



# Creating Ripples of Change

Sustainability Report 2024



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# About this Report

Pengurusan Air Selangor Sdn Bhd (Air Selangor) is pleased to present our 2024 Sustainability Report. This Report scrutinises the significant economic, environmental, and social impacts of our organisation in 2024, providing comprehensive and balanced information for stakeholders.

This Report has been prepared in accordance with the Global Reporting Initiative (GRI) and Sustainability Accounting Standards Board (SASB) standards for Water Utilities and Services industries. The relevant GRI indicators, sustainability disclosure topics, and accounting metrics are detailed in the GRI Content Index table, found within this Report.

## Scope and Boundary

The 2024 Sustainability Report forms part of an annual series tracking the company's sustainability strategy, activities, and programmes implemented, along with performance recorded over the period from 1 January 2024 to 31 December 2024. This Report encompasses all of Air Selangor's operations at our headquarters, ten (10) customer service offices and 12 regional offices, as well as all operational assets in Selangor, Kuala Lumpur, Putrajaya, and Pahang. Pertinent information from previous years has been restated as indicated in the footnotes of relevant sections of the Report.

## Approach to Materiality

We report based on material matters, assessed biennially to ensure continued relevance. This process ensures that our strategy, performance, and prospects are illustrated in the correct context. Our response to material matters in the economic, environmental, social, and governance aspects of our business has also been considered. In developing the 2024 Sustainability Report, we have further included qualitative and quantitative performance measurements, as well as other factors that may have influenced business sustainability.

## Let Us Hear from You

We are committed to continuously enhancing our disclosures in this Report in order to better serve our stakeholders. We invite you to address any questions, comments, or suggestions to [sustainability@airselangor.com](mailto:sustainability@airselangor.com).



Scan to view our  
Sustainability Report online

# Inside this Report

The Air Selangor 2024 Sustainability Report provides a comprehensive account of our progress, performance, and priorities across six (6) key sustainability pillars. The Report demonstrates our commitment to operational excellence, environmental stewardship, digital transformation, and community wellbeing, while highlighting our alignment with global sustainability standards.

This year's Report is anchored by the theme 'Creating Ripples of Change', which captures the cumulative impact of our actions across the value chain. The theme reflects our belief that each initiative has the potential to generate positive, far-reaching outcomes that strengthen water security, social equity, and long-term sustainability.

The Report begins with messages from the Chairman and Chief Executive Officer (CEO), which outline Air Selangor's strategic direction for the year and reaffirm our long-term commitment to sustainable development. This is followed by the Key Performance Dashboard, which provides a high-level summary of core operational data, including non-revenue water (NRW) reduction, carbon intensity, water quality compliance, gender diversity, and other aspects.

Each pillar is presented in detail:

## Pillar 1: Strengthening Governance and Increasing Transparency

This section outlines our corporate governance framework, enterprise risk management practices, anti-corruption measures, and business continuity planning. It includes our response to cybersecurity risks, in alignment with Malaysia's new Cybersecurity Act.

## Pillar 4: Delivering Customer Service Excellence

This section provides a detailed overview of our approach to customer experience, including water quality assurance, improvements in digital service delivery, real-time communication platforms, and complaint-resolution mechanisms. The section also includes analysis of service performance and public engagement initiatives.

## Pillar 2: Reducing the Impact of Climate Change

Pillar 2 outlines our environmental management approach, including carbon emissions tracking, progress toward our Net Zero Energy Vision 2040, and initiatives aimed at improving energy efficiency and water conservation. Full-year environmental performance data is included.

## Pillar 5: Leveraging Digitalisation to Support a Circular Economy

This pillar captures our progress in becoming a digital utility through key features such as the Intelligent Command Centre (ICC), HydroSmart, and the launch of Air Selangor 2.0, an upgraded version of our mobile application and web platform.

## Pillar 3: Prioritising Employee Health, Safety, Competency and Diversity

This pillar highlights our efforts to promote a safe, inclusive, and engaged workforce. It covers health and safety training, wellness programmes, professional development initiatives, workforce demographics, and results from internal engagement activities.

## Pillar 6: Giving Back to the Community

The final pillar presents our corporate social responsibility (CSR) initiatives, including programmes such as Box of Hope, festive aid distribution, online education support for underserved communities, and volunteer engagement through the Hydro Heroes programme. It also includes updates on the Skim Air Darul Ehsan (SADE), our state-driven water accessibility initiative.

**Data, Standards, and Frameworks.** The report follows Bursa Malaysia's Sustainability Reporting Guide, and incorporates guidance from GRI Standards, SASB guidelines (Water Utilities), the UN SDGs, and the Greenhouse Gas (GHG) Protocol. Performance data and materiality assessments are mapped accordingly.

# Chairman's Note

## Assalamualaikum warahmatullahi wabarakatuh, Salam Kita Selangor.

There hasn't been a time in history more pressing than today when people think or speak about water. It has become synonymous with climate change. Too much water, and we stare down the barrel of floods. Too little, and the dread of water cuts strikes worry and fear into both the regular person and folks in industry.

### Strengthening Selangor's Water Resource

On that front, the State Government of Selangor has always prioritised water security as a foundation of inclusive, sustainable growth. In line with the First Selangor Plan (RS-1), Air Selangor has been a key agency tasked to up the game when it comes to water, both in terms of managing our raw water resource, and then ensuring that our infrastructure to treat and supply water rivals Asia's best, at the very least. This is crucial as we adapt to an increasing population from people all over Malaysia who choose Selangor as their home.

One of our most significant interventions was the introduction of the Raw Water Guarantee Scheme, a state-driven initiative that serves to increase water security, provides upstream assurance for raw water supply through long-term resource allocation, policy reform, and strategic investment.

This scheme is designed to reduce Selangor's vulnerability to river pollution, drought, and climate-related disruptions. By diversifying water sources, strengthening inter-agency collaboration, and ensuring environmental sustainability, the Raw Water Guarantee Scheme reinforces our long-term commitment to safeguarding the state's raw water needs.





To ensure raw water security, the State Government's Zero Discharge Policy will help Air Selangor reduce the risk of water disruption at source, and allow the state-owned company to increase its efforts into upgrading the infrastructure at water treatment plants and the supply of water to households and industry via reservoirs and pipes.

With initiatives such as Program Lestari Air for schools, Program Hargai Air for religious organisations, and Program Jom Jimat Air in partnership with ADUN offices and for corporate entities, we are committed to efficient water use and environmental stewardship and will continue to evolve in support of this policy.

These initiatives also complement broader state policies such as the Integrated River Basin Management Plan and Smart Selangor, which reinforces our ambition to build a green, resilient, and inclusive state.

## Aligned with Sustainable Development Goals

Selangor's water policy direction is deeply aligned with the United Nations Sustainable Development Goals (SDGs). In particular, Goal 6: Clean Water and Sanitation, Goal 11: Sustainable Cities and Communities, and Goal 13: Climate Action, which act as pillars in our planning and governance frameworks.

With Air Selangor as our enabler, we continue to embed sustainability principles in infrastructure development, urban planning, and industrial policy. The ongoing expansion of the Rasau Water Supply Scheme is a clear example of a project that will be benefiting almost three million consumers in Klang, Petaling and Kuala Langat regions with the supply of 1,400 MLD when it is fully completed in 2031.

## Public Service with Purpose

Our continued support for the Skim Air Darul Ehsan (SADE) – a state-funded programme providing free, clean and safe treated water to eligible households has demonstrated our commitment to ensuring no one is left behind. Overall, this initiative remains a vital safety net for low-income families in Selangor.

The ripple effect of this programme extends beyond financial relief. It strengthens social safety nets and reinforces the principle that everyone should have access to clean and safe treated water. Through targeted assistance and cross-agency coordination, we continue to make water affordable and accessible to all.

Overall, SADE has helped to benefit 324,257 people in Selangor with RM225,781,269.92 has been disbursed by the State Government.

## Looking Forward: A Smart Water Future

Policy leadership at the state level must continue to enable innovation, cross-sector collaboration, and climate resilience. We remain steadfast in our pursuit of a people-centric water system to sustainably serve households, industries, and future generations.

Improving water conservation, managing demand, and increasing water reserve margins must be shared responsibilities among government agencies, the private sector, and the *rakyat*. Overall, the State is committed to advancing a holistic and sustainable approach to water management – one that recognises the interdependence of policy, governance, environmental stewardship, and service delivery.

Guided by a long-term vision, the state is actively reviewing policies that not only enhance water security but also empower integrated and resilient water management and services.

Through close collaboration with key ecosystem stakeholders such as Suruhanjaya Perkhidmatan Air Negara (SPAN), Lembaga Urus Air Selangor (LUAS), local authorities and other regulatory and environmental bodies, Selangor is taking a proactive stance to safeguard water sources. This integrated ecosystem perspective enables the State to align policy, infrastructure, and innovation; ensuring that every part of the water cycle is managed with care, foresight, and accountability.

## In Gratitude

'Creating Ripples of Change' isn't just this year's theme, it's a reminder that even the smallest actions can spark meaningful change. Every initiative has the potential to uplift communities and shape a stronger, more inclusive state.

As we continue to navigate a changing climate, a growing population, and evolving consumer expectations, I am confident that Air Selangor will continue rising to the challenge. I extend my deepest appreciation to our Board of Directors for their guidance, the management team for their leadership, the team at Air Selangor for their tireless dedication, and to our stakeholders for their trust and collaboration.

Together, we will continue to protect and enhance our water ecosystem, not only for today, but for generations to come.

Yang Amat Berhormat  
**Dato' Seri Amirudin Bin Shari**  
Chairman



# Message from the Chief Executive Officer

## Dear Valued Stakeholders,

Five years ago, we embarked on a bold and necessary journey - to embed sustainability at the heart of everything we do at Air Selangor. We began by setting clear goals, mapping strategic milestones, and aligning our operations with a long-term vision for a more resilient and inclusive water future. We now stand at a pivotal juncture. In 2024, we transitioned from planning to performance, and from ambition to measurable action. It is with great pride and purpose that I present Air Selangor's 2024 Sustainability Report – a testament to our progress and a reaffirmation of our commitment to the communities we serve.



At Air Selangor, our mission is straightforward yet profound: to deliver clean, safe, and uninterrupted treated water with joy in every drop. But fulfilling this promise is far from simple. It demands foresight, discipline, innovation, and above all, sustainable thinking. The question we ask ourselves daily is: How do we ensure that this essential service remains resilient - not just for today, but for generations to come?

### Delivering Tangible Progress: Operational Excellence and Financial Resilience

The answer lies in creating ripples of impact – strategic, deliberate actions that catalyse enduring change. I am proud to reflect on the meaningful strides we made in 2024, where investment in infrastructure, innovation, and talent translated into measurable outcomes.

A key highlight of our operational success is the continued reduction of non-revenue water (NRW), long recognised as one of the sector's most persistent challenges. I am pleased to report that we reduced our NRW rate to 27.00%, a notable improvement from 27.75% in 2023. This advancement not only curbs inefficiencies but also enables significant cost savings, reinforcing our ability to serve over 9.62 million people across Selangor, Kuala Lumpur, and Putrajaya with greater reliability.

In parallel, we increased our water reserve margin to 18.60%, an increase from 15.34% in 2023, further strengthening our capacity to meet growing demand. Our average daily production now stands at 5,306 million litres per day (MLD), made possible through strategic enhancements to treatment infrastructure and the unwavering dedication of our operational teams.

On the financial front, our strength remains grounded in prudent, forward-thinking instruments such as the SRI Sukuk Kelestarian, which earned the prestigious Best SRI Sukuk Award at the 2024 Triple A Islamic Finance Awards by The Asset. This facility is not just a financial mechanism – it is a catalyst for long-term investment in sustainability-driven infrastructure.

In 2024, Air Selangor recorded total revenue of RM2.98 billion. While this reflects a marginal year-on-year increase, it prompted a necessary recalibration of our financial strategy. The hard truth remains – we incur losses for every litre of water sold, which hampers our ability to sustainably maintain and expand critical services for our customers.

To address this, the water tariff adjustment – as announced by the Suruhanjaya Perkhidmatan Air Negara (SPAN) – was implemented in February 2024. This was not a decision taken lightly, but it was an essential one. The resulting investments have enabled us to replace over 146.50 kilometres of aging pipelines, upgrade treatment facilities, and enhance our customer-facing digital platforms like our app to introduce tools that help reduce water loss. These efforts reflect our unwavering commitment to long-term value creation – for both our customers and our business.

## Operational Excellence and Strategic Transformation

Our commitment to operational excellence continues to deliver value across the company. We are guided by core principles that promote the values of teamwork, honesty, integrity, professionalism, and a deep commitment to delivering the highest standards of service. These values form the foundation upon which our 5,000-strong workforce delivers clean and safe treated water every day to our consumers.



Our team conducts rigorous testing and active infrastructure management to maintain a safe water supply. Currently, we operate 1,517 water sampling stations, 12 river monitoring stations, and 39 Off-Plant Autonomous Chlorine Injection Systems (OACIS), allowing for proactive responses to changes in water quality. As a result, we have successfully maintained a water quality compliance rate of 99.93% in line with the Ministry of Health's Drinking Water Quality Standards.

At Air Selangor, we believe that change starts with us. In our efforts to boost water conservation, we have successfully maintained an internal water use rate of 43 litres per capita per day (LCD). We strongly believe that water conservation is a national effort, and this goal can be made a reality by building awareness and educating our customers to make better choices. Domestic daily water consumption in 2024 reached 238 LCD, down from 241 in 2023. This reduction is in line with SPAN's target of reducing consumption to 160 LCD by 2030. We will continue to empower our teams and customers to understand and manage their own consumption on the journey to achieve this target.

To drive this change, and as part of our digital transformation, we launched the enhanced version of our mobile application and web platform. We designed it to empower users with data and insights on their water usage with a feature that lets customers track and monitor their daily water usage. With this, we hope to cultivate a culture of shared responsibility in water conservation.

As we transition to becoming a digital utility, we continue to build intelligence into our networks. Artificial intelligence (AI) and machine learning (ML) are being applied to predictive pipe maintenance, allowing us to detect vulnerabilities before they lead to disruptions. We are also collaborating with the Selangor State Government and Google in a sandbox initiative, where innovative water management solutions are tested and scaled for broader impact.

## Elevating the Customer Experience and Deepening Trust

At Air Selangor, our customers are more than service recipients – they are the reason we exist. Their trust empowers us to strive for excellence, to listen more intently, and to serve more meaningfully. In 2024, that trust was reflected in measurable ways, reinforcing the strength of our relationships and the value of our customer-centric approach.

Our Net Promoter Score (NPS) rose to +26, a remarkable leap from +4 in 2023, signalling growing customer advocacy and confidence in our services. While our Customer Satisfaction Index (CSI) registered a slight dip to 80.3%, down from 83%, we view this as a critical opportunity to recalibrate and further refine our service delivery. Trust, after all, is not built in a moment – it is earned over time, through consistency, integrity, and care.

This commitment to trust was also affirmed in our Corporate Reputation Index (CRI) survey, conducted biennially. In 2024, stakeholder trust climbed to 87%, a substantial increase from 75% in 2022. These figures underscore the positive impact of our strengthened engagement strategies and our relentless pursuit of reliability and transparency.

Central to this transformation has been our drive to modernise communication. By advancing our digital platforms, we achieved a 78% sign-up rate for e-Bil, a key milestone in our journey toward a more sustainable, paperless, and user-friendly experience. Moving forward, we will continue to expand digital touchpoints – enhancing accessibility, accelerating response times, and fostering greater transparency across all customer interactions.

## Expanding Impact Through Sustainability and Community Investment

At Air Selangor, we believe that enduring change is built on consistent, purposeful action. In 2024, we continued to advance initiatives that not only reflect our deep-rooted commitment to sustainability but also extend our impact across both environmental and social dimensions. By embracing a holistic approach, we are striving to build a future where thriving communities and climate responsibility go hand in hand.

Our vision is clear – to achieve Net Zero Energy by 2040, a bold yet necessary ambition that aligns with Malaysia's national goal of carbon neutrality by 2050. This commitment is more than aspirational; it is actionable. A key step forward was the commissioning of 9.0 MWac of solar photovoltaic installations at our Sungai Selangor Phase 2 Water Treatment Plant, and a further 10.5MWac in the process of commissioning at the Sungai Selangor Phase 3 Water Treatment Plant. These clean energy investments are cornerstones of our decarbonisation strategy, enabling us to reduce emissions while ensuring operational resilience. We are already seeing the results. In

2024, our carbon emissions intensity fell to 0.544 kgCO<sub>2</sub>e per cubic metre of water billed, a clear and measurable indicator of our progress towards a lower-carbon future.

Our pursuit of sustainability, however, goes beyond environmental stewardship - it extends to people and the communities we serve. We recognise that sustainability is only meaningful when it uplifts lives. That is why our Sesama Mara programme reached nearly 2,000 families, individuals, and charitable homes this year, offering essential support, resources, and reassurance to those most in need. Meanwhile, through the Hydro Heroes volunteer programme, we provided a platform for our employees to give back to the communities through volunteerism and outreach activities, clocking in 720 volunteer hours throughout 2024.

Through these efforts, we reaffirm our belief: that sustainability is not a side initiative - it is central to who we are, and to the legacy we are building for the future.

## Recognition and the Road Ahead

It is also with great pride that I report that our work and progress have not gone unnoticed. In November 2024, Air Selangor was named Sustainability Rising Star at the Asia Corporate Excellence and Sustainability (ACES) Awards, a recognition that celebrates our leadership in sustainability, innovation, and governance. This award stands as a symbol of the effort put in by each and every one of our employees across every department, reinforcing our responsibility to lead by example in the region.

Looking ahead, we are working on initiatives based on built-operate-transfer (BOT) models and central water reclamation (CWR) projects. Our investments into BOT and CWR projects are part of a strategic shift towards a more sustainable and performance-driven operating model. By partnering with contractors who benefit from cost savings, we are able to optimise resources, improve service delivery, and reduce long-term operating costs. With this, we can ensure better value creation for the company and our customers.

Through these initiatives and projects, we are confident that we can meet the demands for clean and safe treated water, while increasing water reserve margins and improving our bottom line. This is made possible through Skim Jaminan Air Mentah (SJAM) which strengthens raw water security through policy enhancement and targeted investment. We believe that these initiatives are complementary to our services and provide fundamental solutions to address Selangor's ability to respond to drought, pollution, and climate-related challenges.

## A Shared Mission for Generational Impact

As we reflect on the journey of 2024, it becomes clear that every milestone achieved was the result of shared vision, unwavering commitment, and purposeful collaboration. These successes were not realised in isolation - they were made possible by the collective efforts of all who believe in our mission and contribute to our progress.

I extend my deepest appreciation to our Board of Directors, whose strategic guidance and stewardship have been instrumental in shaping the path forward. I also commend the Management Team for your relentless pursuit of excellence and for championing the integration of sustainability across our operations.

To the dedicated employees of Air Selangor - your passion, resilience, and sense of purpose continue to drive our transformation. You are the heart of our organisation, and I thank you for turning ambition into action, and action into lasting impact.

To our stakeholders, valued business partners, and loyal customers - thank you for your trust, collaboration, and support. It is your belief in our work that inspires us to raise the bar, every day.

We are also deeply grateful for the continued support of the Selangor State Government, particularly Unit Perancang Ekonomi Negeri (UPEN), Lembaga Urus Air Selangor (LUAS), the Federal Government through the Ministry of Energy Transition and Water Transformation (PETRA); SPAN; and our partners in local authorities and agencies. Your collective leadership and guidance have been instrumental in enabling us to meet and exceed national sustainability benchmarks.

Together, we are creating ripples of change - not only through large-scale infrastructure projects or policy shifts, but in every thoughtful decision, every act of service, and every drop of water we deliver. These ripples gained international momentum with our recent induction into the Leading Utilities of the World (LUOW) network in May 2025, a historic milestone that makes Air Selangor the first Malaysian water services provider to earn this prestigious global recognition.

This honour is more than an accolade; it is a reflection of our enduring commitment to sustainability, innovation, and to shaping a future defined by resilience, equity, and sustainable abundance - for today's communities and for generations to come.

**Adam Saffian Ghazali**  
Chief Executive Officer



# Who We Are

## Board of Directors<sup>1</sup>



### YAB Dato' Seri Amirudin Shari

Chairman/Non-Independent  
Non-Executive Director

YAB Dato' Seri Amirudin Shari holds a Bachelor of Science in Human Development from Universiti Putra Malaysia. YAB Dato' Seri Amirudin is Dato' Menteri Besar Selangor and holds directorship and positions in various organisations, including but not limited to Menteri Besar Selangor (Pemerbadanan), Perbadanan Kemajuan Negeri Selangor, Perbadanan Kemajuan Pertanian Selangor, and Yayasan Selangor.

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5/5 Board Meeting Attendance

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### YB Dato' Dr Ahmad Fadzli<sup>2</sup>

Non-Independent  
Non-Executive Director

YB Dato' Dr Ahmad Fadzli Ahmad Tajuddin holds a Doctorate in Business Management from Universiti Sains Malaysia. He also holds a Master of Business Administration from Universiti Kebangsaan Malaysia, as well as a Bachelor of Arts (Honours) degree in Islamic Revealed Knowledge and Heritage Studies from the International Islamic University Malaysia. YB Dato' Dr Ahmad Fadzli currently serves as the Selangor State Secretary. Prior to this, he held the position of Selangor State Financial Officer. In addition, among the key positions he has held were Head of Management Development and Innovation Cluster at the National Institute of Public Administration (INTAN), and the Yang Dipertua of the Klang Municipal Council (now known as the Royal Klang City Council).

2. YB Dato' Dr Ahmad Fadzli was appointed as board member on 21 March 2025.

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Appointment Date: 21 March 2025

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1. YB Dato' Setia Hj Haris Kasim resigned as Director on 31 January 2025. He attended 3 out of 5 Board Meetings held in the financial year ended 31 December 2024.



### **YB Dato' Ir. Izham Hashim**

Non-Independent  
Non-Executive Director

YB Dato' Ir. Izham Hashim holds a Master of Business Administration from the University of Malaya and a Bachelor (Hons) of Civil Engineering from the University of Newcastle Upon Tyne, United Kingdom. YB Dato' Ir. Izham Hashim holds directorships and positions in various organisations, including but not limited to Lembaga Urus Air Selangor, Perbadanan Kemajuan Pertanian Selangor, and Perbadanan Kemajuan Negeri Selangor.

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3/5 Board Meeting Attendance

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### **YBhg. Dato' Teo Yen Hua**

Independent  
Non-Executive Director

YBhg. Dato' Teo Yen Hua holds a Master of Business Administration with Advanced Certificate in International Business from New Hampshire College, the United States of America and a Bachelor (Hons) of Arts (Economics) from the University of Malaya. YBhg. Dato' Teo was the first Chief Executive Officer of Suruhanjaya Perkhidmatan Air Negara (SPAN), a position he held from March 2007 to August 2014.

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4/5 Board Meeting Attendance

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### **Marina Yong Poh Nyuk**

Independent  
Non-Executive Director

Marina Yong Poh Nyuk (Marina) holds a Master of Science, Biological Oceanography from the University of Washington, Seattle and a Bachelor of Science in Marine Science and Biology from the University of Miami, Florida, the United States of America. Marina sits on the Board of Governors of Malaysian Institute of Corporate Governance (MICG) and holds directorships in Sustainability Momentum Sdn Bhd and Proforest Sdn Bhd.

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4/5 Board Meeting Attendance

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## Haslina Mansor

Independent  
Non-Executive Director

Haslina Mansor (Haslina) holds a Bachelor of Law (LLB) Honours from the University of Malaya. Haslina was the Chairman of the Special Commissioners of Income Tax, Ministry of Finance, a position she held from 2020 before retiring in October 2021. She previously served as the Chairman of the Advisory Board in the Prime Minister's Department from 2018 to 2020. Prior to that, she was appointed to various senior positions, among them as Director of Certificate of Legal Practice (CLP) Examination of the Legal Profession Qualifying Board from 2016 to 2018, as the Director General of Insolvency from 2014 to 2016 and the Head of the Legal Division in the Economic Planning Unit and Public Private Partnership Unit of the Prime Minister's Department from 2006 to 2010. She began her legal career as a government legal advisor serving various Ministries involving the broadcasting sector, health sector, social security services, domestic trade, and consumer affairs.

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5/5 Board Meeting Attendance

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## Vilashini V.Ganespathy

Independent  
Non-Executive Director

Vilashini V.Ganespathy (Vilashini) holds a Bachelor of Science (Hons), majoring in Accounting from the Queen's University of Belfast, United Kingdom and is a Certified Internal Auditor (CIA). Vilashini is a fellow member of the Association of Chartered Certified Accountants (ACCA), a member of the Malaysian Institute of Accountants (MIA) and an associate member of the Institute of Internal Auditors Malaysia (IIAM). She is currently with ACCA responsible for the development and execution of a wide range of technical and professional development initiatives for accountants in Malaysia and the region. In her role, Vilashini has represented ACCA on various industrial advisory panels, roundtables and regulator-led taskforce in the areas of Integrated Reporting, Sustainability & ESG, Governance and Malaysian Financial Reporting Standards. Prior to joining ACCA, she was Head of Finance for various corporations in the business of automotive, healthcare and technology. She started her career with one of the Big Four accounting firms for six (6) years doing audit and business advisory involving a wide range of Malaysian and multinational clients.

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5/5 Board Meeting Attendance

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## **Tuan Ir. Hj. Nishad Mohamed Hj. C J Mohamed Shaffy**

**Independent  
Non-Executive Director**

Tuan Ir. Hj. Nishad Mohamed Hj. C J Mohamed Shaffy (Tuan Ir. Hj. Nishad) holds a Master of Science in Civil Engineering from the University of Colorado Denver and a Bachelor of Science in Civil Engineering from South Dakota State University, the United States of America. Tuan Ir. Hj. Nishad specialises in Water Resources and Hydrology and held various senior roles in the Department of Irrigation and Drainage then rose to the position of Deputy Director General (Specialist Sector) from February 2020 to May 2021, a post he held prior to his retirement from public service in 2021. He received numerous accolades from the Department of Irrigation and Drainage in appreciation and acknowledgment of his many years of devotional service and had achieved both local and international recognition, most notable for his work in MyCDNET National Forum @ Research Management and Innovation Complex and the United Nations Framework Convention on Climate Change (UNFCCC) – 22nd Conference of the Parties (COP22) (Topic: Flood Mitigation Plan).

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5/5 Board Meeting Attendance

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## **Adam Saffian Ghazali**

**Executive Director**

Adam Saffian Ghazali was appointed CEO of Air Selangor in July 2024, bringing over 24 years of leadership experience in the water services and utility industries. He is a MARA scholar and holds a Master of Applied Taxation from the University of New South Wales and a Bachelor of Business (Accounting & Finance) from the University of Technology Sydney. He is also a Fellow Chartered Accountant with Chartered Accountants Australia & New Zealand and a Chartered Accountant (CA) with the Malaysian Institute of Accountants. His career spans key roles including CEO of Aliran Ihsan Resources Berhad, CFO of Pengurusan Aset Air Berhad (PAAB), and CEO of Alam Flora Sdn Bhd, with earlier experience at PwC in audit and advisory. Adam currently serves as Deputy President of the Malaysian Water Association and is a Strategic Council Member of the International Water Association. His notable achievements include leading water restructuring agreements with seven (7) major operators, driving NRW reduction projects, developing water reclamation plants through alternative financing, and managing large-scale treatment operations – all contributing to the advancement of sustainable water services in Malaysia.

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2/2 Board Meeting Attendance

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## Management Team



### Adam Saffian Ghazali<sup>3</sup>

Chief Executive Officer

*3. Adam Saffian Ghazali's profile has been disclosed in the Board of Directors section.*



### Ir. Abas Abdullah

Director/Head of Planning

Ir. Abas Abdullah has been with Air Selangor since October 2015 and has over 40 years of experience in the water industry. Ir. Abas graduated with a Bachelor of Science (Hons) in Civil Engineering from the University of Strathclyde, United Kingdom and he is also a registered Professional Engineer with the Board of Engineers Malaysia. Ir. Abas served as a Water Engineer at the Selangor Water Supply Department (JBAS) from 1983 to 1998. Throughout his service, he held various positions in terms of water production, distribution, design and planning, consumer management and also as a District Water Engineer. Ir. Abas has previously held the position of General Manager, Business Development and Projects of Premier Ayer Sdn. Bhd. from November 1998 to February 2000. From March 2000 to September 2015, he assumed responsibility as the Chief Operating Officer of Konsortium ABASS Sdn. Bhd., a subsidiary of Kumpulan Perangsong Selangor which is a publicly listed company owned by the Selangor State Government. Ir. Abas was also a Water Advisory Member of the Selangor State Government from 2012 to 2015.



## Kevin Lee Shih-Min

### Head of Finance & Strategy

Kevin Lee was appointed as Head of Finance and Strategy on 15 February 2015 and has over 26 years of experience in finance and economics. Kevin started his career in investment banking with Amanah Merchant Bank and subsequently joined Danaharta. During his seven-year stint with Danaharta, he was seconded to the Ministry of Finance where he advised and played a key role in the implementation of various projects, including the establishment of Pengurusan Aset Air Berhad (PAAB). He subsequently joined PAAB in 2007 assuming the position as Head of Finance and spearheaded efforts to restructure the water supply industry in Melaka, Negeri Sembilan and Johor. Prior to joining Air Selangor, he served as the Head of Group Strategic Planning and Investment at Kumpulan Perangas Selangor Berhad. Kevin holds a Bachelor of Science in Economics from the London School of Economics and Political Science and is a Chartered Financial Analyst (CFA) charterholder.



