

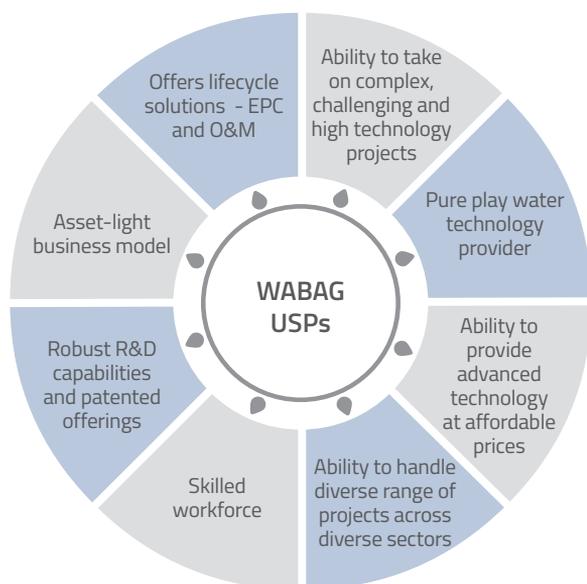
Management Discussion and Analysis

Brand WABAG

WABAG, headquartered in Chennai, India, is a pure play water group and one of the most reputed global brands in the water treatment space. With a legacy spanning over 91 years, over 6,000 projects across diverse sectors and technologies, it is amongst the select few global players capable of providing a comprehensive range of water treatment solutions. The Group backed by its robust technological competence and skilled resources has established itself as a water technology leader.

The Group also believes in making positive impact on the society with its water conservation, preservation, augmentation and recycling solutions. Be it treating water for drinking and daily needs, protecting environment, reducing fresh water extracts, offering alternative sources of water, it has always strived to conserve natural resources.

WABAG actively engages with industrial and municipal clients across the Indian sub-continent, Europe, Middle East, Africa, South-East Asia and Latin America to address their water challenges. The geographical spread and technological edge of the Group enables it to offer advanced technology solutions at competitive costs.



Global economic scenario

2017 has been a year of broad-based cyclical recovery wherein majority of the countries recorded growth. Global GDP growth at 3.8% for 2017 was considerably higher than that of 3.2% in 2016 following recovery in investments and trade on account of accommodative policies and financing conditions, improved confidence, and strengthening commodity prices. Advanced economies (AEs) grew 2.3% in 2017 (1.7% in 2016), while the Emerging Market and Developing Economies (EMDEs) grew 4.8% in 2017 (4.4% in 2016).

Among the AEs the growth was led by the US, Euro area (monetary union of 19 of 28 European member states) the US and Japan that grew 2.3%, 2.3% and 1.7% respectively in 2017 as against 1.8%, 1.5% and 0.9% respectively in 2016. In Europe, policy stimulus and strengthening global demand led to a broad-based growth among member nations. Recovery in private sector credit following stimulative stance of the European Central Bank further boosted the domestic demand and imports. (Source: IMF World Economic Outlook April 2018)

In Latin America, the economic activity is steadily gaining momentum driven by improving global scenario, stabilising inflation, and recovery in countries like Argentina and Brazil. GDP in the region grew 1.3% in 2017 compared to de-growth of 0.6% in 2016 supported by 1% growth in Brazil (-3.5% in 2016). Several countries in the region are witnessing moderation in inflation with subsiding pass-through impact of exchange rate depreciation and expected appreciation in some currencies. Supportive external environment and recovering domestic demand shall boost activity in the region and drive a GDP growth of 2% in 2018. Brazil is expected to witness its second year of gains with a GDP growth of 2.3% as unemployment declines and fixed investments rebound. Steadily improving business confidence and manufacturing PMI (Purchasing Managers' Index) fares a healthy trend of renewal. (Source: IMF Regional Economic Outlook Latin America and Caribbean, Council of the Americas, Focus Economics)

Economic scenario in the Middle East and North Africa (MENA) remained muted, especially among the oil exporters who were impacted by production cuts and lower oil prices. GDP growth in the region was considerably lower at 2.6% in 2017

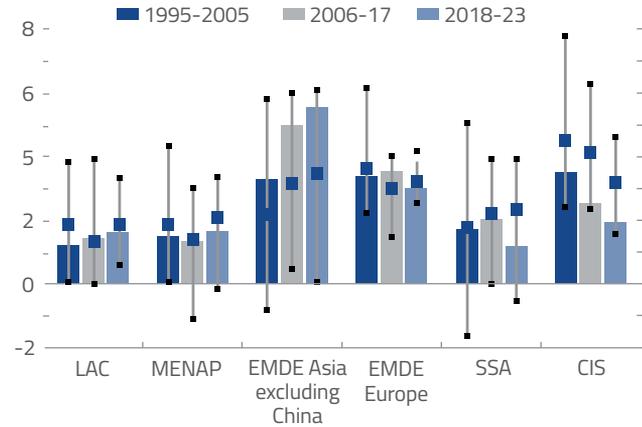
compared to 4.9% in 2016, with MENAP oil exporters reporting a growth of 1.7%. Conflicts, negative impact of low oil prices, fiscal adjustments and agreement to reduce oil production on oil-exporting countries weighed down growth in the region. However, the economic activities post bottoming out in 2017 is expected to accelerate going into FY 2018-19 amidst continued recovery in non-oil activity. MENAP's GDP growth for 2018 and 2019 is expected at 3.4% and 3.7% respectively. The region, especially the oil exporters are likely to benefit from the stronger prospects of Euro area, which will boost exports. The region should also benefit from marginal strengthening of outlook in its keys trade partner, China. (Source: IMF Regional Economic Outlook Middle East and Central Asia)

In the Emerging and Developing Asia, the growth remained flat at 6.5%. Stronger than expected growth in China at 6.9% and ASEAN-5 countries at 5.3% compensated India's weaker than expected growth at 6.7% for 2017. Among the ASEAN countries, strong domestic demand and improved external demand contributed to a healthy growth – Indonesia grew 5.1%, Malaysia 5.9%, Philippines 6.7%, Vietnam 6.8% and Thailand by 3.9%. Booming exports of ASEAN countries will contribute towards steady growth momentum. Indonesia, Philippines and Thailand will witness accelerated growth led by strong investments and domestic consumption; Vietnam on the other hand will benefit from continued expansion of its industrial base. Though poor infrastructure has been a dragging factor, countries like Vietnam and Philippines are making steady progress. It is estimated that the ASEAN countries would be required to invest USD 3.15 trillion dollars in its infrastructure during 2018 to 2030. (Source: IMF Regional Outlook Asia Pacific, Asian Development Outlook 2018)

Post cyclical recovery in 2017, the growth momentum is likely to carry into 2018 and 2019 with output growth forecasted at 3.9% for both years. The higher growth outlook will be driven by sustained momentum in the EMDEs and improved outlook of AEs. In the MENAP, the impact of various issues has bottomed out and the region shows prospects of growth on the back of non-oil activity growth. In LATAM, the economies are showing signs of recovery. In Europe, the activities are expected to remain stable. Growth in commodity exporting nations is expected to rebound as commodity prices firm. (Source: IMF's World Economic Outlook and Regional Outlook reports, World Bank's Global Economic Prospects report)

The year ended on a positive note with fiscal deficit remaining low at 3.5%, the Consumer Price Inflation under control at 4.28% and forex reserves strong at ₹27,597 billion.

Per capita real GDP growth in EMDEs by region (%)



Note: Bars denote PPP (purchasing power parity) GDP-weighted averages, ■ indicate the medians, and black markers denote the top and bottom deciles of per capita GDP growth in the country groups.

LAC – Latin America and the Caribbean, MENAP – Middle East, North Africa, Afghanistan, and Pakistan, EMDE = Emerging market and developing economy, SSA = sub-Saharan Africa, CIS – Commonwealth of Independent States

Indian economic scenario

FY 2017-18 has been an important year of consolidation in India. Reformative initiatives like Goods and Services Tax (GST) and Insolvency and Bankruptcy Code (IBC) in the current fiscal and Real Estate (Regulation and Development) Act in the past along with continued liberalisation of FDIs are strengthening the country's fundamentals. The immediate impact of these initiatives are already beginning to reflect with a 30 place jump in its ease of doing business ranking to 100th position and upgrade in country's credit rating to Baa2 (Baa3 earlier) by Moody's Investors Services. The country is now the eighth most attractive FDI destinations. (Source: World Bank and A. T. Kearney).

