

# Management Discussion and Analysis

## BUSINESS ENVIRONMENT

### Global Economic Outlook

The global pick-up in economic activity that started in the second half of 2016 gained further momentum in the first half of 2017. According to the International Monetary Fund ('IMF'), growth is projected to rise over 2018 and 2019 in emerging markets and developing economies, supported by improved external factors - a benign global financial environment and a recovery in advanced economies.

Global output is estimated to have grown by 3.7% in 2017 (0.5% higher than in 2016). Global growth forecasts for 2018 and 2019 have been revised upward by 0.2% to 3.9%. The revision reflects an increased global growth momentum. For the two-year forecast horizon, the upward revisions to the global outlook result mainly from advanced economies, where growth is now expected to exceed 2% in 2018 and 2019. This forecast reflects the expectation that favourable global financial conditions and strong sentiment will help maintain the recent acceleration in demand, especially in investment, with a noticeable impact on growth in economies with large exports. In addition, the United States ('US') tax reform and associated fiscal stimulus are expected to temporarily raise US growth, with favourable demand spill overs for US trading partners, especially Canada and Mexico, during this period.

In the IMF's World Economic Outlook update for January 2018, the growth forecast in US has been raised from 2.3% to 2.7% in 2018 and from 1.9% to 2.5% in 2019. The forecast has been revised up given stronger than expected activity in 2017, higher projected external demand and the expected macroeconomic impact of the tax reform, in particular the reduction in corporate tax rates and the temporary allowance for full expensing of investment.

Growth rates for many of the Euro area economies have been marked up, especially for Germany, Italy and the Netherlands, reflecting the stronger momentum in domestic demand and higher external demand.

The Euro area recovery was expected to gather strength in 2017, with growth projected to rise to 2.1% in 2017, before moderating to 1.9% in 2018. The increase in growth in 2017 mostly reflects acceleration in exports in the context of broader pick-up in global trade and continued strength in domestic demand growth supported by accommodative financial conditions amid diminished political risk and policy uncertainty.

Growth in the United Kingdom ('UK') is projected to subside to 1.5% in 2018. The downward revision to the 2017 forecast relative to the April 2017 World Economic Outlook is driven by weaker-than-expected growth outturns for the first two quarters of the year. The slowdown is driven by softer growth in private consumption as the Pound's depreciation weighed on household real income. The medium-term growth outlook is highly uncertain and will depend in part on the new economic relationship with the European Union ('EU') and the extent of the increase in barriers to trade, migration and cross-border financial activity.

Growth in the Sub-Sahara region is anticipated to pick-up to 3.2% in 2018 from 2.4% in 2017. Stronger growth will depend on a firming

of commodity prices and implementation of reforms. A drop in commodity prices, steeper-than-anticipated global interest rate increases and inadequate efforts to ameliorate debt dynamics could set back economic growth. South Africa is forecast to tick up to 1.1% growth in 2018 from 0.8% in 2017. Nigeria is anticipated to accelerate to a 2.5% expansion this year from 1% in the year just ended.

The Kenyan economy faced multiple headwinds in 2017 as a result of which GDP growth is projected to dip in the coming years. A drought in the earlier half of the year, the on-going slowdown in private sector credit growth and a prolonged election cycle weakened private sector demand, notwithstanding an expansionary fiscal stance. Nonetheless, reflecting the relatively diverse economic structure, these headwinds were partially mitigated by the recovery in tourism, better rains in the second half of the year, still low global oil prices and a relatively stable macroeconomic environment.

Growth in the East Asia region is forecast to slip to 6.2% in 2018 from an estimated 6.4% in 2017 due to a structural slowdown in China; which is seen offsetting a modest cyclical pick-up in the rest of the region. However, risks to the outlook have become more balanced. Indonesia is forecast to grow to 5.3% in 2018 from 5.1% in 2017. Growth in the Southern Asia region is forecast to accelerate to 6.9% in 2018 from an estimated 6.5% in 2017. Consumption is expected to stay strong, exports are anticipated to recover and investment is on track to revive as a result of policy reforms and infrastructure upgrades. Setbacks to reform efforts, natural disasters or an upswing in global financial volatility could slow growth.

In the Middle East, growth slowed significantly in 2017 on the back of a slowdown in the Islamic Republic of Iran's economy after very fast growth in 2016 and cuts in oil production in oil exporting countries through March 2018 under the extended Organisation of the Petroleum Exporting Country ('OPEC') agreement. In 2018, growth is expected to increase to 3.5%, mostly reflecting stronger domestic demand in oil imports and a rebound of oil production in oil exports. However, regional insecurity and geopolitical risks still weigh on the outlook.

India is expected to pick-up to a 7.3% GDP growth rate in Financial Year ('FY') 2018-19 from 6.7% in FY 2017-18. The growth projection for 2017 has been revised down to 6.7% (7.2% in IMF's April 2017 forecast) reflects still lingering disruption associated with the currency exchange initiative as well as transition cost related to the launch of the national Goods and Services Tax ('GST').

In China, growth is projected to moderate to 6.5% in 2018 from 6.8% in 2017. There is an expectation of expansionary policy mix to meet the target of doubling real GDP between 2010 and 2020.

The pace of expansion in Japan is expected to weaken to 0.7% in 2018 from 1.5% in 2017, based on the assumption that fiscal support fades as currently scheduled, private consumption growth moderates and the boost from 2020 Olympics-related private investment is offset by higher imports and slower projected growth in foreign demand.

Key risks to the global forecast are:

- I. In the near term, risks to the global growth forecast appear two-sided and broadly balanced. On the upside, momentum

could prove to be more durable than expected amid strong consumer and business confidence in, for instance, the Euro area and in East Asia near-term growth could exceed forecast. On the downside, policy uncertainty is more of a concern than usual, reflecting, for example difficult-to-predict US regularity and fiscal policies, the potential adoption of trade restrictions, negotiation of the United Kingdom's relationship with the EU post-Brexit and geopolitical risk.

- II. Beyond the immediate term, risks are skewed to the downside and stem from a host of financial tensions, a possible inward looking policy shift and persistently low inflation in advanced economics and a range of non-economic factors.
- III. Some of the risks around financial tensions are pertaining to the financial stability risk in China, potential tightening of global financial conditions, risks of capital flow reversal from the emerging market economies, challenges facing Euro area banks around non-performing loans ('NPL'), potential rollback of the strengthening of financial regulations, a retreat from Cross-Border Economic Integration and move towards inward looking policy shift.

**Domestic Economic Outlook**

In India, growth slowed in FY 2017-18 due to disruptions from the currency exchange initiative ('demonetisation') in November 2016 and, more recently, the rollout of the GST in July 2017. Inflation has been low compared with the mid-point target in recent months, driven by lower food prices, allowing the Central Bank to cut its policy rate in August 2017.

GDP growth forecast for 2017 was cut from 7.2% to 6.7% by IMF and 2018 forecast set to 7.4%, reflecting the recent slowdown in economic activity (IMF World Economic Outlook, October 2017). Economic Survey of India projects a GDP growth of 7.0-7.5% for FY 2018-19. Growth will be underpinned by private consumption, which has benefitted from low food and energy prices, civil service allowance increases and growth in urban wages, ease in lending rates, solid rainfall forecast in the monsoon season and a doubling in farm loan waivers supporting rural households.

A gradual increase in India's growth rate is expected resulting from implementation of important structural reforms. GST, which promises the unification of India's domestic market, is among several measures which is expected to push India's growth above 8% in the medium term, thus outpacing China's growth.

The Union Budget's major push is on growth stimulation, providing relief to the middle and lower middle class, providing affordable housing, curbing black money, digitalisation of the economy, enhancing transparency in political funding and simplifying the tax administration in the country.

The fiscal deficit of the Government of India, which was 4.5% of GDP in FY 2013-14, has steadily reduced to 3.5% in FY 2016-17 and is expected to further decrease to 3.2% of the GDP in FY 2017-18, according to the Reserve Bank of India ('RBI'). Some modest slippage is expected from the 3.2% target due to weaker than expected revenue from GST, higher oil prices and higher rural expenditure.

India's revenue receipts are estimated to touch ₹ 28-30 trillion (US\$ 436-467 billion) by 2019, resulting from the Government of India's measures to strengthen infrastructure and reforms such as demonetisation and GST.

The Government of India, under the Make in India initiative, is trying to boost the contribution made by the manufacturing sector and aims to take it up to 25% of GDP from the current 17%. The Government has also launched the Digital India initiative, which focuses on three core components: creation of digital infrastructure, delivering services digitally and improving digital literacy.

Fast Moving Consumer Goods ('FMCG') is the 4th largest sector in the Indian economy. There are three main segments in the sector – food and beverages which accounts for 19% of the sector, healthcare accounts for 31% and household and personal care which accounts for the remaining 50%. Favourable demographics and increasing income levels are expected to give a boost to the FMCG market in India, which is expected to grow at a Compounding Annual Growth Rate ('CAGR') of 20.6% and expected to reach US\$ 103.7 billion by 2020 from US\$ 49 billion in 2016.

Key trends which are likely to continue in the consumer goods industry are:

- I. Consumption is expected to drive this revival in growth as households benefit from higher wages and allowances, along with benign inflation (forecast to be 4.5% in 2018: UN World Economic Situation and Prospects 2018, RBI's monetary policy review) and pre-poll step up in public spending. GST tweaks will help lower the tax incidence on consumers.
- II. Growing customer awareness, easier access to products and changing lifestyles are the key growth drivers for the consumer market.
- III. Increase in rural consumption to drive the FMCG market.
- IV. The Government of India's policies and regulatory frameworks such as relaxation of license rules and approval of 51% Foreign Direct Investment ('FDI') in multi-brand and 100% in single-brand retail are some of the major growth drivers for the FMCG market.

Key macroeconomic risks include a slow credit growth due to non-performing assets on bank balance sheets and tightening access to credit for higher risk entities, low capacity utilisation in some industrial sectors and low private investment. However, overall investment is expected to strengthen in 2018, led by public sector capital expenditure alongside FDI.