## Ravindran Karupiah

### Head of Information Technology

Ravindran Karupiah was appointed as Head of Information Technology on 4 February 2015, bringing 32 years of experience in information technology to Air Selangor. Ravindran graduated with a Bachelor of Engineering (Electrical, Electronics and System Engineering) from Universiti Kebangsaan Malaysia in 1988. Prior to joining Air Selangor, Ravindran was the General Manager of Information Technology in Indah Water Konsortium Berhad from 1997 until 2015. He has held various senior positions in previous organisations, namely as Manager, Special Projects and Services in Digi Telecommunications Sdn Bhd from 1995 until 1997, and Manager of Technical Service in Bass Consulting Sdn Bhd from 1990 until 1995. Ravindran was also a Research Fellow of the Malaysian Institute of Microelectronics (MIMOS) from 1988 until 1990.



## Ir. Ainul Azhar Mohd Jemoner

### Head of Planning and Capital Works

Ir. Ainul Azhar Mohd Jemoner (Ir. Ainul) was appointed as the Head of Planning and Capital Works Department from 1 January 2018. He has over 30 years of industry experience. Ir. Ainul graduated with a Bachelor of Science in Civil Engineering from California State University, Fresno, California in 1990 and holds a Master's in Business Administration (MBA) from UiTM-Cardiff Business School. He began his career with the California Department of Transportation (Caltrans) and later joined PLUS Berhad as a senior engineer upon his return to the country. Prior to joining Air Selangor, he was the Senior Engineer 1 in Technical Services for OPUS International Consultants until 2001. Prior to his current position, Ir. Ainul was the Head of Operational Services Department.



## **Kelvin Siew Weng Hoe**

Head of Non-Revenue Water (NRW)

Kelvin Siew Weng Hoe was appointed as Head of NRW on 1 September 2024 since joining the organisation on 3 May 2005. He has 25 years of experience in the water industry; particularly in the fields of water distribution and NRW. Kelvin graduated with a Bachelor of Civil Engineering from Universiti Putra Malaysia in 1999 and has been actively involved in the water industry since then. He has held various senior positions in the organisation over the last 16 years. He started his Air Selangor journey as the Technical Manager for Petaling Region in 2005. He was then seconded to the headquarters in 2008 as the NRW Manager, and was subsequently appointed as the Head of Operation and Maintenance Section in 2011. He then became the Head of Region for Kuala Lumpur in 2012 and the Head of Region for Petaling in 2014, and the Executive Director for NRW Division in 2015. Prior to his current appointment, Kelvin was the Head of Distribution.



## **Thavendran Loganathan**

Head of Risk Management

Thavendran Loganathan was appointed Head of Risk Management for Air Selangor on 1 January 2019 and has served the company since 10 October 2016. He has over 25 years of experience in audit, compliance and risk management. Thavendran graduated with a Bachelor of Accountancy, majoring in Audit and Governance in 2000 from Universiti Putra Malaysia and obtained a Master in Business Administration in 2004 from Universiti Utara Malaysia. He is also a Chartered Accountant (CA) in Malaysia, Certified Integrity Officer (CeIO) and a Certified Sustainability Risk Manager (SRM). Prior to joining Air Selangor, Thavendran previously served as the Deputy Head, Risk Management of Royal Bank of Canada (Malaysia) from 2013 until 2016. He has also held several senior positions namely as the Vice President of Internal Audit in Bank J. Safra Sarasin in Singapore from 2011 until 2013, and as Senior Manager of Operational Risk in Hong Leong Bank, Malaysia from 2009 until 2011.



## **Aris Fadzillah Zulkifli**

Head of Internal Audit

Aris Fadzillah bin Zulkifli was appointed Head of Internal Audit for Air Selangor on 7 August 2017. He has over 15 years of industry experience, particularly in internal audit. Aris obtained a Bachelor of Accountancy in 2002 and a Diploma in Accountancy in 1996 from Universiti Teknologi Mara. Prior to joining Air Selangor, Aris previously served as a Unit Head of AirAsia Berhad from 2015 until 2017 and Assistant General Manager of Kumpulan Perangsang Selangor Berhad from 2012 until 2015. He was also the Senior Manager of Securities Commission Malaysia from 2005 until 2012.



## Ir. Zairi Zainuddin

### Head of Water Quality

Ir. Zairi Zainuddin was appointed as Head of Water Quality on 1 January 2018. He has over 24 years of experience in chemical and process engineering. Ir. Zairi graduated with a Bachelor of Chemical Engineering from Universiti Teknologi Malaysia in 1996. He is a professional engineer registered with the Board of Engineers Malaysia (BEM) and The Institution of Engineers Malaysia (IEM). He is also an accredited member of The Institution of Chemical Engineers United Kingdom (IChemE). He started his career as the Process Engineer of Palm-Oleo Sdn Bhd from 1997 until 1999. Prior to joining Air Selangor, Ir. Zairi served as a Chemical Sales Engineer in Peka Perdana Sdn Bhd and thereafter, as a Process Engineer of Natural Oleochemicals Sdn Bhd in 2000.



## Elina Baseri

### Head of Corporate Communication

Elina Baseri joined Air Selangor on 3 February 2020 and was appointed as Head of Corporate Communication on 1 May 2020. She has over 20 years of experience in corporate and strategic communication, branding, and corporate responsibility. Elina graduated with a Bachelor of Science (Hons) from Michigan State University. Prior to joining Air Selangor, Elina has held various senior positions in major corporations. She previously served as a Deputy General Manager at Perbadanan Insurans Deposit Malaysia (PIDM) from 2018 until 2020 and General Manager, Strategic Communication at Perusahaan Otomobil Kedua Sdn Bhd (PERODUA) from 2016 until 2018. She was also the Head, Corporate Communications of Sapura Kencana Petroleum Berhad from 2011 until 2016. Prior to that, Elina also served as the Manager of Corporate Affairs at Maxis Berhad from 2009 until 2011, Brand Manager at Agensi Kaunseling dan Pengurusan Kredit (AKPK) from 2008 until 2009, and as Marketing Communication Manager at BERNAS from 2002 until 2008.



## Abdul Halem Mat Som

### Head of Customer Experience

Abdul Halem Mat Som was appointed as Head of Customer Experience on 1 September 2020. Abdul Halem has more than 35 years of experience in event management, film production, advertising, manufacturing management, human resources consultancy and training, mass communication, and capital investment. Abdul Halem graduated with a Diploma in Public Administration in 1987, and subsequently with a Bachelor's Degree in Corporate Administration in 1998 from Universiti Teknologi Mara. He obtained a Certificate in Manufacturing Management from the Sanno Institute of Business Administration (SIBA), Tokyo in 1990. He is also the President of UiTM Pahang Alumni and a committee member of Yayasan Siswazah Malaysia. Prior to joining Air Selangor, Abdul Halem served in various multinationals including Omron Malaysia Sdn Bhd and Jami Swilynn Sdn Bhd. He joined Syarikat Bekalan Air Selangor Sdn Bhd in 2014. He has held various senior positions in previous organisations, namely as the Senior Manager, Corporate Communications and Public Affairs Division, and subsequently as the General Manager of the division in January 2007. He then became the Executive Director of the Corporate Affairs Division in January 2010. Prior to his current appointment, Abdul Halem was the Head of Learning and Development Section in the Human Resources and Administration Department.



## **Ir. Azlan Abdullah**

Head of Production

Ir. Azlan Abdullah is a Professional and Chartered Engineer with over 26 years of experience in engineering, project management, and operational leadership across the utilities, infrastructure and aviation sectors. He currently serves as the Head of Production at Pengurusan Air Selangor Berhad, where he is responsible for producing over 5,300 million litres of treated water to more than 9.62 million consumers in Selangor, Kuala Lumpur and Putrajaya. Ir. Azlan brings extensive expertise in strategic planning, productivity optimisation and regulatory compliance, with a proven track record in driving operational excellence and cross-functional transformation initiatives. Prior to this role, he served as a Consultant in the Director of Operations Office at Air Selangor, focusing on enterprise-wide efficiency, manpower productivity and project alignment. His earlier career includes senior leadership positions in UEM Group, Malaysia Airlines, SapuraKencana Petroleum, and Tenaga Nasional Berhad, where he led major infrastructure and offshore installation projects valued in the billions. A firm believer in data-driven leadership and capability development, Ir. Azlan has also significantly contributed to the development of talent and competency frameworks for UEM Group Berhad. His multi-sectoral experience and collaborative approach continue to strengthen Air Selangor's Vision, Mission, and Brand Promise.



## **Ir. Ts. Ahmad Fuad Zainudin**

Head of Distribution

Ir. Ts. Ahmad Fuad Zainudin was appointed as Head of Distribution on 1 September 2024, bringing more than 18 years of experience in the water industry, particularly in water management and water distribution network. Ir. Ts. Ahmad Fuad graduated with a Bachelor of Civil Engineering (Hons) from Universiti Putra Malaysia (UPM) in 2004. He also holds a Master in Water Engineering from UPM. He is a professional engineer registered with the Board of Engineers Malaysia (BEM) and the Institution of Engineers Malaysia (IEM), as well as a professional technologist registered with the Malaysia Board of Technologists (MBOT). He started his career with Syarikat Bekalan Air Selangor Sdn Bhd (SYABAS) in 2005 and has held various senior positions. From 2010 to 2016, he was appointed as the Head of Region for three different regions namely Sabak Bernam, Hulu Selangor and Kuala Lumpur. Prior to his current appointment, Ir. Ts. Ahmad Fuad was the Head of Operational Services.



## **Mimi Nazila Nasharudin**

Head of Procurement

Mimi Nazila Nasharudin was appointed as Head of Procurement of Air Selangor on 1 September 2022. She has over 30 years of experience in procurement, mainly in the oil and gas industry. Mimi Nazila graduated with a Bachelor of Science in Business Administration from Drexel University, Pennsylvania, USA. She is also a certified lead auditor for Integrated Management System for ISO 9001, 14001 and 45001. She started her career progression in Esso Production Malaysia and Measat Broadcast Network. Prior to her current appointment, Mimi Nazila served as the Head of Supply Chain Management OMS at Bumi Armada Navigation Sdn Bhd, where she managed a team of personnel in Kuala Lumpur, Kemaman, Labuan, Singapore, Russia, and Turkmenistan. Previously, she was the Head of Corporate Supply Chain Management at Sapura Kencana Petroleum Bhd.



## Azida Halidin

Head of Special Projects

Azida Halidin was appointed as Head of Special Projects of Air Selangor on 1 September 2024. She has over 19 years of experience in the field of accounting and auditing. Azida graduated with a Bachelor of Accountancy (Hons) from Universiti Teknologi Mara (UiTM). She also holds a Master's Degree in Business Administration from Cardiff Metropolitan University. She is a Chartered Accountant from the Malaysia Institute of Accountants (MIA) and a Certified Chartered Accountant from the Association of Chartered Certified Accountants (ACCA) of the United Kingdom. She started her career progression in Deloitte Malaysia and Shell Malaysia. Prior to her current appointment, Azida served as the Senior Account Manager (Tower Lead) at Air Liquide Business Service Sdn Bhd, managing revenue and collection of APAC countries for their legal entities. Previously, she was the Chief Financial Officer/Head of Procurement at Belait Shipping Co (B) Sdn Bhd.



## Asrina Shariff

Head of Human Resource

Asrina Shariff was appointed as Head of Human Resource on 1 June 2023, bringing more than 32 years of experience in the field of human resource. Asrina graduated with a Bachelor of Economics with a double major in Economics and Political Science from Flinders University of South Australia. Prior to joining Air Selangor, Asrina has held various senior positions in previous companies, namely as specialist, generalist and in leadership roles in various industries such as fast-moving consumer goods (FMCG), logistics, property development, insurance, workforce solutions, consulting, and retail foods. She has more than 24 years of experience in multinational corporations and more than eight (8) years of experience serving in government-linked companies (GLC), investment holding companies and private companies.



## Muhamad Anwar Zamree

Head of Corporate Affairs

Muhamad Anwar Bin Zamree was appointed as the Head of Corporate Affairs for Air Selangor on 15 October 2024. Anwar graduated in Bachelor of Laws (Honours) from the International Islamic University Malaysia (IIUM) and was admitted as an Advocate & Solicitor of the High Court of Malaya. He then started his legal career as a corporate and commercial lawyer at a top-tier firm in Malaysia and has progressed to hold key leadership roles in reputable organisations. Throughout his career, Anwar has developed expertise in corporate, commercial and legal matters in various business sectors including land and property, mergers and acquisitions, restructuring, banking, mining, energy and utilities. Prior to joining Air Selangor, he was the Senior Director and Head of Corporate Services at Lembaga Tabung Angkatan Tentera (LTAT) and a member to Senior Leadership Team of LTAT. He also held key positions including the Director of the Chief Executive's Office at LTAT, Chief Legal Officer at Menteri Besar Selangor Incorporated (MBI) and Legal Counsel at Pelaburan Mara Berhad (PMB). He had also served as a board member of Boustead Properties Berhad and a board committee member for several subsidiaries under MBI.

# About Air Selangor

As the largest water services provider in Malaysia, Air Selangor is responsible for the abstraction, treatment, and distribution of treated water to consumers in Selangor, Kuala Lumpur, and Putrajaya, serving more than 2.7 million accounts consisting of domestic, non-domestic, and others.

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, Enactment 1994, is the ultimate holding corporation of Air Selangor.

Air Selangor utilises a variety of water treatment facilities and assets to provide its customers with 5,280 MLD of clean, safe water per day. It employs over 5,000 employees and works with 2,261 active business partnerships to deliver on this mission.

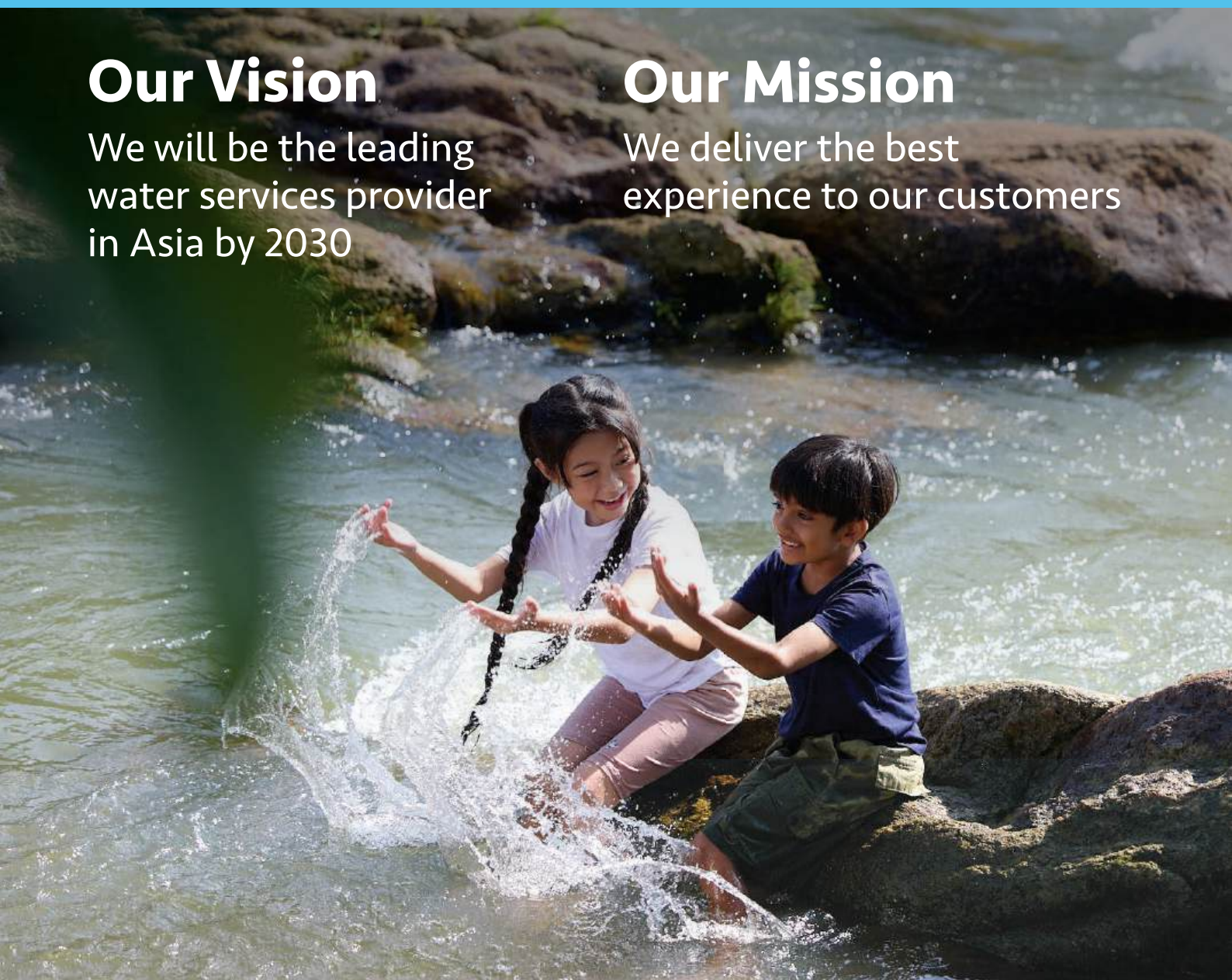
Air Selangor operates under the Water Services Industry Act 2006, which is governed by SPAN.

## Our Vision

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

## Our Mission

We deliver the best experience to our customers





# Core Values

Air Selangor is committed to teamwork, honesty, integrity, professionalism, and delivering the highest standard of services. These core values are the guiding pillars of our service to millions of customers. Together, these values underscore the organisation’s dedication to sustainable and customer-centric water services.

## Teamwork

Providing support to one another, working collaboratively, and respecting one’s views.



## Honesty

Being open and truthful in all dealings.



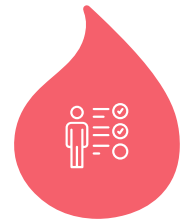
## Integrity

Continually doing the right thing no matter what the consequences.



## Professionalism

Striving for excellence and quality in everything we do on top of being reliable and responsible.



## Highest Standards of Services

Respecting our customers and striving to deliver timely, responsive, and proactive services.



# Our Customers

### Domestic



**2,412,567** accounts

Domestic accounts consist of residential properties, which form the largest portion of the total accounts registered.

### Non-domestic



**329,690** accounts

Non-domestic accounts cover industries, commercial areas, government offices, hospitals, schools, and ships.

### Others



**5,422** accounts

Customers under this category include religious and charitable institutions.



# 2024 HIGHLIGHTS

In 2024, Air Selangor made notable progress across various areas of operation. Throughout the year, we focused on sustainability efforts, net zero initiatives, financial growth, social engagement, environmental stewardship, and governance.



## Sustainability Efforts and Net Zero Initiatives

### Net Zero Energy Vision 2040

In 2023, Air Selangor introduced its Net Zero Energy Vision 2040, which sets a clear target for efficient and sustainable energy use and commits net-zero carbon emissions, aligning with Malaysia's commitment to carbon neutrality by 2050.

### Solar Photovoltaic Installations

A key step forward was the commissioning of 9.0 MWac of solar photovoltaic installations at our Sungai Selangor Phase 2 Water Treatment Plant (WTP), and we are in the process of commissioning a further 10.5 MWac at the Sungai Selangor Phase 3 WTP.



## Financial Growth

### Water Tariff Adjustment

Effective 1 February 2024, SPAN announced a domestic water tariff adjustment to support efforts to enhance infrastructure development and improve service quality, in tandem with all state water utilities as agreed by the Federal Government and consented to by the Selangor State Government.

### Investment in Infrastructure

Additional revenue generated from the water tariff adjustment was used to replace ageing pipes, build new WTP, and implement advanced technologies aimed at reducing NRW.



## Social Engagement

### Sesama Mara Initiative

Under the Sesama Mara corporate social responsibility initiative, Air Selangor supported close to 2,000 families, individuals, and charity homes.

### Mental Health Campaign

Air Selangor continued the #SembangKalauBimbang campaign to raise awareness and promote mental wellbeing among Malaysians.





## Environmental Stewardship

### Water Quality Compliance

Air Selangor achieved a 99.93% compliance rate with the Ministry of Health's Drinking Water Quality Standards, maintaining a rate greater than 99% for three (3) consecutive years.

### Pipe Replacement Programme

Since 2016, we have replaced 1,008.56 kilometres (km) of ageing pipes to improve water supply reliability and reduce leakage.



## Governance

### Regulatory Compliance

Air Selangor's operations are governed by the Water Services Industry Act 2006 and regulated by SPAN, ensuring transparency and accountability.

### Sustainability Reporting

We publish an annual sustainability report, outlining our commitments and progress in environmental, social, and governance (ESG) aspects.



## Major Achievements in 2024

### Advancement of Rasau Water Supply Scheme

The first stage of the Rasau Water Supply Scheme progressed from planning and design phase to construction phase. As of December 2024, the project was 28.7% complete and is expected to be finalised by June 2027. Upon completion, it will supply 700 MLD of clean and safe treated water daily.

### Reduction in Non-Revenue Water

Air Selangor recorded an improved NRW rate of 27.0% in 2024 from 27.7% in 2023, reflecting our ongoing efforts to improve water supply efficiency.

# OEx HIGHLIGHTS

At Air Selangor, sustainability is a commitment that shapes everything we do. To deliver on this commitment, we are transforming the way we work through the Operational Excellence (OEx) Transformation Programme.



## OEx: Transforming for a Sustainable Future

Our journey toward sustainability is powered by transformation of culture and systems, which embeds continuous improvement across our organisation. The OEx transformation programme will enable us to deliver efficient, high-quality, and sustainable water services.

## What is Operational Excellence (OEx)?

Operational excellence means every employee can see, deliver, and improve the flow of value to the customer. OEx is not just about improving processes. It is about building a mindset of excellence, accountability, and innovation across all levels of the organisation.

## Three (3) Focus Areas

# 1

### Business Process Improvement

We streamline end-to-end processes to enhance productivity and service quality.

# 2

### Technology and Systems

We modernise our IT infrastructure to enable better data-driven decision making.

# 3

### People and Capabilities

We invest in our people through upskilling, updated job frameworks, and refine our organisational structure to ensure long-term resilience.

Robust change management initiatives are being deployed to drive the focus areas of change and ensure an integrated working environment for the organisation.

## Our Commitment

# Joy in Every Drop

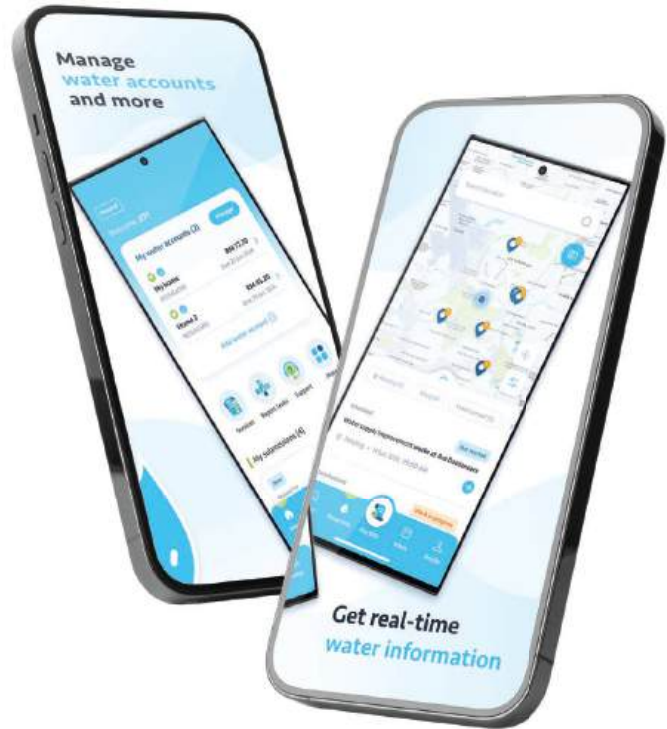
The OEx transformation programme supports our brand promise: **Joy in Every Drop**. Every initiative contributes to delivering water services that are reliable, safe and sustainable.

As we move towards our **2030 vision** of becoming Asia's leading water services provider, all Air Selangorians will continue to embrace open, collaborative working to create lasting impact.

# Empowering Sustainable Living Through Digital Innovation

## Air Selangor 2.0 App and Web Platform

In line with Air Selangor's vision to become Asia's leading water services provider by 2030, the launch of the Air Selangor 2.0 app and web platform placed consumers at the centre of our digital transformation journey. By enhancing our platform, we offer users a more seamless and intuitive experience, empowering them to adopt sustainable and responsible consumption habits.



## Introducing Lifestyle Features: The Seven (7) Pillars of Engagement

The Air Selangor 2.0 platform introduces seven (7) key lifestyle pillars designed to enrich user experience and promote holistic wellbeing:



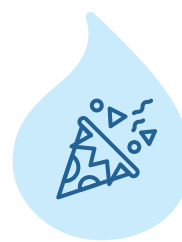
Finance



Education



Community



Fun and Entertainment



Health and Wellness



Sustainability and Conservation



Utility

We are currently focused on the Community, Fun and Entertainment, Health and Wellness, and Sustainability and Conservation pillars. The remaining pillars are scheduled for development and implementation by the end of 2028.

## Promoting Sustainable Practices: Litres Per Capita Per Day (LCD)

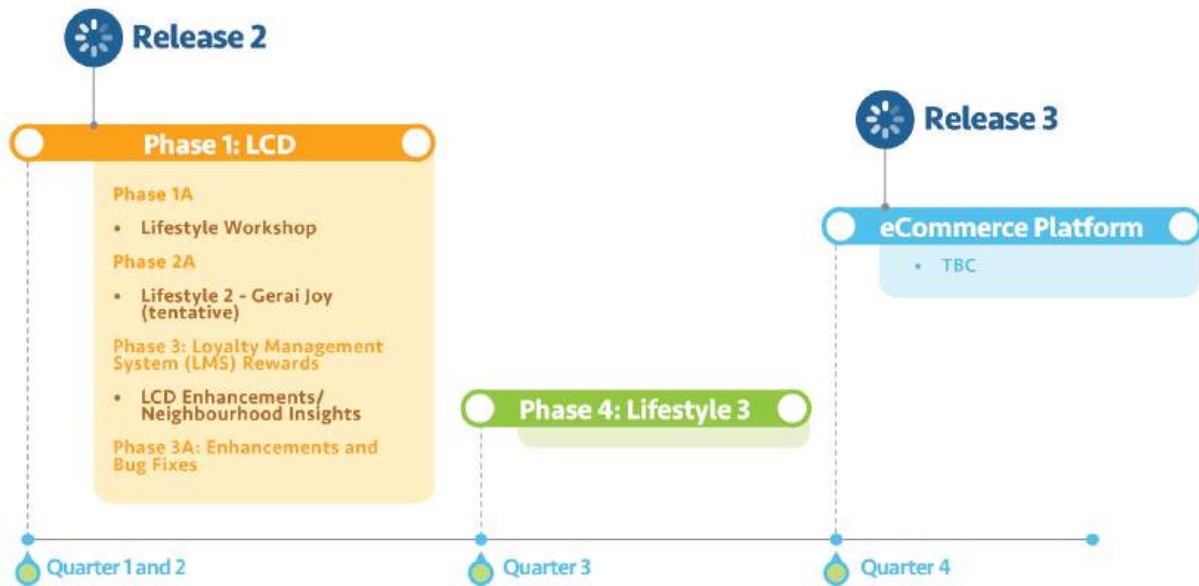
As part of Air Selangor’s commitment to promoting sustainable water use, we introduced the LCD feature. This tool lets users track their daily water consumption, aligning with national and global efforts to encourage responsible water usage. By providing real-time data, the LCD feature empowers consumers to make informed decisions and adopt water-saving habits.

## Joy Chatbot

To reflect our commitment to smarter, faster, and more personalised customer experiences, we introduced Joy – an AI-powered chatbot offering intuitive, 24/7 support through guided self-service and automated issue resolution. Looking ahead, we aim to significantly scale Joy’s capabilities to meet rising customer expectations and achieve a user satisfaction rating of 80% and above.



## Air Selangor Will Launch Lifestyle Features in Phases



## Sustainable Progress Through Digital Excellence

The Air Selangor 2.0 app and web platform act as drivers of digital innovation in Malaysia. By integrating services with lifestyle features, the platform sets a benchmark for digital solutions that promote sustainability and responsible consumption for over 2.7 million account owners. The initial target and objective of the app and web rollout was to convince the 2.1 million registered Air Selangor 1.0 app and web users to download and utilise the new Air Selangor 2.0 version. Through the introduction of new services and intuitive lifestyle options, the overarching goal is to reach the 9.6 million consumers residing in Selangor, Kuala Lumpur, and Putrajaya.



# KEY ASSETS

## Raw Water Storage

3

Off-River Storage

8

Dams

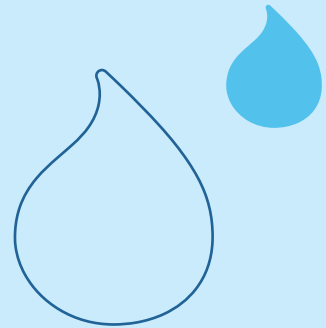
1

Hybrid Off-River Augmentation System (HORAS)  
600

## Water Production

34

Water Treatment Plants (WTPs)



## Water Distribution

1,562

Service Reservoirs

31,250KM

Pipe Length

708

Pump Houses

## Water Quality

# 1,517

Water Sampling Stations

# 12

River Monitoring Stations

# 4

Accredited Regional Laboratories (SSP2, Sg Labu, Sg Semenyih, and Langat 2)

# 39

Off-Plant Autonomous Chlorine Injection Systems (OACIS)

# 190

Hybrid Distribution Water Quality Real-Time Analyser (HYDRA)

## Workforce

# 5,066

Employees

## Gender Diversity

80:20

# AWARDS & RECOGNITIONS



## Operational and Service Excellence

Air Selangor's continued commitment to operational excellence has earned recognition at both national and regional levels.

