



Air Selangor

Nurturing Sustainable Water Ecosystems

SUSTAINABILITY REPORT 2021





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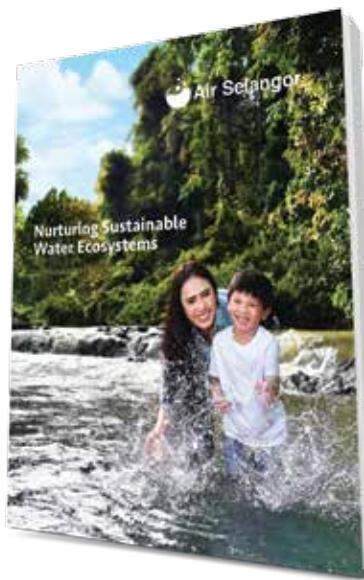
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About This Report

PENGURUSAN AIR SELANGOR SDN. BHD. ("Air Selangor" or the "company") is pleased to present our 2021 Sustainability Report which provides an overview of our business performance as well as insights on how we manage and/or address various material matters relating to the economy, environment, society and governance. This report is consistent with the disclosures from our previous Sustainability Report, and where necessary, we have substantiated our narratives with more in-depth information. Themed "Nurturing Sustainable Water Ecosystems", we aim to equip all our stakeholders with insights on the way we conduct our business and manage sustainability matters in a transparent, concise and balanced manner.

The information included in this report covers the reporting period between 1 January 2021 and 31 December 2021. In terms of sustainability disclosures, we used year-on-year data over a period of three years, wherever available, to reflect our performance based on the selected themes. The scope and boundary of this report covers our business activities and operations in Malaysia which include our headquarters, all 12 regional offices, 10 customer services offices and operational assets. The Sustainability Report is expected to be published annually, unless stated otherwise.

The full version of the Sustainability Report has been prepared in accordance with the "core option" of the Global Reporting Initiative (GRI) Standards. This abridged version of the Sustainability Report contains key highlights from the full version of the report.

Nurturing Sustainable Water Ecosystems

The theme captures Air Selangor's commitment to collaborate harmoniously on matters regarding sustainable water resources, from protection against water pollution to delivery of quality water services. This commitment includes operational excellence and governance that ensures clean and safe treated water to consumers.



All feedback and comments on the sustainability report are appreciated. For any queries, please feel free to contact us via the following channels:

Email : sustainability@airselangor.com

Address : Sustainable Development Unit,
Sustainability & Water Conservation
Section, Risk Management Department,
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59200 Kuala Lumpur



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Sustainability Report online

Bismillahirrahmanirrahim.

As we reflect on the learnings we had over the past year, it is evident that the COVID-19 pandemic has presented a challenge like no other. 2021 was a year of change as the country learned to adapt to living with COVID. Undeniably, the pandemic has taken a toll not only on the entire country but especially on Selangor, Kuala Lumpur and Putrajaya, being the economic crux of Malaysia. We must remain steadfast as we continue the battle toward endemicity for better days ahead.



Chairman's Note

However, it is not always gloom and doom. I must congratulate Air Selangor on the second publication of its Sustainability Report – proving its unwavering commitment to supporting the United Nations' Sustainable Development Goals ("SDGs") within its capabilities as the nation's largest water services company despite the challenges of the pandemic.

When it comes to factoring sustainability and environmental, social and governance criteria into operational and corporate decision-making, momentum has been rather slow in Malaysia. While corporates in the US, Europe and some parts of Asia have adopted such practices at a rapid pace, we are still playing catch-up not only in the sense of putting it to practice via our operations but also in laying the foundational considerations in our actions.



The United Nations Environment Programme Copenhagen Climate Centre "Emissions Gap Report 2021" underscores a few key concerns of which its main aim is to warn us of the catastrophic gap between what needs to be done on climate change against what governments and companies are doing at present. This warning must be specially taken up by everyone including us at Air Selangor, as the impacts of climate change would be immensely costly for us all. According to the Asian Development Bank, six out of the 10 nations most affected by extreme weather events are in the Asia-Pacific. In addition, about USD48.7 billion in annual damages was reported to be caused by disasters in Asia over a 10-year period from 2007 to 2016. Alarmingly, the numbers keep on increasing year on year.

Closer to home, some parts of the country were hit by devastating floods in 2021 affecting livelihoods and businesses with Klang Valley being hit the hardest. The Department of Statistics Malaysia reported that losses due to floods amounted to RM6.1 billion with damages to public assets and infrastructures making up the most of the losses at RM2.0 billion. The Selangor State Government has channelled a total of RM118.25 million in aid to families affected by the flood and allocated more than RM7.0 billion to implement long-term measures in mitigating the future impact of floods.

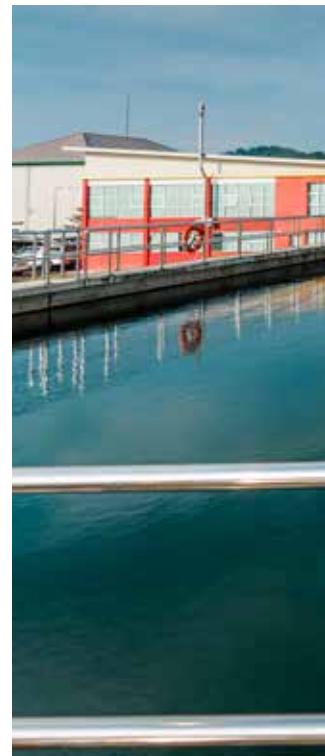
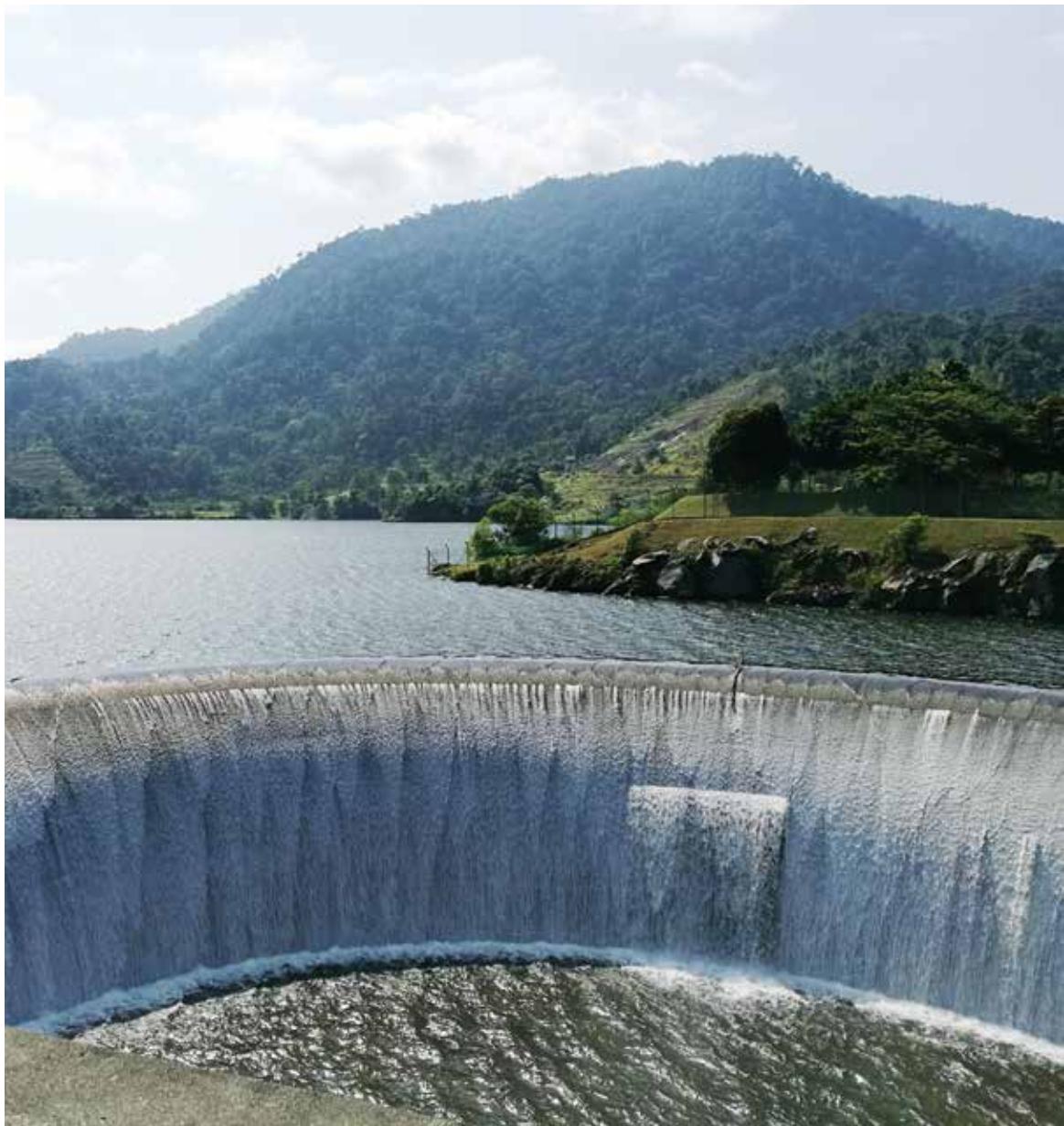
This is indeed cause for serious concern and presents a sobering challenge; especially as Air Selangor aims to be the leading water services company in the region by 2030, so we need to be well poised to take it up.