In India, reform efforts could be aimed at tackling supply bottlenecks, enhancing the efficiency of labour and product markets and modernising the agricultural sector. Labour market reforms such as rationalising labour market regulations may be able to facilitate greater and higher-quality job creation. Another priority area of focus would be on strengthening public banks' loss-absorbing buffers, implementing further public banking sector structural reforms and enhancing public banks' debt recovery mechanisms.

**COMPANY OVERVIEW AND OUR SUSTAINABLE, PROFITABLE GROWTH STRATEGY**

Tata Chemicals Limited ('the Company' or 'TCL') is a global company with interests in businesses that focus on Living, Industry and Farm Essentials. The story of the Company is about harnessing the fruits of science for goals that go beyond business.

The Company started its journey in Mithapur, Gujarat in Western India in 1939 with the creation of a small plant that would raise a

wealth of marine chemicals from the ocean, with a potential to touch human lives in many ways. From these humble beginnings, a global international business was evolved, with operations across the four continents located in India, UK, Kenya and USA. TCL is the world's third largest producer of soda ash with manufacturing facilities in North America, Europe, Asia and Africa, reaches over 148 million households through its Tata Salt brand portfolio in India and covers 80% of India's districts impacting over 5 million farmers through its subsidiaries, Rallis India Limited ('Rallis') and Metahelix Life Sciences Limited ('Metahelix'). To fuel TCL's existing growth and also build a pipeline of innovative products for the future, the Company has established world class R&D facilities such as the Innovation Centre in Pune and Rallis Innovation Chemistry Hub ('RICH') in Bangalore. Our R&D facilities are home to capabilities in nanotechnology, biotechnology, food science and technology and nutrition science.

Apart from innovation, sustainability is also at the core of all of Tata Chemicals' activities. This includes TCL's social responsibility initiatives and is intricately woven into all of the Company's business functions.

The Company continues to transform itself from a commodity and an inorganic chemicals manufacturer towards providing wellness solutions, with a strong focus on consumer, agri and specialty businesses, while further strengthening its core. TCL is making significant progress in its transformation journey by focusing on building brands through greater customer centricity and technology led differentiation. The Company has also embarked on simplification of its business processes, customer experience, portfolio and structures to achieve its transformation goals. TCL is also addressing requisite capability building in each of its businesses to drive long term value creation for stakeholders.

In the inorganic chemicals business, demand and market has been favourable in the year under review with demand and production in China playing a significant role in determining the global prices. Overall inorganic chemicals business will focus on maintaining its leadership position by driving cost efficiencies and customer engagement with a special focus on leveraging technology and scale through operational excellence.

The consumer products business witnessed strong growth across all categories through relentless focus on customer centricity and brand building. Tata Salt was voted as No. 3 in the India's most trusted brands under Food Products category\*. During the year, the Company launched new products such as 'Multi-Grain Khichdi Mix', 'Multi-Grain Chilla Mix', 'Moong Dal Chilla Mix' and multiple variants in organic pulses under the Tata Sampann umbrella brand with positive feedback. The Khichdi Mix provides the power of nutritious grains like unpolished moong dal chilka, rice with Indian super grains like ragi, rajgira, jowar and bajra. These newly launched products provide differentiation through scientific innovation. Looking ahead, the business will further improve the reach of salt and build scale for Tata Salt Lite, pulses, besan and spices, with focus on value added products. The business aims to delight consumers by offering wholesome everyday nourishing foods and will continue to conceptualise market shaping value-added opportunities beyond existing categories in the future portfolio.

The agri business will continue to build the specialty agro chemicals and seeds portfolio through TCL's subsidiaries, Rallis and Metahelix.

\* Source: ET Brand Equity India's Most Trusted Brands 2017

The Company is anticipating a normal monsoon in the year ahead and plans to leverage its strong farmer connect and digitisation initiatives to provide enhanced solutions to improve crop productivity and farmers income.

The Innovation Centre in Pune will continue to support the diverse needs of TCL's businesses, alongside synergistic programs with Tata Group companies, by augmenting facilities, internal capabilities and competencies in the chosen technology platforms across Consumer Foods, Nutritional Solutions and Advanced Materials. The Nutritional Solutions unit, operating with a start-up mindset, will focus on building scale in specialty businesses covering food ingredients and formulations, developed at TCL's Innovation Centre.

In Advanced Materials, TCL will focus on manufacturing its Highly Dispersible Silica ('HDS') formulation, to drive the growth of its specialty silica business. In this regard, the Company signed a Business Transfer Agreement with M/s. Allied Silica Limited ('ASL'), on 7 April, 2018, to acquire their business of precipitated silica, on a slump sale basis along with the existing manufacturing site, which is recently commissioned, at SIPCOT Industrial Park Cuddalore, Tamil Nadu. Upon completion of the acquisition, it will represent yet another step in TCL's journey to build technologically enabled, differentiated businesses, with greater customer centricity, leveraging its core strengths.

During the year, the divestment of Urea and Customised Fertiliser Business to Yara Fertilisers India Private Limited ('Yara India') was completed effective 12 January, 2018. During the year under review, the Company also entered into an agreement with IRC Agrochemicals Private Limited ('IRC'), a wholly owned subsidiary of Indorama Holdings BV, Netherlands, to transfer its Phosphatic Fertiliser business located at Haldia and the Trading business comprising bulk and non-bulk fertilisers, on a slump sale basis, subject to regulatory and statutory approvals and conditions precedent. This transaction is expected to close in the first quarter of FY 2018-19.

#### Maintain Leadership

- Maintain cost leadership and scale further through operational excellence - Global Chemicals (India, US, UK, Kenya)

#### Grow Rapidly

- Grow through increased product portfolio and strategic sourcing - Consumer Products (Salt, Pulses, Spices and Foods)

#### Seed and Build

- Develop niche specialty chemicals portfolio through scientific innovation at IC and acquisition of niche specialty chemicals opportunities - Agrochem, Nutritional Solutions, Advanced Materials

Fig: Tata Chemicals Strategic Direction Ahead

## BUSINESS UNITS

### INORGANIC CHEMICALS

GLOBAL CHEMICALS BUSINESS SALES (USD million)	
FY 2017-18	1,087
FY 2016-17	1,067
FY 2015-16	1,031

**Industry Structure and Developments**

The Company is a leading global manufacturer of basic inorganic chemicals, including soda ash and sodium bicarbonate, with manufacturing presence over 4 continents; North America, Europe, Asia and Africa. Our global supply chain gives us a unique advantage to serve our customers with assured supply and efficient service at competitive prices.

With a capacity of ~4.3 million tonnes per annum, TCL is currently the world’s 3rd largest soda ash manufacturer. More than two-thirds of this capacity is natural soda ash located at Tata Chemicals Soda Ash Partners, Green River facility, Wyoming in the USA, where the world’s largest known deposits of trona are found and at Tata Chemicals Magadi, Lake Magadi in Kenya. In addition to having lower manufacturing costs, natural soda ash helps the Company have a lower energy and environmental footprint. Synthetic soda ash and sodium bicarbonate are manufactured at Mithapur, India and Tata Chemicals Europe, Lostock, UK to largely cater to their respective domestic markets. This process uses raw salt/brine (salt water) and limestone as key raw materials.

**Soda Ash**

After couple of years of relatively sluggish growth, the global soda ash demand in 2017 is estimated to have grown at an above-average growth rate of ~4% p.a. to reach ~58 million tonnes. This was on the back of a rebound in Chinese demand, that had been flat over recent years, and strong demand growth in emerging economies of South America, South East Asia and India. Several other regions including the developed markets of North America and Europe showed flat to moderate growth during the year. Going ahead, world demand is forecast to grow at ~2% p.a. through 2022.

The Indian market demand growth in FY 2017-18 is estimated to be ~12% p.a. supported by both domestic capacity expansion and higher import volumes. North American volumes are expected to have grown marginally largely due to an increase in export volumes over the previous year. The UK market remained reasonably flat for the year with the Company retaining market leadership. Demand growth in most of the key markets of the Company’s African operation like South East Asia and South Asia remained strong.

Global soda ash capacity is estimated to have grown by ~2.5 million tonnes p.a. during the year. After 2 years of capacity consolidation in China, 2017 witnessed a net capacity addition in excess of ~1 million tonnes p.a. Turkey was another region which added ~1.5 million tonnes p.a. capacity during the year as part of its overall plan to exploit its large natural soda ash deposits. India also witnessed ~0.3 million tonnes p.a. capacity addition (10% of total Indian capacity) as leading domestic players expanded operations at their existing production sites. Global capacity is forecast to grow in line with global demand at ~2% p.a. through 2022, with Turkey and Asia leading this capacity addition.

India continues to be a significant importer of soda ash with ~0.84 million tonnes of imports in FY 2017-18, accounting for a little under a quarter of the total domestic demand. The Company recognises the global nature of the soda ash market, characterised by almost a quarter of global volumes being traded, and steadfastly supports fair trade practices. TCL continued to leverage its global supply chain by sourcing soda ash from its units in US and Kenya (along with third

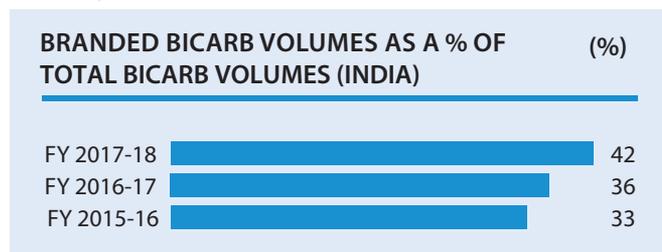
parties) to serve TCL’s customers in India. Similarly, part of the UK demand is also met from imports from the Company’s US unit.

As new Turkish capacity came on-stream during the year, it exerted pressure on soda ash prices, especially in its preferred catchment areas of Western Europe and Latin America. This was mitigated to a large extent by strong growth in global demand especially in Asia. Chinese prices witnessed an upward trend during the year riding on marginal domestic demand growth following capacity consolidation over the last two years. US prices remained largely firm with strong export sales. Regional fluctuations in demand-supply balance, shipping and energy costs, exchange rates and other geopolitical considerations continued to impact soda ash prices. While regional price variations and supply-demand gaps will persist, it is expected that the global prices will continue to reflect movement in the global GDP growth rates and broad energy price cycles.