On 25 April 2024, we received the **Performance Improvement of the Year Award** from SPAN at the 36th Malaysian Water Association (MWA) Annual Dinner and Awards Night. This recognition showcased our outstanding achievements in improving water service efficiency and infrastructure management.

Air Selangor was awarded the **Silver Award for Best Social Media Crisis Management** at the Hashtag Asia Awards 2024 in Singapore. This award acknowledged our effective and timely communication during both scheduled and unscheduled water supply disruptions.

We were also proudly named **First Runner-Up in the Public Listed and Big Corporations Risk Mastery category** at the MARIM Risk Management Awards 2024, held from 16 to 17 July 2024. This recognition affirmed our continued commitment to robust risk management and sustainability practices.



## Corporate and Community Engagement

In 2024, Air Selangor received several prestigious accolades that reflected our continued commitment to community engagement. These recognitions highlight our ongoing efforts to deliver value beyond water services through meaningful partnerships and impactful initiatives.

We were honoured with the **Excellent Business Partnership Award (Rakan Korporat Cemerlang 2023)** by Universiti Malaya, in recognition of our collaboration on water conservation projects, research initiatives, and digital exhibitions. This award showed our dedication to knowledge-sharing and sustainable innovation through academic-industry partnerships.

Further demonstrating our commitment to social impact, Air Selangor received the **Company of the Year (Water Services) Community Care Award** at the Sustainability and CSR Malaysia Awards 2024. The award recognised our Sesama Mara initiatives, including Box of Hope, Festive CSR, and the Empowering Online Learning programmes.

We were also awarded **Best SRI Sukuk** at The Asset Triple A Islamic Finance Awards for sustainable and responsible Islamic financing, through the fifth tranche of SRI Sukuk Kelestarian Air Selangor, valued at RM1 billion.



## Human Resource and Workplace Excellence

Air Selangor was also awarded for our unwavering commitment to employee safety, wellbeing and operational resilience. At the HR Excellence Awards 2024, Air Selangor was honoured for **Excellence in Crisis Management Planning**, recognising our strong business continuity and management (BCM) initiatives. These efforts have strengthened the company's operational resilience and workforce adaptability in the face of evolving challenges.

Further recognition was given at the Duty of Care Awards 2024, where Air Selangor was named **runner-up in the Workplace Wellbeing category** by the International SOS Foundation. This was followed by the **National Occupational Safety and Health Award 2024**, where we were recognised under the Water Utilities category by the National Council for Occupational Safety and Health (NCOSH), showcasing our leadership in maintaining a strong workplace safety and health culture.



## Environmental and Technological Innovation

Towards the end of 2024, Air Selangor was recognised for our continued commitment to excellence in sustainability and innovation.

At the 42nd MSOSH Awards 2024, Air Selangor received the President Award alongside multiple Gold Class Awards for achievements in occupational safety and health (OSH). These awards highlighted our outstanding performance across various regions and facilities, showcasing our dedication to creating safe and healthy work environments.

We were also named the Sustainability Rising Star at the Asia Corporate Excellence and Sustainability (ACES) Awards 2024, shining a light on our initiatives in energy efficiency, carbon reduction, and community outreach. In addition, the D15+ Project received the ESRI Geo-Innovation Award 2024, celebrating our success in leveraging geographic information system (GIS) technology to advance our digital transformation in the water supply and distribution sector.



# Key Performance Data 2024

Yearly Average  
NRW  
**27.0%**  
▼ **0.7%**

Pipe Burst Cases  
per 100km per Year  
**3.25 nos/100km/year**  
▼ **0.93 nos/100km/year**

Revenue  
**RM 2.98 billion**  
▲ **0.16 billion**

Overall Treated  
Water Quality  
Compliance  
**99.93%**  
(no change)

Water  
Reserve Margin  
**18.60%**  
▲ **3.26%**

Average  
Production  
Volume  
**5,306 MLD**  
▲ **79 MLD**

Asset  
Condition Score  
**1.96 (no change)**

Pipe Leak Cases  
**257,448**  
▲ **36,625**

Lost Time Injury  
Frequency Rate  
**0.26**  
▲ **0.07**

Dam Active  
Storage  
**98.97%**  
▲ **1.9%**

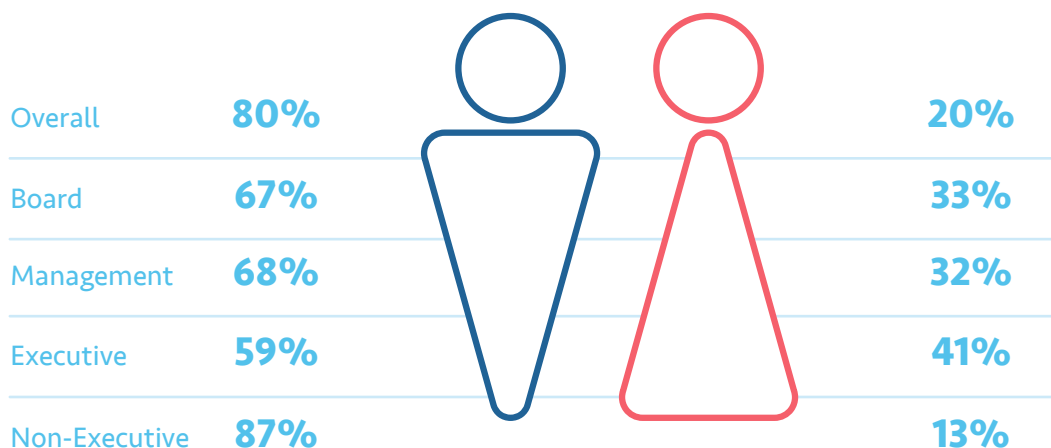
Net  
Promoter Score  
**+26**  
▲ **22**

e-Bil Sign-up Rate  
by Customers  
**78%**  
▲ **5%**

Pipes Replaced  
**146.50km**  
▲ **52.62km**

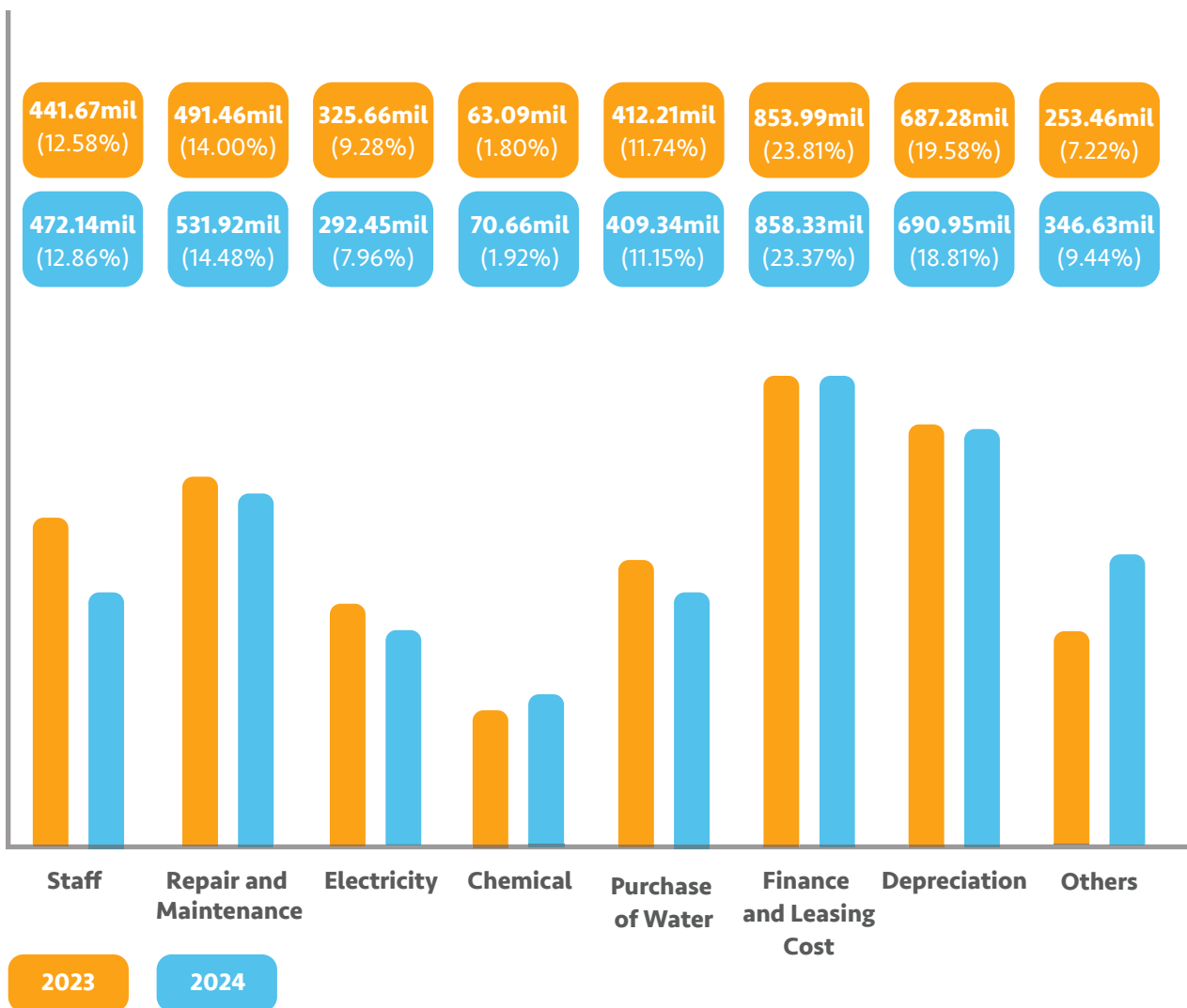
Carbon Emissions Intensity  
(per volume of water billed)  
**0.544 kgCO<sub>2</sub>e/m<sup>3</sup>**  
▼ **0.018 kgCO<sub>2</sub>e/m<sup>3</sup>**

## Gender Diversity Breakdown



# FINANCIAL PERFORMANCE

## Company Level Total Expenditure\*



\*Based on unaudited accounts and excludes exceptional items – intercompany balance written off and other professional service (subsidiaries).

## CAPEX Contracts Awarded

### 2023<sup>1</sup>

Water Forever (SPI 1)<sup>3</sup>

**158.35**  
RM (million)  
**19.81%**  
% against total

Improvement to Asset Reliability and Resilience (SPI 2)

**259.04**  
RM (million)  
**32.40%**  
% against total

Improving Operational Efficiency (SPI 3)<sup>3</sup>

**68.57**  
RM (million)  
**8.58%**  
% against total

Towards Best Customer Experience (SPI 4)<sup>3</sup>

**41.34**  
RM (million)  
**5.17%**  
% against total

NRW Reduction (SPI 5)<sup>3</sup>

**224.37**  
RM (million)  
**28.06%**  
% against total

Creating Conducive Working Environment (SPI 6)

**14.91**  
RM (million)  
**1.86%**  
% against total

Environmental Stewardship (SPI 7)

**32.98**  
RM (million)  
**4.12%**  
% against total

**Total**

**799.56**  
RM (million)  
**100%**  
% against total

### 2024<sup>2</sup>

Water Forever (SPI 1)<sup>3</sup>

**55.97**  
RM (million)  
**8.13**  
% against total

Improvement to Asset Reliability and Resilience (SPI 2)

**47.96**  
RM (million)  
**6.97**  
% against total

Improving Operational Efficiency (SPI 3)<sup>3</sup>

**59.69**  
RM (million)  
**8.67**  
% against total

Towards Best Customer Experience (SPI 4)<sup>3</sup>

**34.58**  
RM (million)  
**5.02**  
% against total

NRW Reduction (SPI 5)<sup>3</sup>

**472.96**  
RM (million)  
**68.70**  
% against total

Creating Conducive Working Environment (SPI 6)

**7.53**  
RM (million)  
**1.09**  
% against total

Environmental Stewardship (SPI 7)

**9.75**  
RM (million)  
**1.42**  
% against total

**Total**

**688.43**  
RM (million)  
**100%**  
% against total

<sup>1</sup> 2023 CAPEX has been updated to include new contracts awarded in 2024 which fall under the 2023 CAPEX budget.

<sup>2</sup> Represents projects awarded under the 2024 budget as of 31 December 2024. Additional projects are expected to be awarded in 2025.

<sup>3</sup> Includes CAPEX which are funded via NRW Matching Grant received from SPAN for the achievement of NRW targets.

## Sukuk Murabahah Programme and Sukuk Kelestarian



In August 2024, Air Selangor completed its seventh issuance under the RM10.0 billion Sukuk Murabahah Programme. The RM1,200.0 million issuance, which includes tenures across four (4) series ranging from ten (10) years to 25 years, represents the company's sixth issuance of the SRI Sukuk Kelestarian Air Selangor (SRI Sukuk).



Effective 3 December 2024, Air Selangor has increased the size of its RM10.0 billion Sukuk Murabahah Programme to RM20.0 billion, maintaining its long-term rating of AAA and short-term rating of P1. The tenure of the 30-year Islamic Medium Term Notes Programme (IMTN) has been extended to perpetuity.



The proceeds from the SRI Sukuk will be used to finance eligible projects in line with Air Selangor's Sustainable Development Sukuk Kelestarian framework. These projects include, among others, sustainable water supply, sustainable water management, and renewable energy initiatives, all of which support Air Selangor's sustainability strategies. The proceeds from the IMTNs will be directed towards financing, among other things, Air Selangor's capital expenditure and working capital requirements.



On 1 October 2024, Air Selangor's Sukuk Murabahah Programme was reaffirmed with long-term and short-term ratings of AAA with a stable outlook, and P1, respectively, by RAM Rating Services Berhad. The AAA rating indicates superior safety for the payment of financial obligations, while the P1 rating reflects high safety for the payment of short-term financial obligations.



# 30-YEAR BUSINESS PLAN



## SPI 1: Water Forever

Towards a Sustainable Water Future

**Related Top 10 Risk:**

- Climate Risk
- Delay in Completion of Rasau Project
- Raw Water Pollution
- Low Water Reserve Margins



## SPI 2: Improvement in Asset Reliability and Resilience

Towards a Resilient Water Future

Towards a Resilient Water Future

**Related Top 10 Risk:**

- Project Delay Risk



## SPI 3: Improving Digital Operational Efficiency

Utility of the Future

Utility of the Future

**Related Top 10 Risk:**

- Technology & Digitalisation Risk
- Cybersecurity Risk

### Objectives:

- Ensure a sustainable water supply for the future.
- Mitigate potential effects of climate change and raw water pollution.
- Design interventions and initiatives that ensure water supply is aligned with water demand. These actions include reducing system water loss, optimising customer water use, and identifying and developing new sources of water.

### Objectives:

- Optimise management and maintenance of our assets.
- Ensure uninterrupted water supply to our customers.
- Rehabilitate, replace and upgrade our assets.
- Improve water storage capacity.

### Objectives:

- 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.

### Achievements as of 2024:

- The average water reserve margin was 16.71% against the targeted 18.06%.
- Packages 1, 2, and 3 of Rasau Stage 1 are in the construction stage, with overall progress at 28.71% as of December 2024.
- Packages 4, 5, and 6 of Rasau Stage 2 are at the pre-planning stage following completion of value assessment in November 2024. The owner engineer has shortlisted contractors for packages 4, 5, and 6 during the pre-qualification stage.
- Langat 2 Phase 1 was fully operational in September 2024 with a total distributable capacity of 1,130 MLD.

### Achievements as of 2024:

- Completed rehabilitation works on 60 unused reservoirs that were identified out of 144.
- 19 new reservoirs are under construction or at the design stage.
- Completed refurbishment works on 13 out of 54 identified pump houses.
- Six (6) new pump houses are under construction or at the design stage.

### Achievements as of 2024:

- The Intelligent Command Centre (ICC) covers:
- 88.56% (650 of 734) active pump houses.
  - 83.42% (1,399 of 1,677) active reservoirs.
  - 27.51% (total of 31,887) asset tagging.
  - The Online Hydraulic Modelling Prediction has been utilised to cover a total of 2,974 km of pipeline and 386 reservoirs.

*Note: Figures have been reduced due to an update of the online model to align with the latest supply system.*



## SPI 4: Towards Best Customer Service

Drinkable Water from Tap by 2028 and Best Customer Service

### Objectives:

- Improve our service delivery and consistently exceed customer expectations in terms of reliability, responsiveness and quality.

### Achievements as of 2024:

- 57,675 faulty meter units were replaced, achieving 87.7% of the targeted quantity for 2024.
- 60,675 degraded meter units were replaced with an achievement of 109.2%, against targeted quantity for 2024.
- Total MLD for the 2024 Meter Replacement Programme is 40.56 MLD (146.37%).
- 51,514 ultrasonic smart meters with leak detection were successfully installed.
- Achieved a Water Quality Complaint Index ratio of 0.37 complaints per 1,000 connections, better than the targeted 0.5.
- 86.2% completion of works for three (3) water courses, namely Sungai Sireh, Sungai Langat and Langat 2, under the Trust Our Tap initiative.
- Achieved the following water quality targets:

Parameter	MOH Target (%)	Achievement (%)
E. Coli	≥ 99.85	100
Free Residual Chlorine (FRC)	≥ 99.00	99.95
E. Coli and FRC	≥ 99.95	100
Turbidity	≥ 98.00	99.98
Aluminium	≥ 95.00	98.31



## SPI 5: NRW Reduction

NRW Reduction to 26.5% by 2025, 25% by 2030

### Related Top 10 Risk:

- Consistency in Tariff Increase & Financial Sustainability
- Sustainable NRW Reduction Risk

### Objectives:

- Reduce water loss throughout our operations, targeting to achieve 26.5% by 2025 and 25% by 2030.
- Optimise operational costs and increase our revenue.

### Achievements as of 2024:

- Achieved NRW reduction of 27.0%, an improvement on 27.7% in 2023. This achievement has surpassed SPAN's NRW Matching Grant target of 28.0% (revised target).
- Achieved a Pipe Burst Index of 3.25 bursts per 100 km per year of pipeline. This was an improvement from 4.18 bursts per 100 km per year recorded in 2023.
- Completed pipe replacement works at 309 hotspots.

Parameter	SPAN Target (%)	Achievement (%)
Repair and resume water supply within 24 hours for communication pipe failure	83	89
Repair and resume supply within 24 hours for failure of mains of diameter less than 200 mm	86	92
Repair and resume supply within 36 hours for failure of mains of diameter more than 200 mm and less than 600 mm	93	98
Repair and resume supply within 48 hours for failure of mains of diameter greater than 600 mm	96	99



## SPI 6: Creating a Conducive Working Environment

World Class Water Services Provider

**Related Top 10 Risk:**

- Talent Succession & Sustainability Risk

**Objectives:**

- 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.

**Achievements as of 2024:**

- Recorded Lost Time Injury Frequency Rate (LTIFR) of 0.26, from 0.19 recorded in 2023.
- A total of 59 employees completed the Coaching and Mentoring Programme.
- A total of 947 employees have participated in the Leadership Development Programme since 2019.



## SPI 7: Environmental Stewardship

Waste Zero Environment

**Objectives:**

- Operate responsibly, minimising our impact on the environment and adhering to regulations.
- Towards a zero-waste environment, optimising resource use and reducing our carbon emissions.

**Achievements as of 2024:**

Achieved compliance with the Department of Environment’s (DOE) Guided Self-Regulation (GSR):

Scope	Compliance (%)
Production Activities	94.31%
Distribution Activities	95.87%

Recorded carbon emission and carbon emission intensity as follows:

<b>Total Carbon Emissions (tCO<sub>2</sub>e)</b>	<b>772,761.48</b>
Produced Volume Carbon Intensity (kgCO <sub>2</sub> e/m <sup>3</sup> )*	0.425
Billed Volume Carbon Intensity (kgCO <sub>2</sub> e/m <sup>3</sup> )*	0.649

*\*Notes:*

- Carbon emission factors based on Malaysia’s 4th Biennial Update Report submitted to the UNFCCC in December 2022.
- Carbon emissions intensity for produced water volume post-treatment, prior to distribution.
- Carbon emissions intensity for billed water volume post-distribution and consumer billing.

# Sustainability Approach

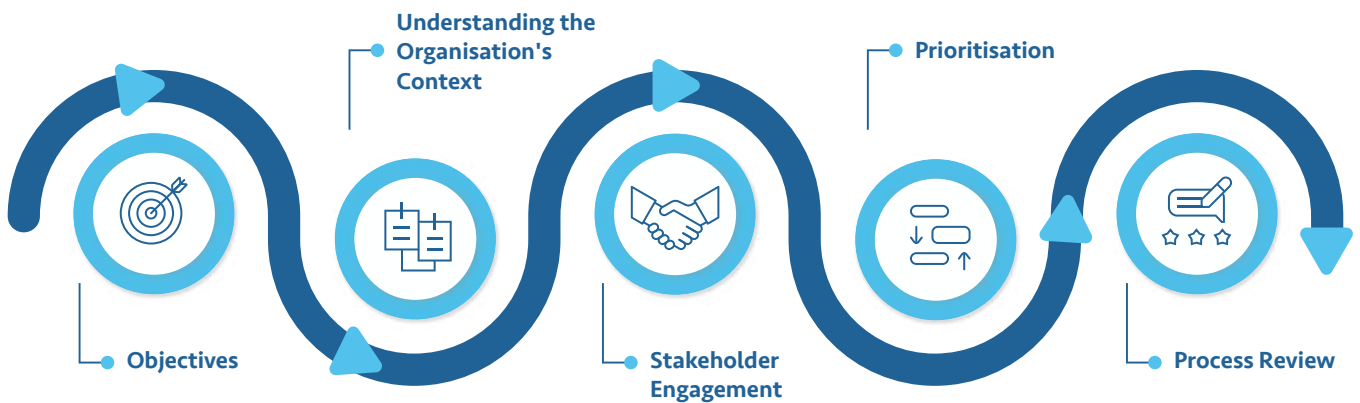
## Reporting Framework

This Report is prepared in alignment with leading sustainability frameworks, ensuring a structured and transparent approach to our performance and commitments. We have adhered to Bursa Malaysia’s Sustainability Reporting Guide (3<sup>rd</sup> Edition) and incorporated both GRI Standards and SASB guidelines specific to Water Utilities and Services. Additionally, to provide a comprehensive view of our sustainability-related efforts, we referenced the United Nations Sustainable Development Goals (UN SDGs) and applied the GHG Protocol: Corporate Accounting and Reporting Standard.

## Approach to Materiality

Our Report is built around the double-materiality assessment, most relevant to our stakeholders and important to our organisation, which we reassess once in two (2) years to ensure they remain applicable and reflective of our strategic focus. This ongoing evaluation allows us to execute our strategy and performance effectively, and define our outlook accurately. We address key ESG issues with a mix of qualitative and quantitative data to capture a full picture of our sustainability performance. For a detailed discussion on our sustainability results and impact, please refer to Pillar 2.

# Materiality Approach



# Our Materiality Matters

 **Environment**

- Water Reserve Margin
- Water Conservation
- Water Supply and Quality
- Environmental Management and Net Zero Energy
- Optimising Operations and Reducing NRW

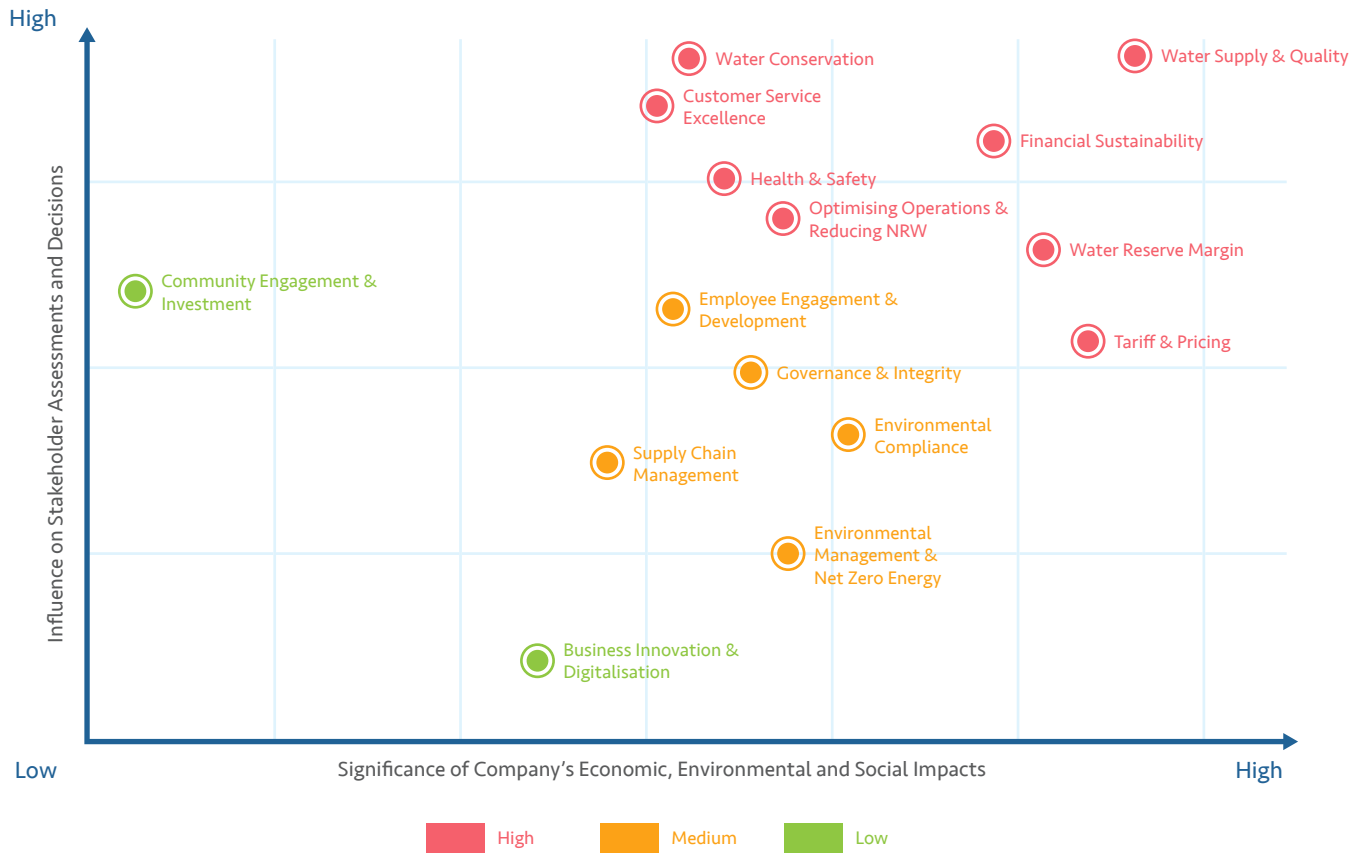
 **Social**

- Customer Service Excellence
- Health and Safety
- Employee Engagement and Development
- Community Engagement and Investment

 **Governance**

- Financial Sustainability
- Tariff and Pricing
- Governance and Integrity
- Supply Chain Management
- Business Innovation and Digitalisation
- Environmental Compliance

# Materiality Prioritisation



# Our Impact on SDGs

In response to the developing worldwide imperative to improve environmental performance through enhanced ESG measures, Air Selangor has adopted and improved practices to align SDGs with its business operations and activities.



# Sustainability Strategy 2020 to 2030

In 2024, the Sustainable Development Unit (SDU) undertook a comprehensive once-in-two-year review of Air Selangor's Sustainability Strategy to ensure its continued relevance and effectiveness. This review focused on reassessing materiality matters, evaluating associated risks and opportunities, validating ongoing action plans, and identifying new strategic actions to enhance Air Selangor's sustainability performance.

As part of this process, the Materiality Matters were meticulously revised and finalised through a series of structured engagements, with internal and selected external stakeholder consultations, workshops with the Sustainability Working Committee, and rigorous review sessions. The refined materiality assessment and proposed updates underwent a thorough validation

process, receiving approval and endorsement from both the Management and the Board Risk and Sustainability Committee (BRSC) in October and November 2024, respectively.

Looking ahead, SDU is committed to presenting the revised sustainability risks and opportunities, along with corresponding action plans, to the Management and BRSC in 2025 for approval. Following this, SDU will play a pivotal role in tracking progress, ensuring the effective implementation of action plans, and providing periodic updates to Management and BRSC in 2025. This proactive approach reinforces Air Selangor's commitment to sustainable growth, corporate responsibility, and continuous improvement in ESG performance.



