



STAYING AHEAD OF THE CURVE

PERFORMANCE REPORT
2018



Semenyih Water Treatment Plant

WHERE ARE WE?

As at December 2018, we are in the final phase of consolidating the fragmented water services companies in Selangor, Kuala Lumpur and Putrajaya. When we complete the acquisition of **Syarikat Pengeluar Air Sungai Selangor Sdn Bhd (SPLASH)**, Air Selangor will become the single holistic licensee to extract, treat and distribute water for all its customers in the aforementioned service areas.

The other five water operators which Air Selangor had acquired were PNSB Water Sdn Bhd (formerly known as Puncak Niaga (M) Sdn Bhd) and Syarikat Bekalan Air Selangor Sdn Bhd (SYABAS) on 15 October 2015, Konsortium ABASS Sdn Bhd (ABASS) on 26 January 2016 and Konsortium Air Selangor Sdn Bhd (KASB) on 11 March 2016.

Air Selangor is a special purpose vehicle (SPV) set-up by the Selangor state government to undertake the restructuring of the water industry in Selangor, and to consolidate the industry in order to provide the best possible water service experience to its customers.

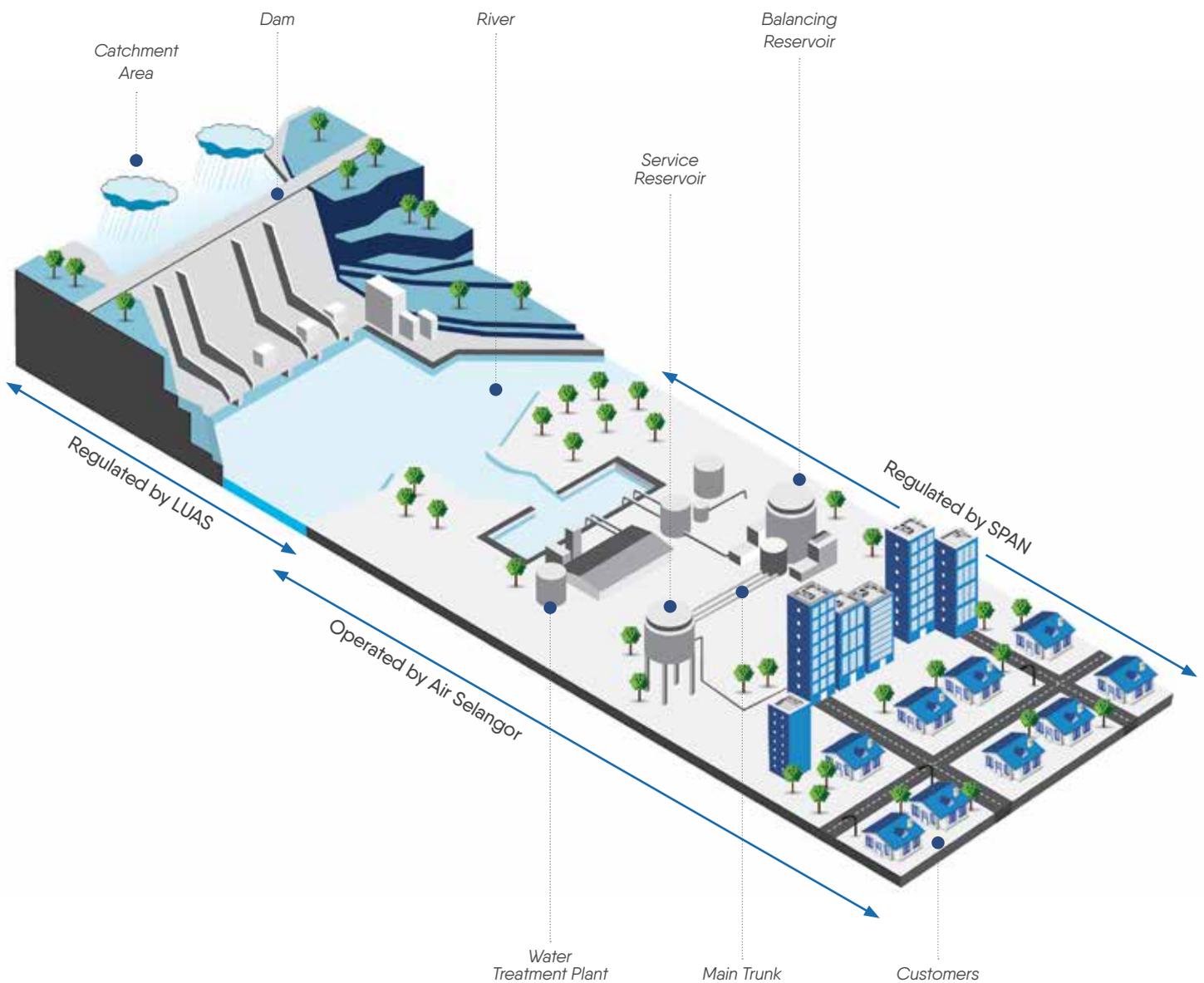
On 13 September 2019, following the completion of the acquisition of SPLASH on 24 April 2019, Air Selangor became the sole licensee to provide water services in Selangor, Kuala Lumpur and Putrajaya.



OUR WATER CYCLE

Air Selangor operates and maintains the entire water services value chain from the reservoirs to distribution of treated water to consumers in Selangor, Kuala Lumpur and Putrajaya.

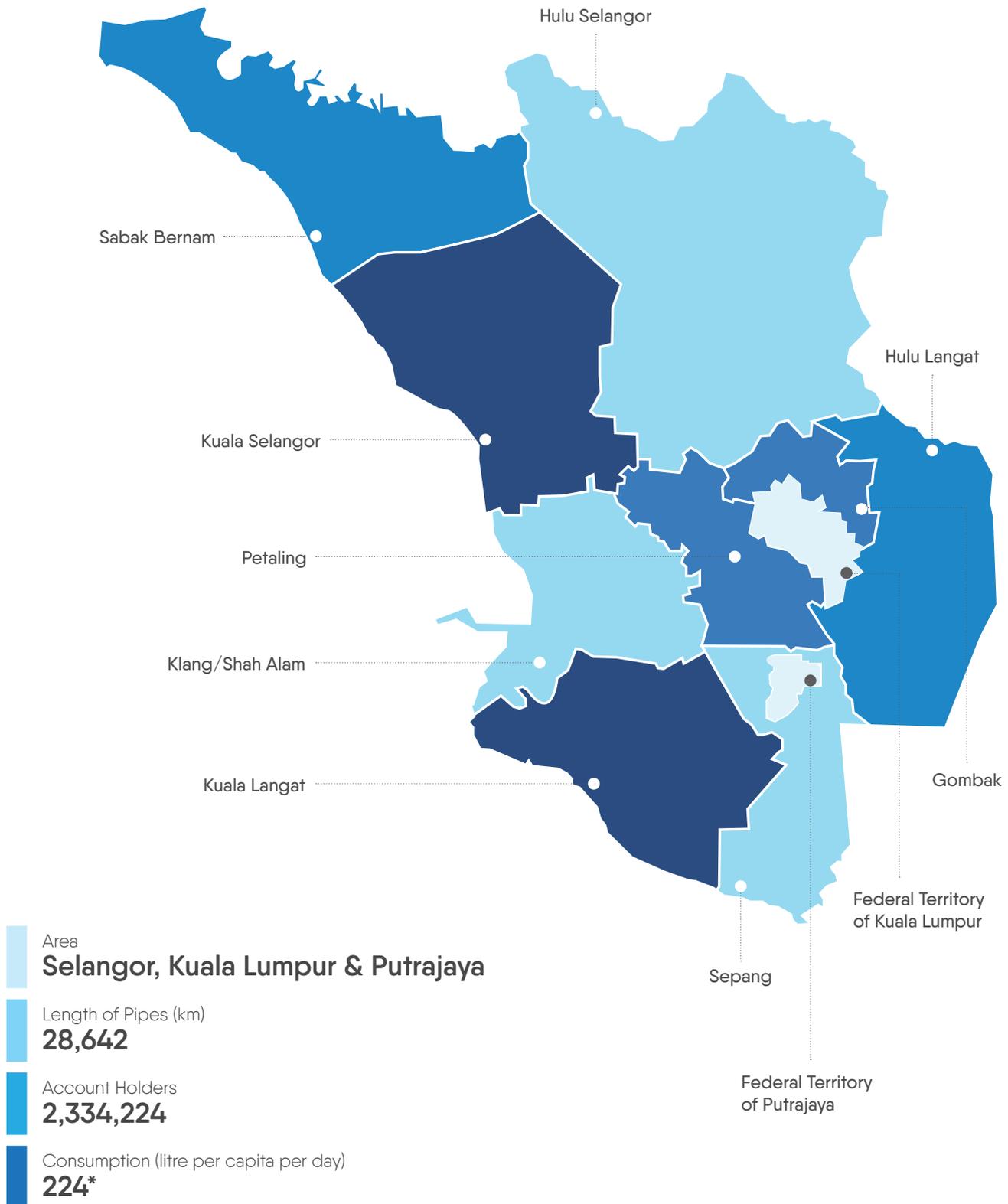
Everyday, 33 water treatment plants supply an average of **4,667 million liters** of water to its **8.413 million*** consumers.



