healthy Reliance!**'

RIL employees undergo regular periodic medical examinations which are also extended to contract employees at manufacturing sites. The results are maintained online, and analysed to provide targeted interventions at individual and group levels. A high alert recall is then sent as per the pre-defined criteria, and a follow up is done until the parameter returns to normal.

RIL has also implemented a programme called 'Task Based Health Risk Assessment' (TBHRA). The programme focusses on approach to evaluate occupational hazard effects on individual with respect to task and job position, and also provide 'exposure data' linked to each employee or group of employees. A significant initiative, '**REFERS**' (Reliance Employee and Family Emergency Response Services) offers 24x7 assistance in case of any medical, accident, fire and security exigencies.

In addition to emergency medical services, the Occupational Health Centres (OHC) offer preventive, promotive, curative and rehabilitative health services to its employees. All centres are equipped with state-of-the-art diagnostic and therapeutic equipment.

Across RIL, as a part of awareness, it celebrates No Tobacco Day, World Diabetes Day, Women's health awareness drive and World Heart Day.

During the FY 2014-15, RIL's expenditure on HSE was ₹ 289.75 crore.

RIL has been accredited by agencies like Joint Commission International, National Accreditation Board for Hospitals, National Accreditation Board for Laboratories, etc. for its initiatives and activities in the field of health and well-being.

Safety

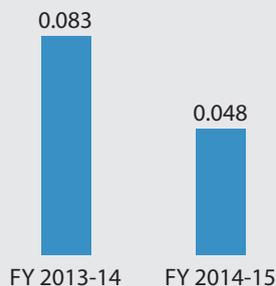
RIL targets zero injuries and incidents. Safety is a critical aspect in delivering responsible products, and hence, RIL conducts its operations considering safety of its employees, suppliers and vendors, as well as communities in which RIL operates. A fully equipped and well-qualified HSE organisation is in place at all locations providing necessary governance, documentation and HSE assurance. To support its HSE organisation, RIL is backed by a Centre of Excellence at the Corporate, which brings in subject matter expertise in various fields of HSE, apart from governance. To ensure the effective functioning of the Health, Safety and Environment Management Systems (HSE-MS), and for conducting regular performance reviews, RIL has also formed a board-level HSE Committee.

RIL's HSE Learning and Development (L&D) programmes and e-modules are designed to equip employees with skills needed for safe operations. These modules cover workplace risk and process risk management. This e-learning is corroborated by field training. Collaborating and networking with global institutions and industries has helped in improving the competencies at every level of line management.

■ Management's Discussion and Analysis

Injury rate at manufacturing locations

(per 100 workforce)

**42.17%**

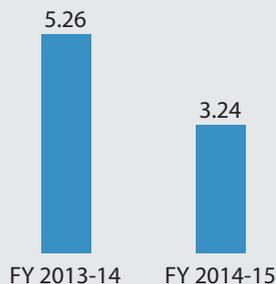
Reduction in Injury rate

The management of Process Safety Risk is part of Process Safety Management in HSE Management framework. At RIL, an integrated robust system is in place to monitor process safety incidents and other HSE incidents.

RIL has implemented 'Learning From Incidents' across its sites to interpret incidents and make improvements in the existing practices. A team of qualified specialists provide recommendations. The action plan is monitored through a comprehensive and robust tracking system to ensure complete adoptability of the plan.

Lost day rate at manufacturing locations

(per 100 workforce)

**38.40%**

Reduction in lost day rate

Nurturing and managing talent

RIL's business strategy is aimed at building social capacity, which leads to sustained growth. RIL has adopted the 70:20:10 principle for nurturing

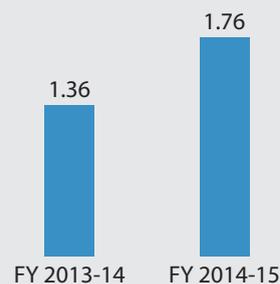
talent. The principle focuses on providing its people three categories of experience, 70% through the challenging work on hand, 20% through interaction with people and 10% from training activities.

While the five functional and four business academies give emphasis to enhancing the functional and domain competencies of employees - through e-learning, classroom training and on-the-job assignments. The Reliance Institute of Leadership focused on building core RIL values and behaviours among employees, through a series of customised workshops to firmly establish the principle that, 'How' we do things at RIL, matters as much as 'What' we do.

RIL imparted more than a million man-hours of trainings (1.76 million man-hours) to its people, both through internal and external subject matter experts in FY 2014-15.

Training

(million man-hours)

**29.41%**

Increase in man-hours of training imparted

RIL partnered with leading institutions and professional bodies worldwide, including the Indian Institutes of Management, Indian Institutes of Technology, Harvard Business School, Bersin by Deloitte and Corporate Executive Board, among others, to provide 'anywhere-anytime', world-class e-learning and classroom programmes.

To build tomorrow's leaders, RIL has rolled out the Career Acceleration Programme (CAP). This programme identifies, supports and accelerates the development of employees, who demonstrate high potential and the level of excellence required to move into senior positions within the organisation.

RIL has created a strong bench strength for leadership roles in the organisation and focusing on long-term development initiatives, such as mentoring and coaching by leadership teams, job rotations and stretch assignments.

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

At RIL, trainings are extended to contractual workforce with a focus towards developing their capacities, especially on HSE.

To inculcate the culture of quality and enhance the knowledge of business process excellence, people are being trained on Six-Sigma protocol. This year, a total of 14,546 person hours of training have been provided on Six-Sigma. During the year, 82 Six Sigma projects have been executed.