I believe it is time for utility services companies to elevate their role to be more sustainable. This is in line with the vision of making Selangor a smart and sustainable city in the future. Thus, the first step is to recognise that we have ourselves, through the range of our operations, the opportunities to make better choices and be more sustainable.

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Let us be reminded that Air Selangor's aim to be a sustainable organisation will not be an easy one but possible nonetheless. The environmental threats we face today are greater than what we have ever encountered before in modern history. Carbon dioxide levels in the air are recorded to be at their highest levels in 650,000 years while the average sea level of the world has risen nearly 7 inches over the past 100 years alone. This has tremendous impact on our operations, especially in ensuring a sustainable water ecosystem for all our stakeholders.



Where once we were questioning whether climate change is a reality, today the world is demanding immediate, purposeful and meaningful actions. In this regard, it should be pointed out that meaningful and positive action against climate change can only be borne out of a genuine sense of responsibility.

I believe it is time for utility services companies to elevate their role to be more sustainable. This is in line with the vision of making Selangor a smart and sustainable city in the future. Thus, the first step is to recognise that we have ourselves, through the range of our operations, the opportunities to make better choices and be more sustainable. And for that, I am proud of Air Selangor for the accountability and action they are taking, which are presented in this Sustainability Report.

We have seen the growing awareness and momentum for global accountability signified by landmark developments like the Paris Agreement under the United Nations Framework Convention on Climate Change. As a signatory to the Paris Agreement since December 2012, Malaysia has committed to a reduction of greenhouse gases by 45% by 2030. This consists of an unconditional reduction of 35% and a further 10% conditional reduction upon the receipt of climate finance, technology transfer, and capacity building from developed countries. The question is, how can we play our part to support Malaysia's commitment?

Air Selangor has always been mindful of the effect of its operations on the environment and continuously incorporates sustainable considerations, particularly from the viewpoint that



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With rapid urbanisation, it is projected that by 2050, 88% of Malaysia’s population will be living in cities and more than half of that will be centred in Selangor, Kuala Lumpur and Putrajaya. Thus, the need to ensure sustainable water supply in the future becomes an even bigger priority.

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climate change presents the single biggest threat to human development. With rapid urbanisation, it is projected that by 2050, 88% of Malaysia’s population will be living in cities and more than half of that will be centred in Selangor, Kuala Lumpur and Putrajaya. Thus, the need to ensure sustainable water supply in the future becomes an even bigger priority.

Selangor’s 2020 Budget saw an allocation of RM1.5 million for green volunteerism, RM50,000 for river conservation efforts, RM500,000 to plant 5,000 trees statewide, RM600,000 to set up recycling centres at all local councils, RM6.85 million for solid waste management, RM40 million for Taman Rakyat Selangor project and allocations to fix solar panels at all local councils. As much as Selangor is already moving towards becoming a green state, more needs to be done. Effective strategies are just mere plans without the concerted support from all relevant parties to pledge, act and commit to being sustainable.

Now that there is the momentum to tackle climate change head-on at the state level, Air Selangor must be prepared to intervene meaningfully by integrating adaptation to climate change into planning, decision-making and operational processes as it is a necessary strategy for sustainable development in the long term. By supporting the SDGs, Air Selangor has already identified what needs to be done for them to make progress in this regard. This is a good first step to participating in the bigger picture of Malaysia’s commitment to the Paris Agreement.

There is little doubt that climate change will impact the water ecosystem at large and it is therefore imperative that mechanisms are introduced to allow sharing of knowledge and experience. In this regard, I would encourage greater cooperation amongst the agencies as there can be so much we can achieve when we band together and do the best we can to overcome any challenges that come our way. I would like to thank the Board, the senior management team, and everyone at Air Selangor for their unwavering commitment all these years. I wholeheartedly believe that Air Selangor will not only be the leading water services company in Asia by 2030, but also a role model for a sustainable operator in the industry.

Let us together strive to nurture a sustainable water ecosystem for a better tomorrow, Insya-Allah.

Thank you.

**YANG AMAT BERHORMAT
DATO’ SERI AMIRUDIN BIN SHARI
Chairman**

Message from the Chief Executive Officer



Dear Valued Stakeholders,

I am delighted to present Air Selangor's second Sustainability Report which details our 2021 sustainability efforts and commitment to inculcate a sustainability culture throughout our value chain, and towards making a meaningful difference in the lives of our stakeholders.

This report contains details that showcase our achievements and undivided commitment in our continuous journey to deliver clean water to our customers, build strong business and community partnerships, and nurture an engaging work environment, all while achieving business excellence. Prepared in accordance with the standards set by the Global Reporting Initiative, and in alignment with five of the 17 SDGs, I hope the readers will find the content of this report enlightening and insightful.

As we step into an era of global uncertainties, we must continuously improve the sustainability of water systems for future generations. The pandemic and the devastating floods that affected the nation in 2021 were clear indicators that we need to expedite responsive solutions toward mitigating and managing climate change, resilient business practices, and adapting to meet the circular economy trends that are collectively driving the new economy.

According to the Organisation for Economic Co-operation and Development ("OECD") Policy Responses to COVID-19 report, for the economic recovery from the pandemic to be durable and resilient, a return to 'business as usual' and environmentally destructive activities must be avoided. The key dynamics to rebuilding with confidence would include alignment with long-term emissions reduction goals, factoring in resilience to climate impacts and increasing circularity of supply chains amongst others.

Air Selangor Sustainability Strategy 2020-2022 supports the company's vision to be the leading water services provider in Asia by 2030. On this front, we have prioritised our focus on fortifying the resilience of water services, by improving overall customer experience and working with stakeholders along the value chain for positive action, cooperation, and contributions that will enhance water infrastructure, policies, conservation, and security. It is crucial that we help solve the grand challenge for the future of the water ecosystems. It means that there is enough water to meet multiple needs of our consumers ranging from agriculture, commercial, personal and industrial.



It also means that water supply remains consistent despite the challenges of climate impacts that is of global concerns now. To that end, as a company we are pushing through sustainable water management without compromising the ability of future generations to do the same.

Despite operational and business challenges faced last year, Air Selangor recorded RM2.18 billion in revenue. A total of RM1.23 billion in Capital Expenditure ("CAPEX") contracts were awarded last year mainly to develop Stage 1 of the Rasau Water Supply Scheme project which is targeted for completion in 2025. The development of this project is vital to address the ever-increasing water demand in the Klang and Petaling regions.

Let me take you through some of the year's milestones in this regard.