While in the short run, India's GDP growth rate has slowed down to 6.6% in FY 2017-18 post three consecutive years of over 7% growth, the country is still rated amongst the best performing economies with strong outlook. The year ended on positive note with fiscal deficit remaining low at 3.5%, the Consumer Price Inflation under control at 4.28% and forex reserves strong at ₹ 27,597 billion. Gross value added growth in FY 2017-18 vis-à-vis FY 2016-17 for agriculture and industry sectors declined from 6.3% and 6.8% respectively to 3% and 4.8% respectively and that of services grew from 7.5% to 8.3%. Decline in agricultural output was primarily driven by weather disruptions and impact of higher base. Industrial output was impacted by temporary disruption caused by GST implementation. Services benefited from an uptick in construction activity. (Source: Central Statistics Office)

Key macro-economic performance indicators

	2013-14	2014-15 (3rd RE)	2015-16 (2nd RE)	2016-17 (1st RE)	2017-18 (1st AE)
GDP growth	6.4	7.4	8.2	7.1	6.6
Private consumption share	57.6	58.1	58.8	59.0	58.9
Public consumption share	10.3	10.4	10.4	10.9	11.4
Gross Fixed Capital Formation share	31.3	30.1	28.5	28.5	28.5

RE – Revised Estimates, AE – Advanced Estimates

(Source: Central Statistics Office)

The implementation of GST has been one important move that is bringing in more efficiency within the system. It expects to eliminate issues relating to multiple-taxation, unify the nation into one market and encourage formalisation. Since its implementation, GST has been successful in increasing the tax payer base by over 50% to 34 lakhs businesses. While being a positive for long term, GST brought in some challenges to small and medium enterprises who are struggling with regulatory issues and delays in refund of input tax credits that is hurting overseas shipment.

IBC has been another significant initiative aimed at effectively resolving banks issues associated with corporate debt and surging non-performing assets. It would be an important tool empowering banks to clean up their balance sheet and improve performance that would help kick-start the credit flow cycle within the economy.

Infrastructure remains a key development agenda for the Government with three-fold rise in allocation since 2014. For FY 2018-19, the total budgetary and extra-budgetary spending towards infrastructure has been estimated at ₹ 5.97 lakh crore. Additionally, massive capex has been envisaged

to build new capacities across primary sectors. The Oil & Gas sector is likely to account for a significant chunk of this. The Ministry of Petroleum and Natural Gas estimates the sector to attract a cumulative investment of USD 40 billion over the next five years. A key development for the sector has been Saudi Aramco's USD 44 billion deal to build giant refinery complex (1.2 mn barrels/day capacity) in India with three oil PSUs from India. The deal is pegged as a game changer for India and will facilitate in meeting the country's growing fuel and petroleum demand. Power sector is another key area that will attract investments worth ₹ 11.5 lakh crore to build new power generation capacity during FY 2017-22. (Source: Union Budget, Ministry of Petroleum and Natural Gas, Central Electricity Authority, IBEF)

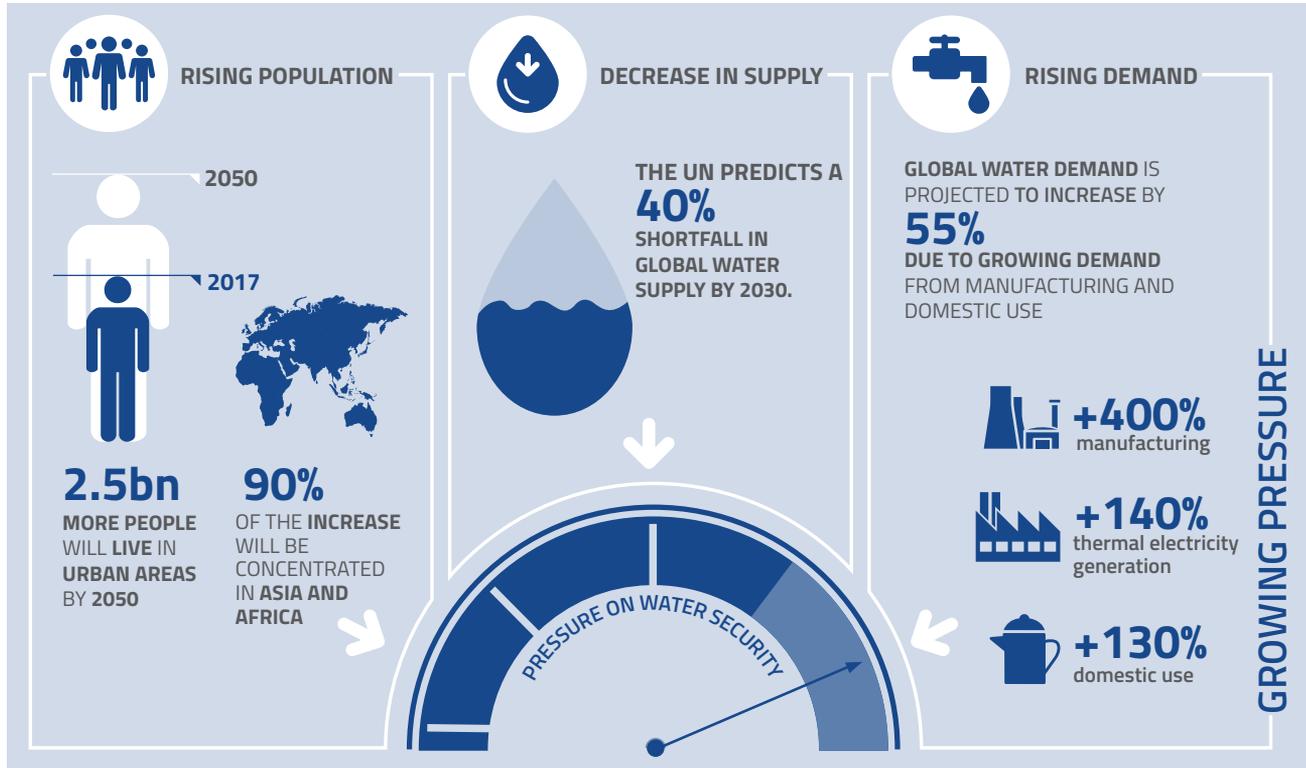
Taking into perspective the recent developments, IMF remains positive of the Indian economy, forecasting its GDP growth to be 7.4% in FY 2018-19 and 7.8% in FY 2019-20. The economic activity will be buoyed by strong private consumption and services, revival in private investments as corporates adjust to GST, enhanced infrastructure spending and recovery in global trade that will boost exports.

Global water scenario

Water, besides supporting life has significant economic cost associated with it. With nearly 78% of the global workforce being to some extent dependent on water, improper water management not only hurts individuals, it negatively impacts the GDP growth of the several countries globally. As per UNESCO, with the rapidly growing demand for water, the world faces a 40% water supply shortfall in 2030 unless radical measures are adopted globally. Countries in Middle East, North Africa and South Asia are already categorised water-stressed having less than 5,000 cubic metres of renewable freshwater per capita. Even more serious is the problem of water contamination that is presently impacting millions globally, causing widespread diseases and deaths.

Trade deficit for the year surged 44.54% driven by faster growth of imports at 19.59% to USD 459.67 billion compared to 9.78% exports growth to USD 302.84 billion.

Pressure on global water security



Though Governments across the globe are joining hands and undertaking commitments to address the water challenge, the intensity of efforts is far from making the desired outcome. As per a report by WHO, in 2015 of the total global population only 71% used safely managed drinking water service and 39% used safely managed sanitation service. Further, nearly 844 mn people globally lacked access to water service and 892 mn defecated in open clearly reflecting the huge shortfall. (Source: Progress on drinking water, sanitation and hygiene report 2017, WHO and UNICEF).

To address this shortfall, companies and cities globally are increasingly beginning to disclose environment data to track the progress. CDP, a not-for-profit charity that operates a global disclosure system, works closely with investors, companies, states and cities to aggregate environmental impact data. As per an analysis done by it in 2017 relating to 569 global cities that disclosed environment data, the following are the findings:

Alarming water statistics

63% of cities disclosing data in 2017 foresee a risk to their water supply from climate change with majority of them being in Asia and Oceania, Africa and Latin America.

132 of these cities have reported declining in water quality as a major risk with 80% of wastewater flowing back into environment untreated.

196 cities have reported increased water stress and scarcity as a risk with 59% of them currently facing or will soon be facing the risk.

(Source: CDP analysis of environment data from 569 global cities in 2017)

- Growing concern of corporates:** Globally, the corporates are becoming more responsible towards the environment and increasingly disclosing their water data. As per CDP Global Water Report 2017, the number of companies disclosing water data increased from 1,432 in 2016 to 2,025 in 2017. Together these companies withdrew around 5.6 billion litres of water in 2017. More importantly, they committed USD 23.4 billion across more than 1,000 water projects in 91 countries. Of these corporates, 56% have set water targets or goals, and 41% are engaging their suppliers to report water management.