Diversity & Inclusion

RIL believes in creating an environment for its employees which is free from any discrimination. The Company culture embraces diversity and aims at treating everyone with dignity and respect. RIL believes in equality irrespective of gender, sexual orientation, disability, caste or age.

As on 31st March 2015, RIL's total people strength is 24,930 including 1,195 female employees. RIL employs people from 19 nationalities.

RIL is strongly committed to gender diversity and has taken progressive measures to increase representation of women in the organisation, especially at the leadership level. Diversity initiatives taken at the corporate level includes:

- Extension of maternity leave
- Introduction of Adoption leave
- Launched a first ever radio show at RIL to hold discussion on gender diversity
- Organising Self-defense workshops for women
- Introduction of Internal Complaints Committee
- Pan-India toll free Helpline for safety & security

R-Aadya Initiative: RIL introduced a common platform for women workforce to connect, converse and collaborate. R-Aadya is about the power of women at RIL. RIL believes that women have the same potential to contribute towards realising the organisation's vision. Under the R-Aadya platform RIL has introduced "Nirbhaya: Be Fearless©" which is an Android emergency application that can send a distress call or emergency message to a specified contact or group in an emergency situation.



Diversity & inclusion at RIL

Ethics and Human Rights

All RIL employees, suppliers and vendors are required to respect human rights of not only each other, but also of the community in which RIL operates in. All the Company's units maintain 100% compliance with local and national laws, regarding ethics and human rights. RIL also takes into account global standards and the Company strives to comply with all global norms on human rights, including the principles outlined in the United Nation's Universal Declaration of Human Rights. All employees are exposed to these topics through organised training programmes. 100% of its non-supervisory permanent employees at its manufacturing locations are covered under collective bargaining agreements with trade unions.

Stakeholder Engagement

RIL's relationships with all its stakeholders have a direct and indirect impact on their business activities and reputation. RIL has identified eight key stakeholders (Investors and Shareholders, employees, customers, suppliers, trade unions, Government and regulatory authorities, local community and NGOs) with whom to discuss common solutions through strategic dialogues.

The Company proactively engages with its stakeholders in order to inform them of their business strategy and operations, shape their products and services, manage and respond to social expectations and improve the environment in which RIL conducts its business.

3. Product & Processes

Innovation

The **Reliance Innovation Council (RIC)** was established in 2008. The RIC spearheads innovation within the organisation by providing RIL a grand innovation vision.

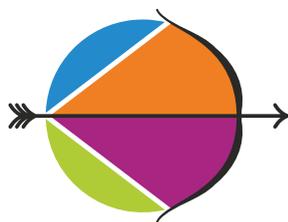
Refer page no. 12 of the Corporate Overview section to know more about the members of the council.

The Reliance Innovation Leadership Centre has led various programmes to integrate innovation within RIL. Some of the key programmes are:



Reliance Innovation Council members with Executive Director Shri Hital R. Meswani

Internal



Mission Kurukshetra (MK): RIL recognises that every mind is creative. MK is a step towards democratising creativity and innovation within the organisation. Through the MK platform, its people can submit ideas and track their progress right up to implementation. In addition, businesses can put up specific challenges seeking novel ideas and solutions. In short, MK aims to be a platform where ideas are born, brought to logical conclusion and executed for impact. In the long term, MK aims to create an environment that allows for every single good idea to be explored for the benefit of the organisation and its people.



Beyonders: The Beyonders programme aims at creating innovation leaders at RIL by linking opportunity with innovation training. The participants receive training in multiple world-class innovation approaches to break psychological inertia and enhance quantity and quality of their ideas. In addition, the programme gives the participants opportunities to lead substantial innovation projects. The Beyonders programme aims to create innovation leaders within RIL who can take on substantial innovation initiatives and introduce the 'next big thing' to the world.



D4 (Define-Discover-Develop-Demonstrate): At RIL, the D4 programme aims to create a drive for innovation within its people, ultimately creating a vibrant culture of innovation. This programme is action-oriented-participants identify innovation opportunities and are trained to use cutting-edge innovation tools and techniques to find innovative solutions. The ultimate objective is to achieve bottom-up innovation and help accelerate the accomplishment of organisational goals. The D4 programme aims to enable and empower middle management to ideate and innovate; hence challenging the assumption that innovation comes only from top leadership.



Leading Expert Access Programme (LEAP): Innovation thrives within inspired minds. LEAP was born with the aim of providing people at RIL with access to global thought and innovation leaders through interactive sessions. From industry captains to Nobel Laureates to Social Crusaders, all have been inspiring the people of RIL through LEAP.

External

Global Innovation Hub: In a move to spur innovation in industry, **GenNext Ventures**, a RIL sponsored Venture Capital fund and Microsoft Ventures have floated the Global Innovation Hub. This globally competitive platform will support entrepreneurs shape their disruptive ideas in a resourceful setting, with help and guidance from leaders across industries and functionalities.

The collaboration will allow entrepreneurs to access the Microsoft business units for product feedback, marketing and technical guidance, including access to Microsoft's Biz Spark programme. The four-month long programme grooms, mentors and nurtures high potential start-ups, by providing deep engagement to strengthen and grow customer traction. Beyond the initial four-month programme, GenNext Ventures will fund selected start-ups graduating from the hub and provide them hands-on support to build and grow their companies into successful global companies.