# Stakeholder Engagement

	Stakeholders/ Engagement Activities	Areas of Concern	Linkage to Material Sustainable Matters	Our Response
Customers	<ul style="list-style-type: none"> <li>• Service counters</li> <li>• Open counters</li> <li>• Helpline</li> <li>• Social media</li> <li>• Mobile application</li> <li>• Air Selangor's website</li> <li>• Media</li> <li>• Reports</li> <li>• Campaigns</li> <li>• Complaint investigation</li> </ul>	<ul style="list-style-type: none"> <li>• Customer service</li> <li>• Feedback on product or services</li> </ul>	<ul style="list-style-type: none"> <li>• Water Quality</li> <li>• Customer Service Excellence</li> </ul>	<ul style="list-style-type: none"> <li>• Face-to-face assistance and interactions</li> <li>• Help Centre assistance and complaint resolution</li> <li>• Mobile application information, announcement and helpline</li> <li>• Website notifications</li> <li>• Social media postings, information sharing and announcements</li> <li>• Press releases</li> <li>• Press conferences</li> <li>• Reports</li> <li>• Consumer and action-oriented campaigns</li> </ul>
Regulators	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Events</li> <li>• Workshops</li> <li>• Site visits</li> <li>• Enforcement activities</li> </ul>	<ul style="list-style-type: none"> <li>• Compliance</li> <li>• Innovation in financial services</li> <li>• Contributing to economic recovery and strengthening resilience</li> </ul>	<ul style="list-style-type: none"> <li>• Excellent Ethics, Governance, Risk and Integrity</li> <li>• Tariff and Pricing</li> <li>• Environmental Compliance</li> </ul>	<ul style="list-style-type: none"> <li>• Participation and sharing of insights during meetings, workshops, forums, special agenda sessions</li> <li>• Conducting study and site visits to other water operators and industries</li> <li>• Policy advocacy to bring forward new guidelines and directives for the water industry</li> <li>• Collaboration and partnerships for events and activities</li> </ul>
Employees	<ul style="list-style-type: none"> <li>• Employee engagement survey</li> <li>• Trainings and engagement events</li> <li>• Internal newsletters and bulletins</li> <li>• Performance reviews</li> <li>• Total Asset Management System (TAMS)</li> <li>• Manual and procedures</li> <li>• Management walkabout and leadership listening tour</li> <li>• HSE Week</li> </ul>	<ul style="list-style-type: none"> <li>• Culture, diversity and inclusion</li> <li>• Health, safety and well-being</li> <li>• Employee grievances</li> <li>• Training, professional &amp; career development</li> </ul>	<ul style="list-style-type: none"> <li>• Health and Safety</li> <li>• Talent Development and Workplace Diversity</li> <li>• Employee Benefits and Engagement</li> </ul>	<ul style="list-style-type: none"> <li>• Onboarding programme</li> <li>• Physical, e-learning and online training programme</li> <li>• Employee engagement and social programme and activities</li> <li>• Physical and online meetings, internal discussion, Teams communication, emails, website and portal information sharing</li> <li>• Employee annual surveys</li> <li>• Performance evaluation and feedback</li> <li>• Workshops, roadshows, teambuilding</li> </ul>
Developers	<ul style="list-style-type: none"> <li>• Meetings</li> <li>• Electronic Development Plan Approval System (eDPLAS)</li> </ul>	<ul style="list-style-type: none"> <li>• Transparency in procurement processes</li> <li>• Innovations and continuous improvement</li> </ul>	<ul style="list-style-type: none"> <li>• Transparency in Procurement and Supply Chain</li> <li>• Business Innovation and Digitalisation</li> </ul>	<ul style="list-style-type: none"> <li>• Pre-engagement preparation</li> <li>• Policy, guidelines and documentation</li> <li>• System and portal access and information</li> <li>• Company events</li> </ul>

# Stakeholder Engagement

	Stakeholders/ Engagement Activities	Areas of Concern	Linkage to Material Sustainable Matters	Our Response
Vendors/Suppliers/ Contractors	<ul style="list-style-type: none"> <li>Vendor engagements</li> <li>Vendor performance reviews/ meetings</li> <li>Vendors' survey</li> <li>Air Selangor's website</li> <li>TAMS' Supplier Portal</li> <li>Tender Air Selangor Telegram channel</li> <li>Code of business ethics for business associates</li> </ul>	<ul style="list-style-type: none"> <li>Efficient and responsible procurement processes</li> <li>Transparency in procurement processes</li> </ul>	<ul style="list-style-type: none"> <li>Transparency in Procurement and Supply Chain</li> <li>Excellent Ethics, Governance, Risk and Integrity</li> </ul>	<ul style="list-style-type: none"> <li>Meetings and briefings to discuss projects and updates</li> <li>System upgrading and introduction of new features or systems</li> <li>Specific planned and periodical engagement programmes and events</li> <li>Continuous governance review and enhancement</li> <li>Review and development of existing and new Standard Operating Procedures (SOPs)</li> </ul>
Local Communities/ NGOs	<ul style="list-style-type: none"> <li>Meetings</li> <li>Engagement sessions, community events and CSR campaigns</li> </ul>	<ul style="list-style-type: none"> <li>Community support, aid and assistance</li> <li>Volunteering</li> <li>Social welfare</li> <li>Education</li> </ul>	<ul style="list-style-type: none"> <li>Engagement Programme</li> <li>Strategic Community Investment</li> </ul>	<ul style="list-style-type: none"> <li>Regular and planned engagement sessions</li> <li>Community events, CSR campaigns, competitions and activities</li> <li>Aid and assistance programmes</li> <li>Volunteering initiatives</li> <li>Social welfare support</li> <li>Education and awareness initiatives and programmes</li> <li>Strategic community investment</li> <li>Sustainable engagement programmes</li> </ul>
State Assembly, Government Agencies, Industry Groups, Academic Institutions and Others	<ul style="list-style-type: none"> <li>Community programmes/events</li> <li>Sidang Dewan Undangan Negeri (DUN)</li> <li>Briefings and engagement sessions</li> <li>Town hall</li> <li>Research collaborations</li> <li>Sharing industry experience</li> </ul>	<ul style="list-style-type: none"> <li>Business opportunity</li> <li>Business strategy</li> <li>Contributing to economic recovery and strengthening resilience</li> </ul>	<ul style="list-style-type: none"> <li>Engagement Programme</li> <li>Strategic Community Investment</li> <li>Excellent Ethics, Governance, Risk and Integrity</li> </ul>	<ul style="list-style-type: none"> <li>Policy and legislative engagements</li> <li>Regular meetings, briefings and townhalls</li> <li>Strategic collaborations</li> <li>Sharing sessions and industry-forums</li> <li>New business models and opportunities</li> <li>Supporting economic recovery</li> <li>Engagement and investment programmes</li> <li>Research and developments</li> </ul>
Media	<ul style="list-style-type: none"> <li>Press conferences</li> <li>Events</li> <li>Air Selangor's website</li> <li>Engagement sessions</li> </ul>	<ul style="list-style-type: none"> <li>Business strategies</li> <li>Financial performance</li> <li>ESG performance</li> <li>Conduct and culture</li> <li>Community support</li> </ul>	<ul style="list-style-type: none"> <li>Excellent Ethics, Governance, Risk and Integrity</li> <li>Strategic Community Investment</li> <li>Business Innovation and Digitalisation</li> </ul>	<ul style="list-style-type: none"> <li>Timely press conferences and media briefings</li> <li>Annual strategic communication plan</li> <li>Proactive engagement sessions</li> <li>Annual surveys</li> <li>Roundtable discussions and feedback sessions</li> <li>Sharing of company's highlights in terms of financial, community investment, sustainability, and technology or innovation advancement</li> </ul>



# Mapping of Sustainability Pillars, Material Sustainability Matters, SDGs, and SPIs

Sustainability Pillars	Material Sustainability Matters	Linkage to SDGs	Related SPIs
<b>Strengthening Governance and Increasing Transparency</b>	<ul style="list-style-type: none"> <li>Governance and Integrity</li> <li>Financial Sustainability</li> <li>Supply Chain Management</li> <li>Tariff and Pricing</li> <li>Environmental Compliance</li> </ul>	 	SPI 6
<b>Reducing the Impact of Climate Change</b>	<ul style="list-style-type: none"> <li>Environmental Management and Net Zero Energy</li> <li>Water Conservation</li> <li>Optimising Operations and Reducing NRW</li> <li>Water Reserve Margin</li> </ul>	   	SPI 1 SPI 5 SPI 7
<b>Prioritising Employee Health, Safety, and Competency and Diversity</b>	<ul style="list-style-type: none"> <li>Health and Safety</li> <li>Employee Engagement and Development</li> </ul>	  	SPI 6
<b>Delivering Customer Service Excellence</b>	<ul style="list-style-type: none"> <li>Water Supply and Quality</li> <li>Customer Service Excellence</li> </ul>	  	SPI 1 SPI 4
<b>Leveraging Digitalisation to Support a Circular Economy</b>	<ul style="list-style-type: none"> <li>Business Innovation and Digitalisation</li> </ul>	 	SPI 2 SPI 3
<b>Giving Back to the Community</b>	<ul style="list-style-type: none"> <li>Community Engagement and Investment</li> </ul>		SPI 1 SPI 4



# Pillar 1

# STRENGTHENING GOVERNANCE & INCREASING TRANSPARENCY



8 DECENT WORK AND ECONOMIC GROWTH



16 PEACE, JUSTICE AND STRONG INSTITUTIONS



# GOVERNANCE AND INTEGRITY

## 1.0 Corporate Governance and Board Oversight

The Board of Directors at Air Selangor is committed to maintaining a rigorous corporate governance framework that adheres to the company's constitution, the Companies Act 2016, and relevant regulatory mandates. As a state-owned entity, we remain steadfast in our commitment to upholding the highest standards of governance, in alignment with the Malaysian Code on Corporate Governance (MCCG) 2021.

To assure oversight and accountability, the Board has established four (4) key Board Committees:

**Board Audit Committee (BAC)**

**Board Nomination & Remuneration Committee (BNRC)**

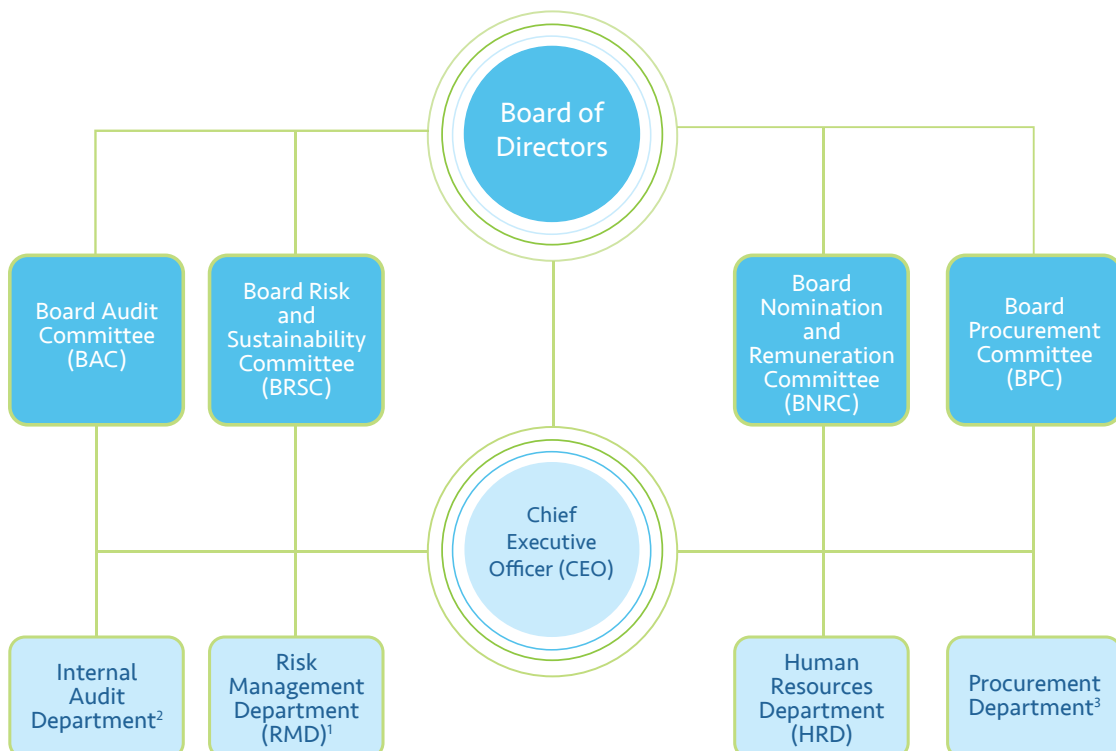
**Board Risk and Sustainability Committee (BRSC)**

**Board Procurement Committee (BPC)**

Each committee operates under a defined terms of reference (TOR), which is periodically reviewed and endorsed by the Board to certify its relevance and effectiveness. These committees provide specialised expertise and guidance on governance matters related to audit, procurement, risk management, sustainability, strengthening decision-making processes, and reinforcing the integrity of internal controls.

The Board Committees are supported by key internal departments, including Human Resources, Finance and Strategy, Internal Audit, Procurement, Risk Management, and Legal and Company Secretarial. These divisions play an instrumental role in upholding compliance, identifying and managing risks and opportunities, implementing adaptive strategies, and facilitating regular reporting and follow-ups to proactively address challenges and drive sustainable growth.

Through this collaborative approach, we strengthened our governance structures, promoted transparency and accountability, and achieved operational excellence in pursuit of our long-term strategic and sustainability objectives.



<sup>1</sup> Offers support and reports directly to the BRSC

<sup>2</sup> Reports directly and functionally to the BAC and administratively to the CEO

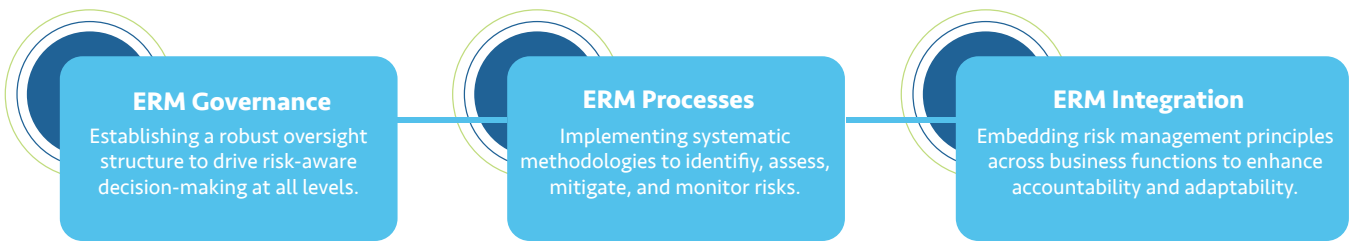
<sup>3</sup> Supports Board Committees functionally and reports directly to CEO

# 1.1 Enterprise Risk Management (ERM)

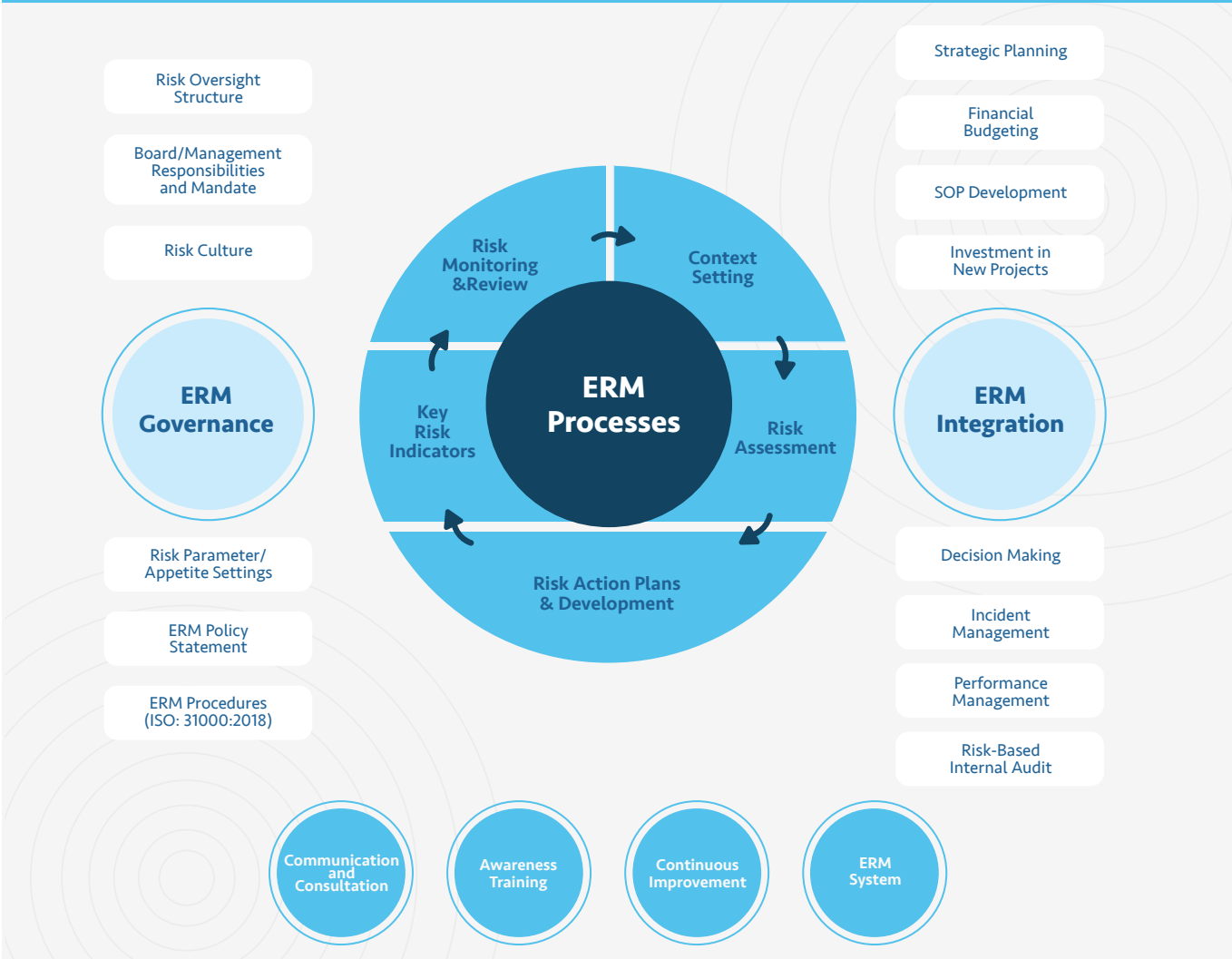
Effective risk management is a cornerstone of our strategic decision-making process, underpinning our commitment to resilience, sustainability, and operational excellence. Recognising the dynamic nature of our operating environment, we adopt a proactive and structured approach through the implementation of our ERM Framework, which is aligned with the internationally recognised ISO 31000:2018 standard. This framework

enables the systematic identification, assessment, mitigation, and monitoring of risks and opportunities that could impact the achievement of strategic and operational objectives.

The ERM Framework is anchored by three (3) core pillars that guide its execution across the organisation:



*This structured approach enables us to proactively manage risks, undertake business continuity, and accomplish long-term strategic objectives.*



## 1.2 ERM Key Initiatives 2024

### Strengthening Risk Governance for a Resilient and Sustainable Future

At Air Selangor, risk governance is an essential pillar of our sustainability strategy, making certain that we diligently identify, assess, and mitigate potential risks that may impact our operations, stakeholders, and the environment. A systematic risk management framework empowers us to strengthen our operational resilience, safeguard water security, and promote regulatory compliance, all while advancing lasting improvement.

### 1.2.1 Elevating Risk Governance Through Regional Risk Management Committee (RRMC) Meeting

As part of our ongoing commitment to strengthening risk governance, the RRMC convened twice in 2024. These sessions played a pivotal role in reinforcing risk oversight across various regions and operational levels. In preparation for the meetings, the Risk Management Department (RMD), in collaboration with risk advocates from Klang, Gombak, and Hulu Langat, conducted structured risk assessment workshops and facilitated in-depth discussions.

These initiatives were designed with the following key objectives:

#### Develop a Comprehensive Regional Risk Profile

To systematically identify, assess, and document critical regional risks, thereby enhancing visibility and enabling more focused mitigation efforts.

#### Foster a Proactive Risk Culture

To embed risk awareness across operational teams, promoting early detection and timely response to emerging risks.

#### Enhance Risk Mitigation Strategies

To improve the effectiveness of mitigation measures by aligning operational risks with broader strategic goals.

#### Strengthen Cross-Functional Collaboration

To encourage open dialogue and coordination among departments and regions, facilitating the consistent application of risk management best practices.

Through these efforts, we continued to elevate our enterprise-wide risk management capabilities and ensure resilient, well-governed operations across all regions.

Chaired by the Director of Operations, the meeting assembled key representatives from RMD, Heads of Section/Region (HOS/R), and Head of Departments (HODs). The dialogues centred on critical operational risks, emerging threats, and mitigation strategies at the regional level.

### 1.2.2 Key Risk Findings and Strategic Response

#### Regional Risk Prioritisation and Interconnectivity

To ensure data-driven risk management, each region was responsible for identifying the top five (5) critical risks affecting their operations. The top five (5) risks identified for three (3) regions, namely Klang, Gombak and Hulu Langat are as follows:

- Collection Risk (e.g. pending water bill collection from active accounts, domestic and non-domestic).
- Workforce Challenges (e.g. ageing workforce, competency and skill gap, motivation, and job satisfaction).
- Unbilled Accounts (e.g. inadequate timeliness in customer bill generation due to system glitch and data transfer gap).

## 1.2.2 Key Risk Findings and Strategic Response

### Regional Risk Prioritisation and Interconnectivity

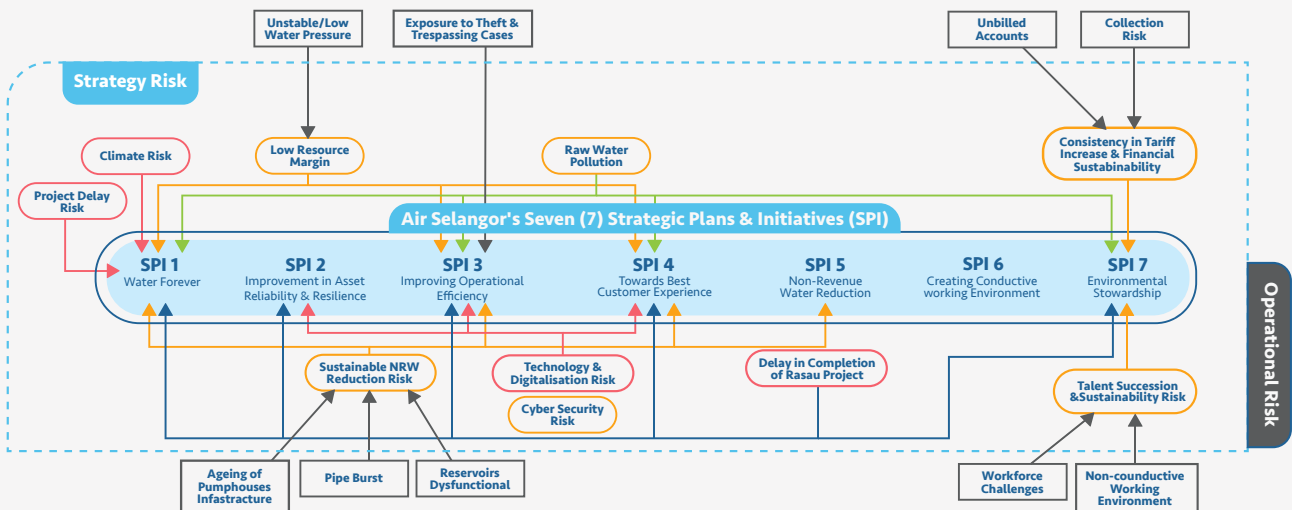
- Non-conductive Working Environment (e.g. ageing building facilities and infrastructure).
- Unstable/Low Water Pressure (e.g. low water pressure due to inadequate water supply infrastructure (reservoir), low water reserve margin, fluctuation in water demand during peak season).

The risk assessment and prioritisation activity will continue in 2025 for other remaining regions accordingly.

The diagram below illustrates the interconnectivity between operational risks (which impact day-to-day functions) and strategic risks (which influence long-term sustainability and corporate objectives).

This interconnected approach allows us to:

- Align regional risk management with broader corporate risk policies.
- Address cascading risks that may impact multiple operational areas.
- Develop targeted risk treatment plans that address both short-term vulnerabilities and long-term sustainability challenges.



### Strengthening Risk Mitigation Frameworks

- We are actively strengthening risk resilience through a series of targeted mitigation measures, grounded in comprehensive risk assessments and governance enhancements. These initiatives are focused on the following key areas:
  - Enhanced Risk Visibility and Real-Time Monitoring
    - Strengthening risk reporting frameworks to support timely and informed decision-making.
    - Leveraging data analytics and digital tools to enable dynamic risk tracking and trend analysis.
  - Proactive Risk Management and Contingency Planning
    - Implementing early warning indicators to anticipate and address risks before they escalate.
    - Optimising Business Continuity Plans (BCP) to ensure minimal service disruption during unforeseen events.
- Embedding an Integrated Risk Management Culture
  - Delivering ongoing training and awareness programmes to embed a strong risk mindset across all levels of the organisation.
  - Promoting risk-informed decision-making by integrating risk considerations into daily operations and strategic planning.
- Strengthening Regulatory and Compliance Alignment
  - Ensuring alignment of risk management practices with both national and international regulatory standards.
  - Enhancing compliance monitoring to maintain high standards of governance, environmental stewardship, and operational excellence.

Through these focused efforts, we continue to build a robust, future-ready risk management ecosystem that supports sustainable growth and operational resilience.

## 1.2.3 Northern and Southern Regional Risk Management Workshop

As part of our continued commitment to strengthening risk governance and operational resilience, the Regional Risk Management Workshop was held for the Northern and Southern Production Regions (NRO & SRO) between November and December 2024. This workshop served as a strategic platform that brought together industry experts, technical and non-technical personnel, as well as key stakeholders for collaborative discussions. Participants explored practical risk management approaches, shared proven mitigation strategies, and identified sustainability-focused improvements to enhance operational effectiveness across the regions.

Approximately 150 participants attended the workshop, comprising various departments from headquarters and regions across Air Selangor, fostering a diverse and inclusive approach to regional risk management.

The objectives and key focus areas of the two-day workshop aimed to:

- Strengthen risk awareness and governance within upstream operations.
- Enhance regional strategies to mitigate potential operational risks.
- Promote cross-functional collaboration through shared insights and industry best practices.
- Drive sustainability in risk management by embedding resilience into operational frameworks.

The workshop featured impactful keynote presentations, dynamic breakout sessions, and in-depth discussions focused on the evolving risk landscape, operational challenges, strategic solutions, and leading practices in risk management.

Beyond knowledge sharing, the workshop aimed to strengthen regional risk strategies, foster collaboration between the production departments and the Risk Management Unit, enhance the effectiveness of mitigation plans, and implement practical, actionable measures tailored to regional needs.

This Regional Risk Management Workshop underscores our commitment to operational resilience, sustainability, and proactive risk governance. Looking ahead, the Risk Management Team, in collaboration with SDU, will expand its engagement efforts across all regions – integrating sustainability-focused risk strategies into operational decision-making and supporting the organisation's journey toward continuous growth and long-term value creation.







## 1.2.4 Embedding Risk Governance in Air Selangor's Sustainability Agenda

Risk governance remains a fundamental pillar of our sustainability journey. By continuously strengthening our risk management framework, we not only reinforce operational resilience but also ensure the long-term security of water resources for future generations.

In line with our commitment to continuous improvement and strategic risk adaptation, we strive to deliver water services that are reliable, sustainable, and climate-resilient. In 2024, the ERM and SDU teams jointly conducted a comprehensive review of Air Selangor's risk management framework. This review incorporated enhanced processes and procedures, based on recommendations from an external consultant in 2023. The initiative marks a critical step in enhancing governance, strengthening risk oversight, and aligning with industry best practices.

While notable progress was achieved in 2024, the risk management framework is scheduled for a holistic revision, targeted for completion in 2025. As part of our broader efforts to embed risk and sustainability considerations across the organisation, we also introduced a mandatory review process for all project proposals exceeding RM50 million and with high-risk exposure. These high-value projects are now subject to rigorous evaluation by the RMD prior to submission for Board approval, ensuring that risk considerations are systematically integrated into strategic decision-making.

Through these proactive measures, we continue to enhance risk resilience, governance standards, and sustainability integration.

## 2.0 Integrity and Governance

As the largest water services provider in Malaysia, we advocate for strict governance frameworks and integrity policies to maintain public trust and operational efficiency. Through the implementation of robust anti-corruption measures, compliance programmes, and risk management strategies, we uphold ethical decision-making and regulatory adherence. By cultivating a culture of integrity, we not only strengthen stakeholder trust, but also enhance service delivery, all while contributing to sustainable and responsible corporate governance.

### 2.1 Air Selangor's Anti-Corruption Plan (AACP)

In 2023, we established Air Selangor's Anti-Corruption Plan (AACP), which aligns with the National Anti-Corruption Plan (NACP). The framework outlines four (4) key strategies, with a total of 59 initiatives developed for implementation between 2019 and 2025. As of 2024, 50 initiatives (85%) have been executed, with the remaining nine (9) (15%) slated for completion by the end of 2025.

### 2.2 External Engagement

The Integrity and Governance Section (IGS), formerly known as the Integrity and Governance Unit (IGU), remains dedicated to upholding ethical business practices with the support of continuous collaborative engagement and awareness sessions with internal stakeholders. Notably, from June to December 2024, IGS worked closely with the Procurement Department to facilitate vendor engagement events, fostering transparency and integrity in Air Selangor's supply chain. These sessions were attended by 550 representatives, including consultants, contractors, suppliers, vendors, senior management, and external stakeholders from relevant government agencies.

These initiatives focused on raising awareness and disseminating information about Air Selangor's anti-corruption policies and initiatives to external stakeholders.

To further strengthen its professional network, IGS engaged with external organisations and industry experts throughout 2024. Key activities included participation in Integrity Day events organised by FGV, SP Setia, and PKNS. Additionally, in December 2024, we hosted a Meet & Greet session with Syarikat Air Perlis (SAP), focusing on knowledge sharing in integrity, governance, sustainability, and business continuity management.

These initiatives underscore our unwavering commitment to promoting ethical governance, fostering transparency, and strengthening industry collaborations in support of sustainable and responsible business practices.