* Forecast by National Statistics Department Malaysia dated December 2018

WHO WE SERVE

Our **33 water treatment** plants serve over **8.413 million** consumers in Selangor, Putrajaya and Kuala Lumpur. The daily average water consumption per person in our service area is **224 litres**.



**as at end 2018*

OUR BOARD & SENIOR MANAGEMENT

To be the best in what we do, we recognise that it takes people to complete the equation. With a strong leadership and a committed team of over **4,520** employees, we strive towards providing the best customer experience to all.



*as at end 2018

AWARDS & ACCOLADES

We are delighted and proud of our numerous accomplishments over the years. These awards, recognition and accolades are a strong testament to our continuous pursuit of excellence. In 2018, we received numerous certification and awards for the following:



National Occupational Safety and Health Excellence Award 2018

We received The National Occupational Safety & Health Excellence Award awarded by the National Council of Occupational Safety & Health under the water industry sector. The Gombak region bagged the award.



Silver Laboratory Excellence Award 2018

Sungai Semenyih WTP laboratory bagged the prestigious Silver Award after successfully maintaining the Institute Kimia Malaysia Laboratory Excellence Award for 10 consecutive years.

The award certifies Semenyih WTP Laboratory as the first WTP laboratory in the country to receive the award having fulfilled all legislative requirements in the field of health, safety and the environment.



ISO 9001 (QMS) Certification

All Water Treatment Plants (WTP) with the exception of Sg Sireh WTP received the ISO 9001 (Quality Management System) certification.

The certification assures customers that constant improvement is being undertaken to ensure delivery of better performance.



ISO 22301 (BCMS) Certification

Both Sungai Labu WTP and Sungai Selangor Phase 2 WTP received the ISO BCMS 22301 (Business Continuity Management System) certification which provides a framework for the WTPs to plan, establish, implement, operate, monitor, review, maintain and continually improve a Business Continuity Management System.



ISO 17025 (Laboratory Accreditation) Certification

Sungai Selangor Phase 2 WTP Laboratory acquired ISO 17025 (Laboratory Accreditation) certification having put in place standards and processes for calibration and testing.

This certification is proof that our laboratory is technically proficient and able to produce precise and accurate test and calibration.



ISO 18001 (OHSAS) Certification

Sungai Selangor Phase 2 WTP received the OHSAS 18001 Occupational Health and Safety Management Certification which provides a framework to identify, control and decrease the risks associated with health and safety within the workplace.



ISO 14001 (EMS) Certification

Sungai Selangor Phase 2 WTP received the ISO 14001 (Environmental Management System) certification in line with our ambition to minimise adverse effects to the environment be it changes to the air, water, or land.

The certification is testament that compliance to regulations, policies and environmentally oriented requirements are met.



Overall Champion Fire Emergency Response Team Competition, Putrajaya Level 2018

The Southern Region emerged champion at the Fire Emergency Response Team Competition, Putrajaya Level 2018 Competition, organised by the Putrajaya Fire and Rescue Department.

PERFORMANCE DASHBOARD 2018

This annual Performance Report outlines our key operations, achievements and initiatives in 2018. One of our key focus areas was to reduce our yearly average non-revenue water (NRW) and we have achieved to reduce it from **31.52%** in 2017 to **30.51%** by end of 2018.

Our focus on leak detection, leak repairs, replacement of aged pipes as well as management of water pressure and monitoring of district metering zones helped in reducing NRW.

In 2018, we invested **RM441.90 million** for capital works projects such as pipe replacement, construction and upgrading of water treatment plants and the distribution systems to improve services and supply capacities.

We also opened up our channels of communication with our customers via short messaging service (SMS) to deliver personalised announcements on water status.

We will continue to deliver the best possible experience to our customers as we strive towards becoming the leading operator in the region.



99.83%
overall water quality compliance



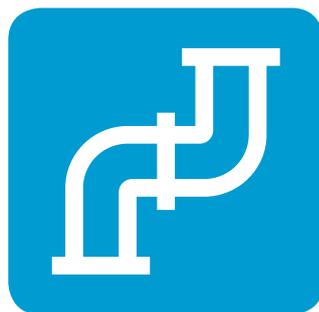
RM441.90 million
in capital works investment



30.51%
yearly average non-revenue water (NRW) rate



13.5 cases
per 100km burst pipe incidents



115.44km
of aged pipes identified for pipe replacement programme



120,488
Air Selangor mobile app downloads

CEO's REFLECTION

Working Towards a Sustainable Future

As the sole water services provider in the state of Selangor, the Federal Territories of Kuala Lumpur and Putrajaya, Air Selangor understands the crucial role it plays in providing continuous supply to our 8.413 million consumers.

STRATEGIC PLANS STREAMLINED

To meet the growing demand for water and to ensure sustainable water resources and supply for all, we formulated **7 Strategic Planning & Initiatives (SPIs)** that comprised targets in 8 Key Result Areas (KRAs) to move us forward. These SPIs and KRAs are part of our draft 30-year business plan which we had submitted to our regulator, the National Water Services Commission (SPAN). This plan will be finalised after the award of our license and upon approval, we hope that these set of SPIs and KRAs will propel forward and help us meet and tackle the many challenges ahead, particularly around growing water demand, mitigating issues of water scarcity, raising our reserve margins while concurrently driving water conservation efforts.

CONTINUOUS IMPROVEMENTS

As part of efforts to improve water supply to our consumers, in 2018 we spent **RM441.90 million** on Capital Expenditure (CAPEX) works. In total, from 2016 to 2018, RM1.145 billion has been spent to repair and upgrade the water supply system as well as improving efficiency of treatment/distribution and customer service systems.

WORKFORCE STRENGTHENING

In ensuring a future-ready organisation, continued leadership intervention and skill-set building programmes in line with our Core Values have been developed to ensure our employees experience impactful leadership and development programmes. Developing future industry experts with specific skills and personalities is critical to sustain Air Selangor's performance in the ever-changing business environment.

In 2018, we held various training programmes to elevate our people's skills and competencies. The Malaysian Skills Certificate presentation to 300 of our employees held in 2018 is a testament of our efforts to produce competent and quality workforce in the water supply industry. More of such talent development plans have been outlined for 2019.