**Sodium Bicarbonate**

Sodium bicarbonate is a versatile product finding use in a wide array of applications including food additives, animal feed, pharmaceuticals, dyes and textiles and air pollution control. The Company believes that given its wide range of existing and new applications, sodium bicarbonate is expected to sustain volume growth rates at above-GDP levels along with offering significant value addition potential in the future. The Company is among the top 5 producers of sodium bicarbonate globally with a total capacity of ~0.2 million tonnes p.a. (4% of global capacity) spread across the India and UK sites.

Indian sodium bicarbonate demand grew by 13% in FY 2017-18 against ~7% growth in the previous year. The key drivers of demand included the food, animal feed and other industrial applications. In addition to pursuing capacity expansion to defend TCL market leadership in Indian bicarb market, the Company has also made significant progress in improving the share of branded products in its bicarb portfolio. In FY 2017-18, TCL launched “Medikarb”, its pharmaceutical grade product which received excellent response from customers. “Alkakarb” and “Sodakarb”, the Company’s other bicarb brands have shown strong growth during the year. Going forward, the Company is focused on retaining its volume and value leadership in the bicarb market.



Tata Chemicals Europe Limited (‘TCEL’), retained its UK market share in sodium bicarbonate during the year. The real success for TCEL has been continued strong export growth in accounts across the globe, thus helping the business grow strongly in the year.

**Cement**

In addition to soda ash and sodium bicarbonate, the Company also manufactures cement as part of its integrated operations at the Mithapur site. The cement plant not only demonstrates TCL’s commitment to site sustainability, by utilising waste fly ash and other

solid by-products produced at the site, but also produces several grades of high quality cement with strong customer acceptance in its target markets.

The cement business registered an improved performance this year over the previous year benefitting both from an improved market scenario and success of initiatives launched last year related to rigorous quality focus and customer connect programs in the Company's target sales regions of Gujarat.

### Business Performance

India Chemical Operations ('ICO') delivered another year of strong performance in a mixed business environment marked by good demand growth on one hand along with significant increase in input energy costs and competitive pressures on the other. The Company executed its operational excellence initiatives with rigour leading to significant cost optimisation across all functions.

The Company targets a "Zero Harm" policy related to the safety of its people and plant assets. After demonstrating a good safety track-record in the first half of FY 2017-18, Mithapur site witnessed 2 fatalities in the second half of FY 2017-18 related to on-site road safety. This has led to even greater focus on behavioural safety and related training programs along with review of Process Safety Risk Management implementation to ensure targeted safety performance.

On the sustainability front, the Company aims to go beyond compliance requirements to setting the industry agenda in initiatives related to the environment and local community engagement. Zero ground water withdrawal, 100% fly ash utilisation, filtration and usage of soda ash solids to minimise solid waste and focused bio-diversity preservation programs indicate TCL's commitment to the environment. As part of the Company's local community engagement, TCL continues to offer a multitude of skill development and self-employment generation programs.

During the year, Tata Chemicals India continued to focus on throughput optimisation of all key products within the prevailing operational constraints and achieved cost control across all functions. This, coupled with marginally better price realisation for most of the key products in TCL portfolio in line with market conditions, led to improved financial performance despite significant rise in the energy costs. The year witnessed the highest ever production and sale of bicarbonate including the launch of "Medikarb", TCL's pharmaceutical grade bicarbonate, along with an overall increase in share of branded bicarbonate. Other performance highlights included record sales of bromine with ~97% volumes shipped in ISO tankers and ~60% increase in bulk movement of soda ash. Finally, in line with the goal of increased customer proximity and ease of doing business; the Company has launched online "ChemConnect", a platform welcomed and widely adopted by its channel customers to enable seamless management of the sales ordering and related processes.

Tata Chemicals North America ('TCNA') sales volumes increased during the year in both North America and export markets as the reliability of production returned along with a strong demand for soda ash in the export markets. Export sales improved due to a sharp reduction in exports from China in 2017. The impact on net revenue of the higher sales volume were partially offset by adverse sales mix and pricing.

For Tata Chemicals Europe ('TCE'), plant operation at Lostock was affected by fire in May 2017, but operated throughout with good efficiencies thereafter. The associated energy business had an outstanding year despite loss of a Gas Turbine spare in January 2018, generating strong income and contributing to very positive outcome

in Soda Ash/Energy Business Unit. The modified sodium bicarbonate at Winnington has performed reliably, enabling strong and reliable customer service delivery and growth during the year. British Salt Limited's salt business delivered good volume and production with good efficiencies and continued its strong market share throughout the year.

For Tata Chemicals Magadi Limited ('TCML'), soda ash dominated the product portfolio with the main destination being in the container glass and silicate sectors. Salt, Crushed Refined Soda ('CRS') and by-products formed the rest of TCML's product portfolio. The Magadi operation has stabilised the Soda Ash Magadi ('SAM') plant performance, which continues to be the lifeline for TCML turnaround. Going forward, TCML will focus on SAM production by ensuring consistent quality and efficient operations resulting in higher volumes.

### Outlook for Business

Despite short-term challenges related to high energy costs, significant domestic and global capacity addition, the Company is optimistic about the long-term prospects of this business. The Company remains committed to strengthen and leverage its leadership position. The Company actively manages its energy cost exposure through Risk Management processes.

The Indian soda ash demand is expected to continue to grow at its long-term growth rate of ~5% p.a. over the next few years. Most of this demand growth is expected to be serviced by planned increase in domestic capacity, including ~0.5 million tonnes p.a. of new capacity coming online in FY 2018-19.

The outlook for TCNA remains positive with soda ash manufacturing continuing to remain sold out. Aggressive pricing from competitors, increased global capacity and strengthened US dollar can impact domestic pricing. TCNA's continued efforts and emphasis will be to stabilise the cost base through a three pillar approach that encompasses Zero Harm, Operational Excellence and Sustainable Growth. The Company continues to focus on sustaining and improving its safety performance. The safety performance at TCNA has improved significantly in the calendar year 2017 with significant reduction in reportable incidents compared to the previous 2 years.

UK operations plan to build on the strong base of FY 2016-17 and FY 2017-18, recognising that it is up against increasingly strong headwinds of higher inflation, increased raw material commodity pricing and greater competition on soda ash and, to some extent, salt product ranges. The drive to increase sales at the sodium bicarbonate plants at Winnington and Lostock will continue. TCEL will move into a major project development and construction phase in FY 2018-19 including the areas of packing/logistics and energy plant efficiency.

For TCML, soda ash demand is expected to remain favourable in FY 2018-19. Competitiveness will be defined by price and quality which means strategic market mixes will determine gains for TCML. TCML's focus will be on markets with best returns.

New Product Development and value added products for the animal industry shall remain the main focus for the TCML's salt business. During the fourth quarter of FY 2017-18, investments on advertisements in local vernacular radio stations targeting the high consumption areas was done with an objective to accelerate volumes for Fortified salt in the FY 2018-19.

CRS growth shall be driven by the Silicate sector in Kenya, Mining in South Africa and trading in the Middle East. Product development continues in this sector since CRS has demonstrated potential for

growth in diverse areas which include lead processing, tobacco, silicate, disinfection, animal feed, compost treatment, jigger treatment, flu gas treatment amongst many others.

### **Risks and Opportunities**

The Company is working to address key opportunities and risks in the business environment in alignment with its growth strategy.

In order to strengthen TCL's leadership position in the growing domestic market, ICO is pursuing capacity expansion options for all the key product lines at Mithapur subject to receipt of required statutory clearances. This volume driven growth plan is being supplemented by plans to address value-driven growth opportunities in select product lines like bicarb where the Company is focusing on scaling up of Medikarb volumes along with launching new high value grades. The business is also leveraging digital platforms for enhanced ease of doing business; building customer partnerships around themes of innovation and sustainability which continue to offer opportunities for stronger customer connect. Finally, several projects around plant and supply chain upgrade and automation are also expected to be executed in the coming year.

ICO is also taking requisite measures to address the key risks to the business. Pressure on soda ash prices due to unfavourable demand-supply balance, higher energy costs and volatility in exchange rates are the most significant risks to the business performance. The Company continues to remain focused towards keeping fixed costs low and controlling variable costs through securitisation of the key raw materials including fuel and limestone along with continuous improvement programs to help mitigate the adverse impact of these risks. Adherence to more stringent environmental norms and improving the safety performance in a sustainable manner are other key areas which the India Chemicals business plans to continue to focus on during FY 2018-19.

At TCNA, the focus is on the continuation of production stabilisation started in FY 2016-17, cost reduction and business optimisation. Business optimisation measures include Zero Based Budgeting project; targeting a reduction in non-manpower fixed costs, pursue an alternative coal source to significantly reduce costs and risk, and investigation of future port and rail fleet strategy. TCNA has received a significant benefit from the US tax reforms with the continuation of the mining percentage depletion allowance, removal of Alternative Minimum Tax (AMT) and a reduction of the corporate tax rate.

Rigorous project management and continued engagement with all stakeholders are critical to managing risks in TCNA. TCNA faces the impact of new tonnes from expansion and greenfield production of low cost Turkish natural soda ash entering the market through FY 2018-19 as well as an increase in domestic competition due to aggressive pricing from competitors for market share as export tonnes are realigned. Tightening regulatory and environmental legislation means that the Direct Sorbent Injection ('DSI') Project (Environmental Compliance) will be operational in 2018 while the Company continues to focus on the management of waste.

In the UK, there is a strong investment pipeline of projects in both salt and sodium bicarbonate/soda ash/energy driving towards increasing cost competitiveness and customer service. These projects will start to be implemented in FY 2018-19 with others completing major pre-construction milestones ahead of FY 2019-20. Growth in sales opportunities in Asia in sodium bicarbonate/salt will continue to bear fruit as a result of dedicated projects.

Potential risks for the UK operations would include a margin reduction if sales prices do not offset increases in commodity raw materials and an inability to pass on carbon emission tax rises. The Brunner Mond pension scheme will undertake the regular triennial valuation exercise during 2018.