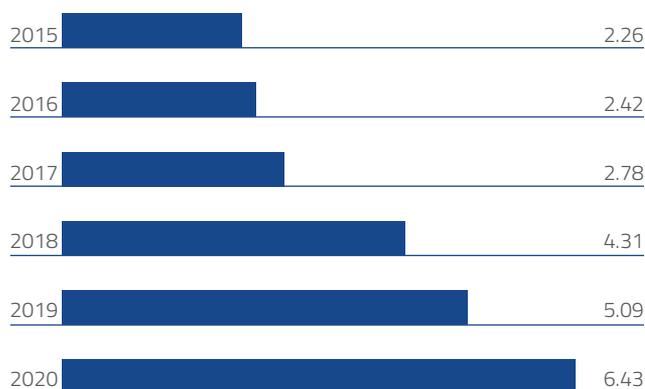
Region-wise demand trend for water and wastewater market

Asia-Pacific

Water leaders of the Asia-Pacific region have pledged to provide safe drinking water and sanitation for all by 2025, five years ahead of the Sustainable Development Goals, in the recently held third Asia-Pacific Water Summit. This would be achieved by doubling investments at the regional level in infrastructure and community-based efforts. The countries have also agreed to advance water research and development as well as education and training to generate innovative solutions. The focus would be on implementation of integrated water resources management at all levels and facilitating increased transboundary cooperation to address challenges collectively. (Source: Yangon Declaration, Asia-Pacific Water Summit)

Besides, the Asian Development Bank also initiated the Water Financing Partnership Facility (WFPPF) on behalf of its financing partners to facilitate investments in water-related projects, with majority of funding towards water supply, sanitation and wastewater management. (Source: Asian Development Bank)

Water Financing Partnership and Facility: Approved water investment and pipeline (in USD billion)



(figures for FY 2018-2020 indicate pipeline of investments)
(Source: Asian Development Bank)

In Sri Lanka, the market is afresh with renewed optimism as the Ministry of Finance established a new PPP unit that could have a multiplier effect in water opportunities. The new PPP unit is believed to be evaluating nearly 20 water PPP projects driven by the backing from the World Bank. These include water collection, treatment and disposal projects worth about USD 900 mn and variety of other projects (including reservoirs and supply) worth USD 2,800 mn. (Source: USAID, GWI magazine December 2017)

In Bangladesh, after a decade of heavy investments and turnaround of the water supply infrastructure, the focus is now on wastewater. As per World Bank, as little as 3% of total wastewater produced in Dhaka is treated resulting in contamination of surrounding water bodies. To tackle the situation, ambitious plans worth USD 1.7 billion for developing 11 new wastewater treatment plants and upgrading existing ones have been chalked out. The scale of the projects has attracted several bilateral and multilateral aids.

In Philippines, the Asian Development Bank (ADB) has committed to finance five water projects through grants totalling USD 770 mn during FY 2017-19.

Middle East & North Africa (MENA)

Being an arid region, the water crisis in MENA is the most intense. Along with rising population, inefficient use and water mismanagement, the problem gets compounded. To counter this challenge, the countries in the region are coming up with ambitious plans. In Kingdom of Saudi Arabia, the Ministry of Environment, Water and Agriculture has allocated an additional USD 47 mn to its annual budget to pay for the installation and operation of mobile desalination units in areas of extreme water need. The state-owned desalination organisation the Saline Water Conversion Corporation has announced tendering of nine facilities with a total capacity of 2,40,000 m³/d across various sites along the Red Sea coast.

In Qatar, the total water market stood at USD 2,735 mn in 2017, out of which 48% was invested towards capital expenditure. Industrial capital expenditure remained almost flat in this region. On the other hand, investment in wastewater networks witnessed a considerable growth over the years and stood at USD 483 mn in 2017 and is forecasted to reach USD 576.9 mn, USD 565 mn and 497.8 mn in 2018, 2019 and 2020 respectively. The region is likely to witness capital investments of USD 1,402 mn in 2018, USD 1,382 mn in 2019 and 1,240.7 mn in 2019.

In Oman, the state-owned corporate entity Haya Water plans to invest USD 2.6 billion in the country's wastewater collection and handling infrastructure over the next four years.

In Bahrain, the total water market in 2017 stood at USD 855 mn, 42% of which was towards capital expenditure. While industrial capital investments in the region have remained flat, investments from the utilities is witnessing significant growth. The region is expected to witness sustained investments in the water sector with capital expenditures expected at USD 342.5 mn for 2018, USD 313.4 mn for 2019 and USD 379 mn for 2020. Seawater and brackish water desalination plants will form a major chunk of investments at USD 88 mn, USD 131.9 mn and USD 164.8 mn expected investments in 2018, 2019 and 2020 respectively

In Egypt, the market following issues from Arab Spring is gradually entering a period of stability. It has one of the fastest growing population in Arab world and is highly dependent on River Nile. Besides, water withdrawals here are expected to increase from 77 km³/d in 2015 to 94.62 km³/d in 2030. The scenario demands the country to make significant investments in building new water and wastewater treatment capacity and reducing dependence of outlying areas on Nile by building desalination capacity. In line with this strategy, the Holding Company for Water and Wastewater (HCWW) has implemented a 30-year (2007-2037) master plan that would require an investment of USD 22 billion. In 2017, the total water market in Egypt stood at USD 3,178 mn, 43% of which was towards capital expenditure.

In Tunisia, the total water market in 2017 stood at USD 711 mn, out of which 41% was allocated towards capital expenditure. Seawater and brackish water desalination plants form a major portion of utility capital expenditure. The water sector in this region is likely to witness sustained investments with capital expenditure expected to reach USD 347.4 mn in 2018, USD 362.4 mn in 2019 and USD 333.3 mn in 2020.

In Nigeria, the total water market in 2017 stood at USD 1,058 mn, 46% of which worth USD 490.8 mn was towards capital expenditure. The water segment in the region is expected to witness significant rise in investments with capital expenditure likely to touch USD 563.2 mn, USD 645.8 mn and USD 762.3 mn in 2018, 2019 and 2020 respectively. *(Source: GWI, Global Water Market 2017, Middle East and Africa)*

Latin America

Latin America, despite having abundant water resources, faces water trouble driven by uneven distribution, heavy exploitation of natural resources and inadequate water infrastructure. However, in the past few years, the countries in the region have heightened their concern and invested in improving coverage. In Brazil, the national water agency took first steps towards this by mapping its wastewater investment needs. It estimated that an investment of USD 47.2 bn would be required to achieve universal urban wastewater collection and treatment infrastructure by 2035.

Argentina aims to overhaul its water sector unveiling plans to set-up 38 water PPP projects worth USD 10 billion with assistance of outside private capital. Focussed on this, AySA, the country's largest water utility successfully raised USD 500 mn through international bonds issue. *(Source: Global Water Intelligence magazines)*

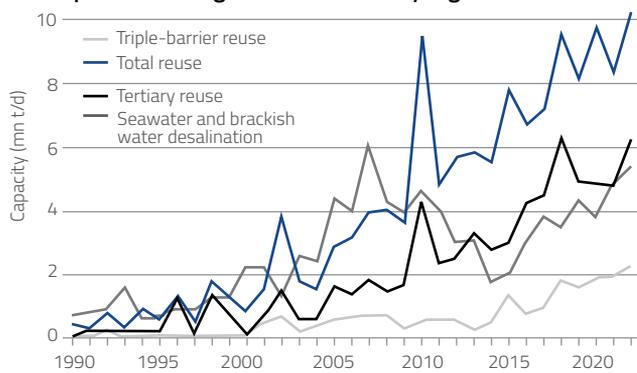
Outlook

With growing population and increasing water consumption from industries the situation warrants immediate actions. While conserving and reusing treated water will be important, reinforcing supplies by desalinating water will also be important. As per GWI's primary findings, the global capital expenditure on desalination and water reuse facility is estimated to increase by more than 60% during FY 2013-2022. Over the five-year period from FY 2016-2020, reuse is likely to grow at a faster rate with newly contracted tertiary and triple-barrier capacity growing at 9.4%, compared to 7.3% for desalination.