In our effort to build a compelling employee value proposition in July 2018, we had successfully consolidated the rewards structure of the various companies that were taken over into a single harmonised structure. The consolidated rewards structure address our overall rewards

philosophy and is connected directly to individual performance - hence, creating a high-performance culture.

The harmonised rewards structure we believe, will eventually satisfy the performers whilst motivate the under-performers by reflecting clarity in all portfolio breadth as well as ensuring sustainable internal equity.

E-BILLING HITCHES

The year also saw us facing some challenges with rising customer complaints over billing issues. We heard our customers out who complained of not receiving their bills while many other voiced their grouses on switching to e-bill. This came by from the roll-out of our new Customer Information System (CRIS) which resulted in the cessation of spot billing.

We had also recorded many high bill complaints on meter reading and data entry. We are happy to note that both issues were addressed over the course of the year. Naturally, with bills not reaching our customers, our collection faced hiccups in the early months of 2018. Mitigation plans have been put into place to tackle this issue.

SUPPLY INTERRUPTIONS

We were fortunate that in 2018, our customers did not face many supply interruptions as we recorded only a handful of major pipe-burst incidents. We are cognizant that the unscheduled shutdown of Sungai Selangor Phase 3 (SSP3) Water Treatment Plant and the Pulau Ketam supply interruptions were temporary setbacks in our quest to provide continuous water supply to our customers. The scheduled maintenance of SSP3, a third-party managed water treatment plant, which was completed ahead of schedule, took a turn for the worst when the plant's surge vessel burst upon the resumption of plant operations.

This led to the activation of the Code Red Emergency Response Plan for SSP3 water treatment plant as supply interruption was prolonged. Extensive damage and complications at site resulted in five days of water supply interruption to our consumers in six regions.

The other supply interruption faced by our customers in Pulau Ketam was due to the sea-bed pipe burst incident caused by third party in September 2018. Repair works took 10 days because the pipe was submerged more than 5-metres under the sea-bed with high tide and strong current further complicating repair works.

MANAGING RISKS

Identifying, understanding, evaluating and responding to risks are fundamental



in delivering our strategic priorities for long term resilience. In view of that, we have outlined our risk management framework encompassing strategic, operational, compliance and financial risks to continuously assess our operational challenges.

A Risk Management Committee meets every quarter to look into the potential impacts to the business and address them accordingly with the right mitigating activities.

SUSTAINABILITY EFFORTS

As we move forward, we will undertake various initiatives to gain a stronger foothold on being more sustainable. Sustainability of our business and our services will continue to be our focus in our commitment to become more socially responsible. Come 2019, we plan to weave sustainable practices into our operations by establishing a sustainability framework.

DIGITAL TRANSFORMATION

We will continue with our innovative ways as we adopt new technologies to transform digitally. We are putting into place new and innovative technologies to not only raise operational efficiency but also drive costs down. Pilot projects for smart meters, pressure transient monitoring, online water analysers, Production Information System (Prodis) and fully automated WTP are among the many digitally driven initiatives undertaken to take the organisation forward. In 2019, we will see more initiatives introduced to transform Air Selangor into a digital water utility.

FINAL LAP OF RESTRUCTURING

As the year drew to a close, we made positive strides in acquiring Syarikat Pengeluar Air Sungai Selangor Sdn Bhd (SPLASH), the last water services company to finalise our consolidation as a single water services provider in Selangor, Kuala Lumpur and Putrajaya. We hope that in 2019 we will end our restructuring journey and move ahead in our transformative journey to become the leading water operator in the region.

Suhaimi Kamaralzaman
Chief Executive Officer

STRATEGIC ROADMAP

Moving Towards Becoming a Digital Water Utility

In 2018, as we revised and refined our Strategic Plans outlined the year before and had finalised it in a **7 Strategic Plans & Initiatives (SPIs) and 8 Key Result Areas (KRAs)**. Initiatives are constantly being developed to meet goals and set targets under each SPI.

The 7 SPIs are:



Ir Abas Abdullah
Director/Head of Operations



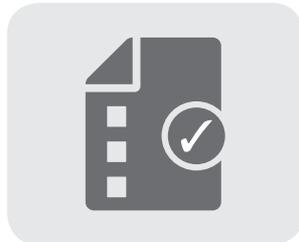
SPI 1 : Water Forever
Towards a Sustainable Water Future

Water Forever is about planning water supply for the future. We will focus on ensuring a sustainable water future so that raw water supply from our rivers and other sources remains sufficient despite climate change and threats of pollution. Water Forever provides a portfolio of options to manage our demand and supply balance up to year 2065 by reducing NRW to 15% by year 2047, reducing consumers' water consumption to 180 liter per capita by 2045 and identifying and developing new water sources.



SPI 5 : NRW Reduction
NRW Reduction
25% at 2023 | 20% at 2035 | 15% at 2048

High NRW reflects big volume of water lost through leaks, bursts, theft and vandalism. As high NRW can mean increased operational costs and lost revenues, we have targeted to reduce our NRW rates 25% by 2023, 20% by 2035 and 15% by 2048.



SPI 2 : Improvement to Asset Reliability and Resilience
Towards Resilient Water Future

In ensuring uninterrupted water supply to customers, our equipment needs to always be in good working condition through maintenance and upgrading. To improve asset reliability and resilience, we will continuously undertake rehabilitation, replacement, upgrading of existing assets, ensuring availability of critical spares and standby equipment and improve reservoir storage capacities.



SPI 6 : Creating Conducive Working Environment
World Class Water Service Provider

Understanding that a conducive working environment has a direct impact on employee productivity and morale, we had undertaken renovation works at our offices to offer our employees a healthy and happy working environment. More renovation and upgrading works will be undertaken in 2019 at various regions and sites.



SPI 3 : Improving Operational Efficiency
Digital Utility of the Future

We will continuously work on improving our operational efficiency to deliver our best to our customers via effective use of resources and efficiently managed production, distribution, finance, asset maintenance and inventory. Various initiatives have been outlined to implement and improve processes, tools, systems as well a well trained and skilled resources to achieve operational efficiency.



SPI 7 : Environmental Stewardship
Waste Zero Environment

We are committed to ensure regulatory compliance and reduce negative impact to the environment.

Residual management, effluent reuse and low-energy/low-chemical treatment processes help us to minimise impact on the environment. We will also implement a sustainable sludge strategy, as well as secure appropriate and safe future uses of sludge.



SPI 4 : Towards Best Customer Service
Drinkable Water from Tap By 2026 & Best Customer Service

To deliver a positive customer experience, all key business processes, system and performance management will be aligned with customer expectation in mind.

- 2018 CAPEX WORKS ACHIEVEMENTS**
- Pipe Replacement | **115.44km**
 - Reservoir & Pump House Rehabilitation | **16 Units**
 - Water Treatment Plant (WTP) | **45 Projects**
 - Sludge Treatment Facility (STF) | **12 Projects**
 - Water Quality Online Analyser | **40 Units**
 - Automatic Secondary Chlorination System | **7 Units**
 - River Monitoring Station (RMS) | **7 Units**
 - Pressure Transient | **500 Units**

DIGITAL SHIFT & TALENT BUILDING

At the 2018 Management Retreat held from 13-15 October 2018, the organisation unveiled its Digital Strategy, a blueprint to steer the organisation in this Fourth Industrial Revolution (4IR) era. We are aware that adopting digital water technologies is imperative in our quest to transform into a digital water utility.

Our digital transformation initiatives will include, among others, implementing real-time monitoring and prediction systems, adopting a digital working culture and empowering customers. In 2019, the digitalisation plans for the company will

be disseminated company-wide through a Digital Drive Forum.

One of the key strategies in the digital transformation is developing a Digital Working Culture by investing into technology and talent building. To ensure present and future organisational success, our talent development programmes will be developed and aligned with our business strategy.