Expanding Water Supply Stewardship

Since Air Selangor was established, our mandate is to abstract, treat and distribute water to approximately 8.4 million consumers in Selangor, Kuala Lumpur and Putrajaya, following the restructuring of the state water-service industry. Since then, Air Selangor has strived to drive more effective and efficient integration of the water treatment and distribution operations towards delivering the best experience to our customers.

Average Water Reserve Margin

13.63%

▲ 1.76%

Reduced NRW in 2021

27.93%

▲ 0.60%

Call Centre Service Levels in December 2021

90%

▲ 41% From June 2021

Sesama Mara CSR Fund in 2021

RM450,704

▲ 40%

This involves the continuous maintenance and upgrading of our assets and infrastructures.

We have successfully increased the average water reserve margin to 13.63% against the targeted 13.15% which is a year-on-year improvement of 1.76%. We have also executed rigorous assets maintenance, completing 102% of planned preventive maintenance and 96% of planned conditioned-based maintenance of our assets.

Harnessing Digital Efficiencies

As quality service and customer safety are at the forefront of our operations, Air Selangor constantly looks to upgrade its mobile communication channels to provide efficient non-physical contact alternatives in our service offerings. In May 2021, two of our mobile services, 'Air Selangor Consumer Mobile Application' and 'Operations Mobile Application' received recognition for excellence during the Malaysia Technology Excellence Awards 2021 Mobile-Utilities Category.

Towards better service excellence, our call centre capacity has also been expanded to provide better, more timely responses. Service levels were successfully improved to 90% in December compared to 49% in June 2021. Special attention was also paid to reducing the frequency of repeated calls and critical customers were prioritised through the enhancement of the complaint management system.

Towards Improving Water Resource Efficiency

There is a growing need for the water economy to become a fully circular one through collaborations, research, innovation, new technologies and new operating methods.

We have started our journey in our continued bid to safeguard water security, we entered into a joint venture with Indah Water Konsortium Sdn. Bhd. ("IWK") on 16 March 2021, to embark on a water reclamation initiative that will further expand the water services industry in Malaysia.

On top of that, showcasing our commitment toward increased efficiency, we have set our Non-revenue Water ("NRW") targets of 25% by 2025, 20% by 2037, and 15% by 2049. Ensuring that we achieve our NRW targets, we have been implementing these various initiatives including the Physical Loss Reduction programme, Commercial Loss Reduction programme, Pipe Replacement programme, and others. With ongoing efforts to reduce NRW, Air Selangor successfully achieved an NRW rate of 27.93% in 2021, an improvement of 0.60% compared to 28.53% in the previous year.



Armoring Ourselves to Tackle Climate Change

We believe that our journey to sustainability isn't a lonely one. Malaysia has documented its commitment to climate change mitigation boldly in the 12th Malaysia Plan ("12MP").

With the aim to be carbon neutral by 2050 at the earliest and to overhaul its energy, transportation as well as land-use sectors, we are seeing industry players and corporates banding together to make the change. Although climate change disaster seems like a distance away from a fortune for Malaysia in the near future, we shall not discount the potential it might bring to the country which might impact the water sources at large.

In anticipation of the impact of climate change on the sustainable water supply especially for our consumers in Selangor, Kuala Lumpur and Putrajaya, Air Selangor has set up a climate change task force to strategise and implement an action plan to mitigate the incoming impact. We need to be ahead of the game in ensuring that we minimise if not eradicate the impact altogether, staying true to our commitment to provide 'water forever' to our consumers.



Serving Our Stakeholders

Last but not least, pivotal to our vision and mission, is our commitment to our stakeholders.

Our employees are the vital drivers of our performance and growth. Much effort has been focused on taking care of our people and ensuring workplace safety during these challenging times. We have worked to speed up vaccinations for our employees through the State's vaccination programme and achieved a 99.90% fully vaccinated record by the end of the year.

In helping the underprivileged communities, our investment in the initiatives under our flagship Sesama Mara corporate social responsibility programme amounted to RM450,704 in 2021, an increase of 40% from RM321,690 in 2020.

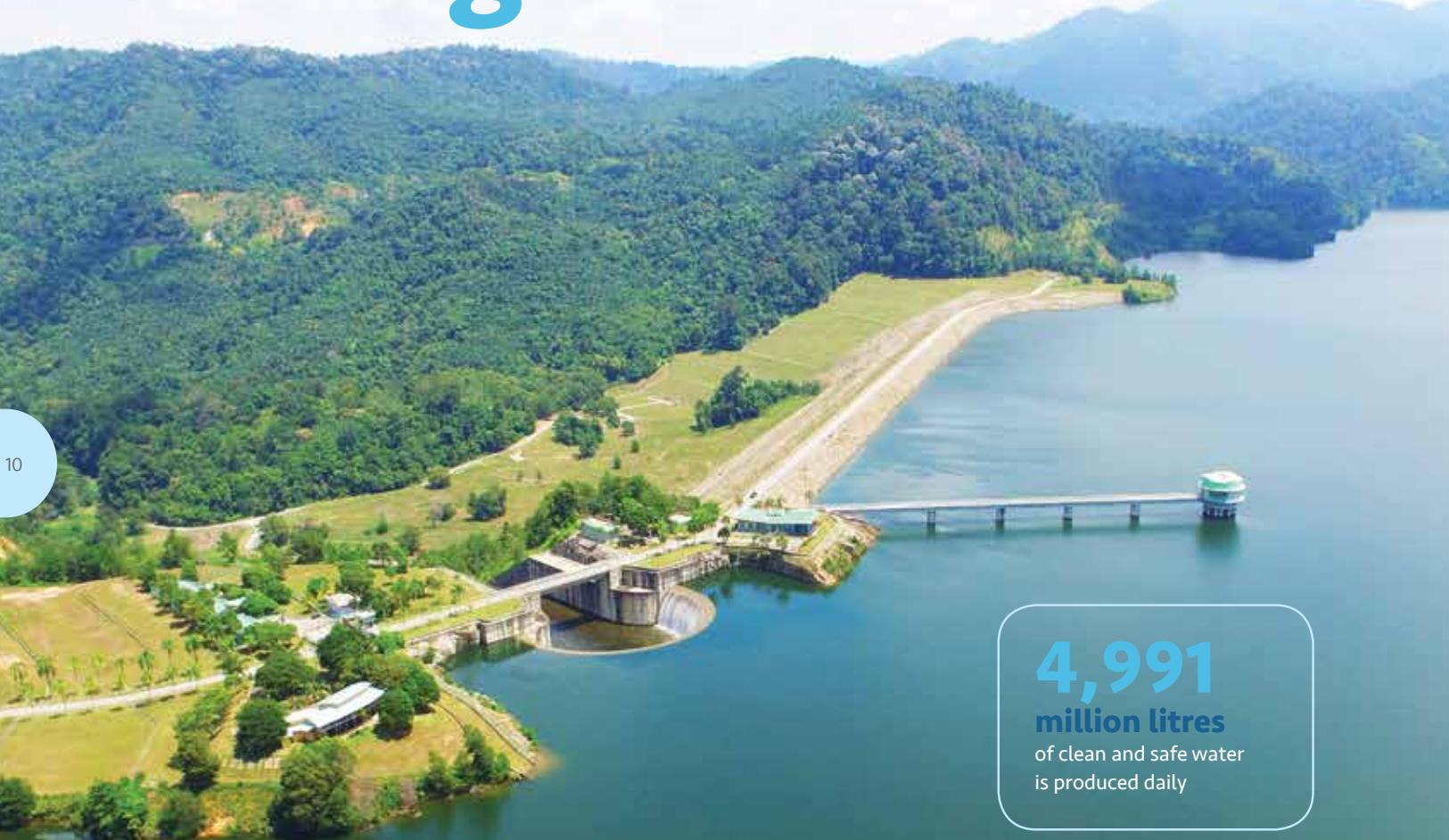
The initiatives under four core pillars are focused on supporting low-income households in ensuring improved access to equity. Strong partnerships are key to the achievement of our upcoming targets and goals. I am grateful for the cooperation of industry and state partners to date and hope that we can further work together to realise effective solutions to surmount the future challenges that will face the water industry.