At TCML, the focus is largely centred on the growth of value added products and successful penetration into new and emerging markets. Developing alternative sources of energy, utilisation of Lean Six Sigma and Lean Manufacturing tools and techniques, continuous process improvement and, enhanced global sourcing will help reduce costs and improve efficiency. Attracting and retaining the right talent, developing alternative employee welfare mechanisms are some of the other opportunities identified by TCML for the coming year.

At TCML, some of the key risks include raw material (Trona) quality, affected by increased siltation in the northern part of the Lake Magadi, a deteriorating road infrastructure, political and environmental regulations, water scarcity and other environmental pressures. In response, the Company continues to increase engagement with local and national stakeholders and supports concerted efforts, including technical collaboration with third parties, to mitigate these risks.

### **Salt and Related Products**

#### **Industry Structure and Developments**

India is the third largest salt producer after China and USA. The total annual production of common salt in India, on an average, is about 28 million tonnes<sup>^</sup>. Production of iodised salt is around 66 lakh tonnes. Branded, packaged edible salt is about two thirds of the edible salt consumed and growing at 9% in FY 2017-18 (Nielsen). During the year, monsoons were well distributed and edible salt supply and demand remained steady throughout the year.

The branded salt share of the market continues to increase due to awareness of better product quality, visible purity and iodine content. Specialty salts like rock salt and black salt have an increased presence in modern format stores.

<sup>^</sup>Source: Salt Annual report 2016-17 - Salt Commissionerate, Government of India (trailing 3 year average)

#### **Performance of Salt and Related Products**

Tata Salt continues to be the leader in the national branded salt segment. Tata Salt Lite continues to be the leading brand in the low sodium salt segment and Tata Salt Crystal leads in the Crystal salt segment. Salt sales volumes have grown by 3.5% p.a. since FY 2014-15 primarily driven by the flagship brand Tata Salt which has grown by 5.2% p.a.

Tata Salt reaches 1.8 million retail outlets across India. This has been achieved through driving supply chain efficiencies and enhanced use of IT and analytics, along with a thrust on distribution and branding. Constant brand building efforts through enhancing visibility at retail, consumer activations and support through both traditional and digital media, have helped strengthen the Tata Salt brand amongst consumers. The Company moved towards building a stronger narrative on health, with the "Sawaal kijiye apne namak se" campaign, bringing forth the evaluation criteria for better-quality salt and establishing the superiority of Tata Salt through easy-to-understand demonstrations. The Company also reached out to consumers through various tactical campaigns like "Mithapur express" and "Sehat ka Charger".

As the brand continues to grow, a number of products designed to cater to specific needs of the consumer have been added to the portfolio in recent years, like Tata Salt Lite, Tata Salt Plus and Sprinklers. In FY 2017-18, the Company launched the powdered format for Rock Salt in addition to the Rock Salt crushers already in the market. In keeping with its sustainability priorities, the Company piloted the recyclable packaging for Tata Salt in Delhi during the year.

The details of business outlook, threats, opportunities, risks and concerns of salt and related products are covered with other consumer product portfolio under the head 'Others'.

TATA SALT VOLUMES		('000 MT)
FY 2017-18		925
FY 2016-17		905
FY 2015-16		868

## OTHER AGRI INPUTS

### Rallis

As the impact of strong El-Niño receded further, India received normal rainfall for the second consecutive year in 2017, though the temporal and spatial distribution of the rainfall remained uneven, affecting cropping. Due to deficient rain experienced in August and September in many parts of the country, around 215 districts (one-third on all-India level) experienced a rain distress situation. Most of these were in the top farming States such as Uttar Pradesh, Madhya Pradesh, Punjab and Haryana.

As per the second advanced estimate, India is likely to see a record output of food grains in the crop year 2017-18, for the second consecutive year. The final estimate for the crop year 2016-17, showed that India's food grain production jumped 9.4% to 275.1 million tonnes in the crop year 2016-17 from 251.6 million tonnes in 2015-16. Despite the high base effect, India is likely to witness food grains production advancing to 277.5 million tonnes in the crop year 2017-18, an increase of 0.9% on Y-o-Y basis.

Due to back to back bumper crop years, as noted by the Economic Survey 2017-18, farm revenues declined for many crops due to prices falling below MSPs ('Minimum Support Prices').

The size of the Indian crop protection industry is approximately ₹ 16,800 crore p.a. Per hectare consumption of agrochemicals is under 1 Kg, one of the lowest among major economies of the world. India's crop protection industry can be classified primarily into four segments; insecticides, fungicides, herbicides and bio-pesticides. While insecticides constitute a higher proportion, fungicides and herbicides are the fastest growing segments of the Indian crop care industry.

In FY 2017-18, India's crop protection industry faced a difficult situation. Raw material prices skyrocketed due to rising crude oil prices. Further, supply constraints emanating from the shut-down in China on pollution concerns of industries supplying raw materials to the agrochem manufacturers affected India's agrochem industry. Lower realisations in many crops in FY 2016-17 due to an over-supply situation and softening of prices affected farm incomes; this, in turn, influenced farmers' spending ability in FY 2017-18. Going forward,

the Government's commitment to doubling farmers' income by the year 2022, growing penetration of efficient irrigation facilities and the increasing popularity of crop insurance schemes may help reduce farm distress and support the agrochem industry to grow.

In FY 2017-18, Rallis reported higher growth in volume and gained market share in key segments, with increases in Paddy and Cotton in the domestic business. During the year, Rallis introduced five new products in the domestic market, catering mainly to paddy, cotton and fruits and vegetables crop areas. The Company expanded its distributor network substantially and also reviewed its credit policy for distributors, without compromising on the established set of risk management principles.

Significant shifts in the farm practices and a focus on higher yields has been leading the global seeds industry on the path of rapid growth. According to an IMARC report, the global seed industry is likely to reach a value of over US\$ 86 billion by 2023, from its current value of US\$ 62.1 billion. India is the fifth largest seed market. At present, India's organised seed market is worth US\$ 3.6 billion which is expected to grow to US\$ 8 billion by 2023. Cotton, paddy, maize and vegetables drive the demand for commercially enhanced seeds in India.

Satisfactory monsoon ensured stable demand but Government interventions experienced in some Indian states, towards the end of the fiscal, posed some challenges for the seed industry.

India's organised Bio Stimulants market is worth ₹ 2,000 crore and is expected to grow 11-13% a year, whereas the Micronutrients market is worth ₹ 1,800 crores and is expected to grow 8-9% a year. Rallis operates in some of the segments of the Bio Stimulants and Micronutrients business categories of the plant growth nutrients. Cotton, paddy, chillies, pulses, fruits and vegetables drive the demand for plant growth nutrients in India.

Demonetisation and roll out of GST had a transient adverse impact on the business in the initial months of FY 2017-18.

Given the need to provide food security and enhanced production along with creating value for farmers, Rallis has embarked on end-to-end agri solutions - Rallis Samrudh Krishi® ('RSK') to drive farm productivity. RSK brings to the farmers the latest technology and practices with a roadmap to increase farm productivity while nurturing safety and protecting the environment. Through RSK, Rallis aims to create value for farmers as well as for the Company - for the farmer, through higher yield, better quality and lower costs, whereas for the Company, through higher revenues and increase in share of farmers' wallet.

Rallis provides farmers with information and predictive analysis of crop health, crop yields, soil moisture conditions, attack of diseases and weather forecast through its digital initiative, Drishti. Drishti is an ambitious and futuristic project that aims to increase the preparedness of farmers in tackling adverse farming conditions by providing them hyper-customised information. Initiative Drishti is still at a nascent stage of development, but holds a promise in helping farmers improve farm productivity in a big way. Samadhan is a mobile app offered to farmers, which provides live weather and mandi prices, customised and dynamic Package of Practices (PoPs), direct access to Rallis' helpline for problem resolution and allows farmers' groups to share experiences. To enable larger use of the digital platforms, the services are available in 12 regional languages. There are 14 dedicated points to handle customer queries. Rallis also uses Sampark, a mobile app for the frontline field force.

## TATA CHEMICALS

In 2017, global crop protection industry was valued at US\$ 61 billion, with the industry growing by just 1.7% globally on a Y-o-Y basis. Owing to extreme climatic changes, soft agri-commodity prices and rising raw material prices posed a significant challenge to the growth of crop protection industry worldwide. While weather conditions in the NAFTA region improved, those in Africa and Australia deteriorated. Soft commodity prices prevailed throughout the review period and wide currency fluctuations with a downward bias did not help either.

Despite these adversities, Rallis managed to grow its international revenues by 9%. It launched five products in the exports markets in Malaysia, Thailand, Myanmar and Nigeria. Good progress has been recorded in Alliance business through several registrations gained during the financial year.

### OTHERS

#### Industry Structure and Developments

##### Pulses and Related Products

Tata Sampann is the only national brand in a pulses market dominated by loose dal which comprise more than 99% of the market. Pulses production in India saw a spike of about 20% over the last three year average. This resulted in low prices throughout the year. The Government has continued to purchase surplus production, restrict imports and open up exports of certain varieties of pulses.

The besan market is estimated to be ₹ 23,000 crore, again dominated by unbranded besan. The Company has continued to focus on protein delivery through pilot launches in various pulses based platforms like multigrain chilla mix, moong dal chilla mix and organic pulses.

##### Spices

The spices industry is highly fragmented and regional in nature with the consumer taste palate changing across regions. Tata Sampann range of spices aims to set benchmarks through its superior product quality and differentiation by not using 'Spent' ingredients. Additionally, the Company is creating and offering products catering to regional tastes. The Company's value proposition for spices includes unique packaging in multiple sachets for maintaining the freshness and guaranteeing a high percentage of active ingredients like Curcumin and Capsaicin for the Pure spice offerings.

#### Product-wise Business Performance

##### Pulses and Related Products

In FY 2017-18, Tata Sampann focused on increasing its presence in the top modern format stores with its range of pulses and besan while strengthening the sourcing, packing and supply chain model for improved efficiencies. Regional packing centres were established leading to improved freshness in market and better ability to respond to fluctuations in the market prices.