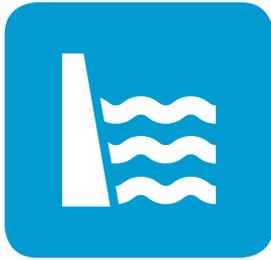
Our talent sustainability focus kickstarted in 2017 with the Malaysian Skills Certificate (SKM) training and by end of 2018, more

than 600 of our employees received the Malaysian Skills Certificate - Recognition for Prior Achievement certification, making Air Selangor the leading water operator in the country with the most comprehensive portfolio of skills-certified employees.

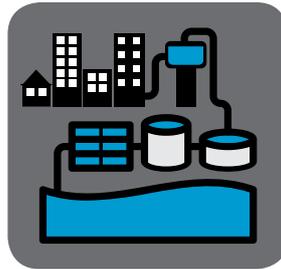
A list of more comprehensive talent development programmes have also been outlined and these programmes will be undertaken throughout 2019 to develop and retain middle management staff as well as develop and groom executive level employees to be the future leaders of the company.



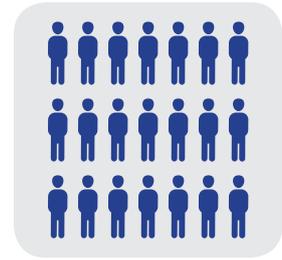
OUR ASSETS AT A GLANCE



Dams **7** &
Off-River Storage **2**



Water Treatment
Plants **33**



Workforce
4,520



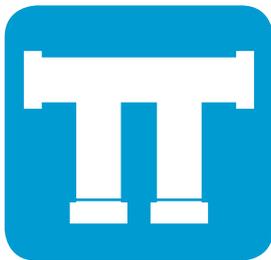
Central
Laboratory **3**



Service Reservoirs
1,573



Pump Houses
667



Pipeline
28,642km



Water Sampling
Stations **1,268**



River Monitoring
Stations (RMS) **7**



Operational
Vehicles **1,334**



Online Analyser (HYDRA-Hybrid
Distribution Water Quality
Real-time Analyser) **40**



Automated Secondary
Chlorinator System
(ASCS) **7**

Note: For the year 2018, the total number of dam under supervision of AIR SELANGOR (asset) are four dams namely (1) Semenyih Dam, (2) Sg. Langat Dam, (3) Klang Gates Dam and (4) Tasik Subang Dam. Sg. Selangor Dam and Sg. Tinggi Dam are under Syarikat Pengeluar Air Sg. Selangor (SPLASH) while Batu Dam is under Department of Irrigation and Drainage (JPS). The total number of Off-River Storage (ORS) is two namely (1) ORS Labu and (2) ORS Semenyih 2.



SEMENYIH 2 WTP

About Semenyih 2 WTP

Semenyih 2 WTP, costing **RM177.7 million** to build was commissioned in early 2018 with a production capacity of 100 MLD. Semenyih 2 WTP provides relief to the existing Sg Semenyih WTP of which the water supply areas comprise of Petaling, Hulu Langat, Sepang, Kuala Langat. The commissioning of the plant has significantly improved water supply to Hulu Langat via Desa Putra and Terminal Bangi Reservoirs.

Ability to Improve Resilience on Pollution

Semenyih 2 WTP extracts raw water from 3 main ponds in Jenderam Hilir. The water from Sg Langat which is high in Ammoniacal Nitrogen, turbidity and other organic or inorganic pollutants are channeled to ponds to allow natural pretreatment by extended retention time. Over time, the pollutants will subside/reduce and the raw water will then be pumped to the treatment plant for further treatment. If Sg Langat is polluted with oil spills or other significant pollutants which will adversely affect the quality of raw water, the specific channel can be closed and isolated so that these pollutants will not be able to enter the pond. The ponds can sustain supply up to 21 days without inflow water from Sg Langat.

Ability to Mitigate Shut Down

The Off-River Storage (ORS) has proved to be effective in providing a sustainable supply of raw water to the treatment plant. The assurance of quantity with improved quality from the ORS has tremendously improved service delivery of Air Selangor to the consumers. The enhanced quality of the ORS enables the plant to operate efficiently with lower treatment costs whilst maintaining an excellent track record of treated water quality. The ability to isolate the inflow and still be able to sustain up to 21 days has increased the plant's resilience and deters the likelihood of plant shutdown due to pollution in the water source.

Advantages of Off River Storage (ORS)

- Helps improve raw water quality.
- Provides for sustainable raw water supply even during potential episodes of pollution, high turbidity and extreme weather condition.
- Significantly reduces chemical consumption at the WTP and with lower levels of process residual.

WATER QUALITY

To ensure that our treated water is safe for consumption and complies with the National Drinking Water Quality Standards issued by Ministry of Health (MOH) Malaysia, we undertake comprehensive water monitoring through regular sampling and testing.

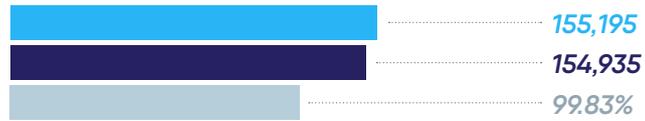
In 2018, 155,195 tests were carried out and from that **154,935 tests** complied to the quality compliance standard, giving us a quality compliance of **99.83%**.

We are proud to note that our quality compliance has always been above **99%** and continues to show improvement.

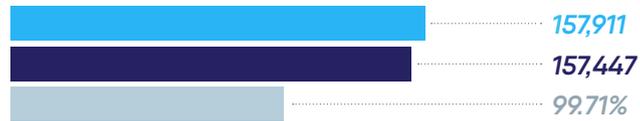
Our Central Laboratories possess the capability of end to end sampling. Sampling activities are conducted from the water source at the dam and river, and thereafter the WTP and ultimately the distribution network. Sampling is done at over **6,000** location points annually.

The laboratories are also equipped with advanced systems, namely **Inductive Couple Plasma Mass Spectroscopy (ICPMS)** which detect heavy metal substances in water and effluent samples and **Gas Chromatography Mass Spectroscopy (GCMS)** which is used for quantitative and qualitative analysis for volatile and semi volatile organic carbon. Currently, this technology is used for analysis of disinfection by product such as trihalomethanes and pesticide in water as well as trace and identify pollutant sources.

2018



2017

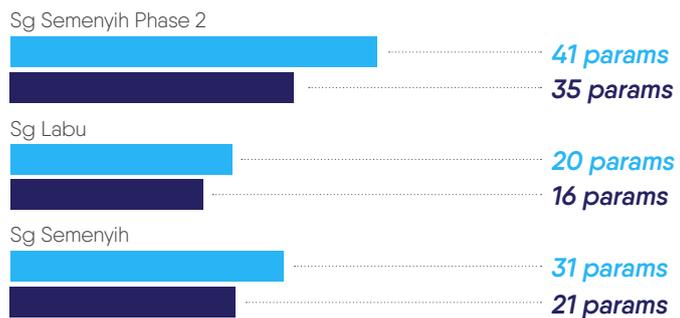


2016



- Quality Analysis (Number of tests carried out)
- Quality Compliance (Number of tests complied)
- Quality Compliance (%)

Parameters accreditation for 2017 and 2018 are as follows:



Parameters (params) ● 2018 ● 2017

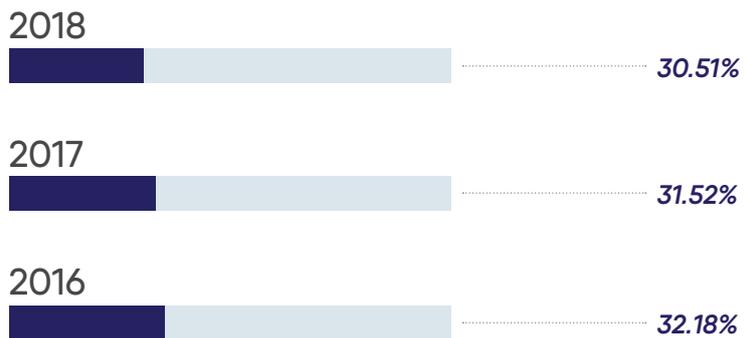


NON-REVENUE WATER

Reducing Non-Revenue Water (NRW) will always remain a high priority for us.