In a nutshell, achieving sustainable water ecosystems requires a multidisciplinary and holistic approach. Following the United Nations General Assembly's recognition of 'the right to safe and clean drinking water and sanitation as a human right', water is essential for the full enjoyment of life for all human beings. Globally it means to provide each person on the planet with affordable access to a minimum of 20 to 50 litres of daily water required to sustain life. Locally it means our effort to ensure that every single person in Selangor, Kuala Lumpur and Putrajaya has access to clean and safe water, especially for underprivileged households where access to alternative sources might be hard to come by. Air Selangor is constantly working to upgrade systems and processes as we are focused on our mission to be the best water services provider in the region by 2030.

Thank you.

SUHAIMI KAMARALZAMAN
Chief Executive Officer

About Air Selangor



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4,991
million litres
of clean and safe water
is produced daily

Air Selangor is Malaysia's largest water operator and serves as the sole public water services provider for Selangor, Kuala Lumpur, and Putrajaya ("Distribution Area") since September 2019. It is responsible for abstracting, treating, and distributing treated water supply to 8.4 million consumers consisting of residential, commercial, and industrial users, as well as government buildings, places of worship, and other vital establishments that bind the states' socio-economic fabric.

Air Selangor Holdings Berhad ("AIS Holdings") is the immediate holding company and Menteri Besar Selangor (Incorporated), a corporate body formed under Enactment No.3 of the Menteri Besar Selangor (Incorporation), Enactment 1994, is the ultimate holding corporation of Air Selangor.

Air Selangor delivers clean and safe water to its consumers through various water treatment facilities and assets with daily production averaging 4,991 million litres. As an essential services provider for highly mature and primarily urbanised areas like Selangor, Kuala Lumpur, and Putrajaya, Air Selangor plays an important role in supporting Malaysia's economic growth through a dedicated team of over 5,000 people who work around the clock to ensure continuous supply of high-quality water for all.

VISION

We will be the leading water services provider in Asia by 2030

MISSION

We deliver the best experience to our customers

OUR CORE VALUES

Teamwork

Providing support to one another, working collaboratively, respecting one's views, and making our work environment well balanced and enjoyable.

Honesty

Being open and truthful in all dealings to allow us to be of great service to our colleagues and customers.

Integrity

Continually doing the right thing no matter what the consequences. With integrity we will live by our standards and beliefs even when no one is watching.

Professionalism

At all times, we strive for excellence and quality in everything we do on top of being reliable and responsible.

Highest Standard of Services

We respect our customers and strive to deliver timely, responsive and proactive services at all times.



The logo features the words "Joy in Every Drop" in a large, bold, blue font. The letter "D" is stylized to look like a water drop with a smiling face. A small blue circle is positioned above the "D".

Joy in Every Drop or 'Setiap Titik Bermakna' describes the aspiration behind everything we do at Air Selangor. It represents the Company's commitment to delivering the highest standard of services for consumers, providing a healthy working environment for employees to thrive, and opportunities for business partners to grow together.

Striving to provide clean, safe, and affordable water for consumers, every drop of water supplied is full of care and reflects the passion for innovation so that consumers can create joyful memories with their loved ones.

As Air Selangor works to ensure the best customer experience, it also works with its employees and business partners to create a joyful working environment for all to grow.

Our Assets

Dams 8^{1,2}	Active Storage for Dams 100%	Hybrid Off-river Augmentation System ("HORAS") 600 1	Off-river Storage ("ORS") 3
Water Treatment Plants ("WTPs") 34³	Average Production Volume 4,991 million litres per day ("MLD")	Pipe length (mapped using GIS) 30,008km	Accredited Regional Laboratory 3
Water Sampling Stations 1,122	Hybrid Distribution Water Quality Real-time Analyser ("HYDRA") 190	Off-plant Autonomous Chlorine Injection System ("OACIS") 27	River Monitoring Stations 15
Pump Houses 728	Service Reservoirs 1,599	Active Operational Vehicles 1,172	Workforce 5,056

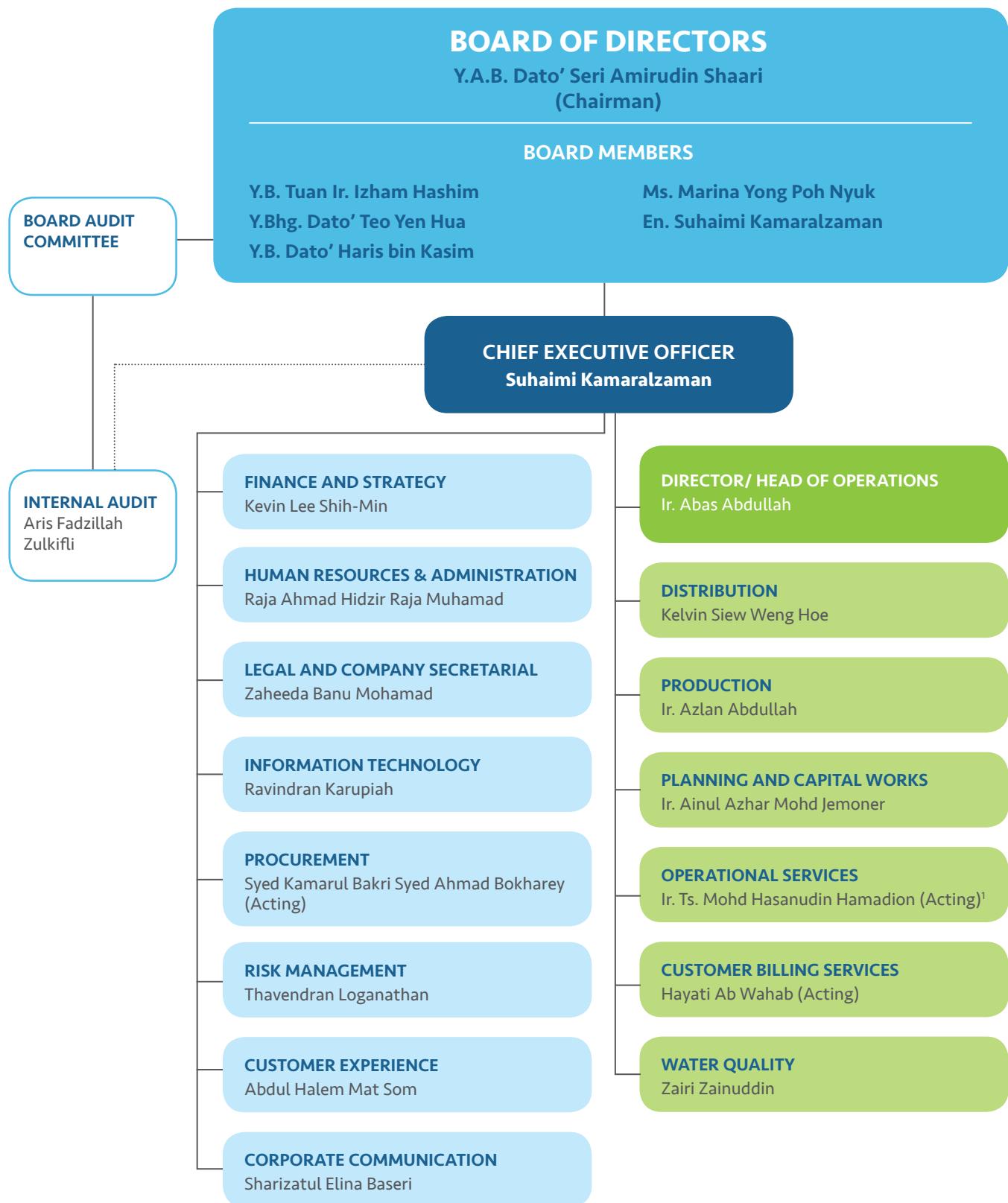
As of 31 December 2021.