##### SHARE OF MODERN TRADE IN PULSES/BESAN VOLUMES (%)

FY 2017-18	9.0
FY 2016-17	2.6
FY 2015-16	2.4

In the value added segment, the Company pilot launched Tata Sampann Khichdi Mix, Moong Dal Chilla Mix, Multigrain Chilla Mix and

Pakoda Mix exclusively with Star Bazaar and Amazon in select cities. The Company also piloted a Tata Sampann range of organic pulses exclusively with Star Bazaar and Amazon. The products have received encouraging response from customers and retail partners.

##### Spices

The Company added three new variants – Chat Masala, Pav Bhaji Masala and Sambhar Masala to the portfolio for Tata Sampann Spices during the year, with the product launches receiving encouraging response from trade as well as consumers. The business has created a benchmark by providing products with assured international quality markers like Curcumin and Capsaicin. Sourced from regions where climate and terrain benefit its natural flavour, Tata Sampann spices retain their naturally available volatile oils, giving fuller aroma and taste. The blended masalas are developed with pure, fresh and authentic ingredients, have recipes made by Chef Sanjeev Kapoor and come in a unique 5-in-1 pack. The Company continued with the campaigns like "Aaj ka masaledar sach" and "Sampann Surprise" to create awareness and establish the superiority of the product. The Company also aligned its go-to-market model for spices to ensure better reach and availability of the product across key cities.

##### NUMBER OF PRODUCTS IN CONSUMER PORTFOLIO

FY 2017-18	32	10
FY 2016-17	29	
FY 2015-16	27	

■ Number of Products in Consumer Portfolio  
 ■ New Products in Pilot Stage

#### Outlook for Business

The outlook for the business continues to be positive as the Company continues to focus on distribution expansion, brand building initiatives and strengthening of supply chain. The Company has identified opportunities around salt and related products, new to market offerings in foods, new packaging formats and tapping unmet consumer health needs. While the salt business continues to be the mainstay in terms of revenue generation, the growing foods portfolio is expected to contribute significantly to the overall business by the end of FY 2019-20. In terms of reach, the business intends to expand its retail footprint to 25 lakh outlets by FY 2019-20. This is being done through greater use of small SKUs, along with new go-to-market models. In addition to the growing retail network, the business is also focused on Modern Trade and non-traditional channels such as e-commerce, to ensure availability at a multitude of consumer touch points. Going forward, the Tata Sampann brand is looking at building a robust value added product portfolio pipeline to deliver higher contribution products.

#### Opportunities and Threats

The business has vast opportunities in the foods market, scope to scale up new variants of salt and is preparing to address opportunities offered by new consumer needs on the back of its robust supply chain and distribution network. Premium product offerings and new go-to-market models are being explored to develop strengths in modern format stores and alternate distribution channels.

The Tata Salt franchise is being leveraged in select international markets.

Differentiated product offerings and targeted communication is being used to address the threat from the unbranded segment and from regional and local brands.

### Risks and Concerns

The business has put policies in place to mitigate risks from changes in the regulatory environment which might limit realisations. There are continuous improvement efforts to exploit efficiencies in the supply chain network to mitigate rising costs of labour and fuel.

### Nutritional Solutions

The growth of Nutritional Solutions, which began with an idea in our lab by a team of passionate scientists which, after intensive work and effort over the last four years is now transformed into a plant in Sriperumbudur, Chennai and investments in Mambattu, Nellore for manufacturing of Prebiotics [Short chain Fructo-oligosaccharide ('FOS') and Galacto-oligosaccharide ('GOS')]. The business, driven by science understanding and customer engagements, to become a leading nutritional innovation across various dimensions of human health. The Nutritional Solutions business is motivated to provide a significant improvement in the quality of life of our customers through innovative solutions.

Leveraging TCL's knowledge in at-scale fermentation, food technology, material sciences, biotechnology and biogenomics, the Company's offerings cater to multiple end segments in the field of gut microbiota modulation and customised health solutions.

FY 2017-18 was yet another milestone year in terms of investments in infrastructure and capabilities. With a committed capital outlay of ₹ 270 crore, the construction of our world-class 5,000 tonnes per annum manufacturing plant at Mambattu, Nellore, Andhra Pradesh is on schedule. The business has built capabilities in IPR clinical studies, product conceptualisation through customer partnership, complex fermentation technologies and gut microbiome data models.

Operations at Sriperumbudur remained stable and the plant supported the increased customer demand by producing higher quantities across multiple grades of FOS. Project execution at Nellore is underway with ground-breaking ceremony performed in November 2017. While sales of FOS and GOS continue to remain buoyant, our newly introduced product offerings also found wide acceptance across various customer segments in food and beverages, infant nutrition, nutraceuticals, pharmaceuticals and animal nutrition. A gross total of 1,700 tonnes of products were sold in India to 600+ customers across 105 cities. To support the upcoming expansion, the business is in the process of setting up of an international distribution network for select markets.

### FERTILISER BUSINESS (DISCONTINUED OPERATIONS)

The Company divested its Urea and Customised Fertiliser business situated at Babrala, Uttar Pradesh to Yara India effective 12 January, 2018. During the year under review, the Company also entered into a Business Transfer Agreement with IRC Agrochemicals Private Limited for the sale of its Phosphatic Fertilisers business and the Trading business situated at Haldia, West Bengal subject to certain regulatory and other approvals. In view of the same, the MDA does not include an analysis of the Fertiliser business.

## ANALYSIS OF FINANCIAL PERFORMANCE

### Standalone performance for the year ended 31 March, 2018

#### Statement of Profit and Loss – Continuing operations

#### 1. Revenue from operations (net):

Particulars	₹ in crore			
	Year ended 31 March, 2018	Year ended 31 March, 2017	Change	% Change
Revenue from operations	3,524	3,837	(313)	(8)
Less: Excise duty on sale of goods	(58)	(230)	172	(75)
<b>Revenue from operations (net)</b>	<b>3,466</b>	<b>3,607</b>	<b>(141)</b>	<b>(4)</b>

Revenue from operations (net) decreased due to lower volumes of soda ash, salt, pulses and spices as well as lower realisation of pulses.

#### 2. Other income:

Particulars	₹ in crore			
	Year ended 31 March, 2018	Year ended 31 March, 2017	Change	% Change
Other income	194	177	17	10

Other income has increased mainly due to Gain on sale/redemption of investments.

#### 3. Cost of materials consumed:

Particulars	₹ in crore			
	Year ended 31 March, 2018	Year ended 31 March, 2017	Change	% Change
Cost of materials consumed	531	480	51	11

Cost of materials is higher due to increase input costs of raw materials comprising of coke, coal and anthracite.

#### 4. Purchases of stock-in-trade:

Particulars	₹ in crore			
	Year ended 31 March, 2018	Year ended 31 March, 2017	Change	% Change
Purchases of stock-in-trade	219	449	(230)	(51)

Purchases of stock-in-trade decreased mainly due to pulse business towards reconfiguration of supply chain management.

#### 5. Power and fuel:

Particulars	₹ in crore			
	Year ended 31 March, 2018	Year ended 31 March, 2017	Change	% Change
Power and fuel	474	378	96	25

The increase in power and fuel cost is mainly due to coal and pet coke price increase.

**6. Freight and forwarding charges:**

₹ in crore

Particulars	Year ended 31 March, 2018	Year ended 31 March, 2017	Change	% Change
Freight and forwarding charges	397	404	(7)	(2)

Freight and forwarding charges have decreased due to lower sales volumes of pulses and salt as well as lower cost of dispatch for free flowing salt.

**7. Finance costs:**

₹ in crore

Particulars	Year ended 31 March, 2018	Year ended 31 March, 2017	Change	% Change
Finance costs	87	101	(14)	(14)

Finance costs decreased due to repayment of loan and reduced working capital borrowings.

**Balance Sheet Analysis**
**Standalone Statement of Balance Sheet**
**1. Investments:**

₹ in crore

Particulars	As at 31 March, 2018	As at 31 March, 2017	Change	% Change
Investments in equity instruments in subsidiaries	2,878	2,878	-	-
Investment in joint venture	166	166	-	-
Investment in preference shares in subsidiaries	978	973	5	1
Investment in other companies	2,367	2,231	136	6
<b>Total Investment</b>	<b>6,389</b>	<b>6,248</b>	<b>141</b>	<b>2</b>

Increase in the value of investments in other companies is mainly due to changes in fair value of such investments and sale of Tata Global Beverages Limited shares.

**2. Inventories:**

₹ in crore

Particulars	As at 31 March, 2018	As at 31 March, 2017	Change	% Change
Continuing operations	451	612	(161)	(26)
Discontinued operations	150	127	23	18
<b>Total Inventories</b>	<b>601</b>	<b>739</b>	<b>(138)</b>	<b>(19)</b>

Inventories decrease mainly due to reduction in stock of traded goods.

**3. Trade receivables:**

₹ in crore

Particulars	As at 31 March, 2018	As at 31 March, 2017	Change	% Change
Continuing operations	140	1,032	(892)	(86)
Discontinued operations	808	834	(26)	(3)
<b>Total Trade receivables</b>	<b>948</b>	<b>1,866</b>	<b>(918)</b>	<b>(49)</b>

Trade receivables decrease mainly due to the sale and transfer of its Urea and Customised Fertilisers Business to Yara India and collections from debtors.

**4. Loans, other financial assets, advance tax assets and other assets:**

₹ in crore

Particulars	As at 31 March, 2018	As at 31 March, 2017	Change	% Change
Loans	2	2	-	-
Other financial assets	77	49	28	57
Advance tax assets (net)	421	431	(10)	(2)
Other assets	247	199	48	24
Discontinued operations	52	42	10	24
<b>Total</b>	<b>799</b>	<b>723</b>	<b>76</b>	<b>11</b>

Increase in other financial assets is due to Gratuity fund receivable from Trusts on account of sale of Urea business.

Increase in Other assets is mainly due to statutory receivables (GST pending settlement).