In 2018, we invested over **RM187.80mil** on NRW reduction programmes such as active leak detection in the main pipeline and reticulation system, System Input Volume control, monitoring of transient pressure, pressure reduction in water balancing areas, establishment of district metering zones, reservoir overflow monitoring, replacement of reticulation and communication pipes, aged meter replacement as well as thwarting illegal water connections.

Our continuous initiatives have led to positive Non-Revenue Water (NRW) 2018 yearly average of **30.51%** compared to **31.52%** in 2017.



● NRW % Yearly Average



PIPE BURSTS & LEAKS

The total number of pipe bursts had significantly decreased from **5,398 cases** in 2017 to 3,871 cases in 2018 due to the various NRW initiatives implemented such as Pressure Transient System and pipe replacement works. In 2018, our Pipe Burst Index stood at 13.5 bursts per 100km of pipeline.

Pipe leaks, on the other hand, recorded a rise in 2018 at **104,033 cases** compared to **101,776 cases** recorded in 2017. This rise was primarily attributed to initiatives such as active searching for new leaks and pipe replacement programmes. On average, about 285 pipe leaks were recorded daily in 2018.

PIPE BURST INDEX

2018



13.5 cases per 100 kilometres

2017



18.93 cases per 100 kilometres

2016



20.5 cases per 100 kilometres

PIPE BURST

2018



2017



2016



● Burst pipes per year

● Burst pipes per day

PIPE LEAKS

2018



2017

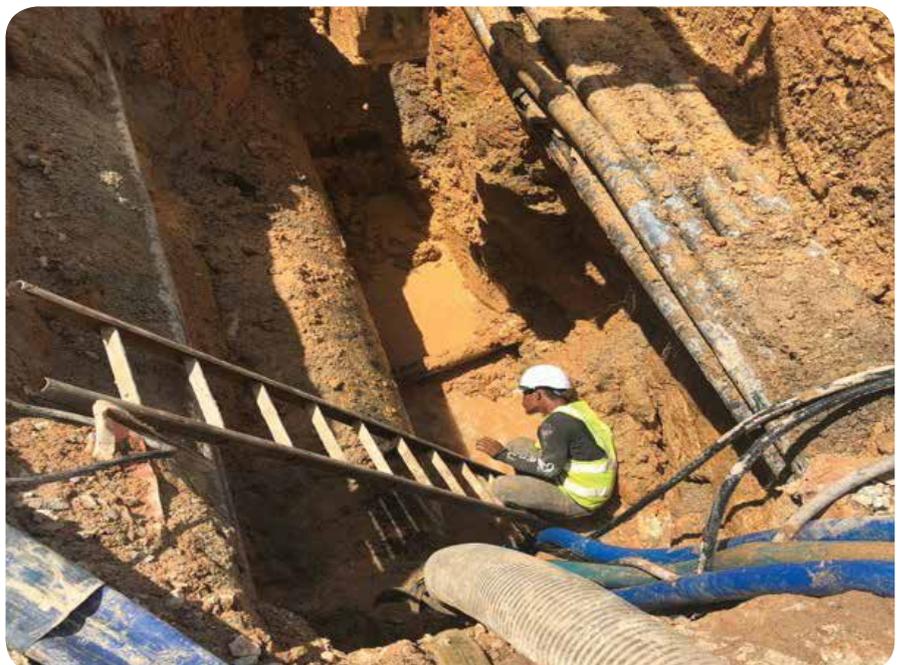
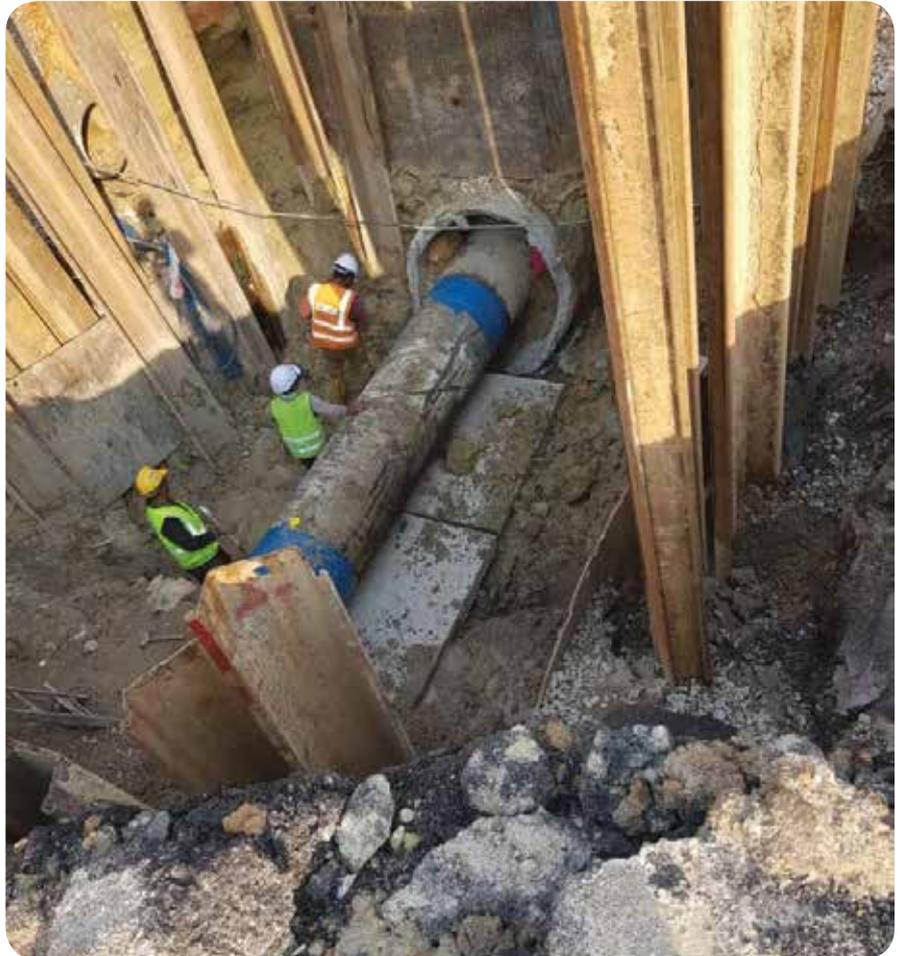