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

Investing in Research & Development (R&D)

Reliance Technology Group's ('RTG') vision is to develop novel and proprietary catalysis, processes and products to improve profitability and sustain the growth of RIL. To achieve this vision, **RTG has transitioned from a smart buyer of technology to a fast customiser of technology, and its current initiatives are rapidly establishing RIL as a flagship developer in few key technology areas.**

RTG transitioned from a smart buyer to a**fast customiser & flagship developer**

of technology

RTG focuses on

- (i) New products, processes and catalyst development to support existing business (near-term R&D), and create breakthrough technologies for new businesses (breakthrough R&D)
- (ii) Advanced troubleshooting and
- (iii) Supporting capital projects, along with profit and reliability improvements in manufacturing plants

As a part of open innovation, RTG is actively collaborating with various international and national institutions for R&D related activities. Some of the prominent institutions are; Florida State University, NUS (Singapore), KIER (South Korea), IIP Dehradun, IIT Mumbai, IIT Kharagpur, IIT Chennai, University of Delaware, Penn State University, Kansas State University & Massachusetts Institute of Technology (MIT).

R&D - Refining

RTG continues to pursue research in the areas of coking, hydro processing, Fluidised Catalytic Cracking (FCC), crude processing, molecule-based process optimisation and value addition from low value refinery streams. In addition to conventional refining area, RTG is also venturing into new areas like biomass gasification, carbon dioxide capture and its utilisation, and Nano technology based applications.

RIL is the sole industry partner in the New Millennium Indian Technology Leadership Initiative (NMITLI) project with Council of Scientific & Industrial Research (CSIR) on indigenous '**Polymer Electrolyte Membrane**' (PEM) fuel cell technology development. After successful lab-scale demonstration of PEM fuel cell technology at a lower power, a bigger scaled-up

cell of 3 kilowatt-electric (kWe) capacity has been designed. A fuel cell test bed is being built, for which the engineering has been done by RIL, while the stack is built by its CSIR partner. This test bed should facilitate automated testing of complete fuel cell system and help in system validation.

RTG also provides advanced technical support through computational fluid dynamics and multiple advanced simulation tools. The modelling and simulation group is engaged in resolving several important refinery and petrochemicals reliability issues, leveraging computational fluid dynamics and other simulation tools.

R&D - Petrochemicals

RTG is providing technology support to olefin crackers, polymers, fibre intermediates, LAB and polyester. The focus areas include:

- i) Efficient asset utilisation
- ii) Development of specialty product grades/materials/catalysts
- iii) Value-addition to by-product streams
- iv) Leveraging opportunities at the chemicals/oil interface

Several projects in the following areas have been completed or are ongoing across the refining and petrochemicals businesses:

- Product & Process development and improvements
- Energy efficiency
- Enhancing product value to customer
- Product applications development
- Catalyst development
- Additive development
- Automation technology

Biofuels and Biochemicals

The '**Algae to Bio-crude**' effort aims at establishing a green platform, to harness natural resources, such as the freely available sunlight, the vast resource of sea water without competing for the limited freshwater sources and low cost nutrients (nitrogen, phosphorus) that will produce abundant quantities of biomass that can be converted to bio-crude. Research efforts on algae are focused on physiology, biochemistry, molecular biology, genomics, and development of technologies for algae cultivation, harvesting, upstream and downstream processing technologies for converting biomass to bio-crude.

RIL is also developing **Jatropha based biodiesel**. The agronomy-based development efforts are helping to develop high-yielding and robust Jatropha cultivars that can be deployed over marginal lands. This initiative is expected to provide better and stable economic alternatives to farmers, who today have limited cultivation

■ Management's Discussion and Analysis

options and are exposed to price fluctuations of their produce. RIL is also partnering with global leaders in hybrid development and evaluating their hybrids in its research farms alongside their hybrids, with an objective of putting together best technology available worldwide.

Breakthrough R&D –

RTG is focusing on the following areas:

- i) Metabolic flux analysis and pathway modification for production of biomolecules
- ii) Scale up of process in bioreactors
- iii) Polyester fabric waste recycling
- iv) Biomass deconstruction
- v) Productivity improvement in agri-based biofuels.
- vi) Development of hybrids and improved production protocols

R&D - Health Safety and Environment

RIL research has yielded benefits in sustainability, process intensification and HSE. Few examples on RTG's initiatives related to HSE include the following:

- RIL is in the process of commercialising a breakthrough technology in the production of LAB. Conventional technology uses hydrofluoric acid (HF) as a catalyst. RIL's new technology **uses a proprietary ionic liquid in place of HF** improving safety, reducing risk to the environment.
- Sulphur is a refinery by-product. In its elemental form, sulphur has limited use. RIL has developed a technology that increases the **efficacy of sulphur as a fertiliser**. It is estimated that Indian soils are 40% deficient in sulphur and RIL new sulphur fertiliser (RelFarmS™) will greatly improve agriculture productivity throughout India. RIL has also acquired specialty polymer technology from Agricultural Research Institute and is exploring its application for sustained and slow release of water to the plants.

For more detail refer Director's Report the technology absorption section on page no. 177.

R&D – Enablers

Infrastructure

The RTG has state-of-the-art R&D facilities in Navi Mumbai and across various locations as mentioned below:

Headquarters- Navi Mumbai R&D Centre:

The newly constructed Research Laboratory became fully operational last year. With a total area of 3,00,000 square feet including 1,20,000 square feet of laboratory space, the new laboratories are among the best equipped in all of

India. An impressive array of advanced equipment (X-ray diffraction, mass spectrometers, chromatographs, nuclear magnetic resonance imaging, electron microscopes, infra red spectrometers, X-ray photoelectron spectrometers, rheometers, etc.) is available to researchers.

This R&D centre focuses on catalysis, chemistry, process engineering, modelling, simulation, material science, synthetic biology, biotechnology, downstream polymer processing, reaction engineering, advanced analytical sciences and product applications.