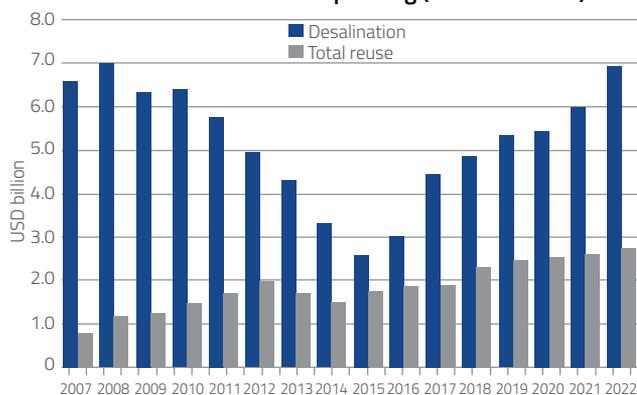
- **Stringency of norms:** Governments across the globe are revising wastewater discharge norms for industries and treated water quality norms. As the move picks momentum, a large number of corporates and municipalities would need to upgrade existing systems or invest in new ones.

As per CDP's analysis collated from a data of 569 global cities and 2,025 corporates, there is a trend of rising awareness leading to increased investments.

Per capita real GDP growth in EMDEs by region (%)



Global Desalination and reuse spending (FY 2007-2022)

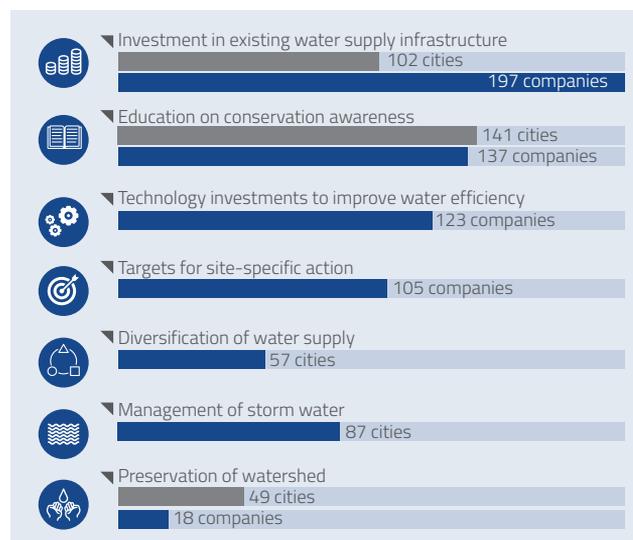


(Source: GWI Desal Data, GWI magazine April 2017)

Moreover, there has been increasing awareness amongst the Governments, municipalities, industry bodies and corporates globally regarding the dire scenario of water. Countries are coming together to plan for a better future, setting stringent sustainable development standards. Though in initial stages, these initiatives have set the right beginning. Several cities and corporates across the globe have lined up investments for ambitious goals. As per CDP's analysis collated from a data of 569 global cities and 2,025 corporates, there is a trend of rising awareness leading to increased investments.

Another interesting development in the water sector would be the increasing concern relating to environmental and health impacts of micropollutants. In advanced countries, there is an increased pressure on Governments to undertake scrutiny of contaminants at both wastewater treatment plants (WWTPs) and industrial outfalls. With research advancing in this field, a wide range of drinking and wastewater treatment systems would be set to require upgrades. Though initially the costs involved in advanced micropollutant removal technology are comparatively higher, they are the way forward owing to its effectiveness.

Cities and companies committing actions to reduce impact of water risks



(Source: CDP)

Indian water scenario

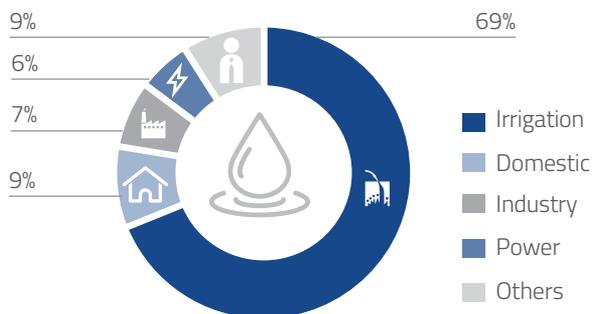
Water management has emerged as an issue of utmost importance in India. Accounting for 17% of global population and having just 4% of global fresh water resource, the country's remarkable economic growth is unfolding a major challenge of sharing water resources among key sectors including agricultural, domestic and industrial.

Poor irrigation and water distribution infrastructure is already resulting in droughts in several parts of the country during adverse climatic conditions. Besides inadequate water treatment infrastructure results in a significant chunk of the population relying on untreated and contaminated water for drinking, thereby leading to widespread diseases. The scenario is grimmer in the rural areas. As per Wild Water, State of the World's Water 2017 report by WaterAid, nearly 63.4 mn people in India's rural areas do not have access to clean water. With 27 out of 35 states and union territories in India being disaster-prone, these marginalised sections are likely to face severe adaptation problems from extreme weather and climate change.

As per a joint study by ASSOCHAM and PwC, as water demand in India increases to 1,500 BCM (billion cubic metres) in 2030 from 740 BCM currently and with no change in supply, the water demand-supply gap would widen to highs of 50% by 2030. Resultantly, the per capita availability of water in India will drop by nearly 40-50%. It is estimated that an additional investment of USD 291 bn would be required to fill this gap.

To address this challenge, the Government has brought in renewed focus to the water sector. The budgetary allocation to Ministry of Water Resources, River Development & Ganga Rejuvenation and the Union Drinking Water & Sanitation Ministry is ₹31,216 crore in FY 2018-19 budget. There is a clear indication of the Government's focus on improving water scenario in the country.

Estimated sector-wise demand for water in India



(Source: Water Management in India: Channeling the Resources, PwC report)

Indian wastewater segment

Globally, 65% or 35.9 mn hectares of the irrigated areas are within 40 km of urban areas and get impacted by dirty wastewater flows. Of this, 29.3 mn hectares are in countries having limited wastewater treatment facility, putting to risk the health of 885 mn urban consumers. India ranks amongst the top five nations accounting for 86% of these farmlands. This when put into perspective of the fact that nearly 70% of India's urban wastewater goes untreated polluting three-fourths of its surface water resources warrants an immediate action.

The scenario is no better in the rural areas. Over 10 crore people living across 12,577 habitations in India face the issues of getting water contaminated with excess fluoride. While nearly 239 mn people comprising 19% of India's population drink water containing unacceptably high levels of arsenic. Long-term intake of such water leads to arsenic poisoning with cancer (skin, kidney or lung), or diseases of skin.

(Source: Water Ministry resources)

The Indian ministry on effluent standards has recently chalked out the revised standards for the quality of effluents released to surface waters from municipal wastewater treatment plants. Though less stringent than initially planned, these new standards will have higher chances of being effective, ensuring maximum coverage. All existing wastewater treatment plants and the ones commissioned after June 2019 would be necessitated to comply with the new norms within five years, thereby opening up a gamut of opportunities.

Changed STP effluent standards in India

Parameter	Limit
pH	6.5-9.0
BOD	20/30 mg/L ¹
TSS	50/100 mg/L ¹
Faecal coliform	1,000 MPN/100 ml

¹ Lower limit for metro cities and most state capitals

Indian water outlook

Indian water sector is at an important juncture. A series of firm initiatives undertaken by the Government, increasing awareness among citizens and stringent policy initiatives is expected to revolutionise the segment.

Asian Development Bank has committed to lend a sum of USD 3.80 bn to India during FY 2017-19 for its water sector. Of this, USD 942 mn will be towards agriculture and natural resources and USD 2,865 mn towards water and other urban services. The Namami Gange project, one of the Government's most ambitious river cleaning projects, has begun to witness momentum. The Government had allocated a massive ₹ 20,000 crore to the programme to undertake several work including development of sewage treatment plants, river surface cleaning, afforestation, industrial effluent monitoring, riverfront development and making villages on the banks of Ganga open defecation free. States coming under its purview include Uttarakhand, Uttar Pradesh, Bihar, Jharkhand, West Bengal, Haryana and Delhi.

In Mumbai, the municipal authority with its strong financing capability, has initiated an ambitious plan to address its wastewater problem by coming out with largest tender in the country for developing urban wastewater treatment facilities. With a total sewage treatment capacity of 2.8 mn m³/d built under 15-year DBO contract, making it an attractive opportunity for WABAG.

WABAG Group Performance

WABAG's operations are spread across four continents - Asia, Europe, Middle East and Africa and South America. To facilitate effective presence in these regions, operations are divided into four clusters with each cluster having its own local set-

₹31,216 crore
 total FY 2018-19 budgetary allocation to Ministry of Water Resources, River Development & Ganga Rejuvenation and the Union Drinking Water and Sanitation Ministry

up and dedicated leadership management team. The synergies among the clusters are leveraged to create better opportunities. The Company is transitioning into this approach as some of the clusters are in nascent stage.