2016



● Pipe leaks per year

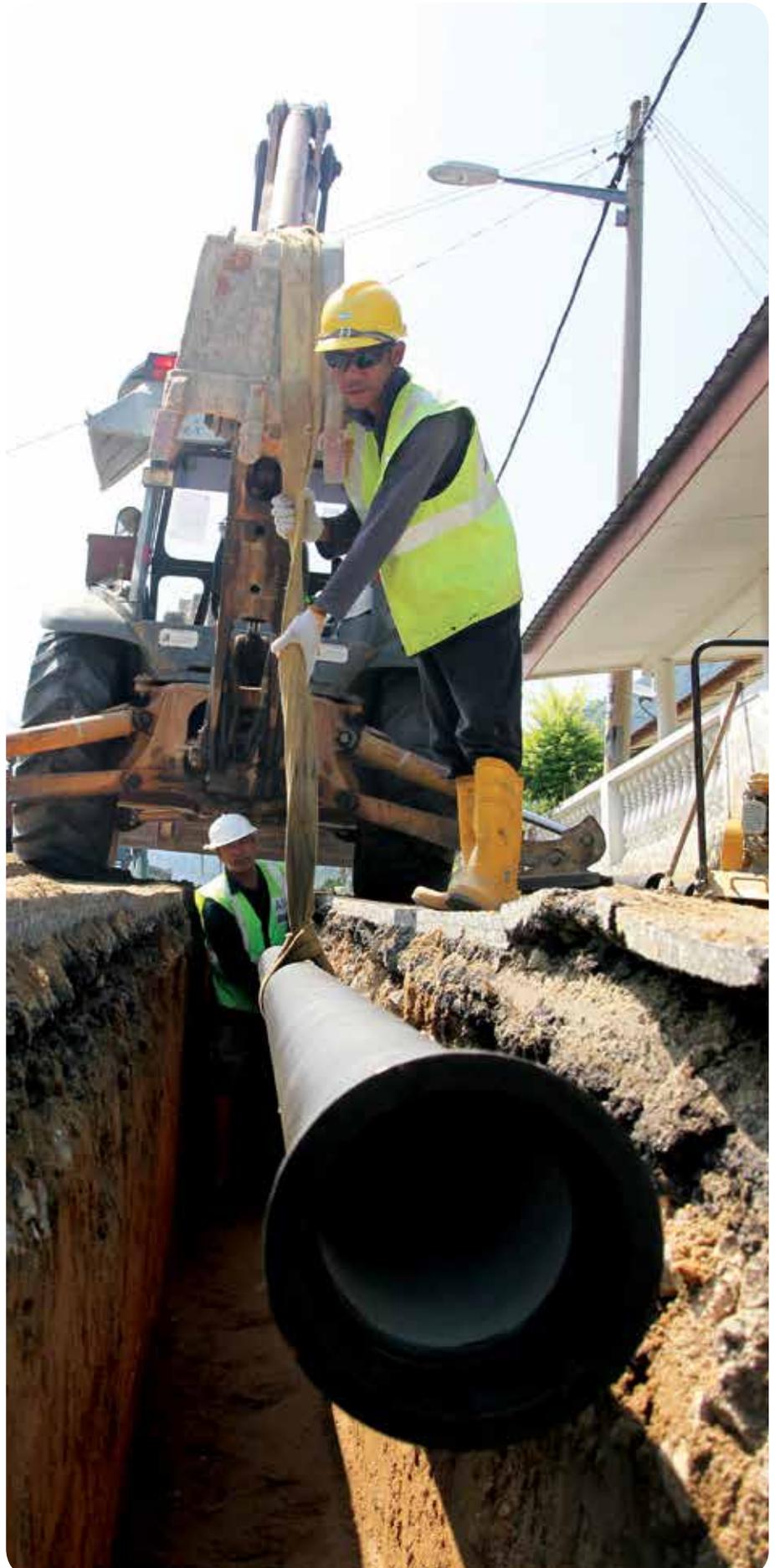
● Pipe leaks per day



PIPE REPLACEMENT

Areas with the highest frequency of pipe bursts are listed as hotspots for pipe replacement programme. In 2018, **29 hotspots** were identified for pipe replacement works. The cost for replacing pipes in these hotspots was **RM100.79 million**. The aging Asbestos Cement pipes were replaced with High Density Polyethylene (HDPE) and Ductile Iron pipes which are more resilient to pressure and weather changes.

The total length of pipes in Selangor, Kuala Lumpur and Putrajaya is **28,642 kilometres**. The pipe materials are Mild Steel, Asbestos Cement, Ductile Iron and Plasticised Polyvinyl Chloride.



CUSTOMER INTERACTION

We use **11 channels** of communication to connect with our customers, with the Contact Centre topping the list with over 1.5 million calls received in 2018. The number of calls received in 2018 saw a **54% increase** compared to 2017. This was mainly due to enquiries about water bills post the Customer Information System (CRIS) implementation as well as on water supply interruptions due to the activation of several ERPs in the months of February, March, June, August and October 2018. Other calls included enquiries about water pressure, meter issues and general enquiries.

Interactions at counters (in all 10 regions) came in second with **509,718** transactions undertaken. In 2018, in line with the company's Digital Drive, we introduced the Air Selangor smartphone application (app), helping us to serve our customers better. By the end of 2018, the app saw a total of **120,488** downloads.



No. of SMS Received
 • 40,351
 • 16,061
 • 5,963



No. of Calls
 • 1,553,584
 • 1,008,764
 • 1,308,396



Counter Interactions
 • 509,718
 • 583,610
 • 604,317



No. of Fax Received
 • 1,616
 • 7,859
 • 7,377



No. of E-mail Received
 • 137,661
 • 93,970
 • 80,314



No. of Twitter Followers
 • 7,631
 • 348
 • Nil



No. of Mails Received
 • 121
 • 303
 • 105



No. of Instagram Followers
 • 2,026
 • 2,714
 • Nil



No. of Whatsapp Group
 • 501
 • 501
 • 446



No. of Facebook Followers
 • 78,987
 • 35,492
 • 24,780



No. of Downloads
 • 120,488
 • Nil
 • Nil

- 2018
- 2017
- 2016

CAPITAL WORKS

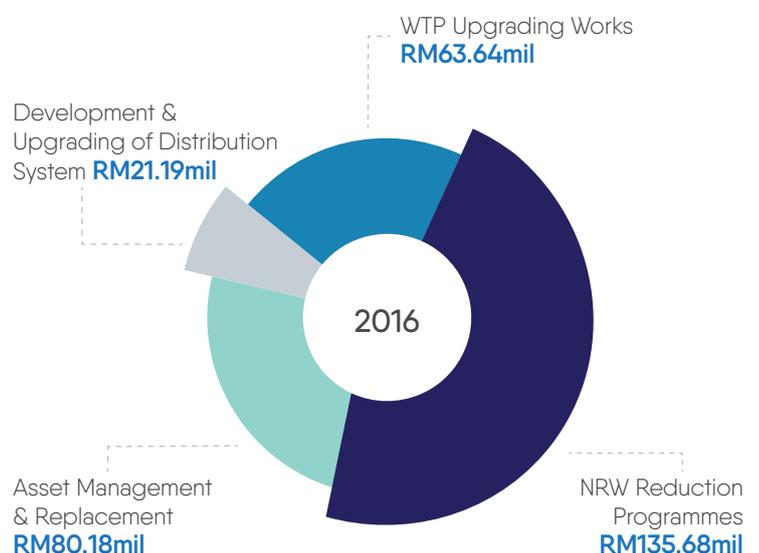
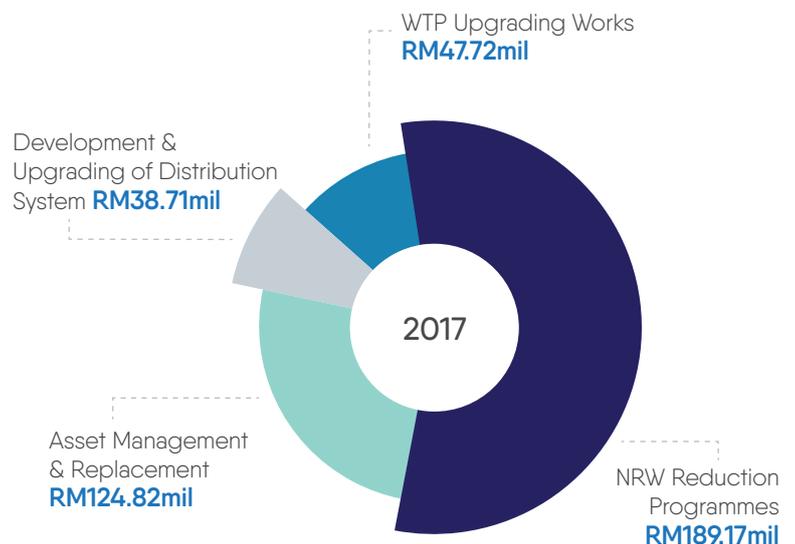
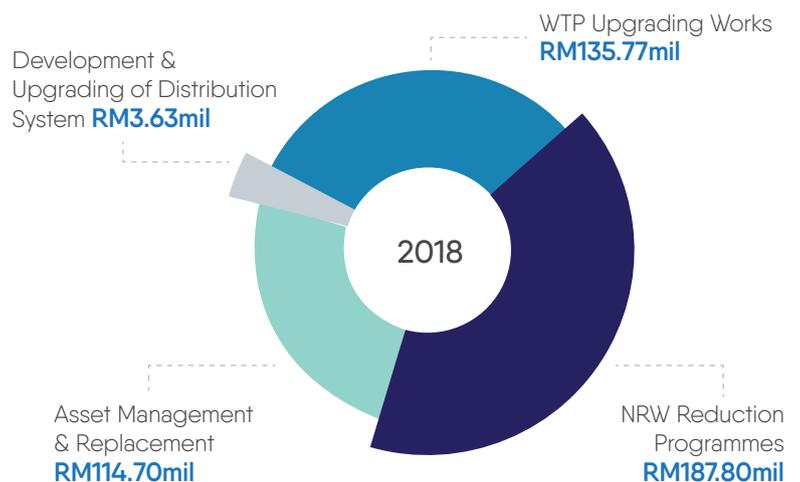
With the main objective of improving our water supply services to our customers, we invested **RM441.90 million** in capital works projects throughout 2018. The biggest investment, totalling **RM135.77 million**, went into water treatment plant upgrading works to ensure efficient operations and maintenance in delivering uninterrupted supply to our customers. In 2017, we invested **RM47.72 million** into the plant upgrading works.