**5. Cash flow:**

Net cash flow from operating activities: The net cash from operating activities is ₹ 836 crore during FY 2017-18 as compared to ₹ 2,393 crore during FY 2016-17. The cash operating profit before working capital changes and direct taxes during FY 2017-18 is ₹ 1,510 crore as compared to ₹ 1,437 crore during FY 2016-17. The change in working capital, during the financial year, is mainly due to decrease in trade receivables and inventories.

Net Cash flow from investing activities: The net cash inflow from investing activities amounted to ₹ 2,866 crore in FY 2017-18 as against outflow of ₹ 152 crore in FY 2016-17. The inflow in FY 2017-18 is mainly on account of sale and transfer of its Urea and Customised Fertilisers Business to Yara India.

Net Cash flow from financing activities: The net cash outflow from financing activities is ₹ 1,496 crore during FY 2017-18 as compared to outflow of ₹ 1,731 crore during FY 2016-17. The outflow in FY 2017-18 is mainly due to repayment of borrowings.

**6. Net borrowings/(Cash):**

₹ in crore

Particulars	As at 31 March, 2018	As at 31 March, 2017	Change	% Change
Non-current Borrowings	681	1,088	(407)	(37)
Current Borrowings	1	523	(522)	(100)
Current maturities of non-current borrowings and finance lease obligations	415	430	(15)	(3)
Discontinued operations	310	371	(61)	(16)
<b>Total Borrowings</b>	<b>1,407</b>	<b>2,412</b>	<b>(1,005)</b>	<b>(42)</b>
Less: Cash and Cash equivalent (including other Bank balances)	3,769	1,112	2,657	239
Discontinued operations	1	-	1	100
<b>Net Borrowings/(Cash)</b>	<b>(2,363)</b>	<b>1,300</b>	<b>(3,663)</b>	<b>(282)</b>

The Net borrowings decreased mainly due to repayment of borrowings and cash receipt on account of sale and transfer of its Urea and Customised Fertilisers Business to Yara India.

## Consolidated performance for the year ended 31 March, 2018

### Consolidated Statement of Profit and Loss - Continuing operations

#### 1. Revenue from operations (net):

₹ in crore

Entity	Year ended 31 March, 2018	Year ended 31 March, 2017	Change	% Change
Tata Chemicals Limited - ('TCL')	3,524	3,837	(313)	(8)
Homefield Pvt UK Limited - Group ('HFUK')	2,124	2,205	(81)	(4)
Tata Chemicals North America Inc ('TCNA')	3,257	3,242	15	-
Rallis India Limited ('Rallis')	1,809	1,768	41	2
Others and Eliminations	(369)	(371)	2	1
<b>Total</b>	<b>10,345</b>	<b>10,681</b>	<b>(336)</b>	<b>(3)</b>
Less: Excise duty	(76)	(335)	259	(77)
<b>Revenue from operations (net)</b>	<b>10,269</b>	<b>10,346</b>	<b>(77)</b>	<b>(1)</b>

Revenue from operations (net) has decreased primarily due to :

- Inorganic Chemicals: Lower volumes of soda ash from India as well as HFUK and depreciating USD and GBP exchange rates against INR.
- Rallis: Higher volumes of agri products.

#### 2. Cost of materials consumed:

₹ in crore

Entity	Year ended 31 March, 2018	Year ended 31 March, 2017	Change	% Change
TCL	531	480	51	11
HFUK	112	154	(42)	(27)
Rallis	830	739	91	12
Others and Eliminations	(82)	(31)	(51)	165
<b>Total</b>	<b>1,391</b>	<b>1,342</b>	<b>49</b>	<b>4</b>

Cost of materials consumed increased primarily at Rallis for agri business due to higher volumes.

#### 3. Purchases of stock-in-trade:

₹ in crore

Entity	Year ended 31 March, 2018	Year ended 31 March, 2017	Change	% Change
TCL	219	449	(230)	(51)
HFUK	332	391	(59)	(15)
TCNA	18	22	(4)	(18)
Rallis	202	110	92	84
Others and Eliminations	(302)	(353)	51	(14)
<b>Total</b>	<b>469</b>	<b>619</b>	<b>(150)</b>	<b>(24)</b>

Purchases of stock-in-trade decreased primarily in India on account of pulse business towards reconfiguration of supply chain and HFUK due to depreciating GBP exchange rates against INR.

#### 4. Power and fuel:

₹ in crore

Entity	Year ended 31 March, 2018	Year ended 31 March, 2017	Change	% Change
TCL	474	378	96	25
HFUK	455	457	(2)	-
TCNA	290	287	3	1
Rallis	54	41	13	32
<b>Total</b>	<b>1,273</b>	<b>1,163</b>	<b>110</b>	<b>9</b>

Power and fuel increased primarily in India, HFUK and TCNA on account higher input fuel cost, offset by depreciating GBP and USD exchange rates against INR.

#### 5. Freight and forwarding charges:

₹ in crore

Entity	Year ended 31 March, 2018	Year ended 31 March, 2017	Change	% Change
TCL	397	404	(7)	(2)
HFUK	236	219	17	8
TCNA	873	853	20	2
Rallis	73	54	19	35
<b>Total</b>	<b>1,579</b>	<b>1,530</b>	<b>49</b>	<b>3</b>

Freight and forwarding charges increased at HFUK and TCNA primarily due to higher volume and price mix, offset by depreciating GBP and USD exchange rates against INR.

#### 6. Finance costs:

₹ in crore

Entity	Year ended 31 March, 2018	Year ended 31 March, 2017	Change	% Change
TCL	87	101	(14)	(14)
HFUK	121	69	52	75
TCNA	100	103	(3)	(3)
Rallis	4	10	(6)	(60)
Others and Eliminations	14	14	-	-
<b>Total</b>	<b>326</b>	<b>297</b>	<b>29</b>	<b>10</b>

Increase in HFUK due to lower MTM gain as compared to previous year and amortisation of upfront fees on account of refinancing of loan. TCL, TCNA and Rallis lower due to repayment of loan and reduced working capital borrowings.

#### 7. Other expenses:

₹ in crore

Entity	Year ended 31 March, 2018	Year ended 31 March, 2017	Change	% Change
TCL	665	772	(107)	(14)
HFUK	418	454	(36)	(8)
TCNA	796	822	(26)	(3)
Rallis	203	307	(104)	(34)
Others and Eliminations	16	(19)	35	(184)
<b>Total</b>	<b>2,098</b>	<b>2,336</b>	<b>(238)</b>	<b>(10)</b>

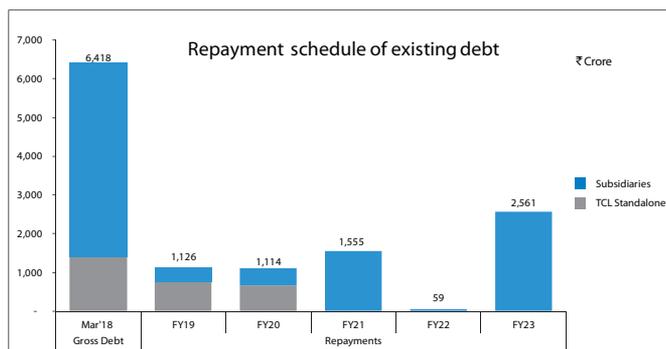
**Other expenses represent the following:**

Entity	₹ in crore			
	Year ended 31 March, 2018	Year ended 31 March, 2017	Change	% Change
Changes in inventories of finished goods, work-in-progress and stock-in-trade	(104)	113	(217)	(192)
Stores and spares consumed	271	250	21	8
Packing materials consumed	334	332	2	1
Repairs	356	395	(39)	(10)
Rent	154	163	(9)	(6)
Royalty, rates and taxes	347	322	25	8
Sales promotion expenses	160	194	(34)	(18)
Others(*)	580	567	13	2
<b>Total</b>	<b>2,098</b>	<b>2,336</b>	<b>(238)</b>	<b>(10)</b>

(\*) – Others include insurance charges, Distributor's service charges, professional fees, foreign exchange loss, travelling expense, provision for doubtful debts and advances, directors' fees/commission and other expenses.

The other expenses have decreased primarily due to:

- Movement in changes in inventories of finished goods, work-in-progress and stock-in-trade is primarily on account of increase in stock levels of agri business.
- Repair expenses lower at HFUK and TCNA.
- Sales promotion expenses lower at TCL India.
- Others mainly due to lower travelling expenditure, professional fee, foreign exchange loss and depreciating USD and GBP exchange rates against INR.

**Total Debt and Amortisation schedule**


Note:

- Gross debt of ₹ 6,418 crore includes ₹ 450 crore of working capital loans and ₹ 83 crore of revolver facility.
- The repayment schedule for term loans has been prepared considering the existing repayment terms. Some of these loans/facilities may be refinanced, in full or in part, from time to time in future depending on the requirement and the business plans.

**INNOVATION AND TECHNOLOGY**
**Innovation Centre ('IC')**

The Company established IC to undertake research in applied sciences with a view to seeding new businesses and supporting existing businesses with innovation. Presently, IC has total 81 active patents out of which 19 have been granted. In FY 2017-18, IC filed 11 new patent applications in various work areas.

The IC continues to work with TCL business units in the nutritional solutions, chemicals and consumer products; other Tata companies, as well as carries out its own research and development activities.

During the year, IC has developed significant additional capability in Food Science and Technology. The R&D efforts in this area have led to the development of innovative consumer products: pulse based mixes (chilla mixes) and multi-grain khichdi which deliver convenience and nutrition. The innovation centre also supported the TCL business in developing the technology for manufacture of pharmaceutical grade sodium bicarbonate.

**Digitalisation & Information Technology (D&IT)**

The Company's IT infrastructure is continuously reviewed and renewed in line with business requirements and technology improvements. The Company has implemented common Enterprise Resource Planning ('ERP') system across all its wholly owned operating subsidiaries. During the year, the Company's systems and infrastructure were augmented and modified to seamlessly support new requirements such as GST and portfolio realignments.

Various digitisation initiatives are taken by the Company to focus on improving efficiency, enhancing stickiness with customers and having better analytics to make informed decisions. A Customer Relationship Management ('CRM') and Distributor Management System ('DMS') were implemented for chemicals business to enhance customer experience and similar systems are now being implemented in the consumer business. The Company has also implemented procurement and spend management systems which have allowed successful collaboration with supply chain participants, for businesses in India. The same solutions are now being extended to other geographies globally.