In its next phase, R&D infrastructure will include high throughput experimentation systems that significantly increase its ability to explore technology options and reduce the time for technology development.

Other Centres and Focus areas

R&D Centres	Focus areas for R&D activities
Hazira	Polypropylene catalysis, and pilot scale testing
Vadodara	Catalysts, adsorbents, organic chemistry, process development, applied biology and environmental science
Patalganga	Polyester materials, processes, products, and applications
Jamnagar	Crude characterisation, process research, and pilot scale facilities for supporting refining operations and renewable energy technology development
Gagva	Water treatment and biotechnology
Samalkot	Biotechnology for biofuel
Naroda	Developing various performance properties for apparel fabrics and auto textiles
Chembur (Mumbai)	Developing Polymer applications and technologies

R&D – Personnel

RIL also runs initiatives and campus recruitment drives across universities and colleges to attract the fresh talent and the next generation of engineers and scientists. The total number of professionals working to support the research and technology activities under RTG is more than 800.

Patents

In FY 2014-15, total 22 patents were granted, in which, three for India, ten for USA, two for China, one for South Korea, one for Indonesia, one for Taiwan, two for Singapore, one for Nigeria and one for Poland.

R&D expenditure

	FY 2014-15	FY 2013-14	FY 2012-13	FY 2011-12	FY 2010-11
Capital	722	810	738	654	203
Revenue	498	408	380	335	314
TOTAL	1,220	1,218	1,118	989	517

(₹ in crore)

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

Product Stewardship

Reliance works towards increasing the recycling and reuse of materials, and thereby inculcating the 3R (reduce, reuse and recycle) philosophy into the production process.

It is Reliance's constant endeavour to make products that have a positive impact on the environment and cater to consumer needs. Some of the instances of product stewardship are listed below:

Product Stewardship in Refining

The RIL's DTA refinery at Jamnagar is producing unleaded gasoline, since its inception. A new benzene recovery unit is being implemented in the Jamnagar DTA Refinery, to reduce benzene from the FCC gasoline, and upgrade it to clean fuels of Euro III/Euro IV standards. This shall help to reduce environmental impact of these fuels at the end use stage.

Product Stewardship in Petrochemical

- i) Promotion of Polyethylene (PE) Flexible Silo Bags for food grain storage to reduce wastage of grain
- ii) Promotion of Rice Husk PVC Composite Boards for construction and furniture application thus reducing the demand of wood
- iii) Recron Green Polyester Staple Fibre which are made from 100% post-consumer waste PET bottles and have one of the lowest carbon footprint
- iv) Promotion of Polypropylene Raffia Bags in fodder packaging for improved milk production
- v) Enhancing PET recycle capacity by 11KT/year

For more information please refer Business Responsibility Report, principle 2.



Recron Green polyester staple fibre

Product Stewardship in Retail

Reliance trends operates a state-of-the-art design studio, fully integrated with sampling and quality testing facility to improve quality and comfort for the customers.

4. Profit

RIL consistently endeavour to enhance shareholder value. RIL's financial performance is explained in

section 'Financial Performance and Review' on page 49 of Management Discussion & Analysis report followed by commentary on each of the major business.

C) RISK MANAGEMENT AND INTERNAL CONTROL

1. Introduction

Reliance actively stimulates entrepreneurship throughout the organisation and encourages its people to identify and seize opportunities. The current economic environment, in combination with significant growth ambitions of Reliance, carries with it an evolving set of risks. Reliance recognises that these risks need to be managed to protect its customers, employees, shareholders and other stakeholders, to achieve its business objectives and enable sustainable growth. Risk and opportunity management is therefore a key element of the overall Reliance strategy. This section provides an overview of the key strategic risks, Reliance's risk and control framework, and its approach to risk management.

2. Creating Value through Risk Management

Reliance operates in diverse industries and global markets, and therefore requires a balanced approach to risk management. An integrated system of risk management and internal controls, which is tailored to the specific segments of Reliance and its businesses, is deployed, taking into account various factors, such as the size and nature of the inherent risks and the regulatory environment of the individual business segment or operating company. This framework undergoes continuous improvements to allow Reliance to optimise its management of risk exposures, while taking advantage of business opportunities.

3. Reliance's View on Risk

3.1 Risk Appetite

Reliance's risk appetite is linked to its strategic approach and is based on the stance it has taken across four areas:

- **Strategic and commercial:** Reliance manages strategic risk in the pursuit of profitable growth in both mature and emerging markets. Given the volatile markets and economic climate in which it operates, the adaptability of its people, its service offering, and its infrastructure are key to manage its risk.
- **Safety and operations:** Reliance is committed to conduct all its activities in such a manner so as to avoid harm to employees and the community. It strives to deliver safe, reliable and compliant operations.

■ Management's Discussion and Analysis

- **Compliance and control:** Compliance with laws and regulations is fundamental to maintain Reliance's license to operate in the various industries that it operates in. Reliance also believes that accurate and reliable information provides a competitive advantage and is key to effective management of its business. It therefore accepts minimal risk in relation to reporting risks.
- **Financial:** Reliance manages financial risk to maintain a prudent financing strategy, even when undertaking major investment, and therefore taking controlled risks in this area.

3.2 Risk factors

Reliance emphasises on those risks that threaten the achievement of business objectives of the Group over the short to medium term. An overview of these risks is provided hereafter, including the actions taken to mitigate these risks and any related opportunities:

i) Strategic and Commercial risks

a. Prices and markets

Reliance's financial performance is subject to the fluctuating prices of crude oil & gas and downstream petroleum products. Prices of oil & gas products are affected by supply and demand, both globally and regionally. Factors that influence the supply and demand include operational issues, natural disasters, political instability, economic conditions and many others. For example, lower prices will mean lower revenues for Reliance's upstream production and as a result the long-term upstream projects may become less profitable. In addition, this may also have an impact on booked reserves. Prolonged unfavourable conditions could also result in cancellation of projects or impairment of assets.