#### Strategy 1

Improving the effectiveness and the integrity of the organisation's business

22  
Initiatives

13  
Initiatives

#### Strategy 2

Inculcating good ethical culture among stakeholders

#### Strategy 3

Promoting transparency in conducting business for the organisation

6  
Initiatives

22  
Initiatives

#### Strategy 4

Strengthening the governance structure of the organisation

### 2.3 Corruption Risk Assessment (CRA)

Between May and June 2024, we conducted an internal Corruption Risk Assessment (CRA) Review as part of our ongoing commitment to transparency, good governance, and the prevention of unethical practices. This proactive initiative was undertaken to systematically identify, assess, and mitigate corruption-related risks across the organisation.

**Key Components of the CRA Review:****Risk Identification**

Systematic evaluation of potential corruption risks across key functions, including operations, procurement, financial management, and other high-risk areas.

**Risk Assessment**

Analysis of the likelihood and potential impact of each identified risk on organisational integrity and performance.

**Mitigation Strategies**

Development of targeted action plans, policies, and internal controls to effectively address and reduce corruption risks.

**Stakeholder Engagement**

Active collaboration with relevant departments, employees, and regulatory authorities to ensure a holistic and integrated corruption risk management approach.

**Monitoring and Reporting**

Implementation of continuous monitoring mechanisms, periodic risk reporting, and feedback loops to support ongoing improvement and accountability.

This review reinforces our dedication to fostering a culture of integrity and accountability throughout its operations. A number of corruption risks were identified, with appropriate action plans developed and committed to by the respective departments. The CRA Review aligns with ISO 37001 (Anti-Bribery Management System), emphasising our pledge to integrity, regulatory compliance, and public trust.

## 2.4 ISO 37001 Anti-Bribery Management System (ABMS)

We remain steadfast in our commitment to maintaining the highest standards of integrity and compliance through the ABMS. As part of this ongoing effort, the IGS conducted an internal audit from May to June 2024, involving a team of ISO-certified internal auditors.

This annual internal audit is a key component of Air Selangor's ABMS compliance framework, ensuring adherence to ABMS standards and regulatory requirements. A handful of minor issues raised were addressed accordingly.

Additionally, in July 2024, an external Surveillance I audit was conducted by SIRIM QAS International Sdn. Bhd. to review internal controls, evaluate action plans, and affirm the ongoing sustainability of Air Selangor's ABMS certification. These efforts underscore our proactive approach to corporate governance, ethical business conduct, and leading anti-corruption standards.

To foster a strong internal culture of integrity, IGS also implemented an internal training programme for selected ABMS internal auditors. A total of 20 participants attended the training, which was conducted by an external trainer, equipping them with the necessary skills to strengthen anti-bribery compliance and governance within the organisation.

### Air Selangor Whistleblowing Policy

*The Whistleblowing Policy serves as a comprehensive framework to facilitate the confidential and responsible reporting of unethical conduct by employees and business partners. It ensures that all reports are handled with integrity, transparency, and confidentiality for whistleblowers. A summary of the Whistleblowing Policy is accessible on Air Selangor's website at:*

*<https://www.airselangor.com/about-us/publications/whistleblowing>*

*During the various engagement sessions with Air Selangor's employees and third parties (consultants, contractors, suppliers, vendors etc) throughout 2024, IGS took the opportunity to highlight the availability of the Air Selangor Whistleblowing channel, namely "etika.air@airselangor.com" for the reporting of any misconduct incidence(s).*

## 3.0 Business Continuity Management (BCM)

We are deeply committed to ensuring uninterrupted water supply, supporting regional economic growth, and enhancing operational resilience. To uphold this commitment, we established a comprehensive BCM framework that provides strategic guidance for compliance with BCM policies, operational procedures, and industry best practices.

Following the successful attainment of the ISO 22301 Business Continuity Management System (BCMS) certification, we continue to refine and strengthen our BCM approach. This includes regular updates to critical components such as the Business Impact Analysis (BIA), Business Continuity Plan (BCP), Crisis Communication

Plan, and Crisis Management Plan – ensuring their continued effectiveness and alignment with emerging risks and operational needs.

To further enhance organisational readiness, we conduct ongoing training programmes, awareness sessions, and system improvements. Regular engagement with BCM coordinators and key representatives ensures that all relevant stakeholders are well-informed, responsive, and equipped to manage potential disruptions. These efforts reaffirm our steadfast commitment to operational excellence, service continuity, and long-term resilience.

### 3.1 BCM Key Deliverables In 2024

#### 3.1.1 Crisis Simulation Exercise (CSE)

In 2024, we carried out two (2) major crisis simulation exercises to strengthen emergency preparedness and business continuity capabilities:

- 1. Bomb Threat Crisis Simulation Drill.** Held at Air Selangor Headquarters on 8 October 2024, this exercise focused on enhancing response protocols to security threats, improving staff evacuation procedures, and strengthening coordination with emergency response agencies.
- 2. Power Down Simulation.** Conducted at the Sepang Regional Office on 10 December 2024, this drill tested the organisation's operational resilience and evaluated the effectiveness of business continuity strategies in managing sudden power outages.

These simulations form a critical part of our proactive approach to crisis management, ensuring operational agility and reinforcing resilience across key operational sites. They enabled us to assess its response readiness, uncover operational gaps, and implement targeted enhancements to strengthen overall crisis preparedness.

The bomb threat drill was designed to assess the effectiveness of emergency evacuation procedures, the functionality of Air Selangor's Incident Command System (ICS), communication protocols during high-risk situations, and the coordination between internal teams and external stakeholders.

Key findings from the simulation included:

- **Bomb Detection Equipment** – Security Section has started to invest in bomb detection equipment, especially for locations gazetted as Sasaran Penting or *Kawasan Larangan/Tempat Larangan* for added security.
- **Establish Standard Code for Bomb Threat** – Security Section has also established a standard code for bomb threat in the Emergency Management Procedure, to be used for communication in the presence of the public and not to cause the public to be alarmed and panic.
- **Readiness of Building Alarm and Announcement System** – The building alarm and announcement system has undergone repair and improvement work so that all staff could receive clear signals and information for direction during a crisis.
  - **Alternate Work Location** – The alternate work location especially for critical business functions has been identified and formalised.
  - **Alternate Location for Auxiliary Police Command Centre (APCC)** – the alternate location for APCC CCTV centralised monitoring operations has also been identified at one of the nearby locations.

### 3.1.1 Crisis Simulation Exercise (CSE)

The insights gained from the simulation exercise provided valuable input for enhancing our crisis management framework and ensuring better preparedness in future scenarios.

As part of the improvement process to strengthen the security preparedness during a bomb incident, some key action plans and recommendations have been outlined from the simulation exercise. These include optimising evacuation protocols and drills, enhancing crisis command and control through a real-time monitoring dashboard and system, strengthening internal and external communication via training and an automated alert system, and improving coordination with law enforcement by establishing collaborative partnerships.

**The power-down simulation** focused on three (3) key areas – mobilisation to alternate work location, assessing IT system and infrastructure resilience, and identifying and evaluating the impact on critical operations.

Overall, the outcome of the simulation shows:

Although Bangunan Kosmopleks and its facilities can be used as alternate work locations, further improvement can be considered to ensure that all critical business functions, including counter services, are able to resume operation promptly, without the need to close the business during disruption.

To improve our preparedness for a power outage, three (3) effective measures are proposed for implementation. Firstly, to improve and strengthen the staff mobilisation strategy to accelerate deployment and support. Secondly, to enhance IT and backup contingencies to maintain the continuity of critical systems. And lastly, to continuously educate employees on BCM readiness through training, the development of a quick reference guide, and other initiatives.



### 3.1.2 Systemised BCM Module

As business continuity risks become more complex, the need for a robust, data-driven approach has become increasingly crucial. We have developed the GARIS-BCM Module, a digital solution designed to enhance the efficiency and effectiveness of BCM.

The GARIS-BCM Module represents a strategic investment in digital transformation, ensuring that critical BCM data is easily accessible, decision-making is optimised, and manual processes are automated, resulting in greater efficiency and cost savings.

Key benefits include providing a centralised, real-time repository for BCM data, streamlining reporting, and integrating risk management and BCM processes on one single platform.

### 3.1.3 Development of BCM e-Learning and Ongoing Trainings

To continue fostering awareness, culture and BCM readiness among our employees, the BCM team, together with Air Selangor's Learning Centre, has launched the BCM E-Learning Module to boost business continuity awareness and preparedness among all employees.

Key Highlights:

#### Digital Learning for Enhanced Preparedness

Educates staff on BCM principles, crisis response, and recovery strategies.

#### Accessible and Flexible Training

On-demand learning enables employees to complete training at their own pace without disrupting operations.

#### Standardised BCM Knowledge

Ensures consistent awareness across all employees.

As of 31 December 2024, a total of 4,610 employees (90.9%) have enrolled and successfully completed the BCM e-learning module, with efforts ongoing to ensure full commitment and participation.

In addition, the BCM team will also deliver the BCM awareness module via a compulsory onboarding programme organised by the Human Resources Learning Centre (HRLC) on a monthly basis, starting from 2024.

### 3.1.4 BCM Engagement Sessions

The BCM team hosted a series of focused engagement sessions with BCM coordinators and key personnel throughout 2024. Key discussions included refining BIA and BCP documentation, improving the interconnectivity of BCPs, and developing manual workarounds for critical systems to ensure operational resilience during disruptions. Additionally, these engagements facilitated the review of BCPs for critical tenders, ensuring that business continuity considerations are integrated into procurement and contractual processes.

### 3.1.5 Business Continuity Management System (BCMS) ISO 22301:2019 Certification

In 2024, we continued to conduct internal and external ISO audits to ensure full compliance with the ISO 22301:2019 standard. These audits assess and maintain the effectiveness of BCM policies, risk mitigation strategies, and operational resilience measures, reinforcing our ability to respond to and recover from disruptions.

## 4.0 Cybersecurity

Recognising the critical role of technology in its daily operations, we have identified cybersecurity as one of its top ten (10) organisational risks. In response, the company has adopted a proactive approach to strengthen its cyber resilience, protecting the security of its systems, networks, and data.

### 4.1 Strengthening Cybersecurity at Air Selangor

As part of our commitment to secure a digital environment, we have made cybersecurity training a mandatory component of employee onboarding. The two-hour Computer Security Awareness e-learning module, available in dual languages, equips all new employees with essential knowledge and skills to safeguard their digital workspace against cyber threats. A total of 429 employees participated in the mandatory e-learning Programme in 2024.

Additionally, we enforce a comprehensive IT Policy, setting clear rules, and guidelines for the responsible use, management, and security of our technology resources. These policies align with our objectives, protect critical assets, and ensure compliance with relevant regulations.

### 4.2 Implementation of Zero Trust

Zero Trust is a cybersecurity framework built on the principle of 'never trust, always verify'. It operates on the assumption that threats can originate both internally and externally, meaning no user or device is trusted by default. Access must always be thoroughly verified.

In 2024, Air Selangor's IT Department (ITD) began implementing the Zero Trust solution across the organisation, successfully onboarding 2,500 users. A total of 4,500 users are scheduled to be onboarded in phases by the end of 2025. Key practices integrated into the framework include multi-factor authentication (MFA), which requires multiple layers of verification beyond just a password, and endpoint security, which ensures that only trusted and secure devices can access the network. Furthermore, we adopted specific Zero Trust solutions that align with our broader cybersecurity strategy.

As cloud computing, remote work, and advanced cyber threats continue to evolve, traditional perimeter-based security is no longer adequate. By adopting Zero Trust, we have enhanced our cybersecurity posture, significantly reducing the risk of unauthorised access, data breaches, and insider threats.

### 4.3 Cybersecurity Act 2024 (Gazetted as Act 854)

Effective from 26 August 2024, the Cybersecurity Act 2024 was introduced to strengthen Malaysia's cyber defenses and elevate resilience, as part of the efforts to mitigate against emerging threats.

As one of the entities within the National Critical Information Infrastructure (NCII), we are required to comply with the following actions:

**Implement the Code of Practice, including adoption of international standards such as ISO 27001.**

**Provide information on assets to SPAN.**

**Conduct an annual risk assessment and submit the report to SPAN by 31 December each year.**

**Undergo assessment and audit by an external auditor once every two (2) years with the report submitted to SPAN.**

**Report cybersecurity incidents to SPAN.**

**Conduct an annual cybersecurity incident simulation exercise.**

### 4.4 Cybersecurity Maturity Assessment (CMA)

Following the findings of the consultant Ernst & Young (EY), ITD is progressing its efforts to implement the 75 initiatives identified across five (5) critical processes of the organisation, namely billing, distribution, production, procurement, and complaint management. As of 2024, ITD has completed 15 initiatives, with the target remaining for full implementation by the end 2026.

## 4.5 Phishing Simulation Programme

In 2024, ITD conducted a total of four (4) phishing simulation programme exercises across the company to evaluate and improve our ability to recognise, respond to, and prevent phishing attacks.

The key objectives are:

- **Raising Awareness.** Educate employees about the dangers of phishing and how to identify malicious emails, links, and attachments.
- **Testing Vulnerabilities.** Assess Air Selangor's current vulnerability to phishing attacks, and identify individuals or departments that may need more targeted training.
- **Strengthening Security Culture.** Foster a collective culture of cybersecurity awareness to ascertain that employees take proactive steps to protect sensitive information and avoid falling victim to cybercriminals.
- **Measuring Response.** Monitor how employees respond to simulated phishing attempts, including whether they click on malicious links, report suspicious activity, or disregard security warnings.
- **Improving Incident Response.** Empower employees with the knowledge to report phishing attempts, and undertook the steps required if they suspect a breach.
- **Enhancing Cyber Defenses.** Use insights from the simulation to improve email filtering systems, strengthen technical defenses, and refine security protocols.

The outcome of the phishing simulation programme indicates an increased level of awareness among employees. Nevertheless, there are still areas for improvement that require ITD's continued efforts.

## 4.6 Cybersecurity Awareness Roadshow

The Information Security Management System (ISMS) and Cybersecurity Awareness Roadshow remain as cornerstone initiatives in bolstering Air Selangor's cybersecurity framework. As of December 2024, the awareness programme had been successfully executed across the organisation, reaching 15 departments, 28 WTPs, six (6) dams, and 12 regional offices.

This ongoing programme is fundamental in equipping employees with the necessary skills and resources to mitigate cybersecurity risks, fostering a culture of proactive defence and vigilance at all organisational levels. Moving into 2025, the programme will expand further to include additional departments and operational units, reaffirming our commitment to implementing robust cybersecurity practices across the organisation.



# FINANCIAL SUSTAINABILITY

As part of our ongoing commitment to long-term financial sustainability, we have implemented a comprehensive strategic approach aimed at addressing key operational challenges, streamlining processes, and ensuring the continued delivery of reliable, high-quality services to our stakeholders. Through extensive assessment and collaborative efforts, we are positioning Air Selangor for enhanced efficiency, resilience, and profitability.

## Phase 1

### Strengthening Internal Operations and Ensuring Operational Efficiency

A cornerstone of our strategy for financial sustainability is optimising internal operations and structures, which includes the following initiatives:

#### Securing Sufficient Treated Water and Maintaining a High Water Reserve Margin

By diversifying water supply sources and exploring alternative solutions such as water reclamation and mobile treatment plants, we are reducing reliance on traditional methods and lowering costs associated with long-distance pipelines.

#### Strengthening Water Connectivity Across Selangor

We prioritise connectivity improvements across raw water resources, treatment plants and demand centres, based on necessity and urgency to ensure a reliable and uninterrupted water supply across the region.

#### Reducing NRW

We are intensifying our efforts to reduce NRW through the strategic expansion of District Metered Zones (DMZs), enhanced leak detection initiatives, and the adoption of performance-based contracts. These targeted measures are designed to improve operational efficiency and strengthen the financial sustainability of the organisation.

#### Optimising the Integrated Water Supply Scheme (IWSS) and Data Centre Support

The IWSS, was developed with a collaborative approach to meet the high water needs of new data centres locating their operations in Selangor. This also expands our customer base and revenue streams, positioning us for long-term success.

## Phase 2

### Financial Optimisation and Revenue Generation

In addition to operational improvements, we are focused on driving financial performance through sustainable, revenue-generating initiatives.

#### Improving Financial Performance

Despite our staff's persevering efforts during water disruptions, Air Selangor recorded a loss of RM683 million due to significant costs in depreciation and finance and leasing. To address this, we are exploring new approaches to optimise both operating and capital expenditures, with the aim of strengthening the company's financial position. Our goal is to create a more financially resilient Air Selangor.

#### Diversifying Revenue Streams

By seeking external business opportunities, optimising profit per cubic metre of water, and exploring partnerships with private investors, we aim to diversify our revenue sources. All these initiatives will be carried out under regulatory oversight from SPAN, ensuring beneficial agreements that align with our commitment to uphold financial sustainability.

### Phase 3

## Sustainability and Long-Term Value Creation

We are dedicated to driving sustainability while fostering long-term value creation for our stakeholders.

### Accelerating the Path to Net Zero by 2040

Achieving net zero by 2040 remains a key pillar of Air Selangor's long-term sustainability strategy. To ensure steady and effective progress toward this target, we are strengthening our implementation efforts by prioritising cost-effective, legally compliant, and practical solutions for the development of green infrastructure. Through this proactive approach, we are committed to accelerating its transition to net zero while delivering lasting environmental, social, and financial value to all stakeholders.

### Upgrading Training and Development for a Skilled Workforce

We are collaborating with Selangor Technical Skills Development Centre (STDC) and Universiti Selangor (UniSel) to establish a world-class water industry training institution to support workforce development and contribute to the overall growth of the water industry in Malaysia, and across Southeast Asia. Through our initiative to nurture talent and expertise, we will continue to drive innovation, efficiency, and profitability.

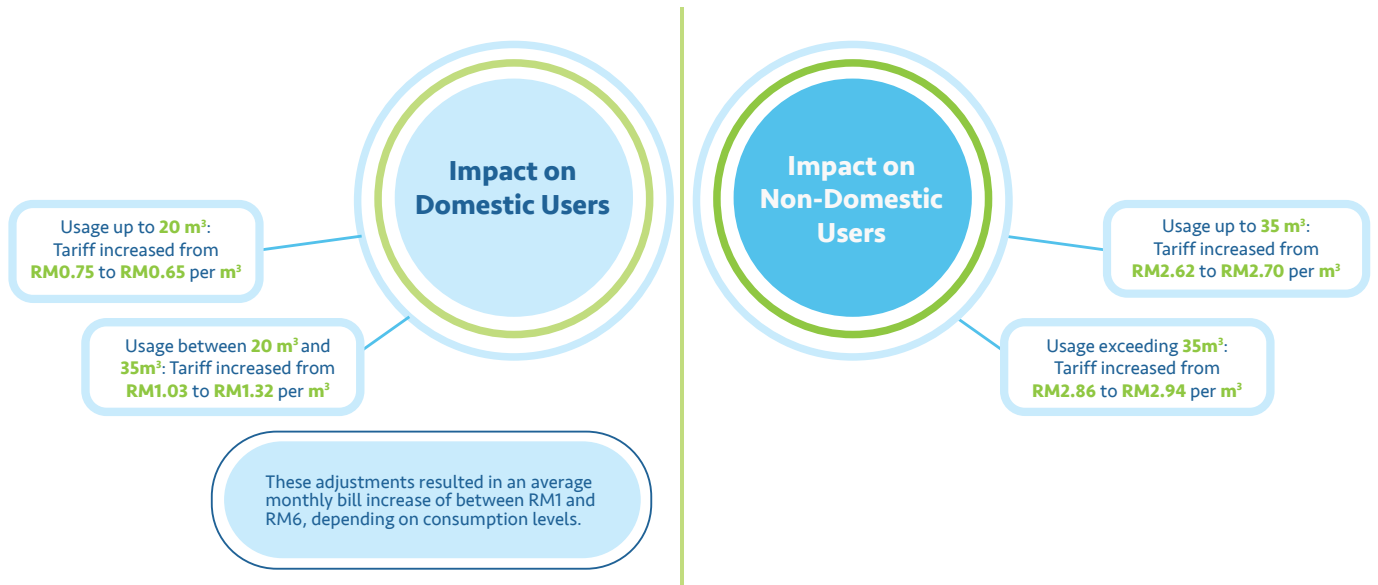
The strategic initiatives outlined in this Report are designed to optimise our internal operations, elevate customer service, and position the company as a leader in sustainability and financial resilience. We are laying a strong foundation for long-term financial sustainability, ensuring the continued provision of high-quality water services while maintaining robust financial health for the years ahead.



# TARIFF & PRICING

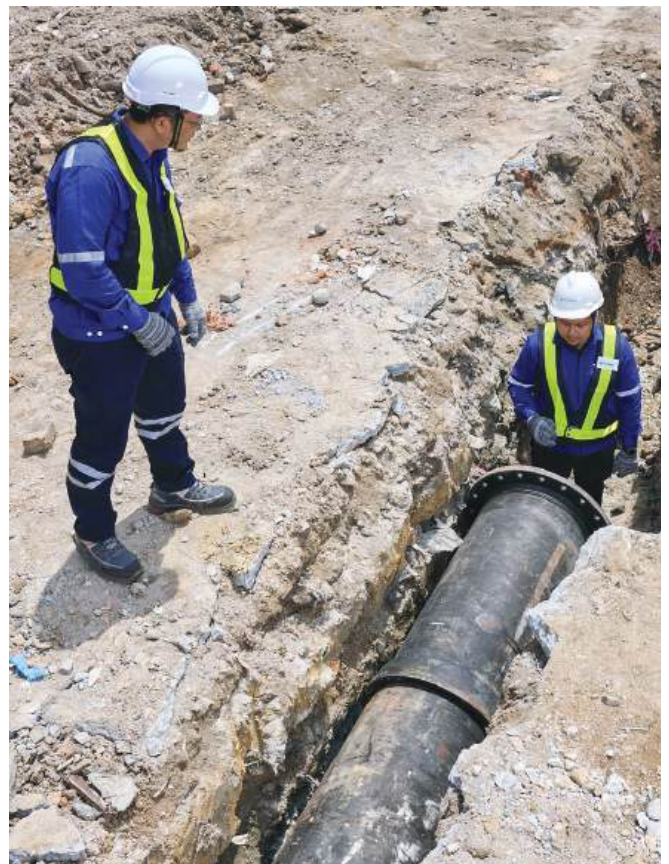
## Tariff Adjustments

In 2024, SPAN implemented strategic tariff adjustments to strengthen the sustainability and quality of water services for Selangor, Kuala Lumpur, and Putrajaya. The tariff adjustment for domestic categories was implemented in February 2024 which marked the first significant increase since the last adjustment in 2006, concurrent with an electricity surcharge, aimed at addressing the increase in Imbalance Cost Pass-Through (ICPT) cost.



Air Selangor's revenue increased by 5.44%, from RM2.82 billion in 2023 to RM2.98 billion in 2024, mainly due to the above tariff adjustment. However, the company expenses also rose by 4.60%, from RM3.51 billion to RM3.67 billion, due to higher operating expenses, leases, and loan repayments.

Despite the tariff adjustment, we have yet to achieve full cost recovery because tariff increases were postponed several times over a period of nearly two (2) decades. Achieving full cost recovery is crucial to ensure the long-term financial sustainability of the company and to maintain high service standards. The tariff adjustment was necessary not only to support ongoing and future infrastructure development but also to address escalating operational and maintenance costs. Judicial tariff adjustments also play an important role in promoting responsible water consumption and supporting broader water conservation initiatives, which are critical resilience behaviours needed to adapt to unpredictable weather caused by climate change.



# SUPPLY CHAIN MANAGEMENT

## Advancing Sustainable Procurement Practices at Air Selangor

We remain committed to strengthening governance, transparency, and sustainability within our procurement processes. In line with this commitment, several key initiatives were implemented in 2024 to digitise procurement operations, enhance vendor engagement, and improve governance frameworks. These strategies support our broader sustainability objectives and reinforce ethical and responsible procurement practices.

### Refining e-Procurement Practices

- The i-Tender platform has been further refined to enhance accessibility and transparency. Key improvements included transparency in awarded contracts. Successful bidders can view the result of the tender in the i-Tender platform, improving efficiency of communication while promoting openness and fair competition.
- Continuous efforts were taken to integrate procurement systems to enable a more seamless and efficient procurement process. In the meantime, we have established a communication channel via email [tender.result@airselangor.com](mailto:tender.result@airselangor.com) for unsuccessful tenderers to enquire on their tender results.
- Introduction of Service Procurement has allowed vendors to track the status of their invoice submissions, facilitating clearer process visibility and communication. These enhancements support our objective of promoting e-procurement practices, systemising tracking mechanisms, and enabling vendor self-management.
- Action is underway to digitise the Annual Procurement Plan, to identify suitable e-solutions that can streamline procurement planning to ensure timely delivery of business and project requirements within an approved budget.

As of December 2024, Air Selangor has invested RM1.3 billion in procurement, with 99% of the total spending with local business partners. This commitment not only strengthens the local economy but also promotes sustainable supply chains by reducing carbon footprints associated with long-distance sourcing. With a total of 2,261 active vendors registered in our procurement system, we continue to empower local businesses, fostering resilience and sustainability within the industry while ensuring a reliable and responsible supply network for our operations.

### Stakeholder Engagement and Capacity Building

Throughout 2024, we conducted five (5) key engagement sessions to disseminate our vision to vendors. These sessions aimed to promote understanding of our expectations and procurement process, foster good working relations, ensure open feedback, and drive improvements. The details of these engagements are as follows:

- **Hari Bersama Vendor – Wilayah Selatan held on 8 March 2024**
  - The programme was attended by a total of 70 vendors, held to align them with our vision and aspirations. It included briefings, sharing, and receiving feedback on vendors' performance, common issues, improvements, as well as integrity in procurement.
- **Business Partner Engagement Session 2024 with Panel Contractors for the Operational Services Department (OSD) in Q2 held on 26 June 2024**
  - A total of 100 participants joined our contractor engagement session, which was held to align all panel contractors with Air Selangor's vision, performance expectations, and operational updates. The event highlighted the importance of integrity and health, safety, security, and environment (HSSE) compliance.
- **Business Partners Engagement Session 2024 with the Water Quality Department and Production Department in Q3 held on 22 August 2024**
  - We introduced a structured vendor engagement programme to strengthen alignment on the company's operational goals, integrity, and adherence to health, safety, and environment (HSE) standards. This session brought together 150 participants, fostering stronger collaboration and performance excellence among vendors.

## Stakeholder Engagement and Capacity Building

- **Business Partner Engagement with the CBS Department in Q3 held on 4 September 2024**
  - This session was attended by 160 participants from 60 companies. The event included presentations on Air Selangor's aspirations, scope of work, annual budget allocation, critical projects, vendor performance, lessons learned, HSSE compliance, and integrity commitments, ensuring transparency and efficiency in vendor partnerships.
- **Partner Engagement with the Planning and Capital Works Department (PCW) in Q4 held on 16 October 2024**
  - This event was attended by 200 participants from four (4) departments/sections – Procurement, Planning and Capital Works, HSSE, and Integrity. The aim of this initiative was to foster a shared understanding of the company's vision and mission, address key issues, and support operational excellence across the value chain.

## Strengthening Governance and Risk Management

The Management Procurement Committee (MPC) plays a pivotal role in reviewing recommendations for tenders that are published in our websites and major newspapers. By incorporating governance oversight and obtaining risk management input, the MPC ensures that award recommendations for tenders are thoroughly reviewed and deliberated before Board approval, reinforcing due diligence and accountability.

Additionally, the TOR for contract management is being refined to bolster internal control processes. This revision aims to strengthen governance practices, establish clear responsibility and accountability including levels of approvals which improved contract management efficiency.

## Vendor Performance Management System 2.0

We continue to enhance our e-vendor performance evaluation platform – **Vendor Performance Management System (VPMS) 2.0**. The digitised evaluation platform offers structured and systematic performance assessments and monitoring. Moving forward in 2025, the system is being explored to further refine to include specific performance categories and framework, promoting a more robust assessment.

## Governance and Policy Enhancements

As part of the ongoing review of procurement's standard operating procedures and/or manuals, the Procurement Manual (Version 3) has been under review in 2024, with a target for finalisation in 2025. This revision aims to further expand and update procurement policies, aligning them with industry standards and regulatory requirements.

Additional initiatives will be implemented to further strengthen governance practices in promoting confidentiality and traceability of information leakages in procurement processes.

## Sustainable Procurement Initiatives

We are actively exploring opportunities to integrate **circular economy** principles into our procurement strategy. A key focus is on recycling and repurposing purchased products, contributing to waste reduction and resource optimisation. These efforts align with our broader sustainability commitments and support environmental conservation.

By continuously refining our procurement strategies, we remain committed to fostering a transparent, efficient, and sustainable procurement ecosystem that benefits both our vendors and stakeholders while advancing our overall sustainability goals.

# ENVIRONMENTAL COMPLIANCE

As a provider of an essential public utility, we bear a significant responsibility to ensure full environmental compliance, thereby safeguarding the long-term sustainability of its operations. We are required to comply with Environmental Quality Act 1974 (Amendment 2024) especially the three (3) key environmental regulations: the Environmental Quality (Scheduled Wastes) Regulations 2005, the Environmental Quality (Industrial Effluent) Regulations 2009, and the Environmental Quality (Clean Air) Regulations 2014.

To uphold these obligations, we adopted the Department of Environment's Guided Self-Regulation (DOE GSR) framework. This comprehensive approach includes the implementation of environmental policies, dedicated budgeting, monitoring committees, pollution control facilities, competency development programmes, as well as robust reporting, communication, and transparency mechanisms. These elements collectively support a self-regulatory model that ensures continuous compliance with environmental standards.