New age systems to enable the next level of digitalisation are being implemented in operations. As a part of this drive, the Company is adding digital tools at Mithapur plant and leveraging analytics for finer control. Remote sensing and Artificial Intelligence ('AI') applications are being explored across operations to improve predictability and efficiency. In new facilities being set up, state-of-the-art control systems are being installed to meet global customer standards from start of production.

Enhancements of the business intelligence platform with visual analytics tools to support business decision making is also underway. Digital is playing an increasing role in the Company, with more mobile applications delivering better experiences across the value chain and through larger usage of market and operational data to provide better analytics.

## HUMAN CAPITAL

From a Human Capital perspective, FY 2017-18 was a very eventful year which saw TCL initiating the exit from the regulated agri-business and at the same time investing in the emerging businesses of the future.

Some key highlights of the year were - divestment of Fertiliser Business, commencement of work on a green field project in Nutritional Solutions, entering into Business Transfer Agreement for acquisition of a Silica Unit, launch of new products in Consumer Business, relocation of offices in India and North America, plans for capacity augmentation in Mithapur as well as acquiring deeper and wider skills in the Innovation Centre to support the growth plans. The HR function has played a key role in all these initiatives working closely with the leadership teams.

Continuing on the transformation agenda, the HR function remains focused on reinforcing the key thrust areas viz. restructuring business and people related costs to remain competitive, attracting required skills, nurturing engagement levels, building the leadership pipeline and enhancing the skills and capabilities needed for the future.

### Restructuring and Capacity Building

As the Company implemented the business restructuring and shift in strategic focus, this also provided opportunities for redefining/ crafting new roles. The Company's internal job posting program – SHINE+ which completed 5 years during this period helped to provide career opportunities to many internal candidates, dealing with redundancies arising out of the divestment and control overall employee costs.

The requirement for niche skills and domain experts have been fulfilled through selective lateral hiring – especially in the areas of Food Science & Technology, Nutrition & Wellness, Digitisation, Materials Sciences to help deliver TCL's plans. This year, the Company went back to campus to bring on board a batch of fresh engineering graduates in various disciplines to meet its talent needs in the coming years.

### Skills and Capability Building

Developing and strengthening capabilities for all employees has remained an ongoing priority for the Company in the year gone by. The Company invests on internal talent and nurture them through the culture of continuous learning and development, thereby building capabilities for creating future leaders. This year, the Company started a new initiative 'Leadership Connect' providing a platform for informal yet focused interactions between the Board of Directors and identified key talent. This was seen as an enriching and insightful experience for the participants. TCL also continued to deploy its regular capability building programmes like 'SpringBoard', Management Development Programme ('MDP'), Operator development programmes, Sales Training, etc. to address needs of specific groups. At the manufacturing locations, the Company is also planning in advance to handle retirement related skill gaps at the front line operator level by inducting fresh talent and providing them with a detailed multi-skilled training to ensure that they are fully trained before being deployed on the job. The Company also has a policy to offer education assistance and sabbatical leave to encourage employees take up courses for furthering their knowledge and skills as a stepping stone to further career growth. The Company believes that its collective efforts in Learning & Development will help to have

the right capabilities and acquire the competitive edge in a tough business environment.

### Employee Engagement

The Company believes that in today's times, nurturing and strengthening employee engagement is a crucial imperative. The HR function, therefore, has worked on multiple drivers of engagement right from helping managers understand their own people management style so that they can play critical role in improving work group engagement. The HR function has also enhanced employee on-boarding process, reviewed package of benefits apart from many localised initiatives to enable employees to feel valued and connected with the organisation.

The senior leadership team visited many of the Company's locations periodically to interact with employees across levels and to share information on the Company's plans and focus areas as well as to also understand their views or address their concerns. Monthly business updates are also sent out through the LEAP Post as well as quarterly employee communication is addressed by the senior leadership.

The Company has had an excellent track record of harmonious industrial relations built on the foundations of mutual trust and co-operation which has helped sustain productivity levels.

The Company's workforce is a partner in its progress and share the common vision for growth, contributing their best. The Company is ready for the future.

The overall voluntary attrition rate for FY 2017-18 was 9.5%.

Manpower strength as on 31 March, 2018, excluding Rallis and Metahelix, was 3,528 spread across 2,327 in TCL India, 551 in North America, 385 in Europe, 251 in Magadi, 11 in South Africa and 3 in Singapore.

## SAFETY AND HEALTH

Driven by "Target Zero Harm" - Zero Harm to People, Zero Harm to Asset and Zero Harm to Environment, 'Safety' is one of the core values at Tata Chemicals. There is an unwavering commitment to the continuous improvement of the organisation's safety performance. Benchmarking with the companies that are best in the business, the Company is committed to continuously employing world-class Safety, Health and Environment ('SHE') practices.

For an exclusive focus on safety and sustainability, the Company has a Board level CSR, Safety and Sustainability ('CSS') Committee. This Committee of the Board provides valuable direction and guidance to the Management to ensure that Safety and Sustainability implications are duly addressed in all new strategic initiatives, budgets, audit actions and improvement plans. They also monitor and review reports monthly and quarterly on SHE performance including policy and legal compliances. The Chief Safety, Engineering & Project Officer has direct access to the Chairman of the CSS Committee. The Board-level Risk Management Committee also monitors the progress on mitigation plans associated with key safety risks.

The senior leadership at TCL also plays a definite and defining role in affirming positive attitudes towards safety and creating an enabling environment. The Company's Corporate SHE policy is the overarching policy, with the subsidiaries fine-tuning it to align with the local regulatory and safety directorates. The health and safety of

people is of utmost importance to TCL and the Company is keen to address any risk that could pose a threat to a safe and healthy work environment. To ensure steady improvement in the SHE performance, the Company has adopted voluntary standards such as Tata Safety & Health Management System, OHSAS 18001, Responsible Care and the British Safety Council guidelines.

The Company's approach to safety is cohesive and integrates individual and group values, attitudes, competencies and patterns of behaviour. As an organisation, the Company's commitment towards its safety management programs follows a top-down approach, with the senior management persistently working towards establishing, demonstrating, sustaining and improving the safety culture and incorporating the Company's core value of safety in their daily responsibilities. The Company places the collective ownership of safety and demands excellence and accountability from every individual. The workforce is actively involved in promoting safety and a conscious effort is made to keep them engaged. Cross-functional teams, joint management-workmen committees headed by Senior Management are formed at the site level that work with focused agenda across occupational health and safety areas, safety best practices, risk control, etc. A stronger individual commitment to safety is also built by linking variable pay/incentive to the safety record of the business for the year.

All locations of Tata Chemicals assess the high hazard areas and activities, with the intent of minimising risk to the lowest extent possible. The employees are specially trained to tackle any potential hazards that may arise in the course of their work. Additionally, tailored periodic medical check-ups are administered to the TCL people, based on the risk profile of their work area, to identify risks to human health, if any, as early as possible. Adequate medical facilities are present at all manufacturing sites; specialised medical facilities can be accessed through tie-ups with other hospitals, nursing homes, etc.

In order to ensure safety at sites, specific programs were initiated like the implementation of Process Safety & Risk Management at Mithapur, Hazard Identification Tours and LEAKS program in North America, Safety Charters reviews at Magadi, improvements in the training program and introduction of certification program at various locations of Tata chemicals in India as well as Global operations. Mithapur site received a Runner-up shield from Gujarat Safety Council for the year 2016 (previous year performance assessed in FY 2017-18) for "Lowest Disability Injury Index". Middlewich operations in the UK won Safety Award for "An Innovative New Approach to training, using 'Virtual reality' during EU salt European General Assembly meeting in Basel Switzerland". From the past seven years, the Company has been achieving the best Safety performance through 76% reduction in Recordable Injury Frequency rate. In Supply chain Safety, TCL's Safety requirements are communicated to the third parties, periodic audits are conducted and the Company is handholding the third parties to improve their safety practices and align their performance to TCL's Target Zero Harm.

## **SUSTAINABILITY**

Long term sustainability has always been Tata Chemicals' core guiding principle. Our Corporate Sustainability Policy that is aligned to the Tata Group sustainability policy further guide our actions and relationships with all our stakeholders. In a changing world, the Company strives to be ahead of the curve, by aligning itself even more closely with all its stakeholders. Constant efforts are made to

understand sustainability aspects of the various stages of our value chain and increase stakeholder engagement to identify opportunities that meet 'essential needs' relating to economic, environmental and social aspects. While we are driven by our mission, 'Serving Society through Science', our unwavering commitment to be an innovative, sustainable organisation and to empower our communities, pushes us to think of new ways to achieve the balance between our social, environmental and economic goals. The Company has a dedicated corporate sustainability department that works closely with businesses and facilitates incorporation of key processes within the Company. The Company uses various frameworks to help in this journey. These include ISO 14001, OHSAS 18001, GRI framework, Carbon Disclosure, UNGC, etc. and we work on disclosures across these frameworks. Aligned with the UN Global Sustainable Development goals, the Company is working on further reducing our water and carbon footprints, managing waste and increasing the reach and impact of our community development initiative especially in the neighbourhoods of all manufacturing plants.

### **Integrated Report**

In accordance with the International Integrated Reporting Council (IIRC) Framework, Tata Chemicals has included an Integrated Report <IR> as part of this Annual Report. <IR> seeks to provide a concise and integrated account of how our strategy, governance, performance and prospects are delivering on its core purpose – being a global company. <IR> encompasses all key non-financial performance indicators which are material to the Company as per Global Reporting Initiative (GRI), United Nations Global Compact (UNGC), and Carbon Disclosure Project (CDP).

### **Business Responsibility Report**

Tata Chemicals continues to report on its Business Responsibility in line with the Regulation 34(2)(f) of the SEBI Listing Regulations. The Business Responsibility Report detailing the initiatives taken from an environmental, social and governance perspective, in the prescribed format is available as a separate section of the Annual Report and also hosted on the Company's website [www.tatachemicals.com](http://www.tatachemicals.com).