¹ Kelau Dam was handed over to Air Selangor in 2020.

² Seven dams are under the supervision of Air Selangor, and one dam i.e., Batu Dam is under the supervision of the Department of Irrigation and Drainage.

³ Thirty-one WTPs are operated by Air Selangor, and three WTPs are under appointed parties.

Our Leadership Team



¹ Effective 1 September 2021. The organisational chart is valid as of 31 December 2021.

Our Customers



DOMESTIC

Domestic customers include residential properties which form the largest part of the total number of registered accounts with Air Selangor.

2,230,180
accounts
(87.21%)



COMMERCIAL

Commercial customers include industries, commercial areas, and ships.

313,256
accounts
(12.25%)



OTHERS

Other customers include government offices, religious and charitable institutions.

13,812
accounts
(0.54%)



Our Business Plans

As the sole water services provider for Selangor, Kuala Lumpur, and Putrajaya, Air Selangor is committed to ensuring a sustainable supply of clean and safe water for its customers.

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However, there are several key operational challenges faced, predominantly, the continuous increase in water demand due to population growth, urbanisation, and industrialisation, and the threat to water security resulting from climate change and raw water pollution. In ensuring it remains resilient and responsive in meeting consumer water needs, the Company is guided by its 30-year business plan consisting of seven Strategic Plans & Initiatives ("SPIs") and eight Key Result Areas ("KRAs") which have been approved by Suruhanjaya Perkhidmatan Air Negara ("SPAN").

A Capital Expenditure ("CAPEX") of over RM35 billion has been earmarked for this business plan which will be utilised to upgrade existing water infrastructure, improve operational efficiency, and source new water resources. The business plan will be reviewed from time to time, in response to the changing operating environment of the water services industry.

Air Selangor's Strategic Plans and Initiatives

Tracking and monitoring of real-time progress and performance of Air Selangor's SPIs are managed through the Air Selangor Strategic Plans and Initiatives Realisation ("ASPIRE") Dashboard using Big Data Analytics solutions. The ASPIRE Dashboard project which was completed in 2021 is an executive intelligence single touchpoint dashboard that measures business performance and productivity through key drivers namely, strategic indicators, tactical drivers, and operational measures. It also identifies CAPEX spending for each SPI.

The key drivers of the ASPIRE project are:

- **Strategic Indicators**
Lead indicators to measure achievement of the SPI
- **Tactical Drivers**
Internal and external drivers that are used to identify areas for improvement that will influence the achievement of strategic indicators
- **Operational Measures**
Actionable information and measures which are used to monitor progress for immediate action for both medium and long-term, as these will impact tactical drivers

SPI Achievement

SPI	Objectives	Achievements in 2021
SPI 1 Water Forever Towards a Sustainable Water Future 	<ul style="list-style-type: none"> Ensure sustainable water supply for the future. Mitigate potential effects from climate change and raw water pollution. Design interventions and initiatives that ensure water supply is in tandem with water demand. Some of these actions include reducing system water loss, optimising customer water use, as well as identifying and developing new sources of water. 	<ul style="list-style-type: none"> Successfully increased the average water reserve margin to 13.63% against the targeted 13.15%. This is a year-on-year improvement of 1.76%. Awarded contracts for Package 2 and Package 3 of Rasau Water Supply Scheme amounting to RM896.29 million.
SPI 2 Improvement to Asset Reliability and Resilience Towards a Resilient Water Future 	<ul style="list-style-type: none"> Optimise management and maintenance of our assets. Ensure uninterrupted water supply to our customers. Rehabilitate, replace, and upgrade our assets. Improve water storage capacity. 	<ul style="list-style-type: none"> Completed 102% of planned preventative maintenance of assets. Completed 96% of planned condition-based maintenance of assets. Completed 8,791 corrective maintenance of assets. Completed pipe replacement works for 154 hotspots. Completed rehabilitation works for 44 unused reservoirs out of 144 identified. Completed refurbishment works for 9 pump houses out of 54 identified. Purchased and received 71 units of various vehicles to enhance operational capability and improve the efficiency of fleet movement during service disruptions.
SPI 3 Improving Operational Efficiency Digital Utility of the Future 	<ul style="list-style-type: none"> Leverage the growth of digital connectivity and big data to become the Digital Utility of the Future. Ensure effective use of resources across our operations, namely production, distribution, asset inventory and maintenance, and customer management. 	<ul style="list-style-type: none"> Launched new Operations Business Intelligence for Closed-Loop Customer Management to improve customer complaints management. Completed ASPIRE dashboard. Capacity of the Intelligent Command Centre covered 74.53% of all active reservoirs and pump houses. Completed Radio Frequency Identification tagging for 24,331 assets. Covered a total of 2,903 km of pipeline and 369 reservoirs using online Hydraulic Modelling Prediction.

SPI	Objectives	Achievements in 2021																			
SPI 4 Towards Best Customer Experience Drinkable Water from Tap by 2028 and Best Customer Service	<ul style="list-style-type: none"> Improve our service delivery and exceed customer expectations in terms of reliability, responsiveness, and quality continuously. 	<ul style="list-style-type: none"> Achieved call centre service level of 90% in December. Achieved 101.74% of meter replacement works. Completed the pilot installation of 8,041 Advanced Metering Infrastructure meters in the Sepang Region. Achieved Water Quality Complaint Index ratio of 0.54 complaints per 1,000 connections, below the targeted 0.6. 96.70% completion of works for 6 watercourses under the 'Trust our Tap' initiative. Achieved water quality targets as follows: 																			
		<table border="1"> <thead> <tr> <th>Parameter</th><th>MOH Target</th><th>Achievement</th></tr> </thead> <tbody> <tr> <td><i>E. Coli</i></td><td>≥ 99.85</td><td>100.00</td></tr> <tr> <td>Free Residual Chlorine ("FRC")</td><td>≥ 98.15</td><td>99.97</td></tr> <tr> <td><i>E. Coli & FRC</i></td><td>≥ 99.95</td><td>100.00</td></tr> <tr> <td>Turbidity</td><td>≥ 98.00</td><td>99.99</td></tr> <tr> <td>Aluminium</td><td>≥ 90.00</td><td>96.74</td></tr> </tbody> </table>		Parameter	MOH Target	Achievement	<i>E. Coli</i>	≥ 99.85	100.00	Free Residual Chlorine ("FRC")	≥ 98.15	99.97	<i>E. Coli & FRC</i>	≥ 99.95	100.00	Turbidity	≥ 98.00	99.99	Aluminium	≥ 90.00	96.74
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SPI 5 NRW Reduction NRW Reduction by 25% by 2025, 20% by 2037, 15% by 2049	<ul style="list-style-type: none"> Reduce water loss throughout our operations, targeting to achieve 25% by 2025, 20% by 2037, and 15% by 2049. Optimise operational costs and increase our revenue 	<ul style="list-style-type: none"> Achieved NRW reduction of 27.93% surpassing the target of 28.00% as set by SPAN. Achieved Pipe Burst Index of 6.37 bursts per 100 km of pipeline against the benchmark of 13 bursts per 100 km per year¹. Achieved water supply target as follows: 																			
		<table border="1"> <thead> <tr> <th>Parameter</th><th>SPAN Target</th><th>Achievement</th></tr> </thead> <tbody> <tr> <td>Repair and resume water supply within 24 hours for communication pipe failure</td><td>80.00%</td><td>84.30%</td></tr> <tr> <td>Repair and resume supply within 24 hours for the failure of mains of diameter less than 200mm</td><td>80.00%</td><td>86.40%</td></tr> <tr> <td>Repair and resume supply within 36 hours for failure of mains with a diameter 200mm > diameter < 600mm</td><td>90.00%</td><td>96.10%</td></tr> <tr> <td>Repair and resume supply within 48 hours for the failure of mains of a diameter greater than 600mm</td><td>95.00%</td><td>98.20%</td></tr> </tbody> </table>		Parameter	SPAN Target	Achievement	Repair and resume water supply within 24 hours for communication pipe failure	80.00%	84.30%	Repair and resume supply within 24 hours for the failure of mains of diameter less than 200mm	80.00%	86.40%	Repair and resume supply within 36 hours for failure of mains with a diameter 200mm > diameter < 600mm	90.00%	96.10%	Repair and resume supply within 48 hours for the failure of mains of a diameter greater than 600mm	95.00%	98.20%			
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Repair and resume supply within 48 hours for the failure of mains of a diameter greater than 600mm	95.00%	98.20%																			

¹ Based on Unavoidable Annual Real Losses (UARL) and Infrastructure Leakage Index (ILI), Allan Lambert, Water Loss Research and Analysis Ltd, United Kingdom, 2019, the benchmark pipe burst index is at 13 bursts per 100 km per year.