To continuously minimise Non-Revenue Water (NRW) loss, **RM187.8 million** was spent on NRW reduction programmes in 2018, among which were investments into:

- Active leak detection in the main pipeline and reticulation systems.
- Installing pressure transient sensors.
- Replacing reticulation.
- Replacing communication pipes.
- Replacing aged meters, among others.

Meanwhile, investments into asset management and replacement in 2018 was at **RM114.70 million**.

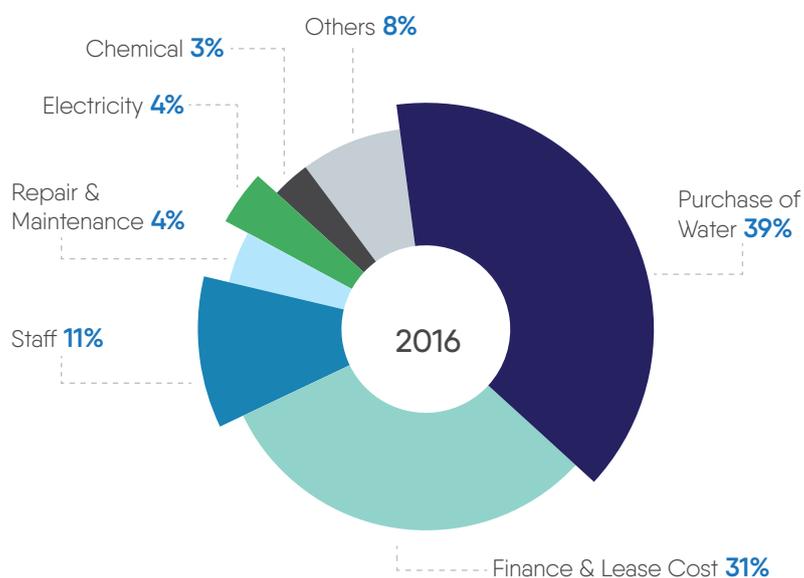
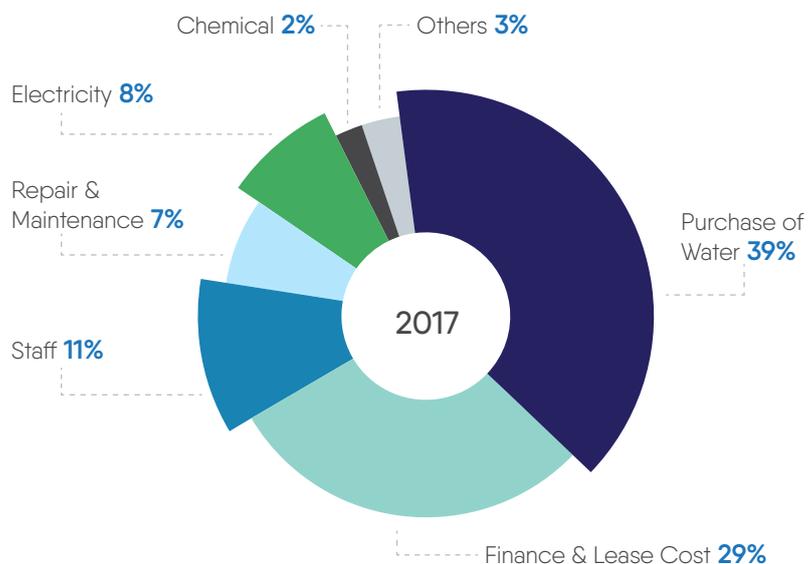
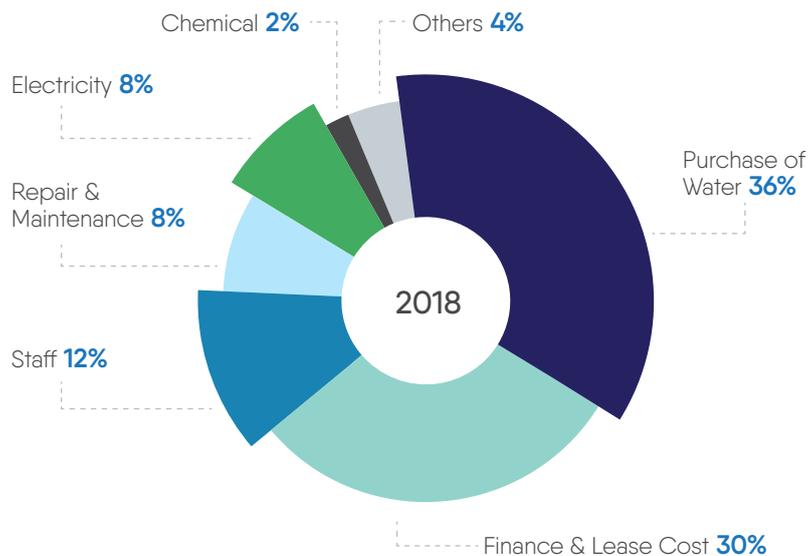
Investments into development and upgrading of distribution system were at **RM3.63 million** in 2018.



OPERATING EXPENDITURE

Total Opex spending by value has increased in 2018 by **9%** from the preceding year. With the increased capacity of water produced from the new Semenyih 2 water treatment plant, the quantity of water purchased from third party operators was reduced resulting in a cost reduction of **3%** to **36%**, from **39%** in 2017.

To fund new Capex and pipe replacements projects in 2018 for NRW reduction and WTPs upgrading, Finance and Lease cost has increased to **30%** compared to **29%** in 2017. As a proportion of Opex, repair and maintenance, and staffing costs increased to **20%** in 2018 arising from initiatives implemented to focus on improvement in customer services, production and distribution efficiencies.



MANAGING RISK

The Risk Management Department was established to identify, assess and prepare for any crisis, hazards and other form of risks that may interfere with our operations and objectives.

Our Enterprise Risk Management (ERM) plan not only calls for risk identification and risk mitigation, but it also supports as a key “decision making” tool for continued sustainability of our operations, aided by our **monthly risk monitoring** and quarterly **Risk Committee Meetings (RMC)** throughout 2018.