Snapshot of WABAG's clusters

	India cluster	Europe cluster	Middle East and Africa (MEA) cluster	Latin America (LATAM) cluster
Countries of interest/ covered	India, Bangladesh, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Nepal, Philippines, Singapore, Sri Lanka, Thailand, Vietnam	Austria, Czech Republic, Macao, Romania, Switzerland and Turkey	Kingdom of Arabia, Bahrain, Egypt, Libya, Namibia, Nigeria, Oman, Qatar, Tanzania, Tunisia and UAE	Argentina, Brazil, Chile, Colombia, Ecuador, Mexico, Peru and Uruguay

India Cluster

Overview

WABAG India: WABAG India as a leading player in the Indian water space, has a robust track record of handling complex and large projects for industrial and municipal clients. Ability to offer advanced technological solutions at competitive cost makes it one of the most successful international water players. It is an important strategic unit supporting the operations of global units with financial and skilled manpower resources. Some of the flagship projects executed by the unit include:

- World's largest tannery Wastewater Treatment Plant (WWTP) for the Calcutta Leather Complex
- World's first treated Wastewater Effluent Recycled plant converting into ultra pure de-mineralised water at Panipat Refinery
- World's first PTA (Purified Terephthalic Acid) along with other petrochemical effluent treatment through UASB process followed by MBD UFRO Wastewater recovery for re-use at Reliance Dahej. The complex Petrochemical effluent consisting of effluents from MED, LDPE, LCDPE, ROGSE India's first treatment recycle and reuse plant
- Asia's first Wastewater treatment plant for Reliance 20 Million Tonne Jamnagar Refinery
- Largest High Pressure Condensate treatment plant with 38 Bar feed pressure external regenerated with a spherical vessel for 800 MW Power Plant
- Largest single train Sea Water Desal plant (UFRO) for 28 MLD at Reliance Jamnagar Refinery
- India's First Power effluent recycle plant at NTPC Badarpur at Rayalseema Thermal Plant in Andhra Pradesh
- India's largest –
 - Fully potable Seawater RO plant on DBO model at Nemmeli, Chennai
 - Lamella based (inclined plate settlers) Drinking Water Treatment Plant for Mumbai Municipal Corporation of 455 MLD

- Steel Mill Waste High rate filtration plant of 21 MLD for ESSAR Steel for treating Mill scale effluent

WABAG Philippines: A wholly-owned subsidiary of WABAG India, the unit is a leader in water treatment sector in Philippines. Based in a region having less land availability and high energy costs, the unit specialises in offering cost-effective, innovative water technology solutions. Focussed on domestic and neighbouring markets of Vietnam and Cambodia, it collaborates with other units to procure cost-effective resources and ensure timely delivery. Some of the flagship projects handled by the unit include:

- Sewage Treatment Plant (STP) at:
 - Bagbag, Tatalon and Ilugin CYCLOPUR® - SBR technology
 - Dona Imelda with MBBR – FLUOPUR® technology
 - Muntinlupa, Tunasan and Valenzuela with activated sludge process
 - Drinking WTP with innovative WABAG filtration system at Putatan
- Pasig Sewer Network Project

Cluster Highlights, FY 2017-18

- Key orders bagged:
 - USD 25 mn WTP retrofit project from Metro Manila for 900 MLD La Mesa-2, the world's ninth largest drinking WTP
 - USD 13 mn 150 MLD WTP in Vietnam. A high-profile investment from Vietnam-Oman Investment, the project would meet clean water need of nearly 3 mn people
 - 470 mn PHP direct negotiated contract for BNR project of Tunasan and Valenzuela
 - ₹ 386 crore repeat order from Bangalore Water Supply and Sewerage Board for a 150 MLD STP at K&C Valley, Bengaluru along with O&M for 10 years
- Successful completion of the challenging Putatan WTP despite change in inlet water parameters post design completion

Strategic direction ahead

- Regional market strategies –
 - **India:** The unit shall focus on ramping up operational efficiency and execution expertise to remain prepared for capitalising on the pent-up demand from various Government initiatives like Namami Gange, Smart Cities, Swachh Bharat Mission and AMRUT scheme.
 - **Philippines:** The unit shall focus on creating new business models and positioning strategically to be able to undertake Financed Projects that are expected to emerge as future business opportunity. It shall continue to consolidate operations to achieve better cost optimisation and competitiveness to strengthen presence in the South East Asia. The unit shall target more O&M and industrial projects.
- Cluster strategies –
 - Primarily focus on projects from financially strong municipalities, Oil & Gas sector and other funded projects
 - With tightening environmental and waste discharge norms, the focus will be on leveraging in-house technologies to the advantage of industrial and municipal clients
 - To continue to strengthen its presence in Singapore, Sri Lanka, Malaysia, Bangladesh, Thailand and Vietnam

Europe Cluster**Overview**

WABAG Austria & Turkey: The Austrian and Turkey businesses combine to operate together as one unit to synergise their diverse competencies. While the Austrian unit being the oldest subsidiary possessing robust track record, experienced staff, technology and engineering capabilities, the Turkey unit enjoys the advantage of young energetic staff, execution skills, local market expertise and low cost. Together they position as high technology-oriented European company offering water treatment solutions for municipal and industrial clients at competitive pricing. International exposure from the erstwhile Austrian unit, especially in the Middle East, would enable the combined entity to expand aggressively to newer regions. Some of the flagship projects of the unit include:

- High-end wastewater reclamation system for the Ujams Industrial Park in Windhoek, Namibia (BOOT project)
- Turnkey drinking WTP for the district of Brčko in Bosnia and Herzegovina
- First fully-biological WWTP on the Croatian coast for the city of Senj
- Turnkey sludge treatment plant for the Xiaohongmen WWTP in Beijing, China
- Brackish water desalination plant, Al Wasia, near Riyadh in Saudi Arabia

- World's first and unique direct potable water reuse plant at Goreangab, Windhoek, Namibia
- O&M of WWTPs and pumping stations covering the entire Istanbul city
- Turnkey drinking WTP at Izmir, Turkey
- Municipal WWTP at Siverek, Turkey
- O&M of the drinking WTP at Adana, Turkey

WABAG Switzerland: The unit in existence since 1995 is the market leader commanding more than 70% of the market share in the advanced technology segment and is EN ISO 9001:2008 certified. Possessing R&D capabilities and infrastructure, it has to its credit several ground-breaking innovations enabling creation of a patented technologies repository. It is amongst the first few to possess micro-pollutants removal technological competence. It serves as the Group's knowledge and technology back-office enabling it to bag complex projects. Offering pioneering and customised solutions, the unit has executed over 200 municipal and industrial projects. Some of the flagship projects of the unit include:

- Innovative groundwater treatment at Muttenz employing advanced oxidation PAC-adsorption and ultrafiltration technologies for the first time in Switzerland
- Lake WTP with ultrafiltration, ozonation, activated carbon filtration and final disinfection at Horgen
- Switzerland's largest:
 - Spring WTP using ultrafiltration technology at Sonzier
 - WWTP with membrane bioreactor technology (MARAPUR®) at Zermatt
 - Tertiary wastewater filtration plant at Zurich-Werdhölzli
- Tertiary treatment for eliminating micro-pollutants using the BIOZONE® process at St. Pourçain, France
- Renewal of aeration system and PLC-Scada system at the Choutrana WWTP in Tunis, Tunisia
- BIOPUR® plant for Algeciras, Spain aimed for water reuse, built on reclaimed land

WABAG Romania: The unit in existence since 2008 offers EPC and O&M solutions to industrial and municipal clients in the process water and wastewater treatment space and is EN ISO 9001:2008, OHSAS 18001:2007 and ISO 14001:2004 certified. It is reputed for quality, environmental practices and stringent compliance standards. It specialises in providing complex water technology solutions to Oil & Gas sector and has rich experience in operating refinery ETPs. Some of the flagship projects of the unit include:

- Produced WTP for Romania's largest oilfield, Suplacu de Barcău
- Comprehensive refurbishment and upgrade in two stages and simultaneous operational management for PetroBrazi refinery Effluent Treatment Plant (ETP), Romania
- Tertiary filtration system for water reuse at PetroBrazi refinery ETP, Romania
- Compact ETP (containerised) for KAR refinery at Erbil, Iraq
- Operational management and technical adaptations at Arpechim refinery ETP, Romania
- Municipal WWTP at Cugir, Aiud and Ocna Mures, Romania

WABAG Czech Republic: The unit headquartered in Brno has been in existence since 1994 and is EN 9001:2000, ISO 14001:2004 and OHSAS 18001:2008 certified. It is amongst the oldest subsidiaries catering to both industrial and municipal segments. With operations spread across Slovakia, Serbia, Turkey, Uzbekistan and Vietnam, the unit serves as the cluster's competence centre for industrial water treatment services. The Cluster's focus towards the energy sector is primarily driven by this unit.