SPI	Objectives	Achievements in 2021												
SPI 6 Creating Conducive Working Environment World-Class Water Service Provider	<ul style="list-style-type: none"> Position Air Selangor as an employer of choice by creating a safe and conducive work environment. Develop and grow talent within our Company to ensure a sustainable pipeline of leaders and achievers. 	<ul style="list-style-type: none"> Recorded Lost Time Injury Frequency Rate ("LTIFR") of 0.53. Launched the first Fitness Centre at Headquarters for employee benefit. Achieved 80% score in overall Employee Engagement Survey and maintained our position at the Top Quartile of Malaysia Country Norm. Employees are provided with access to professional counselling services for employees as part of Air Selangor's efforts to improve mental wellbeing. Continuation of the COVID-19 Command Centre to facilitate pandemic response within the Company towards maintaining business continuity and protecting employee health. As part of Air Selangor's succession planning, twenty-five employees from the Corporate Talent Pool were selected to participate in a 2-year exclusive Talent Leadership Development Programme. Air Selangor has enrolled a pool of 891 employees, representing 53% of the technical positions, into various competency certification programmes recognised by the Jabatan Pembangunan Kemahiran, Ministry of Human Resources, Malaysia. As a result, the 891 employees have also received the Malaysian Skills Certificate, a formal, nationally recognised certificate issued by the Government. 												
SPI 7 Environmental Stewardship Waste Zero Environment	<ul style="list-style-type: none"> Operate responsibly, minimising our impact on the environment, and adhere to regulations. Towards a zero-waste environment, optimising resource use and reducing our carbon emissions. 	<ul style="list-style-type: none"> Achieved compliance with the Department of Environment ("DOE") Guided Self-Regulation ("GSR"): <table border="1"> <thead> <tr> <th>Scope</th><th>Compliance (%)</th></tr> </thead> <tbody> <tr> <td>WTPs</td><td>84.32</td></tr> <tr> <td>Distribution Activities</td><td>65.47</td></tr> </tbody> </table> <ul style="list-style-type: none"> Recorded carbon emissions and carbon emissions intensity as follows: <table border="1"> <tbody> <tr> <td>Total Carbon Emissions (tCO₂)</td><td>579,937.53</td></tr> <tr> <td>Produced Volume Carbon Intensity (kgCO₂/m³)</td><td>0.318</td></tr> <tr> <td>Billed Volume Carbon Intensity (kgCO₂/m³)</td><td>0.440</td></tr> </tbody> </table>	Scope	Compliance (%)	WTPs	84.32	Distribution Activities	65.47	Total Carbon Emissions (tCO ₂)	579,937.53	Produced Volume Carbon Intensity (kgCO ₂ /m ³)	0.318	Billed Volume Carbon Intensity (kgCO ₂ /m ³)	0.440
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Our Financial Performance

Revenue
RM2.18
billion

CAPEX
(contracts awarded)
RM1.23
billion

OPEX
RM2.43
billion

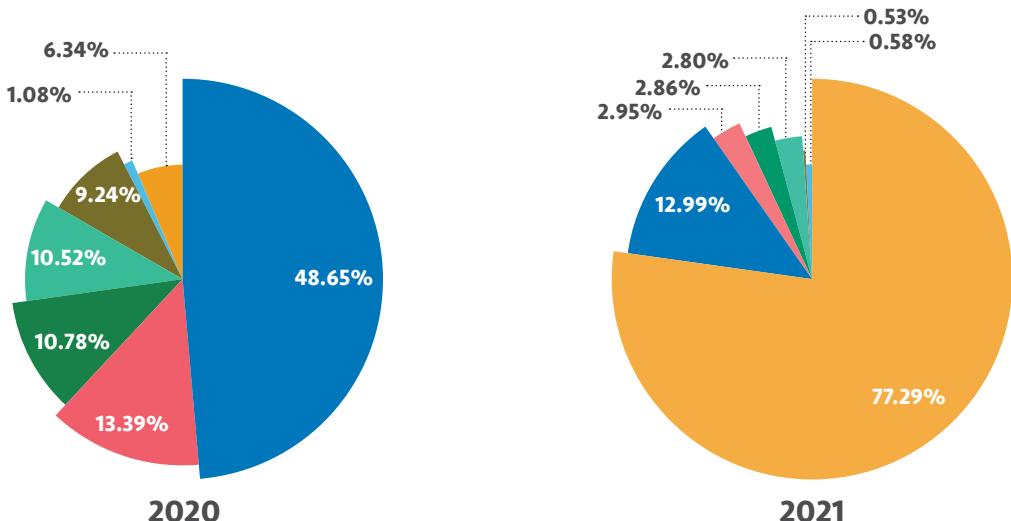
Air Selangor currently operates its business within a tariff environment that does not allow for full-cost recovery. Revenue earned by Air Selangor in 2021 was sufficient only for the defrayment of Operational Expenditure ("OPEX"), and partial defrayment of lease rental and CAPEX for the year. Against the operational and business challenges faced arising from the pandemic, and amidst the unsustainable tariff environment, Air Selangor recorded RM2.18 billion in revenue for 2021, in-line with the revenue achieved in 2020. In 2021, Air Selangor awarded approximately RM1,230.12 million in CAPEX contracts, a significant increase of 240.00% from 2020 mainly due to contracts awarded for the development of the Stage 1 Rasau Water Supply Scheme.

CAPEX (Contracts Awarded)	2020 ¹ (RM mil)	2021 (RM mil)
SPI 1 - Water Forever	22.92	950.79
SPI 2 - Improvement to Asset Reliability & Resilience	175.97	159.80
SPI 3 - Improving Operational Efficiency	48.45	36.29
SPI 4 - Towards Best Customer Experience	38.98	35.17
SPI 5 - NRW Reduction	38.05	34.41
SPI 6 - Creating a Conducive Working Environment	33.43	6.57
SPI 7 - Environmental Stewardship	3.90	7.09
Total	361.71	1,230.12

¹ Includes new contracts awarded in 2021 under the 2020 CAPEX budget

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CAPEX (Contracts Awarded)



● Water Forever (SPI 1)

● Improvement to Asset Reliability & Resilience (SPI 2)

● Improving Operational Efficiency (SPI 3)

● Towards Best Customer Experience (SPI 4)

● NRW Reduction (SPI 5)

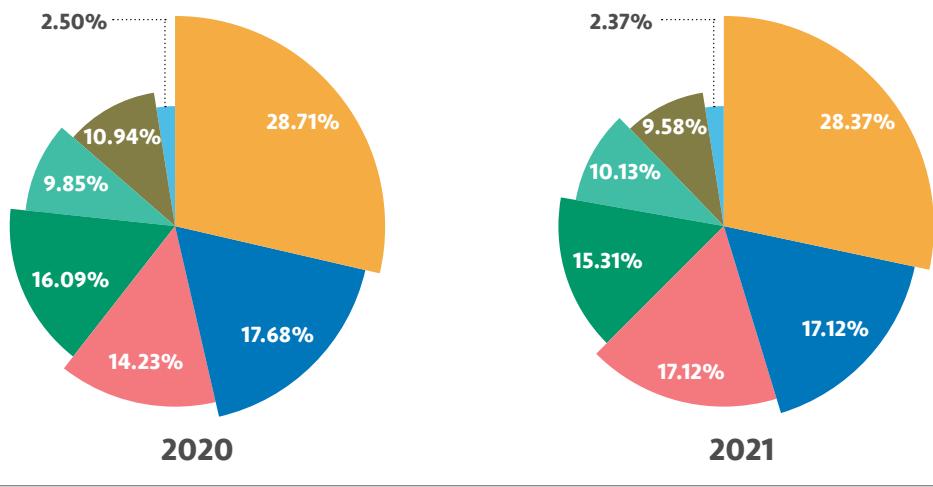
● Creating Conductive Working Environment (SPI 6)

● Environment Stewardship (SPI 7)

Air Selangor recorded OPEX of RM 2.43 billion in 2021, with major expenditures being finance and leasing cost, followed by staff costs, and repair and maintenance cost. The 2021 OPEX increased by 5.31% compared to the 2020 OPEX.