### **Sustainability Reporting**

The Company strives to be a leader in corporate sustainability and continues to focus on the triple bottom-line. One of the key elements of sustainability is ensuring transparency and disclosures. The Company has used the GRI-G4 guidelines as a basis for informing all stakeholders our sustainability performance. Sustainability Report 2016-17 covered all major manufacturing plants of Tata Chemicals across the Globe. This year's <IR> in the Annual Report contains assured sustainability data for FY 2017-18. All additional information from all geographies, not covered under the <IR>, will also be available in the public domain shortly and can be viewed in the Sustainability section of our website [www.tatachemicals.com](http://www.tatachemicals.com).

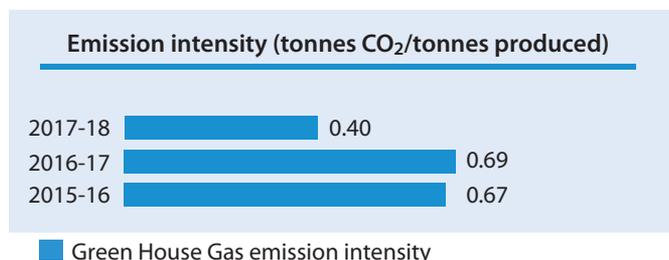
### **United Nations Global Compact ('UNGC')**

The Company is a signatory to the UN Global Compact that promotes ten principles in the areas of human rights, labour standards, environment and anti-bribery. The Company has been preparing and uploading the Communication on Progress ('COP') since 2005. The Company continues its commitment to the UN Global Compact and will submit its COP on the ten UNGC principles for FY 2017-18. The details of UNGC can be viewed on [www.unglobalcompact.org](http://www.unglobalcompact.org) and on the Company's website [www.tatachemicals.com](http://www.tatachemicals.com).

## Carbon Disclosure Project ('CDP')

CDP is a not-for-profit charity that facilitates the global disclosure system for investors, companies, cities, states and regions and helps them to manage and report on their environmental impacts. It has developed a system that leads an engagement on environmental issues across the world. Its vision is to develop a thriving economy that works for both people and planet. Tata Chemicals has been reporting on CDP climate change, CDP water and CDP supply chain.

Currently, CDP not only helps in disclosure, but also helps to evaluate the performance based on predefined performance categories. This helps the organisation to perform better on an Y-o-Y basis to achieve the desired goal. Tata Chemicals has maintained the performance grade "B" in CDP 17 as well, same as previous year.



## BUSINESS EXCELLENCE

The Company remains committed to continually raise the bar on performance in all aspects of the business. The Tata Business Excellence Model ('TBEM') serves as a pivotal framework that allows the Company to gain insights into its performance and establish continuous improvement initiatives for attaining superior business results and maximising satisfaction and value to the customers. The TBEM framework comprises six core aspects of business excellence: Leadership, Strategic Planning, Customer Focus, Measurement Analysis and Knowledge Management, Workforce Focus and Process Management. For a global organisation which has its manufacturing operations spread across four continents, with diverse business segments and employees from different cultures, TBEM serves as a platform to establish a common standard of excellence. The Company participates in the Tata Group level TBEM assessments, which provide valuable inputs into the strengths and areas of focus for the Company. This helps TCL to strengthen the culture of excellence and progress towards becoming a world class organisation.

## INTERNAL CONTROLS

The Company has an independent Internal Audit Department with well-established risk management processes both at the business and corporate levels. The Controller - Risk reports directly to the Chairman of the Audit Committee of the Board of Directors, which ensures process independence.

The scope and authority of the Internal Audit Department is derived from the Audit Charter approved by the Audit Committee.

To have access to advance and cutting edge data analytical tools and technologies along with inputs and insights on industry best practices, the Company has co-partnered and engaged a reputed external firm was ensured from second quarter of FY 2017-18. Reviews are conducted on an on-going basis, based on a comprehensive risk-based audit plan, which is approved by the Audit Committee at the beginning of the year.

The Audit Committee meets on a quarterly basis to review and discuss the various Internal Audit reports and also review closure of all agreed actions and compliance to the audit plan.

The Company believes that every employee has a role to play in fostering an environment in which controls, assurance, accountability and ethical behaviour are accorded high importance. To supplement the reviews carried out by the Internal Audit teams, the Company follows an elaborate system of Control Self Assurance ('CSA') (self-audit) which is carried out during the year. The CSA coverage includes all critical departments in the organisation.

The IT enabled CSA process provides a good bottom-up approach and build up for the CEO/CFO certification as required under Regulation 17(8) of the SEBI (Listing Obligations and Disclosure Requirements) Regulations, 2015, besides helping in awareness creation of controls across a wide segment of the Company employees. This complements the Internal Audits conducted to ensure total coverage during a year.

## RISK MANAGEMENT FRAMEWORK

The following section discusses various dimensions of TCL's Enterprise Risk Management. The risk-related information outlined in this section is not exhaustive and is for information purposes only. The discussion may contain statements, which may be forward looking in nature.

The Company's business model is subject to uncertainties that could cause actual results to differ materially from those reflected in the forward looking statements.

### Overview

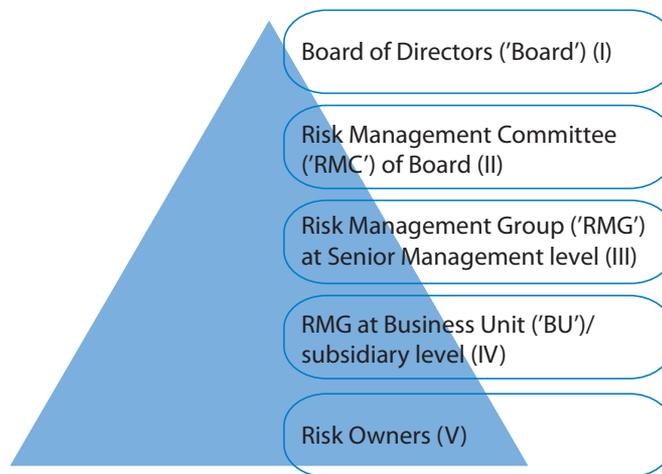
Risk Management and Internal Audit functions complement each other. Enterprise Risk Management ('ERM') at TCL seeks to minimise adverse impact on the business objectives and enhance stakeholder value.

Over the years, the ERM process has evolved into a robust exercise entailing a balanced bottom-up and top-down approach covering all units, functions and departments of the Company and its subsidiaries.

The ERM process framework has evolved and matured over the years and is based on international standards such as ISO 31000 and Committee of Sponsoring Organisations of the Treadway Commission ('COSO') with inputs drawn from the best practices of leading companies across industries.

**RISK MANAGEMENT: GOVERNANCE STRUCTURE**

The risk management framework works at various levels across the enterprise. The key roles and responsibilities regarding risk management in the Company are summarised as follows:



Level	Key roles and responsibilities
I.	<ul style="list-style-type: none"> <li>• Reviewing and guiding risk policy of the Company</li> <li>• Ensuring the integrity of the systems for risk management</li> </ul>
II.	<ul style="list-style-type: none"> <li>• Overseeing the Company's risk management process and controls</li> <li>• Setting strategic plans and objectives for risk management, risk philosophy and risk minimisation</li> <li>• Reviewing compliance with policies implemented by the Company</li> <li>• Reviewing risk assessment of the Company annually and exercising oversight of various risks including strategic risk, operational risks, market risk, etc.</li> <li>• Oversight of the Company's risk tolerance and risk appetite</li> <li>• Report and update to the Board periodically on various matters it has considered</li> </ul>
III.	<ul style="list-style-type: none"> <li>• Identification and review of enterprise risks from time to time, initiating mitigation actions, identifying owners and reviewing progress</li> <li>• Identification and review of risk appetite and risk trigger (at Enterprise Level)</li> <li>• Implementation of Risk reduction strategies</li> <li>• Formulating and deploying Risk Management Policy</li> <li>• Deploying practices for identification, assessment, monitoring, mitigation and reporting of risks</li> <li>• Providing updates to RMC from time to time on the enterprise risks and actions taken</li> </ul>
IV.	<ul style="list-style-type: none"> <li>• Reviewing respective BU/Subsidiary risks from time to time, initiating mitigation actions, identifying owners and reviewing progress</li> <li>• Identification and review of risk appetite and risk trigger (at BU/Subsidiary Level)</li> <li>• Implementation of risk reduction strategies</li> <li>• Deploying Risk Management Policy</li> <li>• Deploying practices for identification, assessment, monitoring, mitigation and reporting of risks</li> <li>• Providing updates to RMG and RMC level from time to time on the respective SBU risks and actions taken</li> </ul>
V.	<ul style="list-style-type: none"> <li>• Responsible for developing and acting on risk mitigation plan</li> <li>• Providing periodic updates to RMC on risks with mitigation plan</li> </ul>

## Risk Categories

The following broad categories of risks have been considered in the risk management framework:



- **Strategic Risk** – includes the range of external events and trends (like Government policy) that can adversely impact the Company’s strategic growth trajectory and destroy stakeholder value.
- **Reputational Risk** – includes range of events that creates a mismatch between stakeholder expectations and his/her perception about the Company’s performance around those expectations.
- **Operational Risk** – are those risks which are associated with operational uncertainties like failure in critical equipment, attrition, etc.
- **Regulatory and Compliance Risk** – Risks due to inadequate compliance of regulations, contractual obligations and intellectual property violations leading to litigation and loss of reputation.
- **Financial Risk** – This covers financial risks facing the organisation in terms of internal systems, planning, funding, etc.

## Cautionary Statement

Statements in the Management Discussion and Analysis describing the objectives, projections, estimates and expectations of the Company, its direct and indirect subsidiaries and its associates, may be ‘forward looking statements’ within the meaning of applicable laws and regulations. Actual results might differ substantially or materially from those expressed or implied. Important factors that could make a difference to the Company’s operations include, among others, economic conditions affecting demand/supply, price conditions in the domestic and overseas markets in which the Company operates, changes in the Government regulations, tax laws and other statutes and incidental factors.