The unit has expertise in pre-treatment systems, demineralisation, condensate polishing, ion exchange technology, cooling water treatment, filtration and neutralisation. It holds the reputation of working on small nuclear power plants in Czech Republic. Some of the flagship projects of the unit include:

- Industrial water treatment at Slovnaft, Slovakia
- Reconstruction of industrial WTP for the Prerov Power Station, Czech Republic
- Modernisation of drinking WTP in Plzen, one of Czech's most important water supply plants
- Municipal WWTP at Trenčín, Slovakia
- Industrial water reclamation plant for steel works Smederova, Serbia
- Demineralisation plant for power plant at Khoms, Libya

Highlights, 2017-18

- Key orders bagged:
 - EUR 4.6 mn WWTP for Philip Morris near Buchrest
 - RON 12.8 mn refurbishment and extension project of Kashira plant near Moscow, Russia. The order marks second contract in the F&B sector from PepsiCo
 - EUR 4.6 mn O&M contract extension for OMV Petrom's ETP at Petrobrazi Refinery and Arpechimi

- EUR 10 mn project for design and supply of a new drinking WTP employing RO technology for phase 3 Al Saad BWRO, Saudi Arabia
- EUR 17.4 mn industrial WTP for Tobruk Thermal Desalination project from General Desalination Company of Libya
- WABAG Romania successfully completed 10 years of operations, growing into a Company with 22 references in Romania, in the field of industrial and municipal water and wastewater treatment. With this, it also celebrates 10 years of continuous operation management Petrobrazi's ETP for OMV Petrom SA
- Successful operational merger of Austria and Turkey units to optimise operations facilitated faster closure of several projects. This also enabled reduction in operational costs and led to enhancement in the ability to bid for larger projects
- Achieved completion of Steckel mill upgradation of laminar cooling for phase 1 upgradation of WTP for Arcelor Mittal Steel in Ostrava in a record timeframe of seven months
- Completed the Produced WTP at Suplacu (one of the largest oilfields in Romania) for OMV Petrom. The innovative project marks WABAG's first ever implementation of the Moving Bed Biofin Reactor ('MBBR') technology in an industrial application
- New R&D activities initiated:
 - Designed and installed a pilot multi-barrier system for treating lake water. It will test effectiveness of innovative control system for advanced oxidation using ozone, improve operational efficiency of the Granular Activated Carbon filters and determine viability of Nano-Membrane filtration as a future process option
 - Undertook pilot trials for micro-pollutant removal in biological treated wastewater using adsorption and oxidation processes
 - New type of submerged membranes in MBR application

Strategic direction ahead

- Regional market strategies –
 - **WABAG Austria and Turkey:** The unit would drive localisation by increasing local execution and supporting operations of its subsidiaries. This would facilitate in reducing costs thereby making the unit more competitive and at the same time gain trust of clients as lifecycle partners. The unit will target more financed and technology-related projects to reduce risk and competition. It will also leverage its references and know-how to expand O&M business.
 - **WABAG Czech Republic:** The unit will leverage its goodwill and strong network among Russian speaking countries

REJUVENATING **WATER**. ENRICHING **COMMUNITIES**.

(Russia, Uzbekistan and Turkmenistan) to grow business and explore export opportunities. It shall focus on targeting new sectors such as steelworks, oil & gas and chemical plants.

- **WABAG Romania:** The unit will retain its focus on oil & gas and food & beverages sector along with exploring opportunities in other sectors across multinational companies and offering them full range of services
- **WABAG Switzerland:** The unit will remain focussed on exploring more opportunities in the micro-pollutants segment and strengthen leadership position in this field
- Cluster strategies –
 - Focus on advanced technologies and new regulations like micro-pollutant removal in treated wastewater
 - Capitalise on the strong growth potential of the industrial sectors like oil & gas, food & beverages
 - Capitalise on the huge opportunities arising in water and wastewater segments for rehabilitation and upgrade of existing treatment plants
 - Leverage technological know-how to intensify activities in Germany where significant infrastructure investments are expected in advanced water technologies (removal of micro-pollutants from treated water) and in Russia for industrial solutions

Middle East and Africa (MEA) Cluster

Overview

Headquartered in Dubai, the MEA cluster is focussed on providing EPC and O&M services to industrial and municipal clients in the Middle East region, especially the Oil & Gas companies. With major opportunities coming in from the region, the cluster will serve as the new growth engine for WABAG Group.

Highlights, FY 2017-18

- Key orders bagged:
 - USD 105.5 mn repeat direct order from Dangote Oil Refining Company, Nigeria for Raw WTP and ETP
 - USD 3.3 mn 3-year O&M order from National Water Company (NWC) for 400 MLD WTP in Saudi
 - USD 5 mn 2-year O&M order from Public Works Authority, ASHGAL of catchment 3 and catchment 8 pumping station which includes a 680 MLD WYP in Qatar
- Achieved substantial progress in terms of impact, visibility, reputation and permanent presence in the region. Also, appointed Mr. Deep Raj Saxena as the CEO of the cluster to effectively grow business

- Developed EPC capabilities in the market contributing to enhanced confidence in local knowledge and ability to take on full project responsibility in Saudi and Qatar
- Enhanced competitiveness in the region enabled efficient execution of O&M business in Qatar, Bahrain and Oman
- Realignment of business development responsibilities for promoting brand in the region

Strategic direction ahead

- Cluster strategies –
 - Make strategic investments to build local competencies and capture identified opportunities
 - Focus more on industrial projects
 - Enhance share of O&M to ensure long-term presence and steady source of revenues
 - Strengthen markets in Saudi Arabia and Qatar and explore opportunities in Kuwait and UAE
 - Partner construction companies and funding organisations to target municipal market penetration and capitalise on the massive BOT opportunities
 - Explore G2G and multilateral funded job opportunities

Latin America (LATAM) cluster

Overview

Headquartered in Brazil, it is a relatively new cluster marking WABAG's presence in the fourth continent. The cluster will drive the Group's business in the medium to long term.

Highlights, FY 2017-18

- Set-up a subsidiary in Brazil to strengthen local presence

Strategic direction ahead

- Cluster strategies –
 - Form strategic alliances with large and established construction companies to bid for funded projects
 - Leverage the business development effort to build strong brand image

International Engineering Centre (IEC)

WABAG's International Engineering centres, in Pune and Vadodara provide project design and engineering support to its EPC business. Since its establishment in 2008, IECs gradually developed its capabilities to deliver world-class and cost-effective engineering services. It has built a competent team of engineers and invested in state-of-the-art software to attract global engineering business. It has steadily evolved into a profit center, providing engineering services to global market under the banner of Wabag Engineering Services (WES).

Its cross-discipline and diversified resource capability will be utilised to provide services in verticals like oil & gas, power, fertiliser, and steel among others.

Financial performance

On a consolidated basis, the Company achieved sales of ₹ 3,457 crore in FY 2017-18 as compared to ₹ 3,208 crore in FY 2016-17, registering a growth of 7.8%. Profit after Tax for the year stood at ₹ 132 crore as compared to ₹ 102 crore in FY 2016-17.

The Standalone sales for the year stood at ₹ 1,856 crore as against ₹ 1,798 crore in FY 2016-17 registering a 3.2% growth. Profit after Tax for the year stood at ₹ 117 crore as compared to ₹ 75 crore in FY 2016-17.

Human Capital

As an engineering company working with advanced water technologies, knowledge capital is critical. This makes people the most important asset and people welfare is one of the most important objective for WABAG. The organisation prides in its robust intellectual capital, consisting mainly of engineering professionals. With highly experienced senior management, competent middle management and enthusiastic junior management team, the Company is capable of handling large and complex projects.

The Company focusses on promoting a positive work culture through its policies and best HR practices. This contributes towards higher transparency while providing equal opportunities to all. The Company adopts zero tolerance approach towards any kind of racial, sexual, religious, gender or any other kind of harassment as protected by the law.

During FY 2017-18, WABAG made steady progress with its "One WABAG" concept. It led to self-driven objectives giving way to organisation-driven objectives resulting in better coordination among teams, functions, and clusters which in turn improved productivity. This conceptual shift brought more cohesiveness amongst the employees and gave a new dimension to team work. WABAG also formulated its DNA to promote effectiveness of this initiative. These DNAs have facilitated in shaping a better organisation culture and defining the character of the Company and its employees. It enabled redirecting efforts and determining each action of the organisation. WABAG's DNA includes:

- Professional excellence and pride
- Intensity to succeed
- Absolute commitment to WABAG values which include:
 - Customer focus
 - Integrity and intellectual honesty
 - Commitment, accountability and ownership
 - Timeliness and discipline

- Optimise cost, avoid wastage yet emphasise quality
- Build and actualise team work
- Respect to fellow employees
- Avoid even a semblance of impropriety

WABAG's Talent Management

Recruitment

WABAG undertakes a comprehensive manpower planning exercise every year, based on which individuals across functions and units are hired. The Group HR is responsible for senior level recruitments, while the local team handles middle and junior level. A campus recruitment programme is also arranged to recruit Graduate Engineer Trainees (GETs). Besides, with the growing scale, brand reputation and global exposure of WABAG, it has been able to attract the best talents in the industry.