OPEX	2020 (RM mil)	2021 (RM mil)
Finance and leasing cost	662.97	689.91
Staff	408.19	416.24
Repair and maintenance	328.74	416.23
Purchase of water	371.52	372.29
Others	227.44	246.42
Electricity	252.59	232.97
Chemical	57.80	57.69
Total	2,309.25	2,431.75

OPEX



Key Performance Data

¹ Score is between 1 (Very Good) and 5 (Extremely Critical).² Gender diversity in 2020 was 79% male and 21% female.³ Data as of December 2021. Data presented next to arrows for increment or reduction, are in comparison to 2020.

Our Sustainability Approach

Sustainability at Air Selangor is guided by the Air Selangor Sustainability Framework which supports the Company's Vision and Mission. The efforts taken are underpinned by the Air Selangor Core Values and sustainability material matters identified through the materiality assessments that we undertake. The Sustainability Framework sets out the company's approach to sustainability, defines how sustainability is governed and identifies initiatives to be carried out in line with the sustainability strategies, reporting performance, and stakeholder engagement.

Sustainability Governance

At Air Selangor, sustainability efforts are driven by the Sustainable Development Unit and supported by the Sustainability Working Committee. The Management Committee ("MC") has oversight to ensure effective implementation and integration of sustainability across the organisation. The Management communicates relevant sustainability updates to the Board of Directors ("Board") every quarter.

Chief Executive Officer & Management Committee



The CEO and Management committee oversees the implementation of sustainability initiatives, and development of sustainability strategies.

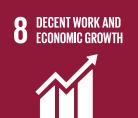
Our Contribution to the Sustainable Development Goals

As a water services provider, Air Selangor has identified five priority SDGs to contribute towards, particularly 6, 8, 12, 13, and 16. SDG 6 is the main priority, in line with Air Selangor's business of providing clean water and managing water resources sustainably for the benefit of its stakeholders. By delivering targeted outcomes under SDG 6, Air Selangor is also positively contributing to the other SDGs.

Sustainable Development Unit



The Sustainable Development Unit within the Sustainability & Water Conservation Section, Risk Management Department leads the sustainability strategies and initiatives, conducts regular reporting on sustainability initiatives, and provides support to the Management on sustainability risks and opportunities.



Sustainability Working Committee



The Sustainability Working Committee supports the Sustainable Development Unit in implementing sustainability strategies and initiatives, recommend changes in material matters, identify, manage, and monitor action plans.



The following summarises our approach toward the achievements of the SDGs, which includes:

1. Aligning Air Selangor's long-term sustainability strategy under each of the priority SDGs with the regulators' focus areas and the operating landscape.
2. Building evidence by monitoring and reporting data to demonstrate progress and highlight areas for improvement.
3. Engaging with various stakeholders along the value chain, including regulators and policymakers to strengthen partnerships towards achieving the SDGs for the industry.

Our Priority SDGs & SPIs that support them	Our Contribution (2021)
 SPI 1, 2, 3, 4, 7	<ul style="list-style-type: none"> Supplied treated water to 280 consumers in two <i>Orang Asli</i> villages in Bukit Lagong, Gombak and Bukit Kechil, Kuala Langat. Achieved 100% compliance to the Ministry of Health's ("MOH") Quality Assurance Programme with zero violations for <i>E. Coli</i> and zero simultaneous violations incidents for <i>E. Coli</i> & free residual chlorine. Achieved 99.80% compliance with the MOH Drinking Water Quality Standards. Actively monitored raw water quality at all intake sources through a team of technical experts who will notify the relevant authorities if pollution is detected. Joint venture with IWK to embark on water reclamation initiatives. The maiden water reclamation plant in Setia Alam is currently able to supply up to 4.0 MLD of reclaimed water. Working towards a zero effluent discharge operating model for all WTPs to minimise the impact on the environment. Committed to reducing water loss in its operations and has successfully reduced this to 27.93% in 2021 from 28.53% in 2020. Actively promote water conservation through various educational and awareness programmes in partnership with educational institutions and state assemblymen. This includes distributing free water thimbles and promoting the Air Selangor Water Handbook to help consumers reduce water use. Published the 'Water Handbook – Sustainable Consumption and Conservation for Individuals and Organisations', to introduce ways to use water sustainably. Conducted four River Care programmes in collaboration with Friends of River Malaysia ("FoRM").
 SPI 1, 2, 3, 6	<ul style="list-style-type: none"> Employed more than 5,000 skilled employees and provided them with competitive remuneration and benefits. Identifying ways to improve diversity at the workplace and creating equitable opportunities for growth, welfare, and well-being. In 2021, our employee turnover rate was at 6.44%. Promoted the importance of road safety, especially to its meter readers who are always on the road, by organising programmes to prevent road accidents such as Health, Safety and Environment Stand Down and distribution of motorcycle high visibility vests. No direct hiring of migrant labour. All suppliers and vendors are also required to adhere to appropriate health and safety standards in managing their employees/workforce as stipulated in their contracts.
 SPI 1, 3, 4, 7	<ul style="list-style-type: none"> Optimising the water treatment process and chemical usage by using technology such as advanced treatment processes. The chemicals are certified by SPAN, SIRIM, and/or Jabatan Kemajuan Islam Malaysia ("JAKIM"), where applicable. Managing the various residuals from the water treatment process to meet full compliance with the Environmental Quality (Scheduled Wastes) Regulation 2005. Continuously exploring recycling solutions to treat effluents and thus reduce freshwater abstraction. Reduced impact on the environment by implementing GSR, the Recycle for Life campaign, and optimised how energy and other resources are used by implementing Energy Savings Pilot Projects. Assessing the use of alternative coagulants to reduce the amount of residuals produced and landfilled. Publication of annual sustainability report in accordance with GRI Standards.

Our Priority SDGs & SPIs that support them	Our Contribution (2021)
 SPI 3, 7	<ul style="list-style-type: none"> Working towards climate-proofing its operations to ensure a sustainable water supply. Adopted new methods of raw water storage via ORS and HORAS 600 to minimise the impacts of water scarcity that may arise due to climate change. Taking steps to reduce internal carbon emissions through efficiency measures and renewable energy opportunities. Identified plans for climate change impact preparedness.
 SPI 1, 2, 3, 4, 7	<ul style="list-style-type: none"> Introduced mandatory e-learning module on Anti-Bribery and Anti-Corruption Module for all employees to ensure awareness. Organised Engagement with Rasau Water Supply Scheme Bidders and Tender Briefing to reiterate Air Selangor's zero-tolerance policy towards acts of corruption and bribery. Continuous service delivery improvement by engaging stakeholders, and being responsive to customers, while communicating challenges, strategies, and performance transparently.

Air Selangor's Sustainability Strategy

Air Selangor derived a set of strategies for OP1 between October 2019 and 2022, which are focused on addressing current gaps and identifying opportunities for further improvement. These strategies were derived from the materiality assessment exercise, stakeholder engagement sessions, as well as existing and future plans that are aligned with the company's sustainability ambition and have been approved by Management for implementation.