Mitigation: Since Reliance operates an integrated hydrocarbon business, some of these risks can be offset by gains in other parts of the Reliance's business. In addition, Reliance proactively hedges these exposures.

b. Competitive forces

While Reliance seeks to compete on the basis of product differentiation, it operates in commodity-type markets. It is therefore, important to manage its costs, to ensure it has an edge in pricing over its competitors.

Surplus refining capacity in India, augmentation of refining capacities by PSUs (Public Sector Undertaking) and the additions of new refining capacity in Asia, notably in China and the Middle East, will increase competition in the region, potentially impacting GRM in its refining and marketing business.

Mitigation: As a risk-mitigating strategy, Reliance continues to diversify its product portfolio and also develop new export markets. It is also investing in projects to strengthen cost competitiveness.

c. Brand and reputational risks

As one of India's leading brands, Reliance's reputation is an important asset.

Mitigation: The Group has defined a RMS and code of conduct that govern how all employees in Reliance operate. Compliance with these organisational policies, code of conduct, regulatory compliance requirements and other governance requirements, are key to protect Reliance's reputation.

d. Political instability, acts of terrorism, government policies

Social or civil unrest, in geographical areas where Reliance operates, can have an impact on its operations. Potential developments that may impact its business operations include government pricing policy of petroleum products, piracy on high seas, any changes to Indo-US economic policy, acts of terrorism or civil unrest that may have an impact on safe operations of its facilities and transportation of its products.

Political unrest and tensions in the Middle East, North Africa can cause short-term fluctuations in crude prices and crude availability.

Mitigation: To mitigate the risks resulting from non-availability of crude and feedstock, Reliance has a diversified crude sourcing strategy from multiple geographies (Asia, the Middle East, West Africa, Latin / South America and North Africa) under both short-term and long-term arrangements.

ii) Safety and operational risks

a. Changing technology and obsolescence risk

The changing technologies and the natural ageing of existing facilities pose the risk of production plants becoming obsolete and uneconomic. Aged plants are prone to unplanned shutdowns, increased maintenance and operating costs. Deployment of new technologies and ongoing maintenance processes are key to enhancing the reliability of operations and reduction in operating costs, while improving the safety of operating conditions by extending the useful life of assets.

Mitigation: Reliance utilises a dedicated Research & Development function, which develops near term and incremental improvements, as well as step change improvements to existing products and processes.

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)

b. Cybersecurity risk

At Reliance, the use of information and telecommunication technologies is increasing, resulting in greater security threats to its digital infrastructure. A breach of its digital security or disruptions to its digital infrastructure, due to intentional actions, such as cyber-attacks or human error could lead to serious impacts to its businesses. These impacts may include injury to staff, loss of control, impact on continuity or damage to assets and services, harm to the environment, the loss of sensitive data or information, legal and regulatory breaches and reputational damage.

Mitigation: Reliance continues to strengthen its responses to cybersecurity threats through proactive and reactive risk mitigations. These include, proactive activities to continuously improve its cybersecurity policies, standards, technical safeguard, ongoing monitoring of new and existing threats and IT security awareness initiatives. Its reactive responses to cybersecurity threats, which include IT disaster recovery, emergency response and business continuity management capabilities to enable the reduction of the impacts of a cybersecurity event.

c. Major project execution risk

Reliance's future growth plans depend upon successful delivery of major capital projects. Major capital projects include the Jamnagar project (cracker, gasification etc.), which is designed to deliver a step change in energy costs and increase the production capacity of ethylene and other downstream products at the complex, as well as the launch of a pan-India telecom infrastructure to provide 4G LTE TDD high speed wireless internet and mobile communication services. Delivery of these major projects is key to Reliance's future financial performance. Managing the risks related to the delivery of these and other major capital projects is key to enhancing Reliance's long-term shareholder value.

Mitigation: Project risk management is embedded in the way Reliance delivers projects. These includes a specialised project delivery function with experience project management professionals, project risk modelling on a project-by-project basis, partnering with experienced vendors to execute complex projects and ongoing review and escalation of issues that undermine project success.

d. Evolving Health, Safety, Security and Environmental (HSSE) risks

Reliance is exposed to a wide spectrum of HSSE risks, given the diversity and complexity of the industries, it operates in. The exploration and production of oil and gas, transportation of the hydrocarbons and their further refining and processing is regulated by various HSSE related regulations across the geographies where Reliance operates. A major HSSE incident, such

as fire, oil spill, security breach can result in loss of life, environmental degradation and overall disruption in business activities.

Mitigation: Reliance follows an HSE policy that 'Safety of persons overrides all production targets', which incentivises all employees to strive for excellence in safety management for the benefit of its employees, customers and the communities. Reliance has set it self the goal of 'zero injuries and incidents'. The Group conducts HSSE audits to get assurance on HSSE management framework protocols and regulatory compliances.

iii) Compliance and control risks

a. Reporting and estimation of provisions and reserves

The estimation of proved oil and gas reserves involves subjective judgements and determinations based on available geological, technical, contractual and economic information. These estimates may change depending on the availability of new information from production and drilling activities, or changes in economic factors like change in pricing of crude, projection of foreign exchange rates and natural decline in the field and unexpected geological complexity, among others. The published provisions and reserves may also be subject to correction due to errors in application of published rules and change in guidance. Any downward adjustment would indicate lower production volumes in the upstream business.