In alignment with GSR requirements, we established established two (2) key oversight bodies: the Environmental Regulatory Compliance Monitoring Committee (ERCMC) at the strategic level and the Environmental Performance Monitoring Committee (EPMC) at the regional level. The ERCMC convenes quarterly in tandem with the HSSE Corporate Committee to reinforce governance and drive cross-functional coordination on environmental compliance matters.

In response to recent amendments to the Environmental Quality Act, which now enforces stricter penalties for non-compliance, we proactively issued official internal communications to inform all relevant stakeholders. These efforts ensure awareness of the updated regulatory

landscape and reinforce our ongoing commitment to environmental stewardship.

As of 2024, we maintain 43 scheduled waste storage facilities, supported by a team of 100 certified environmental professionals across four (4) key areas of expertise: Certified Bag Filler Operation (CePBFO), Industrial Effluent Treatment Systems Operations (CePIETSO-PCP), Scrubber Operation (CePSO), and Scheduled Waste Management (CePSWaM). These initiatives have contributed to the DOE GSR completion rate of 94.31% for Production activities and 95.87% for Distribution activities in 2024.

Through internal monitoring a total of 40 non-compliances were recorded in 2024 against the Industrial Effluent Regulations, improved by 67.23% compared to 122 non-compliances in 2023. The primary cause of these violations is due to insufficient capacity for residual treatment, which we are currently working on upgrading and constructing new Residual Treatment Facilities (RTF) to cater for future demand. These initiatives are part of DOE-Air Selangor resolutions, for which the progress is updated and reported to DOE on a regular basis.

We are continuously making efforts to explore collaborations and partnerships with external parties to develop effective residual waste management strategies focusing on recycling, composting, and other waste diversion efforts including conducting study and nursery trials on the reuse of the residual as topsoil in the agriculture industry.

As of December 2024, we recorded no significant spills and received zero notices of non-compliance and zero fines from DOE under all regulations.



Pillar 2

# REDUCING THE IMPACT OF CLIMATE CHANGE



6 CLEAN WATER AND SANITATION

7 AFFORDABLE AND CLEAN ENERGY

12 RESPONSIBLE CONSUMPTION AND PRODUCTION

13 CLIMATE ACTION

The global economic losses from climate change could reach US\$38 trillion annually within the next 25 years, underscoring the urgency of addressing this critical issue. Unchecked global warming means rising temperatures intensify heatwaves, storms grow more destructive, and extreme weather events become more frequent.

Over the past three (3) to five (5) years, Malaysia has faced unpredictable weather with an increase in heatwaves, intense rainfalls, longer dry spells, and frequent flash floods. These changes are influenced by climate change and the El Niño phenomenon, affecting monsoon seasons and impacting both urban areas and water supply systems.

Beyond environmental consequences, climate change threatens livelihoods and poses significant risks to businesses, including water service providers. It also has the potential to disrupt operations and hinder long-term value creation for stakeholders. In response, we remain committed to adaptation and innovation, ensuring the sustainability of both our company and the water ecosystem.

# ENVIRONMENTAL MANAGEMENT AND NET ZERO ENERGY

## Our Approach

We recognise the urgency of addressing the climate crisis and remain steadfast in mitigating its impact to ensure an uninterrupted and sustainable water supply for our customers. Through our designated programmes for SPI 1: Water Forever and SPI 7: Environmental Stewardship, we have developed comprehensive action plans to minimise the effects of climate change on our operations.

Our approach is holistic, encompassing the establishment of the Climate Change Taskforce, continuous monitoring and reduction of emissions, transitioning to cleaner energy sources and strengthening water conservation strategies. Additionally, we are committed to enhancing our zero-waste initiatives and ensuring full compliance with environmental quality regulations. By integrating these efforts, we strive to build a resilient and sustainable water ecosystem while contributing to broader environmental preservation goals.

**1** Climate Change Taskforce

**2** Carbon Emissions

**3** Net Zero Energy Vision 2040

**4** Managing Energy Consumption

**5** Water Conservation

**6** Internal Water Use

**7** Waste Management

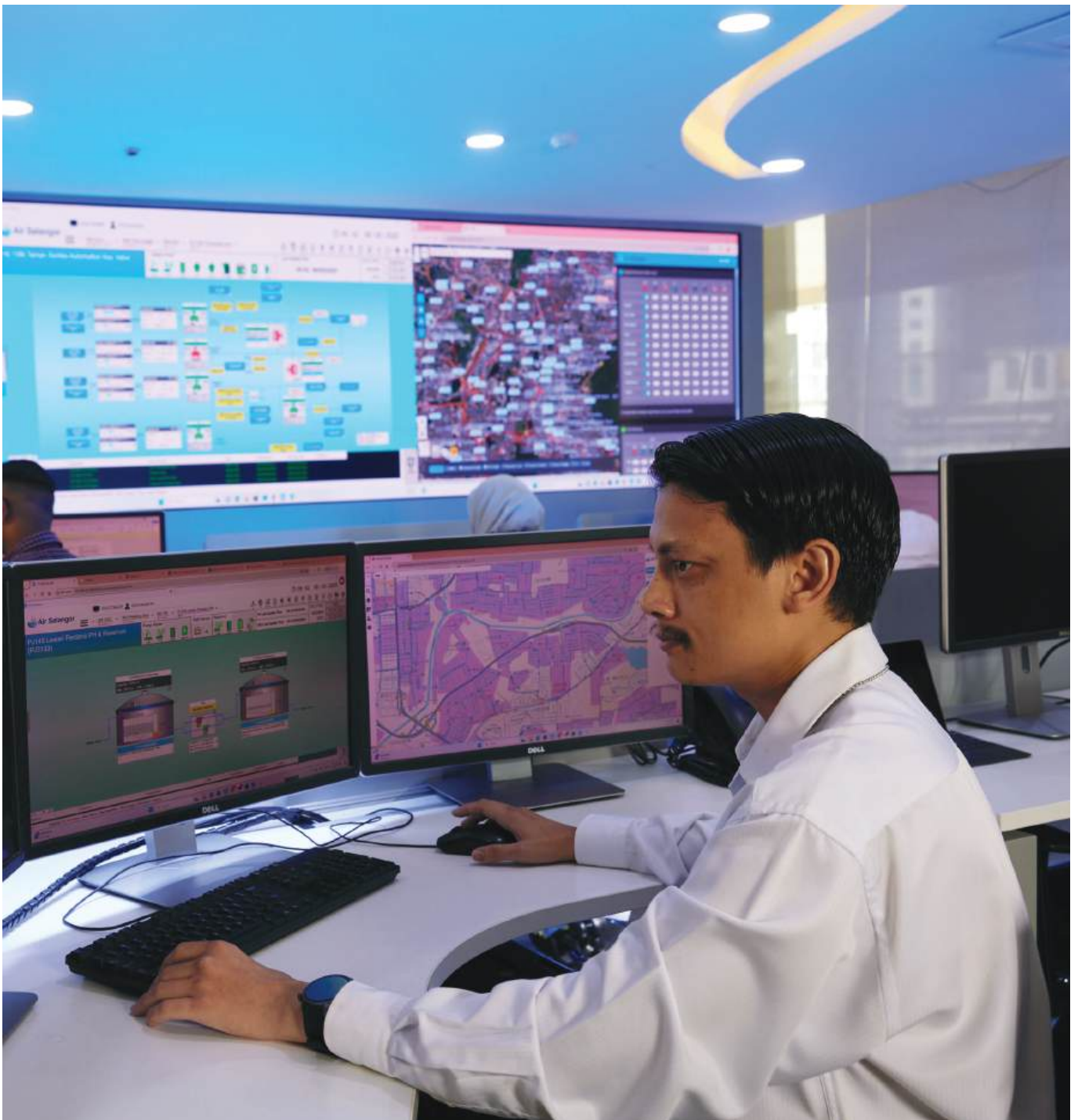


## 1.0 Climate Change Taskforce

We acknowledge the significance of climate impact to our business and have established a Climate Change Taskforce to address the physical impacts of flood and drought events.

The Drought Strategic Framework allows the company to build resilience, introduce interventions, and improve communication through four (4) key pillars, namely water resources management, water supply management, demand management, and communication strategy. Our Flood Risk Mitigation Framework is focused on two (2)

mitigation measures, namely structured measures and non-structured measures that will employ a systematic and organised approach to address the risks and impacts of flooding, and flexible and adaptable measures to allow for creativity and exploration in addressing flood risks, respectively.



## 1.1 Carbon Emissions

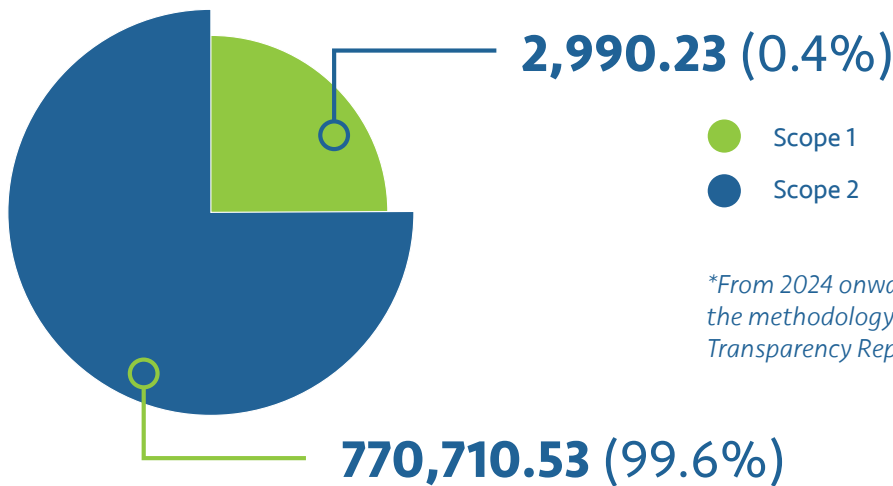
We continuously monitor the impact of carbon emissions from our operations through carbon management initiatives. As of December 2023, we recorded and disclosed Scope 1 emissions which consist of fuel consumption from petrol and diesel to power fleet vehicles, backup generators and various machineries, and Scope 2 emissions, which solely consists of the electricity purchased to operate WTPs, pumphouses, office buildings and all associated facilities.

There has been a slight increase in Scope 1 emission due to the increase in fuel consumption in 2023. It should be noted that fuel consumption is not contingent on the volume of treated water produced, rather, it is influenced

by the unpredictability of maintenance and cleaning activities at the treatment plant.

Scope 2 has also seen an increase in emissions due to our reliance on purchased electricity. Despite this, we have managed to maintain relatively low carbon intensity amidst increasing production to meet the water demand. This is achieved through various operational efficiency programmes, reduction of NRW and improved billing collection.

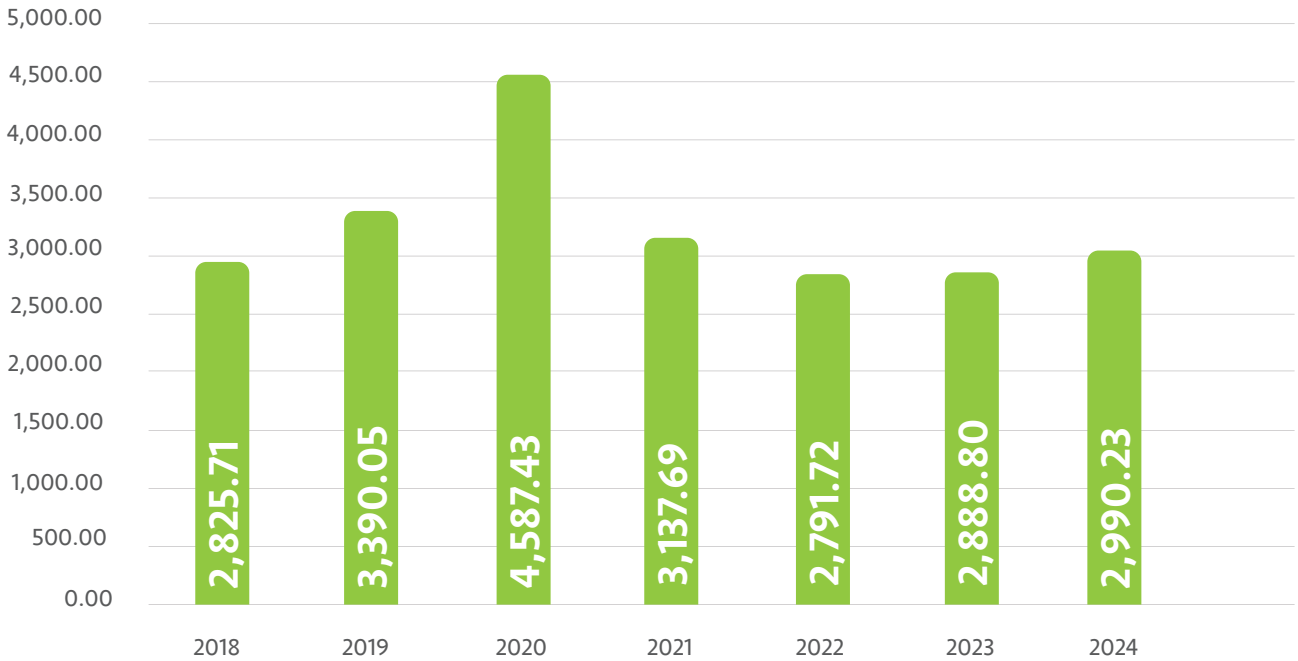
### Breakdown of Carbon Emissions by Scope (tCO<sub>2</sub>e)



*\*From 2024 onwards, CO<sub>2</sub>e calculations are based on the methodology outlined in Malaysia's First Biennial Transparency Report (BTR1).*



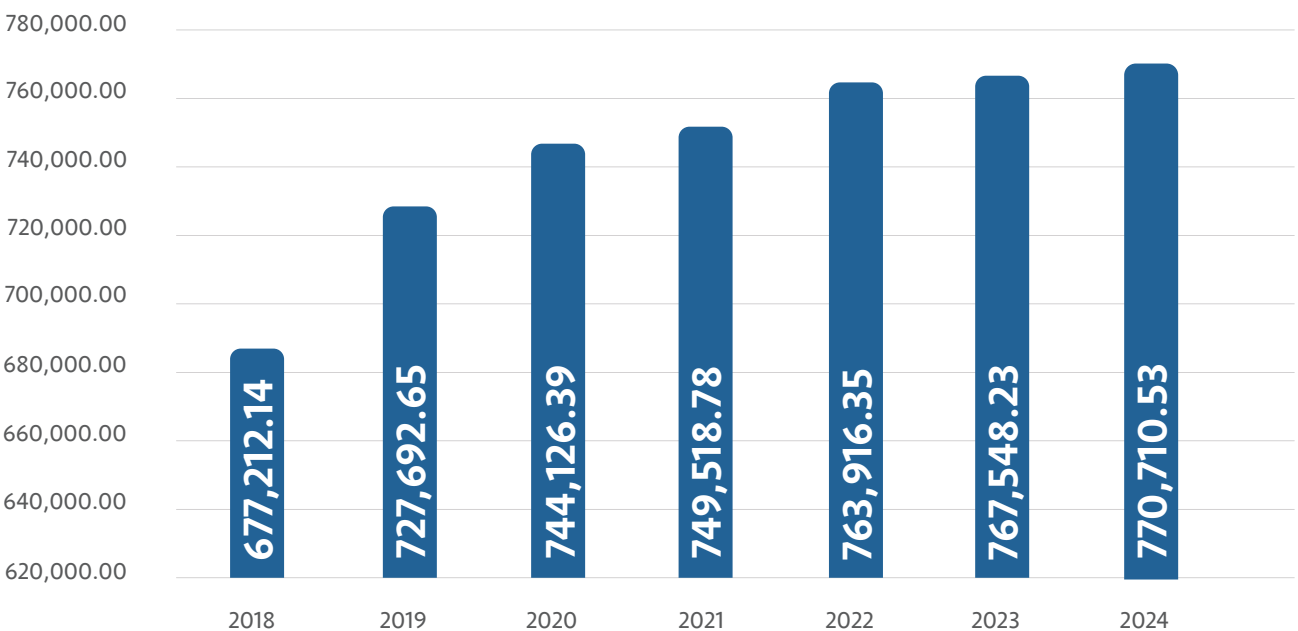
## Scope 1: Breakdown of Carbon Emissions (tCO<sub>2</sub>e)



\*From 2024 onwards, CO<sub>2</sub>e calculations are based on the methodology outlined in Malaysia’s First Biennial Transparency Report (BTR1).

## Scope 2: Breakdown of Carbon Emissions (tCO<sub>2</sub>e)

\*Scope 2 emissions have been restated according to the latest emission factor released by Malaysian Energy Commission, MyEnergyStats, the latest Grid Emission Factor (GEF) for Peninsular Malaysia in 2022 is 0.774 GgCO<sub>2</sub>e/GWh.



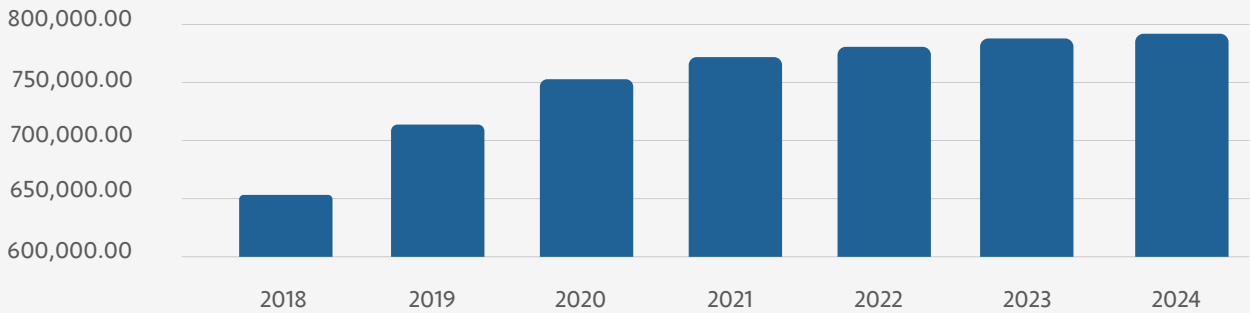
\*From 2024 onwards, CO<sub>2</sub>e calculations are based on the methodology outlined in Malaysia’s First Biennial Transparency Report (BTR1).

# Total Carbon Emissions

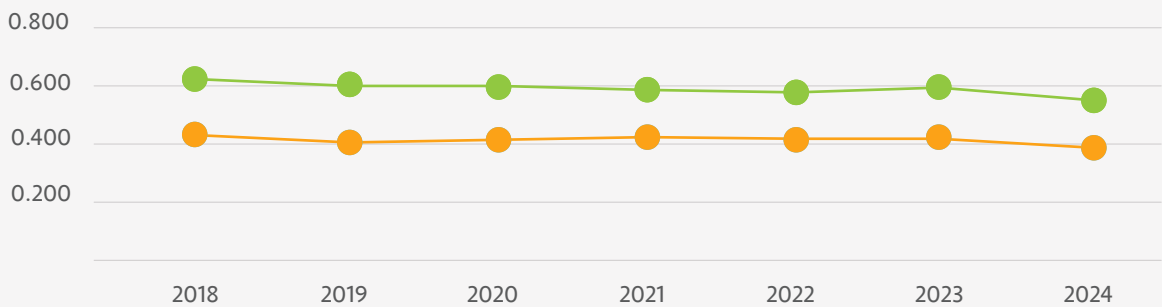
Year	Total Carbon Emissions (tCO <sub>2</sub> e)	Produced Volume Carbon Intensity (kgCO <sub>2</sub> e/m <sup>3</sup> )	Billed Volume Carbon Intensity (kgCO <sub>2</sub> e/m <sup>3</sup> )
2024	773,700.76	0.398	0.544
2023	770,437.03	0.425	0.592
2022	766,708.06	0.422	0.586
2021	752,656.46	0.425	0.589
2020	748,713.82	0.421	0.591
2019	731,082.70	0.418	0.600
2018	680,037.85	0.431	0.628

\*From 2024 onwards, CO<sub>2</sub>e calculations are based on the methodology outlined in Malaysia's First Biennial Transparency Report (BTR1)

## Total Carbon Emissions (tCO<sub>2</sub>e)



## Produced Volume Carbon Intensity (kgCO<sub>2</sub>e/m<sup>3</sup>) Billed Volume Carbon Intensity (kgCO<sub>2</sub>e/m<sup>3</sup>)

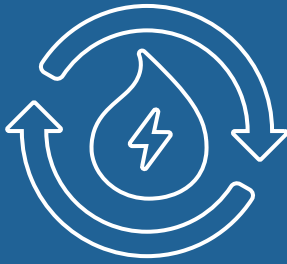


## 1.2 Net Zero Energy Vision 2040



We remain committed to supporting the National Energy Transition Roadmap (NETR) by implementing strategic decarbonisation and carbon management initiatives. Following the launch of Air Selangor's Net Zero Energy Vision 2040, we have taken significant strides in implementing energy efficiency measures and renewable energy projects to reduce our carbon footprint. These initiatives are expected to steadily increase our clean energy capacity, reinforcing our long-term commitment to sustainability.

## 1.3 Managing Energy Consumption



### Renewable Energy for Water (RENEW)

Renewable Energy for Water (RENEW) is a landmark, collaborative initiative to drive the company's net-zero ambitions. The implementation of RENEW has been distributed across three (3) phases, with each phase reflecting the incremental adoption of renewable energy. As of December 2024, 17 sites of solar systems have collectively generated 16,514,068 kWh annually, resulting in an average monthly net savings of approximately RM137,000. Moving forward, this number will continue to grow as we expand our solar deployment and integrate additional sites under our energy efficiency programme, further strengthening our net-zero energy initiatives.



### Fleet Energy Management

We have implemented a Vehicles Management and Usage Policy to enhance fleet management efficiency. Operational and management vehicles are equipped with fuel cards and an automated fuel usage reporting system. Additionally, GPS trackers are installed to enable real-time monitoring, improve driver behavior, reduce theft risks, and optimise routing and dispatching, particularly for water tankers.



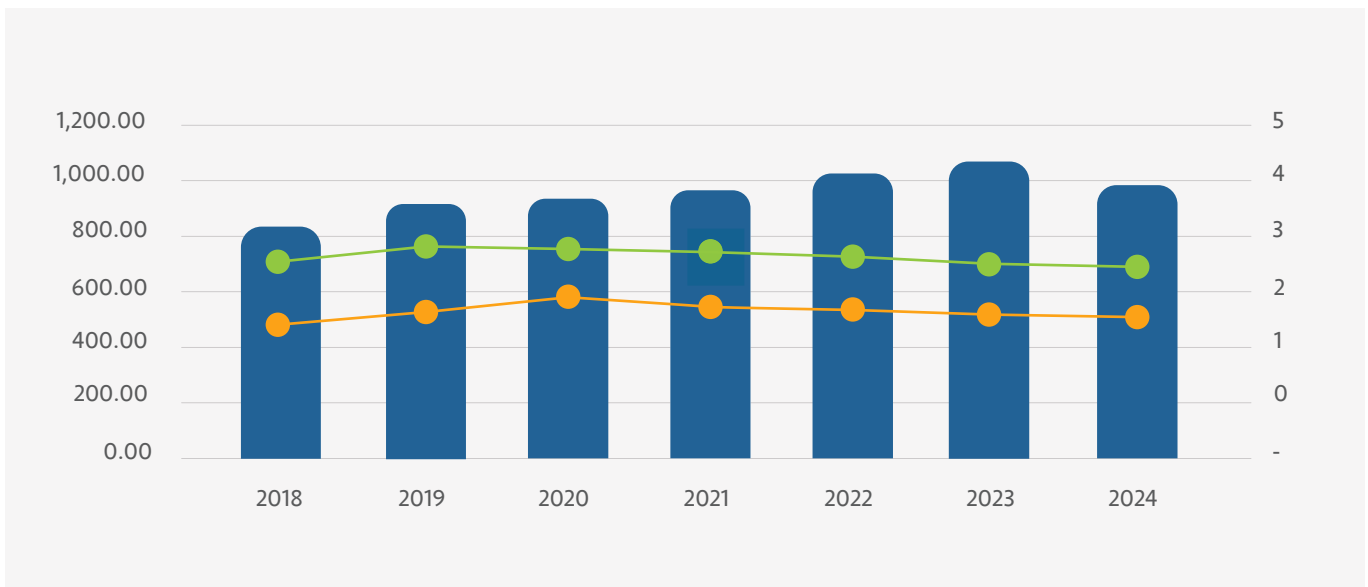
### Overall Energy Consumption

In 2024, we recorded a reduction in overall energy consumption, driven by improved operational efficiency and the integration of renewable energy into our operations. While fuel consumption has remained relatively low since 2020 due to effective fleet and machinery management, this latest reduction marks a significant shift. Electricity consumption, which had previously increased in line with regional development, has also stabilised as a result of enhanced energy management practices. These efforts have contributed to a continued downward trend in energy intensity.

At the same time, we have intensified efforts to enhance energy efficiency across our operations. Through pump system upgrades and process optimisation, we have been able to reduce electricity consumption while improving overall operational efficiency. These measures directly support our target of reducing Air Selangor's Corporate Energy Index by 15% over 15 years, ensuring that we achieve our decarbonisation goals in a structured and measurable manner.

## Total Electricity Consumption

Year	Electricity Consumption (GWh)	Produced Energy Intensity (MJ/m <sup>3</sup> )	Billed Energy Intensity (MJ/m <sup>3</sup> )
2024	995.75	1.866	2.554
2023	1,012.60	1.932	2.689
2022	1,007.81	1.963	2.723
2021	988.81	1.977	2.735
2020	981.70	1.980	2.778
2019	960.02	1.944	2.794
2018	839.17	1.719	2.507



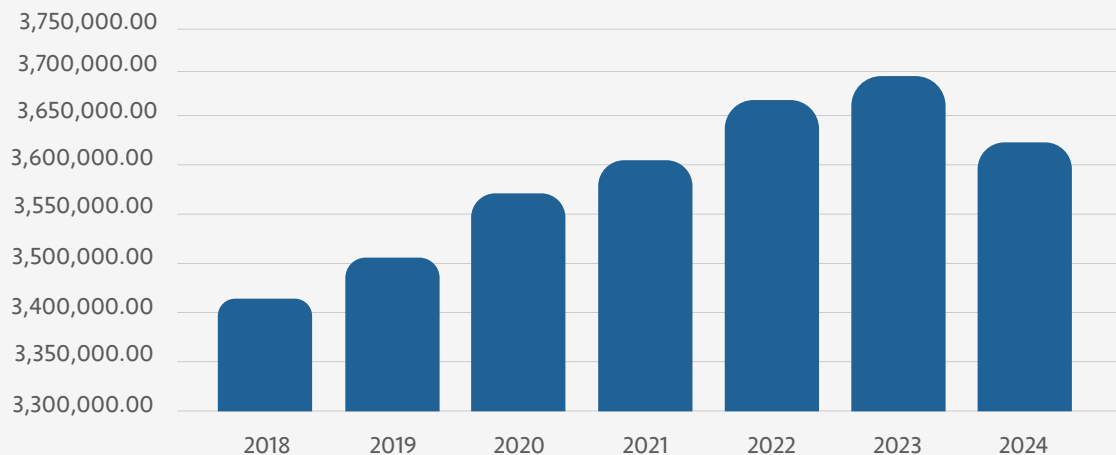
## Total Fuel Consumption

Year	Total Fuel Consumption (m <sup>3</sup> )
2024	1,148.95
2023	1,128.32
2022	1,093.27
2021	1,224.85
2020	1,795.20
2019	1,333.63
2018	1,126.40

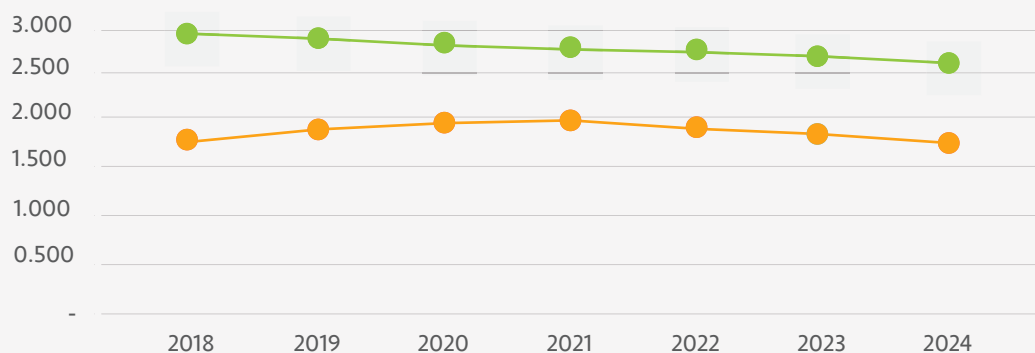
## Total Energy Consumption and Energy Intensity

Year	Total Energy Consumption (GJ)	Produced Volume Energy Intensity (MJ)	Billed Volume Energy Intensity (MJ)
2024	3,620,537.59	1.864	2.550
2023	3,684,851.91	1.932	2.689
2022	3,666,313.69	1.963	2.723
2021	3,606,477.34	1.979	2.738
2020	3,571,649.95	1.966	2.759
2019	3,504,050.43	1.945	2.796
2018	3,448,066.98	1.937	2.825

### Total Energy Consumption (GJ)



### Produced Volume Energy Intensity (MJ) Billed Volume Energy Intensity (MJ)





# WATER CONSERVATION

Domestic daily water consumption has remained stable since 2022. The movement restriction order during the pandemic led to a surge in water consumption between 2019 and 2021. However, as daily life returned to normal, consumption saw a notable decline in 2022, with an average recorded usage of 245 LCD. This downward trend continued in 2023, reaching 241 LCD, and further decreased to 238 LCD in 2024, though it remains above the United Nations' recommended level of 165 LCD.