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The progress of these strategies is disclosed in the following pages of this report.

Strategy 1 Enhancing Governance & Integrity

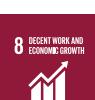
- a. Embed sustainability governance mechanisms to ensure management oversight.

SPI 3: Improving Operational Efficiency



- b. Establish and implement an international standard of ethical behaviour throughout the organisation.

SPI 1: Water Forever



Strategy 2 Standardising Data & Processes

- a. Integrate and streamline all data management processes and systems across the organisation.

SPI 2: Improvement to Asset Reliability & Resilience



SPI 3: Improving Operational Efficiency

- b. Establish a system for monitoring and analysing sustainability related data.

SPI 3: Improving Operational Efficiency



Strategy 3 Transparent Communication

a. Enhance communications throughout the organisation and externally with customers through new and existing platforms.	SPI 4: Towards Best Customer Experience SPI 6: Creating Conducive Working Environment	
b. Establish an annual Sustainability Reporting process which integrates performance data and sustainability commitments.	SPI 3: Improving Operational Efficiency SPI 7: Environmental Stewardship	

Strategy 4 Reducing Environmental Impact

a. Improve operational efficiency and cost savings through effective energy management.	SPI 3: Improving Operational Efficiency SPI 7: Environmental Stewardship	
b. Reduce environmental impact of operational waste and effluent.	SPI 3: Improving Operational Efficiency SPI 7: Environmental Stewardship	
c. Lead by example through efficient use of water in the face of climate-change.	SPI 1: Water Forever SPI 7: Environmental Stewardship	

Strategy 5 Be Socially Responsible

a. Embed a culture of health and safety throughout the organisation.	SPI 6: Creating Conducive Working Environment	
b. Enhance product quality and protect customer health through continuous improvement.	SPI 1: Water Forever SPI 4: Towards Best Customer Experience	
c. Identify and develop an impactful flagship corporate responsibility programme.	SPI 1: Water Forever SPI 7: Environmental Stewardship	
d. Create opportunities to promote and enhance employee diversity.	SPI 3: Improving Operational Efficiency SPI 6: Creating a Conducive Working	

In 2021, Air Selangor developed a longer-term sustainability strategy up to 2030 in line with business plans and emerging sustainability risks and opportunities for its business operations. This strategy is being deliberated and will be disclosed in the next sustainability report upon approval.

Sustainability Performance Highlights

Enhancing Governance and Integrity

Introduced **Governance and Risk Information System ("GARIS")**, an online platform for risk assessment, monitoring, and reporting.

Established a crisis escalation matrix for non-water related emergencies.

19 Air Selangor's panel land surveyors participated in the **Integrity Awareness** event.

Buddy Region initiative implemented to ensure adequate manpower and seamless staff deployment during the pandemic period.

Implemented:
Anti-Bribery and Anti- Corruption ("ABAC") Framework, Policy and Procedures.

Cross-WTP Manpower Training programme conducted to create multi-talented workforce to maintain business continuity.

Dedicated whistleblowing channel via
etika.air@airselangor.com

99% of employees completed the Anti-Bribery and Anti-Corruption module.

56 contractors participated in the Tenderer's Satisfaction Survey.

Engagement with **86 participating bidders of Rasau Water Supply Scheme** on Air Selangor's zero-tolerance policy toward acts of corruption and bribery.

Integrity Virtual Roadshow:
Speak Up A total of 12 sessions carried out reaching 758 employees.

8 whistleblowing cases were recorded with one case forwarded to Human Resource and Administration Department for further investigation.

Standardising Data and Processes

Completed the commissioning of the **Intelligent Command Centre** with improvements in certain key functions

Data Analytics Centre Introduced **Exploratory and Predictive Analytics** to drive business decision-making.

Embarked on **Enterprise Content Management System ("ECMS")**

Received recognition for the successful implementation of the **Integrated Management System** comprising 5 Management Standards:

ISO 9001:2015
Quality Management System

ISO 14001:2015
Environmental Management System

ISO 45001:2018
Occupational Health and Safety Management System

ISO/IEC 27001: 2013
Information Security Management System

ISO 55001:2014
Asset Management System

Completed pilot implementation of the **Identity and Access Management System** to reduce cybersecurity risk.

Change of Ownership online application upgraded to the **eForm platform** and gathered **13,832 applications**

Introduced **Security Access Management System** to enhance security system by implementing online registration for entry to Air Selangor premises.

Completed **Closed-Circuit Television System** implementation with **947 cameras** at **135 premises**

Transparent Communication



368,341
Facebook Followers



64,291
Twitter Followers



31,464
Instagram Followers

Air Selangor launched its **Henti Tugas microsite** to provide a platform for customers to obtain information related to water disruption.

Introduced **Help Centre**

for customers to submit inquiries and check the status of queries raised



2,574,915

Air Selangor
Mobile App Downloads

+5.00

Net Promoter Score (NPS)

72.10%

Customer Satisfaction (CSAT) score

51.48% e-Bil

e-Bil sign-up rate by customers

78.00%

Corporate Trust score



Enhanced and introduced features to the **Air Selangor Mobile Application**, allowing access to enhanced **e-Bil registration** features and notification settings.

Operational Excellence

251,901 analysis conducted to test water quality	9,027 Pipe Cleaning Works	265 Reservoir Cleaning Works	100 New Hybrid Distribution Water Quality Real-Time Analyser ("HYDRA") stations
1,822 mil.m³ Volume of Treated Water Produced	8,418,100 Total number of consumers	5 new Off-Plant Autonomous Chlorine Injection System ("OACIS")	
144 reservoirs and 54 pump houses rehabilitated	97,095 assets have been registered in Total Asset Management System ("TAMS")	99% local procurement with 3,471 active vendors	

Reducing Environmental Impact

192.50 Million Litres/Day NRW Savings in 2021	31.70 Million Litres/Day Savings through meter replacement and meter relocation works	Average internal water consumption 62.02 litres per capita per day	52,963m³ Total Internal Water Use
Introduced the Hydro Squad featuring Nabil Ahmad, Aishah Sinclair, and Arwind Kumar to educate the public on water conservation.	Presented a donation of RM50,000 and a woodchipper machine worth RM13,000 to FoRM.	11,027kg of recyclables were collected via the Recycle For Life Campaign	99,523 Total leaks detected through Active Leak Detection programme
ZERO violations recorded for Environmental Quality (Scheduled Waste) Regulations 2005 and Environmental Quality (Clean Air) Regulations 2014	ZERO notices, compounds, or fines for non-compliance with environmental regulations	In response to the December floods , Air Selangor deployed 81 tankers as well as set up static water tanks and water filling stations	Reduction of 0.25% in carbon emission intensity for billed water volume

Be Socially Responsible

33% Management Positions held by Women	6.44% turnover rate	Introduced 90-day maternity leave	RM3.3 million Investment in Training and Development of Employees
202 Training Programmes 121,723 hours of Learning Recorded.	Average Training Hours per Employee by Gender: 39.07 - Female 29.24 - Male	Identified 53 Potential Employees under the Talent 2.0 Programme	Total contribution of RM802,800 to assist employees affected by the December Floods.
Launched Air Selangor Fitness Centre at Headquarters	Participation by 3,126 employees for record-breaking feat in conjunction with Malaysia's 64th National Day Celebration .	100% Retention rate among employees who took parental leave for the year .	Appointed two certified counsellors and identified 20 employees to serve as Rakan Prihatin for the benefit of employees' mental health.
ISO 45001:2018 Certification of Occupational Health and Safety Management System ("OHSMS")	0.53 Lost Time Injury Frequency Rate (LTIFR)	Implementation of Indoor Air Quality ("IAQ") walkthrough inspections for all premises	
Placed 47 air quality sensors at Headquarters	Sesama Mara Grassroot initiatives continued to be held to support communities during the COVID-19 Pandemic .	258,896 Applications received for Skim Air Darul Ehsan	99.90% Employee vaccination completion rate

Head Office

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