Mitigation: Reliance has a reserves assurance framework and process in place to ensure accuracy in reporting of reserves volumes.

b. Regulatory compliance risks

The evolution of the global regulatory environment has resulted into increased regulatory scrutiny that has raised the minimum standards to be maintained by Reliance. This signifies the alignment of corporate performance objectives, while ensuring compliance with regulatory requirements.

Mitigation: Reliance recognises that regulatory requirements can at times be challenging, and therefore will:

- Strive to understand the changing regulatory standards, so as to strengthen its decision making processes and integrate these in the business strategy of each of the industries in which it operates
- Drive business performance through the convergence of risk, compliance processes and controls mechanisms to ensure continued operational efficiency and effectiveness

■ Management's Discussion and Analysis

iv) **Financial risks**

Treasury risks

Treasury risks include, among others, exposure to movements in interest rates and foreign exchange rates. Reliance also maintains sufficient liquidity, so that it is able to meet its financial commitments on due dates and is not forced to obtain funds at higher interest rates. It has access to markets worldwide and it uses a range of products and currencies to ensure that its funding is efficient and well diversified across markets and investor types.

■ **Foreign Exchange risk**

Reliance prepares its financial statements in Indian Rupee (INR), but most of the payables and receivables of hydrocarbon business are in US Dollars, minimising the cash flow risk on account of fluctuations in foreign exchange rates. Reliance avails long-term foreign currency liabilities (primarily in USD, EURO and JPY) to fund its capital investments.

Reliance also avails short-term foreign currency liabilities to fund its working capital.

Mitigation: Foreign exchange risk is tracked and managed within the risk management framework. Short-term foreign currency asset – liability mismatch is continuously monitored and hedged.

The foreign exchange market is highly regulated and Reliance ensures compliance with all the regulations.

■ **Interest rate risk**

Reliance borrows funds from domestic and international markets to meet its long-term and short-term funding requirements. It is subject to risks arising from fluctuations in interest rates.

Mitigation: The interest rate risk is managed through financial instruments available to convert floating rate liabilities into fixed rate liabilities or vice-versa, and is aimed at reducing the cost of borrowings.

4. How Reliance manages risk

Reliance manages, monitors and reports on the principal risks and uncertainties that can impact its ability to achieve its strategic objectives. The Company has established the Reliance Management System (RMS) as part of its transformation agenda. RMS incorporates an integrated framework for managing risks and internal controls. The internal financial controls have been documented, embedded and digitised in the business processes. Internal controls are regularly tested for design and operating effectiveness. Reliance's management systems, organisational structures, processes, standards, code

of conduct and behaviours together form the RMS that governs how Reliance conducts its business and manage associated risks.

Reliance has introduced several improvements to Integrated Enterprise Risk Management, Internal Controls Management and Assurance Frameworks and processes to drive a common integrated view of risks, optimal risk mitigation responses and efficient management of internal control and assurance activities. This integration is enabled by all three being fully aligned across Group wide Risk Management, Internal Control and Internal Audit methodologies and processes.

Reliance's risk management framework is designed to be a simple, consistent and clear framework for managing and reporting risks from the Reliance's operations to the Board. The framework and related processes seek to avoid incidents and maximise business outcomes by allowing management to:

- Understand the risk environment, and assess the specific risks and potential exposure for Reliance.
- Determine how to deal best with these risks to manage overall potential exposure.
- Manage the identified risks in appropriate ways.
- Monitor and seek assurance of the effectiveness of the management of these risks and intervene for improvement wherever necessary.
- Report up the management chain to the board on a periodic basis about how risks are being managed, monitored, assured and the improvements that are being made.

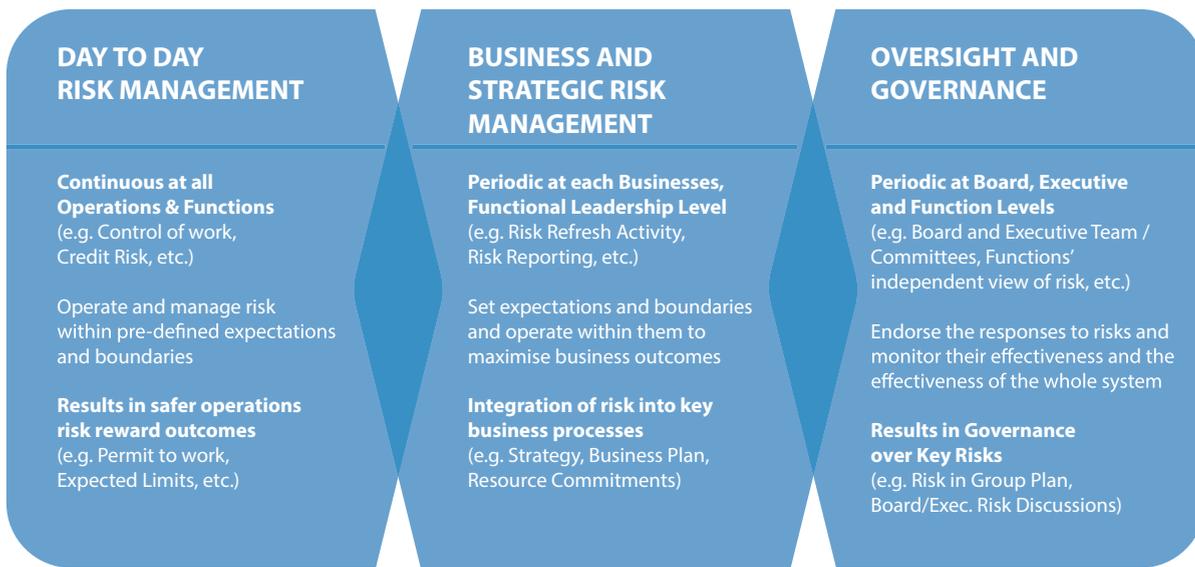
Group Risk Management Framework

The Group Risk Management Framework, is designed to help ensure risk management is an integral part of the way that Reliance works everywhere to enable risks to be identified, assessed and managed appropriately. The Group Risk Management Framework comprises three levels:

■ **Day-to-day Risk Management**

Management and staff at Reliance's facilities, assets and functions identify and manage risk, promoting safe, compliant and reliable operations. For example, Reliance's group-wide Operating Management System (OMS) integrates Reliance requirements on health, safety, security, environment, social responsibility, operational reliability and related issues. These Reliance requirements, along with business needs and the applicable legal and regulatory requirements, underpin the practical plans developed to help reduce risk and deliver strong, sustainable performance.

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)



■ **Business and Strategic Risk Management**
Through Business Risk & Assurance Committees, Reliance's businesses and functions integrate risk into key business processes, such as strategy, planning, performance management, resource and capital allocation, and project appraisal. Reliance does this by collating risk data, assessing risk management activities, making further improvements and planning new activities.

■ **Oversight and Governance**
Reliance's Board, along with executive and functional leadership provides oversight to identify and understand significant risks. They also put in place systems of risk management, compliance and control to mitigate these risks. Executive committees set policy and oversee the management of group risks, and dedicated Board Committees review and monitor certain risks throughout the year.

Reliance's Group Risk team analyses the Group's risk profile and maintains the Group Risk Management Framework. Its Group Audit team provides independent assurance to the Board, through its Committees, over whether the Group's system of risk management and internal control is adequately designed and operating effectively to respond appropriately to the risks that are significant to Reliance.

D) SMART TRANSFORMATION AT RELIANCE (STAR)

Reliance has been working to deliver a large scale, multi-year business transformation programme called STAR.

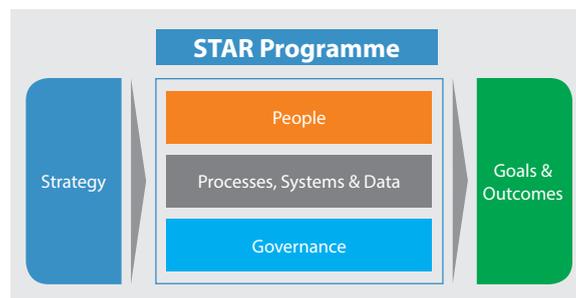
The STAR programme is an integral part of Reliance's strategy to build competitive advantage and use

technology for its advantage. This programme has seen concentrated efforts on three pillars -

- a) People – to build and sustain a human capital advantage
- b) Processes Systems & Data – to develop an integrated, end-to-end digital chain providing real time information
- c) Governance – to provide continuous assurance to all stakeholders

The successful implementation of STAR will enable the institutionalisation of Reliance's DNA to:

- Create a new set of leaders who retain the best elements of what makes Reliance distinctive and take its business forward with new energy and entrepreneurship
- Create scalable frameworks and methodologies to extract full value from existing assets and quickly integrate and monetise new lines of business and acquisitions
- Implement world class integrated processes and systems solutions to fully leverage existing and emerging technologies to allow Reliance to become more informed, effective and efficient



Coverage of STAR

STAR covers three businesses, Refining & Marketing, Petrochemicals and Oil & Gas Exploration & Production, and support functions such as Manufacturing, Projects, Procurement & Contracting, Logistics, Human Resources (HR), Finance, Information Technology (IT), Research and Development, Corporate Security, Governance & Integration (G&I), Risk and Audit.

Progress during the year

Successful transformation requires vision, leadership, dedication, discipline and teamwork sustained over a multi-year timeframe. Reliance continues to meet this criteria for the STAR project which is unique and unparalleled in both scope and outcome. Significant progress being made across the entire agenda during FY 2014-15 with the following highlights.

1. People

Reliance has taken strong steps forward in its HR Transformation, a key part of its STAR Business Transformation programme. Under the banner of 'R-HR Transformation', the programme is steeped in a desire to drive both a culture change in Reliance and to embrace new business processes used by the world's leading companies. The objective of this transformation is to achieve Reliance's vision of being:

"A modern, progressive people environment, where purpose-driven talent are attracted and motivated by a consistent meritocratic HR framework and where high quality leaders capable of realising RIL business goals are identified, encouraged, and rewarded."

Significant progress has been made during FY 2014-15.

- Reliance launched new 'Values & Behaviours'
- Implemented new processes for employee objective setting and performance management. This better aligns corporate and individual performance and rewards
- Implemented improved Talent Management processes
- Started to develop new Leadership Development and Learning programs

2. Processes, Systems and Data

Reliance started with the aim of seamlessly integrating and systems enabling all of its processes. To achieve this Reliance mapped all of the key processes in detail. These processes were then integrated and optimised with the aim to technology enable them through a series of system go-lives.

Till date Reliance successfully delivered integrated systems go-lives for the E&P business in April 2014 and for the R&M business in January 2015. The R&M go live was very large and complex and was delivered successfully without impacting business operations. The scope included Jamnagar refinery and included Petrochemicals activities at the site. With these go-lives Reliance has made substantial progress to automated processes, reducing manual effort and improving controls and transparency through an end-to-end digital chain.