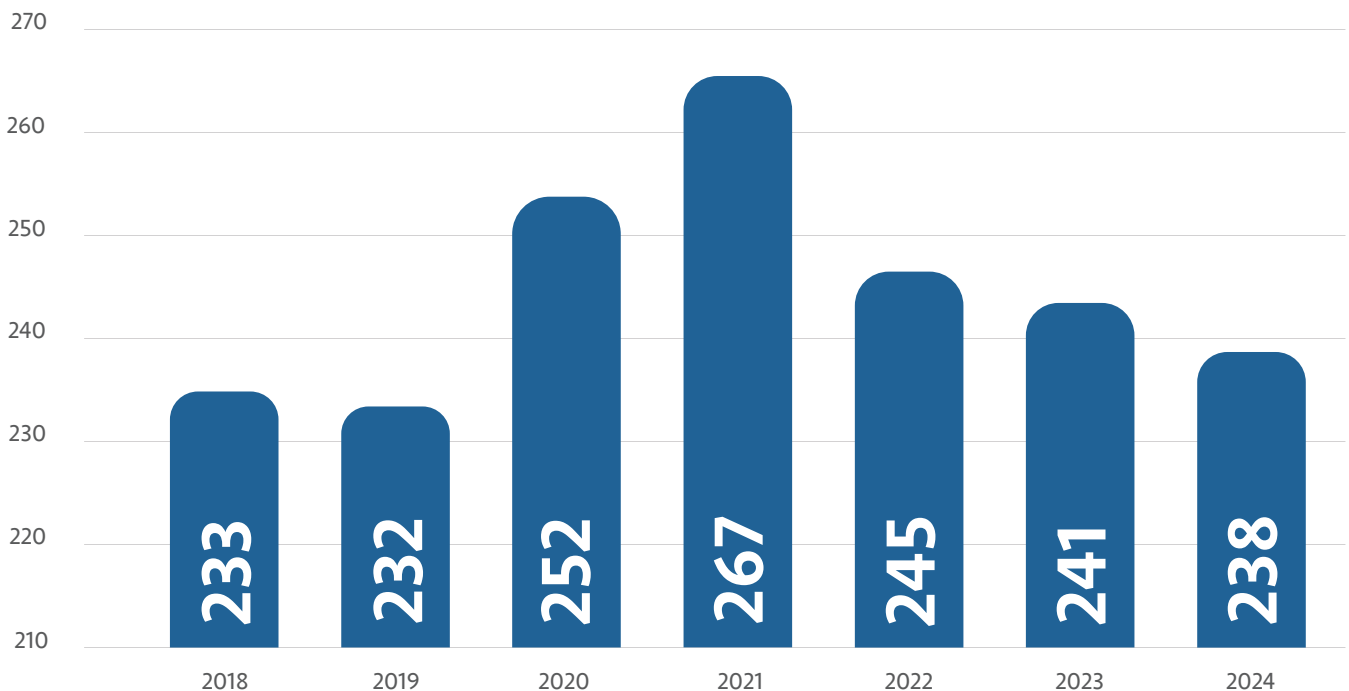
To address this ongoing challenge, we implemented the Water Conservation Roadmap 2022–2025, designed to enhance engagement initiatives and expand outreach efforts, fostering a stronger culture of water conservation among consumers. The regions where we operate are expected to face increasing water stress due to the impacts of climate change and rising demand from population growth and development. In addition to strengthening water supply resilience through infrastructure and service readiness, managing consumer water demand through conservation efforts is essential.

Domestic daily water consumption has remained stable since 2022. The movement restriction order during the pandemic led to a surge in water consumption between 2019 and 2021. However, as daily life returned to normal, consumption saw a notable decline in 2022, with an average recorded usage of 245 LCD. This downward trend

continued in 2023, reaching 241 LCD, and further decreased to 238 LCD in 2024, though it remains above the United Nations' recommended level of 165 LCD. To address this ongoing challenge, we implemented the Water Conservation Roadmap 2022–2025, designed to enhance engagement initiatives and expand outreach efforts, fostering a stronger culture of water conservation among consumers.



## Average Domestic Water Consumption Litres per Capita per Day (LCD) (Selangor, Kuala Lumpur, and Putrajaya)



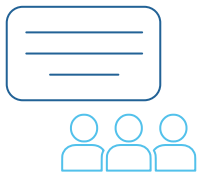
## 2.0 Water Conservation Framework and Policy

Regulated under the Water Services Industry Act 2006 (WSIA), we are responsible for developing and implementing a water conservation programme. This framework is guided by five (5) key approaches to address critical water conservation challenges:

# 5 KEY FRAMEWORK APPROACH



**Partnerships  
and Advocacy**



**Education  
and Awareness**



**Utilising  
Technology**



**Interventions  
and Incentives**



**Research**

## 2.1 Engagement Programmes

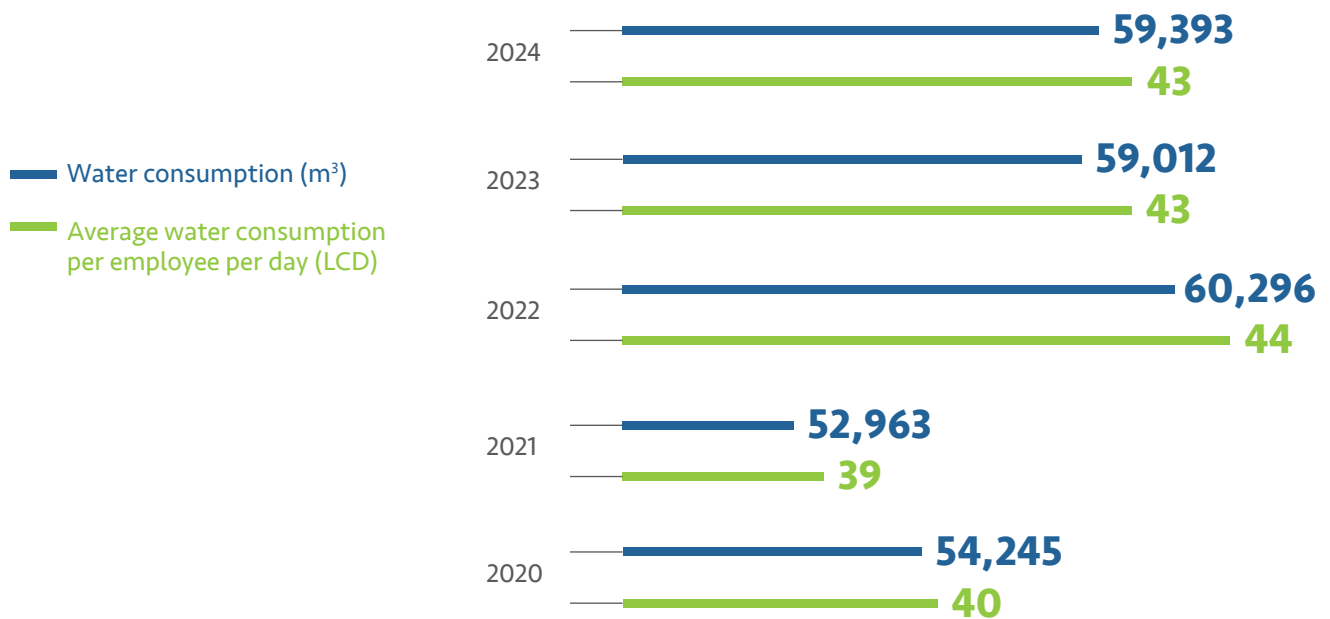
Public engagement remains a key pillar of our water conservation efforts. Through continuous collaboration with government agencies, regulators, local authorities, schools, universities, and non-government organisations (NGOs), we actively raise awareness about the importance of sustainable water usage. In 2024, these efforts expanded further with various targeted programmes, including Programme 'Lestari Air' for schools, Programme 'Hargai Air' for religious organisations, Programme 'Jom Jimat Air' in partnership with ADUN offices and for corporate entities. Water conservation talks were conducted, water thimbles were distributed, and the Smart Tap Replacement Programme was extended to local *suraus* and other places of worship, reinforcing the commitment to promoting responsible water consumption across different communities.



## 2.2 Internal Water Use

It is imperative that we also actively monitor internal water consumption at our office buildings to demonstrate our continuous commitment to ensure prudent consumption especially post-pandemic.

### Total Internal Water Consumption and Average Water Consumption per Employee per Day<sup>5</sup>



<sup>5</sup> A system-related discrepancy was identified in prior years' LCD reporting. The issue has since been resolved, and the figures have been duly adjusted to accurately reflect data from the 2020 period onwards.

## 2.3 Rainwater Harvesting System

The use of rainwater harvesting systems is part of our initiative to reduce reliance on treated water by utilising alternative sources. Building on efforts from 2022, two (2) additional systems were installed in 2023 at the Klang and Petaling region offices, with the harvested rainwater used for watering and cleaning purposes. In 2024, this initiative continued with the installation of two (2) more systems, including at the Hulu Langat and Sabak Bernam regional offices.

### 2023

Klang & Petaling regional offices

### 2024

Hulu Langat & Sabak Bernam regional offices

## 2.4 Internal Water Audit

We initiated a series of internal water audits in 2023 to assess and evaluate water usage patterns while identifying inefficiencies across selected regional offices. The audits include a thorough assessment of existing infrastructure, plumbing fixtures, storage, filtration systems, and operational procedures. As of December 2023, audits have been completed at the Gombak and Kuala Langat regional offices, with plans to extend the initiative to additional locations. In 2024, the programme continued with audits at several more regional offices, including Klang and Petaling Jaya, incorporating enhanced methodologies to further improve water efficiency and conservation efforts across our operations.

## 2.5 Water Conservation Unit (WCU) Training: Empowering Water Stewards, from Awareness to Action

We reinforced our commitment to water conservation through the WCU Training, held on 28 November 2023. The session aimed to inspire participants to become advocates for water conservation and climate action by equipping WCU and Customer Experience (CX) representatives with insights into the urgency of water conservation amid the local climate crisis. In 2024, we continued this effort by enhancing training programmes to strengthen customer engagement and service excellence. This initiative includes advanced sessions on effective communication, accountability and customer interaction, ensuring WCU and CX representatives are well-equipped to advocate for water conservation while improving service delivery.

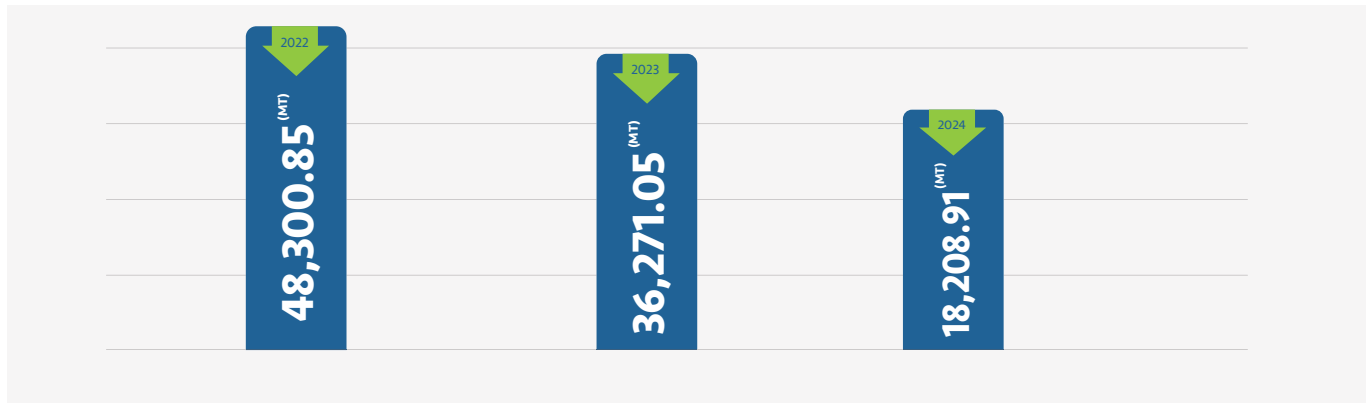


### 3.0 Waste Management

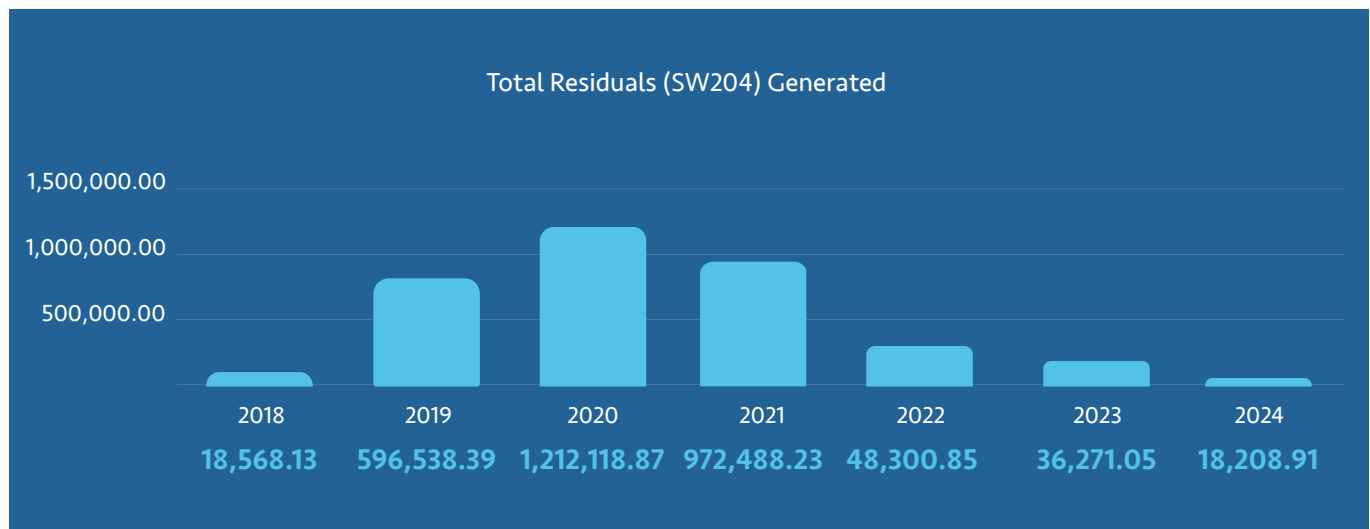
We ensure compliance with the Environmental Quality Act by managing waste in accordance with our HSE policy, as well as ISO 14001 Environmental Management standards.

#### 3.1 Scheduled Waste

Residual waste from the water treatment process is classified under the Environmental Quality (Scheduled Wastes) Regulations 2005. Through improved operational efficiency, we successfully reduced residual waste generation from 48,300.85 million tonnes (MT) in 2022 to 36,271.05 MT in 2023 and to 18,208.91 MT in 2024.



#### Total Residuals (SW204) Generated



Besides alum sludge (SW204), our operations generated various other types of scheduled waste, including fluoride bags and contaminated containers (SW409), discarded chemical waste (SW429), spent lubricant oil (SW305) and other scheduled waste. Throughout 2024, the total volume of this waste amounted to 40.66 MT, which were disposed of at the approved facility, Kualiti Alam's sanitary landfill.

As a continuous learning and sharing practice, the Environmental Unit carried out multiple engagement sessions with other institutions. Examples included collaboration with Forest Research Institute Malaysia

(FRIM) on a study and pilot project focused on reuse of residual from water treatment process (SW204) into soil amendments media for agriculture. The pilot study was successfully completed, demonstrating that residuals from the water treatment process have significant potential as soil amendments for landscape and forest trees, resulting in better growth performance compared to standard soil amendments.

Meanwhile, lead-acid battery waste (SW102) is sent to an approved recycling centre. In 2024, a total of 9.09MT was successfully recycled.

### 3.2 Recycle for Life

In 2024, the Recycle for Life initiative successfully collected 6,084 kg of recyclable materials, including paper, plastic, aluminium, e-waste, used cooking oil and fabric. This effort was made possible through collaborations with Cenviro, SW Corp and Lifeline Clothing, ensuring responsible waste collection and management. We remain committed to fostering a culture of sustainability by actively promoting recycling among employees, reinforcing awareness of proper domestic waste management, and encouraging environmentally responsible practices within the organisation.

### 3.3 Monitoring Air Quality

We continuously conduct indoor air quality monitoring at our headquarter offices as per the Department of Safety and Health (DOSH) Industry Code of Practice for Indoor Air Quality 2010. Additionally, we conduct annual air quality monitoring to comply with Environmental Quality (Clean Air) Regulations 2014 at all WTPs facilities and pump houses with standby diesel generators and air pollution control devices such as chlorine scrubbers, bag filters, and fume hoods.

### 3.4 Environmental Initiatives

In 2024, we reinforced our commitment to environmental conservation by planting 1,000 Bakau trees at Hutan Simpan Banjar Utara, Tanjung Karang, and Hutan Simpan Kapar Tambahan, Jeram, Selangor, in collaboration with Pejabat Perhutanan Daerah Pantai Klang. As part of our outreach efforts, we engaged with over 200 students from UNIMAS and UTM through the HSE in university programmes, equipping them with essential HSE knowledge and requirements to better prepare them for the industry.

Additionally, we continued our annual River Care Programme, working closely with communities in Kg. Batu 3, Semenyih, and Sg. Selaru, Serendah, to promote river conservation and sustainable water management.



# OPTIMISING BUSINESS OPERATIONS AND REDUCING NRW

We have set key operational targets, focusing on Water Forever programmes such as Improving Asset Reliability and Resilience, Improving Operational Efficiency, and NRW Reduction. These priorities underpin our efforts to meet rising water demand, enhance water quality, reduce NRW, optimise asset management and strengthen best practices across the supply chain.

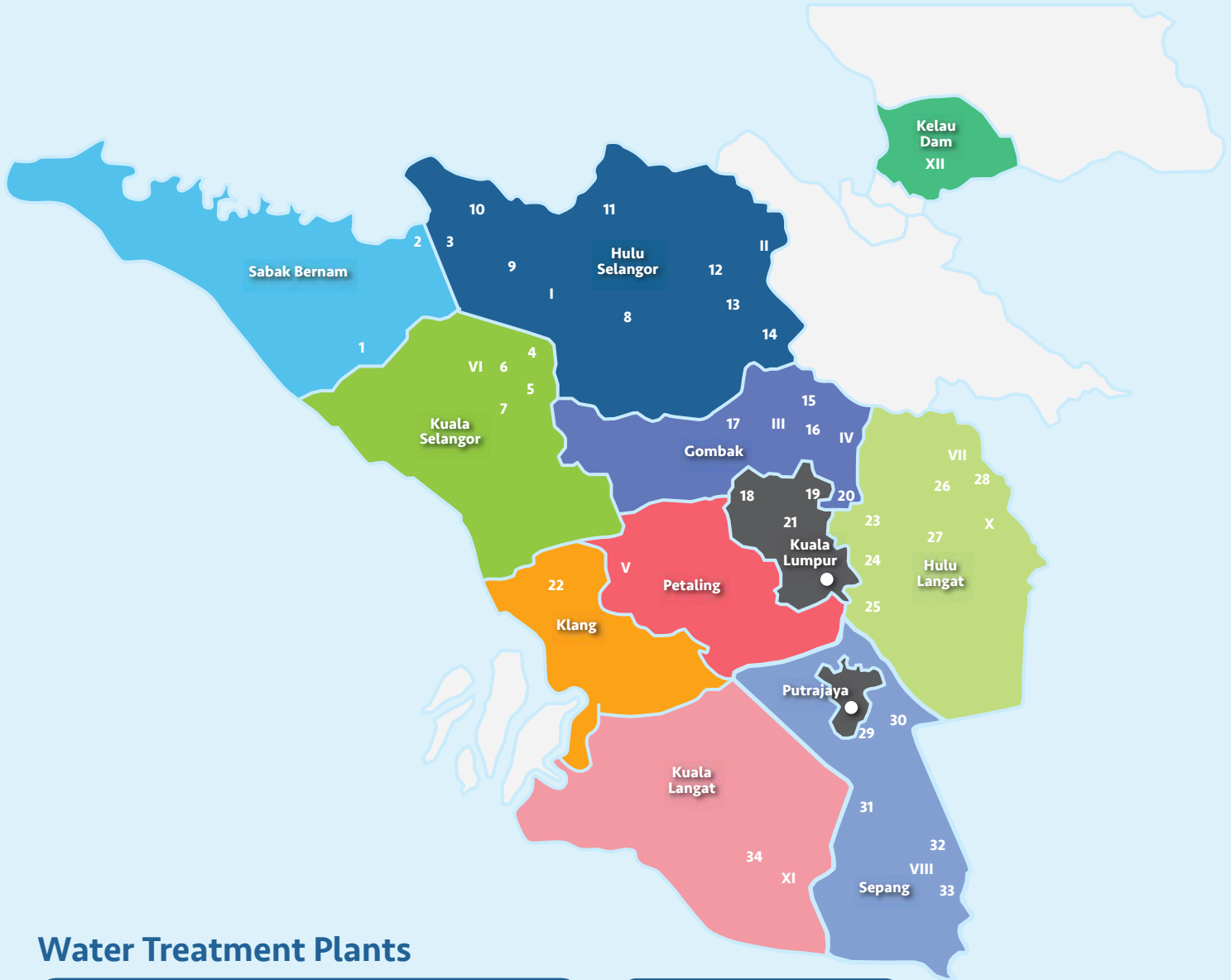
## 4.0 Water Supply

Selangor, Kuala Lumpur, and Putrajaya are among the most densely populated areas in Malaysia, with rapid population and development growth driving increased water demand. This presents a challenge in balancing supply and demand. As the nation's largest treated water provider, we remain committed to ensuring a sustainable water supply through comprehensive measures outlined in SPI 1: Water Forever.



## 4.1 Water Production

Air Selangor extracts raw water from dams and rivers in Selangor and Pahang to meet the region's water needs. In 2023, the average production increased to 5,227 MLD from 5,117 MLD in 2022, reflecting the rising demand for treated water. This upward trend continued in 2024, with production reaching 5,306 MLD. The increase underscores our ongoing efforts to expand water supply capacity through infrastructure upgrades, operational efficiencies, and strategic resource management, ensuring a reliable and sustainable water supply for consumers.



## Water Treatment Plants

Northern Region		Southern Region
1. Sg Sireh	14. Sg Batu	23. Langat 2
2. Bernam River Headworks	15. Sg Rumpit	24. Sg Langat
3. Sg Dusun	16. Batang Kali	25. Cheras Mile 11
4. Rantau Panjang	17. Sg Batu	26. Sg Lolo
5. Sg Selangor Phase 1	18. Sg Rumpit	27. Sg Serai
6. Sg Selangor Phase 2	19. Sg Gombak	28. Sg Pangsoon
7. Sg Selangor Phase 3	20. Sg Rangkap	29. Sg Semenyih
8. Rasa	21. Kepong	30. Semenyih 2
9. Sg Tinggi	22. Wangsa Maju	31. Bukit Tampo
10. Sg Selisek	23. Ampang Intake	32. Salak Tinggi
11. Kalumpang	24. Bukit Nanas	33. Sg Labu
12. Kuala Kubu Bahru	25. North Hummock	34. Labohan Dagang
13. Batang Kali		

## Dams/ORS/HORAS

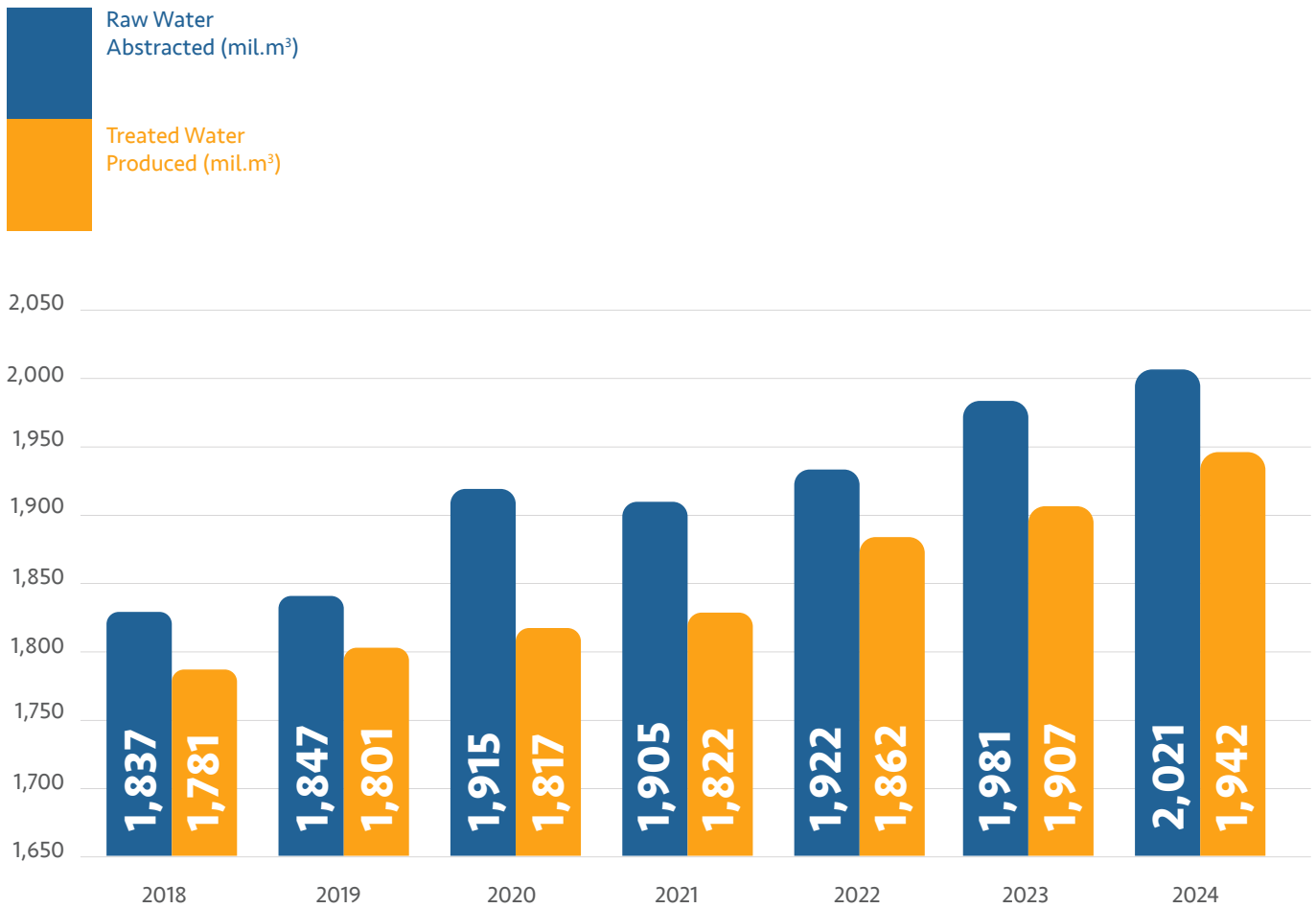
Northern Region	Southern Region
I. Sg Tinggi	VII. Sg Langat
II. Sg Selangor	VIII. ORS Sg Labu
III. Batu <sup>1</sup>	IX. ORS Semenyih 2
IV. Klang Gates	X. Semenyih
V. Tasik Subang	XI. ORS Labohan Dagang
VI. HORAS 600	XII. Kelau <sup>2</sup>

<sup>1</sup>Batu Dam is under the supervision of the Department of Irrigation and Drainage.

<sup>2</sup>Kelau Dam is located in Pahang.



## Volume of Water Abstracted and Produced



## WATER RESERVE MARGIN

The water reserve margin represents the surplus water available beyond regular demand, serving as a buffer to accommodate unexpected increases in consumption or supply disruptions. It is calculated as the difference between the distributable capacity of the water treatment system and current demand. We have a target of 21.60% water reserve margin by 2030.

In 2024, the water reserve margin saw a notable increase to 18.60%, up from 15.34% in 2023. This improvement was primarily driven by the injection of Langat 2 WTP production, reaching up to 795 MLD.

The Rasau Water Supply Scheme Stage 1, currently under development, is projected to contribute an additional 700 MLD upon its completion in June 2027. Meanwhile, by 2031, after the completion of both Stage 1 and 2 of the Rasau Water Supply Scheme, 1,400 MLD of supply will be available.

## 4.2 Water Supply Disruption

We remain committed to minimising water supply disruptions through regular maintenance and early detection systems. However, unscheduled interruptions may still arise due to pollution incidences, pipe bursts, pump house failures or reservoir issues. In the event of a major disruption, the Emergency Response Plan (ERP) will be activated to mitigate the impact and ensure consumers receive alternative water supply.

Incidents	Number of Disruptions			Durations (hours)			Average No. of Affected Accounts		
	2022	2023	2024	2022	2023	2024	2022	2023	2024
Water Outages Pipe Size > 600mm	67	49	55	1,366	1,209	1,691	9,449	3,827	5,446
Unscheduled Pump House Breakdown	61	34	21	557	333	242	1,906	2,250	1,026
Reservoir Issue	94	87	63	1,145	1,207	1,003	1,726	11,636	865
Unscheduled WTP Shutdown	6	3	4	169	139	176	219,379	830,890	309,376
Scheduled Disruption Due to Maintenance and Upgrading Work	1	1	1	55	72	48	126,142	291,870	594,614

## 4.3 Pasukan Khas Lembangan dan Alur Air

The Pasukan Khas Lembangan dan Alur Air (PAKAR) was established to support the Local District Authority and LUAS in protecting raw water sources from pollution. PAKAR conducts river water quality assessments and surveillance at 227 sampling points across six (6) catchment areas. River monitoring stations have been installed along selected rivers to track water quality trends and serve as an early warning system for potential pollution incidents. Unmanned aerial vehicles (UAVs) are also deployed to profile catchment and industrial areas, identifying discharge sources and land use activities that may contribute to water pollution. A watershed management study was initiated in 2022 to assess our existing watershed management programme. In 2023, an odour detection study was completed by the vendor Universiti Malaysia Pahang Al-Sultan Abdullah (UMPSA) at the Sungai Semenyih WTP intake. Subsequently, the odour detection instruments were enhanced and will be presented at the upcoming Air Selangor Technical Policy Committee (AISTPC) 2025 meeting.