Training and development

Being involved in high technology and complex projects, WABAG takes training and skill development initiative seriously. This begins with preparation of annual training calendar and goal sheet, based on which internal and external training programmes are arranged. Any shortfall in employee goal is adequately addressed and remedial actions are suggested. Some of the key initiatives undertaken by the Company during the year include:

- **Advanced technology training:** The Company provides youths training on patented and advanced technologies to create a pool of high-skilled employees allowing it to take-up more technology-oriented projects. Besides these trained people also collaborate with marketing teams to prepare stronger bids and increase chances of winning.
- **Skill matrix programme:** The programme aims at enriching employees by facilitating them to gain additional skills. This was achieved by encouraging individuals from one discipline to handle a completely different job profile for a certain period.
- **Onsite learning and development (L&D):** The Company implemented a unique L&D initiative by combining it with business. A team of 37 people identified from the in-house talent pool were provided onsite training to enable them to get first-hand project and technology experience. These employees then became the trainer and trained others. Further, a competency analysis was also carried out to identify and fill-up gaps.
- **HIPOT (high potential) programme:** The programme focusses on identifying leadership position across various organisational levels and filling them with HIPOT employees. Various Talent Development Councils, headed by senior managers, have been formed at functional and cluster levels to identify new leadership levels, mentor the HIPOTs and

assist them in building a development plan. The initiative will be an important step towards achieving succession planning across all functions.

- **Leadership development programme:** The Company runs two leadership programmes – the Leadership Excellence Programme (LEX) and Young Entrepreneurship Programme (YEP). LEX focusses on imparting leadership values and skills to middle level managers to build succession plan. YEP on the other hand focusses on enriching talent of promising youth by providing them career development opportunity through a part-time management programme from tier-I National B-School.

Rewards and Recognition Programme

The Company believes in appropriately rewarding and motivating the employees. Employees' efforts are recognised by conferring them 'Star Performer' and 'Best Employee of the Quarter' awards. A Performance Management System has been devised to ensure fairness and transparency in employee performance review. Towards this, the Company has undertaken steps like identifying commonality in roles across disciplines, creating standardised qualitative goal sheets and introducing monthly scorecard review mechanism.

Knowledge Management

Being a technology company, WABAG values organisational knowledge as one of the important business drivers and over the years, it undertook various initiatives to capture, store and disseminate knowledge. In FY 2017-18, WABAG took this initiative a step ahead by forming a separate 'Knowledge Management (KM)' function focussed on integrating it with the business processes by leveraging new technologies. This department will focus on building a sustainable process facilitating the usability of the accrued organisational knowledge for remaining competitive as well as to enhance the customer delight. The individual verticals of the WABAG KM framework are under various stages of implementation. These verticals are expected to enhance the productivity, reduce risk and benefit the customer.

Quality, Health, Safety and Environment (QHSE)

WABAG is committed to Quality, Health, Safety and Environment and has embraced ISO management system as one of the tools to comply with International standards. As on March 30, 2018, it successfully integrated the three Management Systems – Quality Management System ISO 9001, Environment Management System ISO 14001 and Occupational Health and Safety Assessment Series 18001. Further, to maintain and enhance Quality, Health, Safety, and Environment practices, the Company undertakes internal and external audit at specified frequency. The audit results form the basis for continuous

improvement plan. In FY 2017-18, the Company approved 25 internal ISO auditors, qualified to perform internal audit.

Quality

WABAG believes in the importance of quality to build goodwill. With regards to this, it conducts client satisfaction and feedback survey every year to understand pain areas. In FY 2017-18, WABAG achieved a client satisfaction score of 4.7 on a scale of 1 to 5, with 5 indicating extremely satisfied. It also follows the practice of thoroughly evaluating the suppliers to WABAG Standard and only deals with approved ones while holiday listing non-performing ones. The Company implements risk-based thinking concept considering the external and internal issues and impact that relevant interested parties can have on achieving the results during planning and subsequent process. A proactive approach is taken to reduce and keep in check the undesired effects through early identification of risk throughout the project phase. In FY 2017-18, the Company upgraded its ISO 9001 Quality Management System to 2015 version.

Health

WABAG believes in providing healthy working environment at its office and at project and O&M sites. It conducted several health camps at EPC and O&M plants for all the workmen/women and supervisors. It focussed on promoting awareness on health and prevention of illness through various schemes like frequent inspection of labour colony, providing potable water to all the workmen, first-aid training, general health check-up for all the employees and workmen, and heat stress prevention campaign. The Company communicates relevant health-related topics to its employees via tool box talk on daily basis and mass communication.

Safety

In FY 2017-18, WABAG worked on strengthening safety measures by launching a number of initiatives that contributed to improved performance at its EPC and O&M projects. These initiatives include:

- The concept of safety alerts and weekly safety messages to increase awareness
- Reporting on near miss incidents which eventually led to adoption of preventive measures and helped in avoiding such incidents
- A digital platform for online reporting
- An e-learning programme whereby 100 employees received online safety-related training from DuPont, which shall be cascaded across the organisation

- Job Safety Analysis practice for identifying and mitigating specific job-related hazards and building a roadmap for safer project executions. The practice shall be effective in sensitising the importance HSE among construction workers, managing whom is an extremely difficult task
- Behaviour is one of the most critical elements in ensuring that the workplace is safe and everybody understands the responsibility at workplace. The project is launched at 2 sites and corporate office and will further cater to all projects
- Conducted 4-day training on NEBOSH (National Examination Board in Occupational Safety and Health) curriculum for all the safety officers understanding the importance of knowledge acquisition and skill development exercise in safety management

WABAG's strong focus on improving safety standards was not only visible in its initiatives; it was also evident from appreciation received from the clients. Across two of its prestigious projects AMAS STP and RIL Jamnagar ETP where it achieved the milestone of 3 mn and 15 mn safe working hours respectively.

During the year, WABAG celebrated the 67th National Safety Week along with the stakeholders' participation at its project and corporate office, whereby the best workers and contractors were awarded. The event exemplifies WABAG's seriousness in safety standards and promotes safety culture across the organisation. The Company intends to undertake more such initiatives with focus on digitisation and training.

Environment

WABAG's commitment to protect the environment encompasses all aspects of its business from Engineering, Procurement, Construction and O&M. The Company's proactive efforts to minimise environment footprint included the areas of energy conservation, efficient use of materials and expansion of recycling efforts. Additionally, the Company set the following objectives:

- Minimum use of groundwater
- Re-use of treated water
- Maintaining greenery
- Control of oil spillages
- Protecting the soil surface from contamination
- Noise control
- Effective management of concrete waste

To achieve its environment targets, the Company uses LED bulbs, reuses sewage-treated water, undertakes landscaping

and planting trees at the project sites to prevent soil erosion, and sends back the leftovers concrete to the batching plant.

The Company also undertakes measuring air and water quality and noise level at the predefined intervals by an independent agency. Remedial actions are immediately initiated if any of the parameters goes beyond the specified limits. All the project sites and O&M plants are subjected to compliance audit by external agency every six months for compliance to ISO 14001 standards.

Information Technology

Information Technology continues to be an important function at WABAG facilitating in efficiently handling its massive operations spread globally. During FY 2017-18, the Company primarily focussed on adopting various digital initiatives and undertaking technology restructure of the Global ERP upgrade. Digitisation and analytics have created lot of interest across WABAG global offices.

Digital Initiatives

The Company undertook several digital initiatives during the year which include:

- Launched One WABAG Service Desk as the one-stop solution for registering, tracking and delivering services for IT and other service departments such as Engineering, Legal, Admin and Commissioning among others
- Developed dashboards to monitor the project health and financial position in near real-time
- Introduced real-time attendance capturing across all O&M sites through cellular network-based Portable Fingerprint readers
- Installed high resolution cameras, controlled through mobile application, for live monitoring at project sites

Risks Management and Internal Control

The Company has deployed a time-tested and established risk assessment and governance framework for managing the various external and internal risks and uncertainties. These risks are continuously assessed and a strategy to mitigate, avoid or transfer / share the risks is arrived at based on criticality, acceptable risk tolerance and underlying circumstances. This enables the Company to pursue optimal business opportunities fully supported by the risk strategy thereby maintaining and enhancing shareholder value. The Company's approach towards risk management is reinforced by its experience, knowledge and understanding of the various current and future risk scenarios. The objective of the Company's risk management is to maintain an appropriate risk-return balance, while ensuring agility in the decision-making process within the framework of highest quality of governance.