3. Governance

The way Reliance conducts its business has evolved over the decades, both at the individual business and the group levels. In FY 2014-15, Reliance launched the RMS which formalises the governance framework in a transparent manner and codifies the way work gets done at Reliance. The RMS encompasses the policies, processes, tasks, behaviours and other aspects of the Company and is organised across four areas:

- Purpose and Values
- Group Strategy, Financial Framework and 'How We Manage Risk'
- 'How We Organize and Manage the Company'
- 'How We Verify' that the business is operating and performing as it should

The RMS establishes clarity and a common understanding of the way Reliance operates. Reliance has created a new function called Governance & Integration to ensure RMS governance processes, frameworks and content is kept current and that all elements of RMS are aligned and integrated.

Focus for next year

The focus for FY 2015-16 will be to:

- Embed and operationalise a full cycle for governance within the new RMS framework
- Complete the full implementation of the people R-HR Transformation projects
- Implement systems go-lives for remaining Petrochemical businesses

When fully deployed, Reliance's goal is that all of these transformation projects will create a foundation to support and enable Reliance to be among top-50 Company in the Fortune 500 list by 2020, with a 'most admired company' status in India.

MANAGEMENT'S DISCUSSION AND ANALYSIS (CONTINUED)



RIL's Chairman and Managing Director Shri Mukesh D. Ambani being conferred the honorary Doctor of Science degree by ICT

AWARDS AND RECOGNITIONS

Some of the major awards and recognitions conferred on Reliance during FY 2014-15 are:

Leadership

- RIL's Chairman and Managing Director Shri Mukesh D. Ambani was conferred the Honorary Doctor of Science degree by the Institute of Chemical Technology (ICT)

Corporate Social Responsibility

- Awarded the 'Corporate Social Responsibility Company of the Year' for the second consecutive time in the Asia Oil & Gas Awards 2015, organised by Oliver Kinross
- Awarded the 'Best CSR project in environment management forestry /horticulture & Best CSR Innovation Award' by Institute of Chartered Accountants of India (ICAI)
- Won the 'Best Corporate Social Responsibility Practices Award' and the 'Best use of Corporate Social Responsibility practices in Manufacturing Award' at the 3rd Global CSR Excellence and Leadership Conference of the World CSR Congress

Quality and Excellence

- Won three Par Excellence and one Excellence award under Quality Circle (QC) and Lean QC category respectively at the National Convention 2014 of the Quality Circle Forum of India (QCFI)
- Won the Par Excellence Award at the National Convention of Quality Concepts (NCQC)
- Received the 'Best-in-Class Award' from Asia Pacific Quality Organisation (APQO)
- Received Par Excellence award at National Quality Circle Convention-2014 and Gold awards at Annual Convention on Quality Concepts (ACQC) organised by QCFI
- Received the esteemed 'Golden Europe Award' for Quality & Commercial Prestige at the convention organised by Otherways Management & Consulting Association (OMAC)
- Received the 'Gold Award' at the International Convention of Quality Control Circles - 2014 (ICQCC)
- Won two Par Excellence awards in Kaizen by Quality Circle Forum of India
- Won the 'Gold Award' at the Annual Convention on Quality Concepts organised by QCFI



Best Corporate Social Responsibility Practices 2014



Diamond Award and "Gold Award" on Lean Six Sigma

- Won the Diamond Award and "Gold Award" at the Annual Convention & Competition on Lean Six Sigma Convention

Projects and Engineering

- Received 'Bechtel's Award for Quality Engineering' for its off-site and utilities engineering

Health, Safety and Environment

- The Floating Production Storage and Offloading (FPSO), Dhirubhai-1 platform, received the 'Best Overall Safety Performance' in the offshore production platforms category in 2014
- Awarded as the 'HSE Company of the Year' at the Asia Oil & Gas Awards 2015, organised by Oliver Kinross
- 'Gold Award in Arogya World Healthy Workplace Award 2014'
- Awarded the 'Golden Peacock Occupational Health & Safety Award' for the year 2014
- Awarded the 'Golden Peacock Environment Management Award' for the year 2014
- Won the 13th annual 'Greentech Safety Award 2014'
- Won the 15th annual 'Greentech Environment Award 2014'
- Won the first position in the 'Green Warrior' competition organised by Times of India

Energy and Water conservation / efficiency

- Awarded 'Excellent Energy Efficient Unit Award' at the CII National Energy Efficiency Summit
- Received 1st prize in Petrochemicals sector in National Energy Conservation Award - 2014 by Bureau of Energy Efficiency

Human Resources, Learning and Development

- Awarded the 'Golden Peacock National Training Award 2014' at the Golden Peacock Awards

Retail

- Recognised as the 'Best Brand' in the Consumer Electronics and Appliances Retailers category by The Economic Times Best Brands 2014
- Franchise India Retail Awards 2014 - CDIT and Telecommunications Retailer
- Awarded the 'Most Admired Retailer' of the Year - Large Format as well as Private Label by Images Retail Awards 2014
- Ranked among the 'Most Trusted Service Brands' in India by Brand Equity
- Award for 'Marketing Excellence in Retail Sector' given in the field of Marketing Dynamics towards a sustainable tomorrow and continuous marketing practice in Retail
- Award for 'Best Diamond Jewellery' of the Year from National Jewellery Awards 2014, in Vogue and Bridal category

Sustainability

- Won the 'CII-ITC (Confederation of Indian Industry) Sustainability Award 2014'
- RIL ranked as India's Greenest Company in a survey of 500 global majors conducted by The Newsweek in partnership with Corporate Knights Capital. **Ranked at 185**, RIL is the highest ranked Indian company among the **World's Greenest Companies**