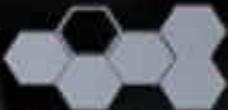
In addition to that, we had also carried out the following risk engagements:



In 2019, we will work on our sustainability efforts, by setting up a Sustainability Section, with the focus on defining our own **Sustainability Development Goals and the Strategic Objectives for OP1 (2019-2021)**.

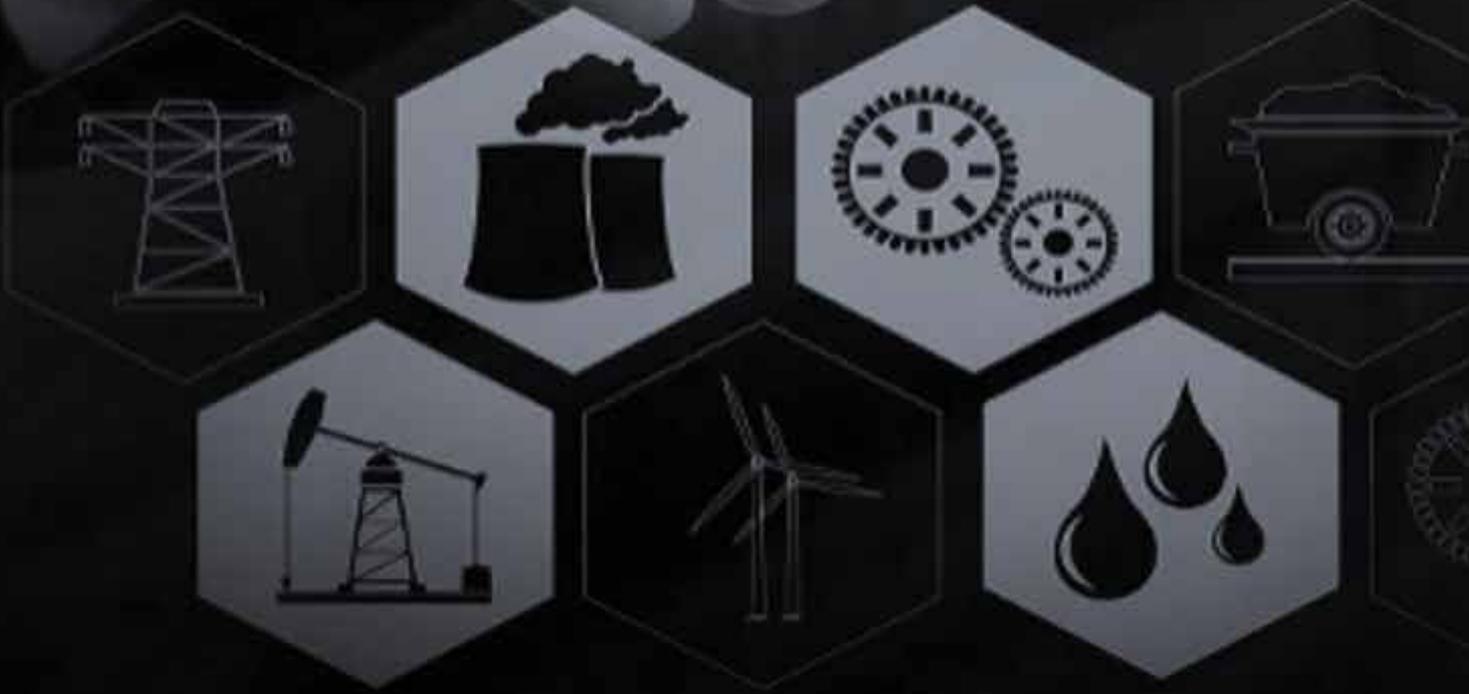


GETTING READY FOR A DIGITAL [R]EVOLUTION

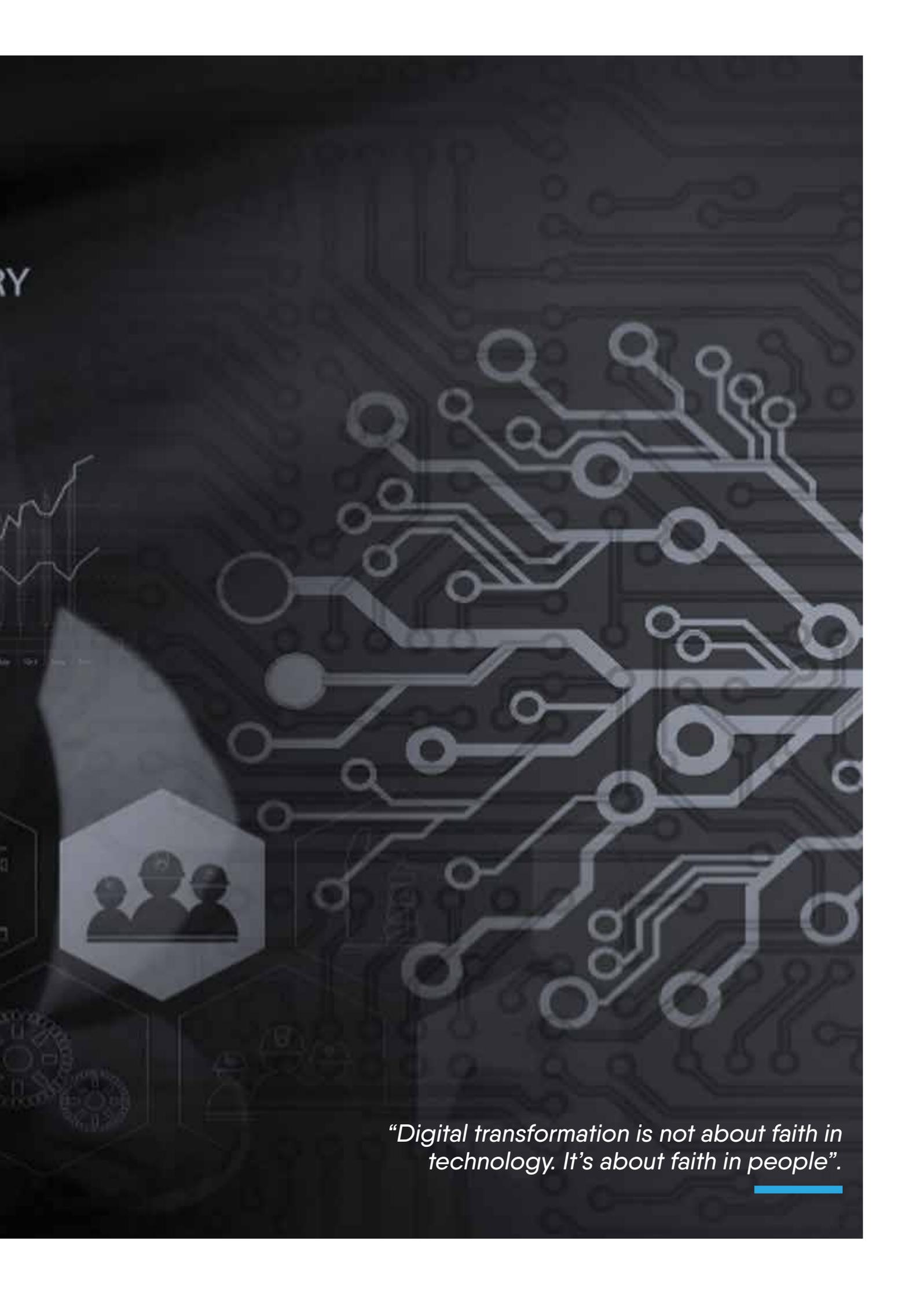


INDUSTRIAL

- Manufacturing
- Supply chain
- Product
- Cargo
- Customer
- Delivery
- Inventory
- Management
- Freight



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“Digital transformation is not about faith in technology. It’s about faith in people”.

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