The Board, Audit Committee and Monitoring Committee which includes senior management are responsible for maintaining the risk management / governance frameworks which are exercised through evolved good internal controls, processes, policies and guidelines. The Board assesses and approves the overall risk appetite, monitors the risk exposure and sets the group-wide limits and periodically reviews the same. WABAG’s risk framework is based on the concept of ‘three lines of defence’ wherein management control is the first line of defence, the various control and compliance oversight functions established by management the second and independent assurance the third. Each of these three “lines” plays a distinct role within the organisation’s wider governance framework.

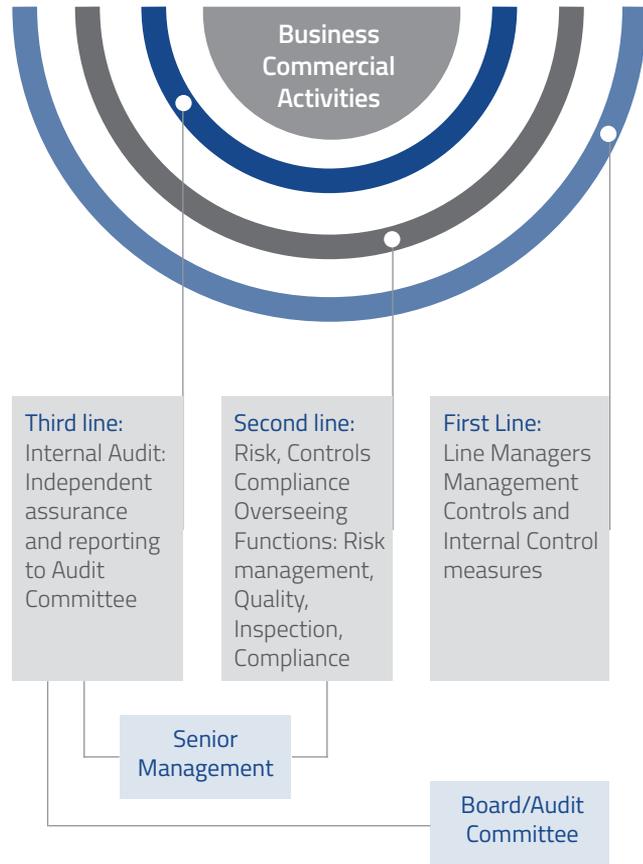
The Company’s management systems, organisational structures, processes, standards, code of conduct and behaviours together form a system of internal control that governs its high conduct in business and management of associated risks.

The Company has an integrated risk assessment and management process, wherein all relevant external and internal risks are identified, evaluated and mitigated across the life cycle of the projects and their operations. It starts from pre tendering stage till closure of a project and/or operations and maintenance of the project. These are monitored and enhanced through the global Enterprise Resource Planning (ERP) package in the Company. There are well documented procedures, policies and authorisation levels for the various business decisions that govern the conduct of business at various levels across geographies. These have embedded in them the various risks identified and their mitigation aspects.

WABAG also has a strong internal assurance team to support the Group CEO and Managing Director directly to identify and manage the various operational, business, commercial and external risks.

The effectiveness of the internal control mechanism is reviewed by an independent professional internal audit function and by the statutory auditors. The Audit Committee of the Board periodically reviews the functioning of the internal audit and the implementation of the recommended measures to improve the internal control mechanism.

Risk management framework based on Three Lines of Defence:



Macroeconomic risk

Changes in economic and relevant regulatory policies, lower GDP growth, scaling back of Government initiatives and termination of Government contracts with little or no prior notice, insufficiency of funds and the reluctance of Government departments to make quick decisions may adversely impact opportunities from a specific country or region.

Mitigation measures

WABAG evaluates risk rating of every country and takes it into account for evaluation of Bid / No Bid and pricing decisions. The Company creates a roadmap for responsive actions to maintain manageable risk exposure. Macroeconomic risks largely relate to order intake. The Company is operating in over 30 countries and the geographical risk that may arise in one country may be mitigated through diversified presence.

Political risk

Disruptive geopolitical scenario (includes political shifts, such as major policy changes, coups, revolutions and wars) and changes in Governments or unstable political regimes in the geographies where the Company is present, can delay project execution.

Mitigation measures

WABAG adds 'force majeure clauses' in all its contracts to indemnify its business operations. The Company also takes adequate insurance cover to proactively manage political risks. The Company continuously assesses insecure political climate, new legislation and elections among others and avoids contracts in areas found to be too risky. For all international projects, the Company treats contracts as order intake only after down payment and Letter of Credit is received and credit insurance secured.

Competition risk

Rising competition from other global organised players in the bidding process may compel the Company to lower prices to win contracts and maintain market share. This may lead to substantial margin pressure.

Mitigation measures

The Company's brand value and relentless focus on quality and customer service gives it a competitive advantage over others. Past performance, legacy brand and benchmark project references help it secure contracts consistently. The Company offers competitive pricing to customers, due to technological superiority and large presence in low-cost economies and maintains an edge over competition.

Vendor risk

WABAG depends on vendors for the construction of its various projects and supply of key equipment. Therefore, it is exposed to uncertainty in the quality of their services, equipment and supply including timely delivery. This can cause operational delays and increased costs.

Mitigation measures

WABAG has vendor sourcing decisions incorporated into its key risk factors. The Company follows a strict vendor evaluation and re-classification programme along with vendor due diligence for a comprehensive vendor stratification. There are multiple levels of authority within the Company for approvals to choose an appropriate vendor based on past experience, creditworthiness of the vendor, quality and reputation. Service vendors are also guided and mentored for best practices in project management which is mutually beneficial in project execution.

Customers credit profile risk

Poor creditworthiness of customers can cause multiple setbacks in the midst of an order execution and lead to project delays.

Mitigation measures

WABAG evaluates customer balance sheet and risk analysis at pre-bidding stage. The Company prefers to bid for funded projects. It chooses projects, which involve Government bodies and institutions with stable financing capabilities like the World Bank, JBIC, JICA, ADB and EXIM bank, among others, where payments are made directly to contractors by these agencies.

Consortium partners credit profile risk

Consortium partners may default on their obligations, causing project delays and financial losses for the Company.

Mitigation measures

WABAG evaluates consortium partners through a detailed due diligence to gauge their business, credentials and financial health at pre-bidding stage. The Company minimises losses of liquid funds deposited with or invested in such partnerships by careful partner selection.

Commodity price risk

Inconsistent commodity supply and price volatility of specific commodities/raw materials could affect project cost and gross margins.

Mitigation measures

WABAG provides clauses in supplier contracts to deal with price contingencies. The Company optimises operations to estimate overall costs correctly and minimise cost overruns that arise due to unexpected commodity price changes. Most of the contracts with municipality are funded by multilateral agencies and these contracts have price adjustment clause linked to inflation index published to compensate increase in cost of goods or services. Most of these contracts follow FIDIC norms.

Forex risk

Volatile global currencies may impact WABAG's profitability adversely.

Mitigation measures

The Company regularly evaluates foreign exchange movements and hedges positions through forward / options contracts to safeguard against currency volatility. In most international projects, the Company negotiates USD or Euro for offshore portion and local currency for onshore portion, which acts as a natural hedge. Translation risks are not hedgeable and they are non-cash in nature.

Cautionary statement

The Management Discussion and Analysis contains “forward-looking statements”, identified by words like ‘plans’, ‘expects’, ‘will’, ‘anticipates’, ‘believes’, ‘intends’, ‘projects’, ‘estimates’ and so on within the meaning of applicable securities laws and regulations concerning WABAG’s future business prospects and business profitability. All statements that address expectations or projections about the future, the Company’s strategy for growth, product development, market position, expenditures and financial results, are forward-looking statements. All these prospects are subject to a number of risks and uncertainties and the actual results could materially differ from those in such forward-looking statements. The risks and uncertainties relating to these statements include, but are not limited to, risks

and uncertainties regarding fluctuations in earnings, ability to manage growth, competition (both domestic and international), economic growth in India and the target countries worldwide, ability to attract and retain highly skilled professionals, time and cost overruns on contracts, ability to manage international operations, Government policies and actions with respect to investments, fiscal deficits, regulations, interest and other fiscal costs generally prevailing in the economy etc. Past performance may not be indicative of future performance. The Company does not undertake to make any announcement in case any of these forward-looking statements become materially incorrect in future nor shall the Company update any forward-looking statements made from time to time by or on its behalf.