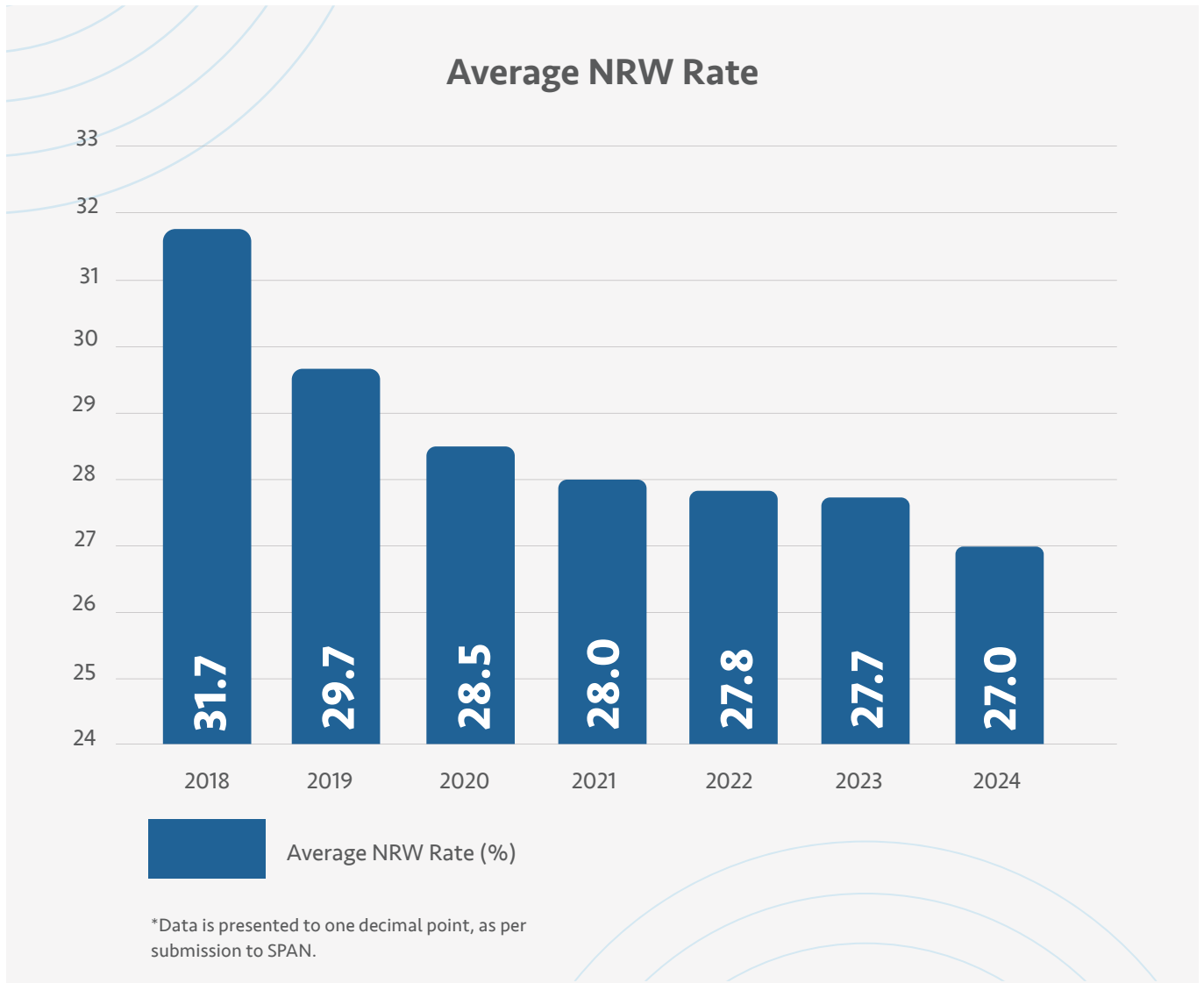


## 4.4 Non-Revenue Water (NRW)

Reducing NRW remains a top priority for us to ensure that all treated water reaches customers and is billed accurately. NRW refers to water that is lost before reaching customers' meters, impacting both consumers and business operations. These losses can result from leaks, pipe bursts, reservoir overflows, meter inaccuracies, and water theft.

We aim to reduce NRW to 26.5% by 2025 and further to 25% by 2030. In 2024, the NRW rate was recorded at 27.0%, a 0.7% reduction from 27.7% in 2023, successfully meeting SPAN's matching grant target of 28.0%.

We will continue to implement two (2) categories of NRW reduction programmes which are the Physical Loss Reduction Programme and the Commercial Loss Reduction Programme.



## 4.5 Asset Management System (ISO 55001)

Effective asset management, timely maintenance and infrastructure upgrades are key to uninterrupted water operations. Guided by SPI 2: Improvement to Asset Reliability and Resilience, we prioritise efficiency through asset inventory, criticality assessments, and maintenance achievements. In 2023, two (2) asset management system (ISO 55001) surveillance audits were completed, and 24,331 assets were tagged, covering 21.20% of total assets.

In 2024, we continued strengthening asset management by expanding asset tagging, enhancing maintenance, and upgrading infrastructure. By December 2024, 31,887 assets had been tagged, covering 27.51% of total assets, with 11 locations inclusive of selected WTP, dam, region and departments in HQ for ISO 55001 internal audits completed.



# Performance Data

## Environmental

Description	2018	2019	2020	2021	2022	2023	2024
Average Daily Domestic Water Consumption per Capita (LCD)	233 <sup>1</sup>	232	252 <sup>2</sup>	267 <sup>2</sup>	245 <sup>5</sup>	241 <sup>1</sup>	238
Total Internal Water Consumption (m <sup>3</sup> )			54,245	52,963	60,296	59,012	59,393
Average Daily Water Consumption per Employee (LCD)			40	39	44	43	43
Total Energy Consumption (GJ)	3,448,066.98	3,504,050.43	3,571,649.95	3,606,477.34	3,666,313.69	3,684,851.91	3,620,537.59

## Energy Intensity (MJ/m<sup>3</sup>)

Description	2018	2019	2020	2021	2022	2023	2024
Produced	1.937	1.945	1.966	1.979	1.963	1.932	1.866
Billed	2.825	2.796	2.759	2.738	2.723	2.689	2.554
Total Electricity Consumption (GWh)	839.17	960.02	981.70	988.81	1,007.81	1,012.60	995.75
Total Fuel Consumption (m <sup>3</sup> )	1,126.40	1,333.63	1,795.20	1,224.85	1,093.27	1,128.50	1,148.95
Total Carbon Emissions (tCO <sub>2</sub> e) <sup>3</sup>	680,037.85	731,082.70	748,713.82	752,656.46	766,708.06	770,437.03	773,700.76

# Performance Data

## Carbon Emissions Intensity (kgCO<sub>2</sub>e/m<sup>3</sup>)

Description	2018	2019	2020	2021	2022	2023	2024
<b>Produced</b>	0.382	0.406	0.412	0.413	0.411	0.404	0.390
<b>Billed</b>	0.557	0.583	0.578	0.571	0.569	0.562	0.530
<b>Total Scope 1 Carbon Emissions (tCO<sub>2</sub>e)<sup>3</sup></b>	2,825.71	3,390.05	4,587.43	3,137.69	2,791.72	2,888.80	2,990.23
<b>Total Scope 2 Carbon Emissions (tCO<sub>2</sub>e)<sup>3</sup></b>	677,212.14	727,692.65	744,126.39	749,518.78	763,916.35	767,548.23	770,710.53
<b>Total SW204 Scheduled Waste Generated (MT)<sup>4</sup></b>	18,568.13	596,358.39	1,212,118.87	972,488.23	48,300.85	36,348.01	18,208.91

1. Data obtained from Malaysia Water Industry Guide 2019.
2. Data is restated based on updated population data from the Department of Statistics Malaysia that was released in 2022.
3. The carbon emissions have been restated based on carbon emissions factors from Malaysia's Fourth Biennial Update Report (BUR) submitted to the United Nations Framework Convention on Climate Change in December 2022.
4. Data excludes SSP1, SSP3 and Rasa WTPs.
5. Data for the year 2022-2023 has been restated according to SPAN calculation.

Pillar 3

# PRIORITISING EMPLOYEE HEALTH, SAFETY, COMPETENCY AND DIVERSITY



**6** CLEAN WATER AND SANITATION



**7** AFFORDABLE AND CLEAN ENERGY



**12** RESPONSIBLE CONSUMPTION AND PRODUCTION



**13** CLIMATE ACTION



Employees are the driving force behind our success. We are committed to fostering a safe, inclusive, and high-performing workplace that supports professional growth and wellbeing. Through the implementation of SPI 6: Creating a Conducive Working Environment, we aim to create a workplace culture that empowers our workforce and enhances operational excellence.

By attracting, developing and retaining top talent, we ensure that Air Selangor remains at the forefront of innovation and service excellence. Our commitment extends beyond recruitment, and we strive to nurture our employees by equipping them with the necessary skills, knowledge, and resources to thrive.

Ensuring a safe and healthy working environment is a top priority. We are dedicated to upholding the highest standards of occupational health and safety, safeguarding our employees, and fostering a culture where workplace risks are proactively managed.

**Under our employee health, safety, and wellbeing framework, we focus on two (2) key areas:**



## Health and Safety

Strengthening workplace safety protocols and promoting employee wellbeing.



## Employee Engagement and Development

Enhancing professional growth, fostering an inclusive workforce, and ensuring a rewarding and supportive workplace experience for all.

# HEALTH AND SAFETY

## 1.0 Health and Safety Management

We are committed to embedding a strong safety culture across our operations, ensuring the wellbeing of our employees, contractors, and stakeholders. We strictly comply with the Occupational Safety and Health Act (OSHA) 1994 (Amendment 2022) and relevant regulations governing workplace safety. We reinforce this commitment through the implementation of the ISO 45001:2018 Occupational Health and Safety Management System, which provides a structured approach to identifying, mitigating, and managing workplace hazards effectively.

In 2024, we further strengthened our HSE Policy, extending it to cover all employees and contractors engaged in our operations. This policy outlines clear guidelines and protocols to uphold workplace safety, including hazard identification, risk assessments, emergency preparedness, and employee safety training. Our stringent safety measures aim to create a secure and conducive working environment that fosters a proactive safety mindset among our workforce.





## 1.1 Health and Safety Governance

We prioritise a structured governance approach to occupational health and safety, ensuring that safety remains a core aspect of our operational framework. Our Health and Safety Committee plays a vital role in monitoring, evaluating, and enhancing workplace safety policies and procedures. Regular internal audits and compliance checks are conducted to identify potential safety gaps and implement corrective actions accordingly.

### Key governance initiatives undertaken in 2024 include:



#### Inspections for Workplace Safety and Site Safety

Comprehensive safety inspections conducted across all operational sites to evaluate compliance with HSE policies and regulatory requirements.



#### Hazard Identification and Risk Assessment Risk Control (HIRARC) Reviews

Systematic reviews carried out to ensure workplace hazards are effectively managed and mitigated.



#### Safety Leadership Engagements

Senior management participating in Leadership Listening Tours (LLT) engaging employees at various work locations to discuss safety concerns and reinforce safety best practices.



#### Contractors HSE Excellence Award (CONHEXA)

To recognise and honour contractors who demonstrate exceptional performance in health and safety management. This award underscores our commitment to ensuring that all projects are executed with the highest standards and safety stewardship.

We have also implemented internal monitoring systems to track incidents and enforce timely intervention measures. In addition, we actively engage with employees through safety awareness campaigns, digital HSE alerts, and hands-on training sessions.

## 1.2 Health and Safety Training Initiatives

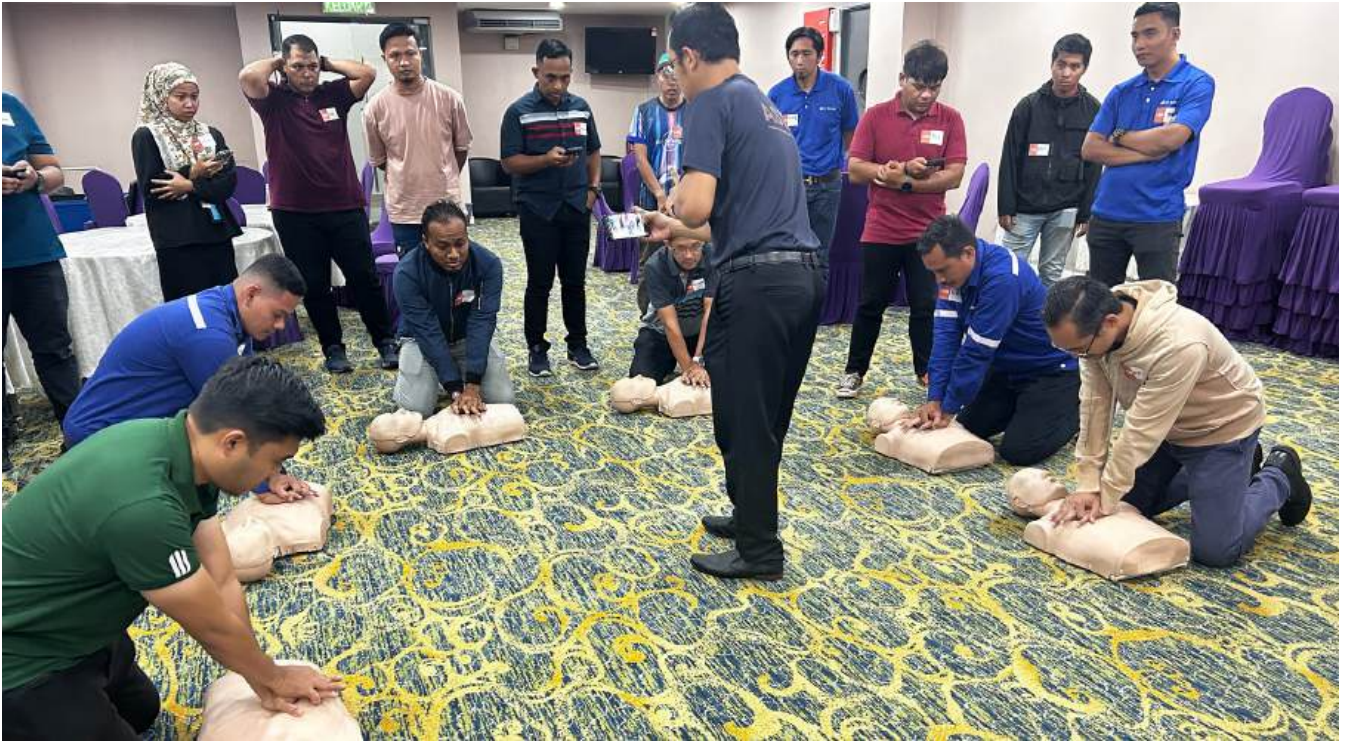
We remain dedicated to equipping employees and contractors with essential occupational safety knowledge and skills. In 2024, we implemented an extensive range of HSE training programmes designed to address workplace hazards, improve emergency response, and strengthen safety best practices.

Below is a summary of the key occupational health and safety training programmes conducted across different regions:

PROGRAMMES	PLACEMENT
2024 Global Sustainability Forum: A Roadmap To Net Zero	Headquarters
2024 ISO/IMS Internal Auditor Training – 9001:2015	Headquarters, Sepang Region, Southern Region
2024 ISO/IMS Internal Auditor Training (55001:2014)	Headquarters, Northern Region, Southern Region
24 <sup>th</sup> Conference and Exhibition on Occupational Safety And Health	Headquarters
2 <sup>nd</sup> Asia HSE Summit 2024	Headquarters
5 <sup>th</sup> International Fire Conference And Exhibition 2024	Headquarters
Advanced Internal Auditor Skills – ISO 14001 & ISO 45001	Gombak Region, Headquarters, Hulu, Selangor Region, Kuala Lumpur Region, Northern Region, Petaling Region, Sepang Region, Southern Region
Authorised Entrant and Standby Person (AESP) for Confined Space	Gombak Region, Headquarters, Hulu Langat Region, Hulu Selangor Region, Klang Region, Kuala Langat Region, Kuala Lumpur Region, Kuala Selangor Region, Northern Region, Petaling Region, Sabak Bernam Region, Sepang Region, Southern Region
Basic Occupational First Aid (BOFA), Cardio Pulmonary & Resuscitation (CPR) & Automated External Defibrillator (AED)	Gombak Region, Headquarters, Hulu Langat Region, Hulu Selangor Region, Klang Region, Kuala Langat Region, Kuala Lumpur Region, Kuala Selangor Region, Northern Region, Petaling Region, Sabak Bernam Region, Sepang Region, Southern Region
Certified Environmental Professional in Scheduled Waste Management (CEPSWAM)	Northern Region, Sabak Bernam Region
Course for Certified Environmental Professional in Scrubber Operation (CEPSO)	Northern Region, Southern Region
Course for Certified Environmental Professionals in the Operation of Industrial Treatment (CEPIETSO)	Northern Region
Emergency Response & Preparedness Plan Director Development Programme	Headquarters
Forklift Truck Safety & Competency Workshop	Gombak Region, Headquarters, Hulu Langat Region, Hulu Selangor Region, Klang Region, Kuala Lumpur Region, Northern Region, Petaling Region, Sepang Region, Southern Region
<i>Higien Industri dan Kesihatan Pekerja Tahun 2024 – Latihan Kesedaran Ergonomik &amp; Penyakit Muskuloskeletal/Latihan Pemuliharaan Pendengaran/Latihan Pengurusan Bahan Kimia/Latihan Pertolongan Cemas &amp; Asas Bantuan Hayat</i>	Gombak Region, Headquarters, Hulu Langat Region, Hulu Selangor Region, Klang Region, Kuala Langat Region, Kuala Lumpur Region, Kuala Selangor Region, Northern Region, Petaling Region, Sabak Bernam Region, Sepang Region, Southern Region
<i>Kursus Pertolongan Cemas Kesihatan Mental (MHFA)</i>	Gombak Region, Headquarters, Hulu Langat Region, Klang Region, Kuala Lumpur Region, Northern Region, Petaling Region, Sabak Bernam Region, Sepang Region, Southern Region
Lead Auditor Course IMS ISO 9001, ISO 14001 & ISO 45001 (Exemplar Global Certified)	Headquarters

<i>Latihan Penyelaras Keselamatan dan Kesihatan Pekerjaan (OSH Coordinator)</i>	Gombak Region, Headquarters, Hulu Langat Region, Hulu Selangor Region, Klang Region, Kuala Langat Region, Kuala Lumpur Region, Kuala Selangor Region, Northern Region, Petaling Region, Sabak Bernam Region, Sepang Region, Southern Region
Lead Auditor Integrated Management Systems (IMS) ISO 9001, ISO 14001 & ISO 45001 (Exemplar Global Certified)	Headquarters
Proactive Workshop on Incident Management (Pro-Wim) Training Module	Gombak Region, Headquarters, Hulu Langat Region, Hulu Selangor Region, Klang Region, Kuala Langat Region, Kuala Lumpur Region, Kuala Selangor Region, Northern Region, Petaling Region, Sabak Bernam Region, Sepang Region, Southern Region
MSOSH Conference – The Impacts of Climate Change on Occupational Safety and Health	Southern Region
<i>Operasi Dos Bahan Kimia Awalan &amp; Pencampuran</i>	Northern Region, Southern Region
OSH Coordinator Training	Northern Region
Overhead Cranes Safe Operation	Gombak Region, Headquarters, Hulu Selangor Region, Klang Region, Kuala Langat Region, Kuala Lumpur Region, Kuala Selangor Region, Northern Region, Petaling Region, Sabak Bernam Region, Sepang Region, Southern Region
<i>Pengendalian Ancaman Bom</i>	Gombak Region, Headquarters, Hulu Langat Region, Hulu Selangor Region, Klang Region, Kuala Langat Region, Kuala Lumpur Region, Kuala Selangor Region, Northern Region, Petaling Region, Sabak Bernam Region, Sepang Region, Southern Region
<i>Pengukuhan Organisasi Keselamatan Kebakaran (OKK) Bersama Jabatan Bomba dan Penyelamat Malaysia</i>	Gombak Region, Headquarters, Hulu Langat Region, Hulu Selangor Region, Klang Region, Kuala Langat Region, Kuala Lumpur Region, Kuala Selangor Region, Northern Region, Petaling Region, Sabak Bernam Region, Sepang Region, Southern Region
Permit to Work (PTW)	Gombak Region, Headquarters, Hulu Langat Region, Hulu Selangor Region, Klang Region, Kuala Langat Region, Kuala Lumpur Region, Kuala Selangor Region, Northern Region, Petaling Region, Sabak Bernam Region, Sepang Region, Southern Region
Process Safety Management (PSM)	Southern Region
<i>Program Latihan Dalam Perkhidmatan Musketry Senjata Api</i>	Gombak Region, Headquarters, Hulu Langat Region, Hulu Selangor Region, Klang Region, Kuala Langat Region, Kuala Lumpur Region, Kuala Selangor Region, Northern Region, Petaling Region, Sabak Bernam Region, Sepang Region, Southern Region
Safe Handling of Liquid Chlorine	Northern Region, Southern Region
Safety Induction Course for Construction Workers	Southern Region
Sustainability Risk Management Certification – Managing Environmental, Social and Governance (ESG) Risk	Headquarters
<i>Taklimat Kesedaran – Peraturan-Peraturan Kualiti Alam Sekitar Akas 1974</i>	Headquarters, Northern Region, Southern Region
<i>Tatacara Selamat Pengendalian Bahan Kimia Merbahaya</i>	Headquarters, Northern Region, Southern Region
<i>Teori &amp; Praktikal Pemanduan Lori Tangki Bagi Warga Kerja Sokongan ERP</i>	Headquarters, Northern Region, Southern Region
<i>Teori &amp; Praktikal Penggunaan Sodium Alumino Silicate</i>	Headquarters, Southern Region
<i>Teori dan Praktikal Prosedur Kecemasan Kebocoran Klorin</i>	Northern Region
Conference on Asia Road Safety 2024	Headquarters

These training programmes ensure that employees and contractors develop critical safety competencies, adhere to best practices in hazard management, and remain compliant with occupational safety regulations.



### 1.3 Enhancing Workplace Safety Culture

Beyond training, we promote a strong safety culture through various engagement initiatives, including:

1

Mandatory Emergency Response and Safety briefings for all new employees as part of the induction programme.

2

Fire Marshal and First Aid Training to ensure personnel are equipped to handle emergencies effectively.

3

Proactive Incident Management workshops to improve response time and accountability in handling safety incidents.

4

Regular Mock Drills and Safety Simulations to enhance emergency preparedness.

5

Commuting Safety Management Training to minimise commuting-related workplace hazards.

## 1.4 Health and Safety Awareness

Ensuring that employees are well-informed about HSE best practices is a core component of Air Selangor's safety strategy. Our compulsory e-learning HSE Awareness Module equips employees with essential knowledge on workplace hazards, risk mitigation techniques, and incident reporting procedures. This module is continuously updated to reflect new regulatory requirements and operational risks.

In addition to the online module, focus group discussions were conducted in 2024 to enhance employees' understanding of the HSE Consequence Management Procedure and relevant legal requirements. These interactive sessions provided employees with the opportunity to discuss real-life case studies, fostering a deeper understanding of safety responsibilities within their roles.

### HSE Flash

Periodic digital notifications providing practical safety tips and important regulatory updates.

### HSE Alerts

Notifications on incidents that occurred in the workplace, or in related incidents to alert and inform all employees.

### HSE Advisory

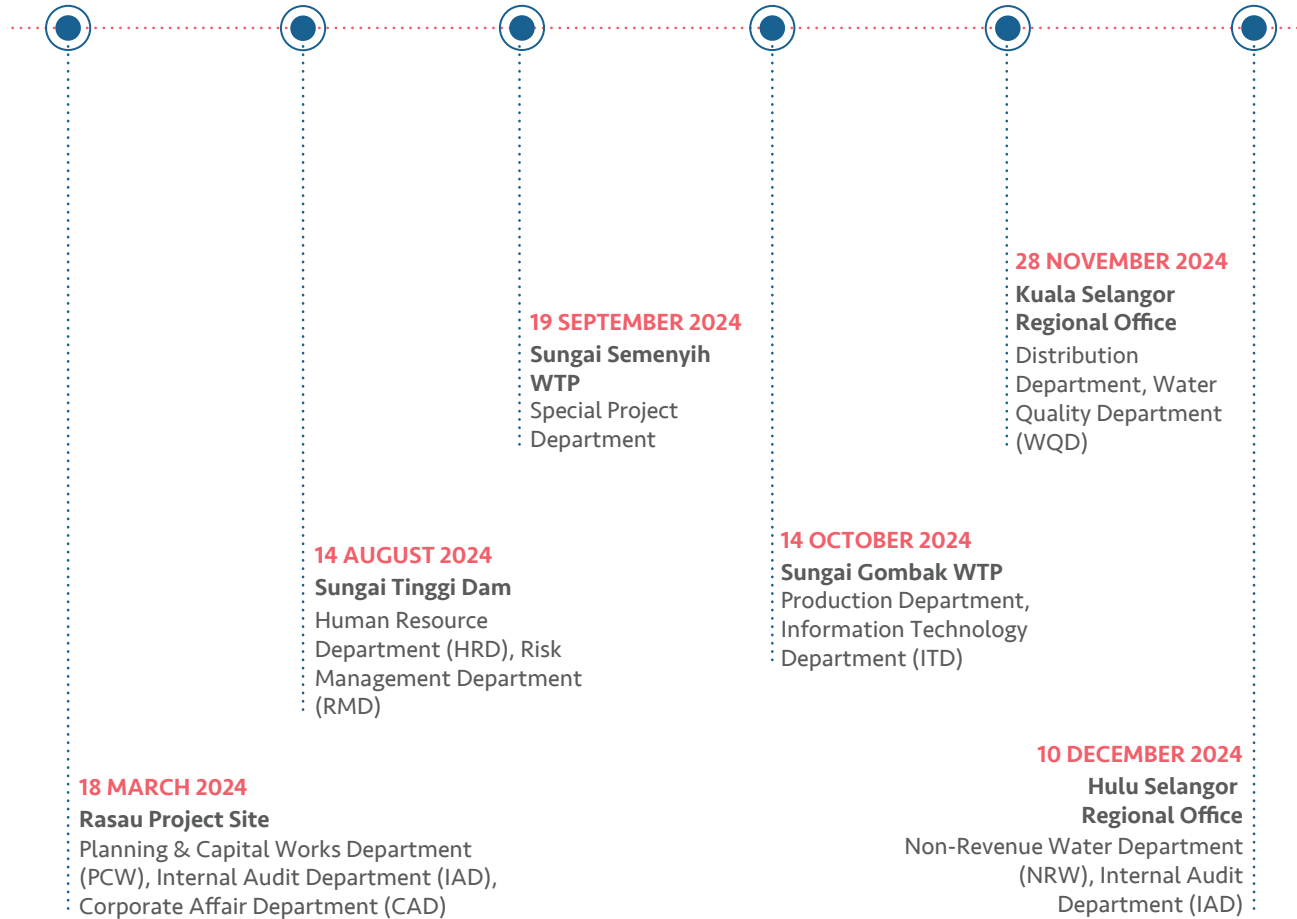
Regularly issued safety bulletins covering seasonal risks such as monsoon-related hazards, heat stress prevention and public health alerts.

### Incident Case Studies and Lessons Learned

Sharing of workplace incidents and corrective measures to reinforce safety accountability across teams.

## 1.5 Leadership Listening Tour (LLT) 2024

In 2024, the HSSE Section coordinated a new cycle of Air Selangor's LLT to strengthen communication between employees and senior management on HSE matters, facilitating direct engagement between top management and employees across multiple locations.



### The primary objectives of LLT 2024 were:



#### Enhancing Employee Engagement

Providing a direct platform for employees to voice safety concerns and suggestions to senior management.



#### Strengthening Safety Commitment

Reinforcing a culture of proactive safety leadership across all operational units.



#### Driving HSE Excellence

Ensuring continuous improvement in workplace safety through two-way communication, and real-time feedback mechanisms.

These engagement initiatives underpin our commitment to instilling a culture of safety, empowering employees with the knowledge and resources needed to maintain a safe working environment.



## 1.6 Employee Wellbeing and Wellness

Employee wellbeing remains a cornerstone of our commitment to fostering a healthy and supportive workplace environment. We have expanded our wellness initiatives in 2024 to include a variety of physical fitness programmes, mental health support, and preventive healthcare measures.

### Key wellness initiatives conducted in 2024 include:

FITNESS AND WELLNESS ACTIVITIES	PREVENTIVE HEALTHCARE MEASURES	MENTAL AND EMOTIONAL WELLBEING INITIATIVES
<ul style="list-style-type: none"> <li>• Medical Checkup (March)</li> <li>• Zumba Session (May &amp; August)</li> <li>• Jungle Trekking Sungai Pisang (June)</li> <li>• Keep Fit with Pound Stick (June &amp; September)</li> <li>• Combat Cardio (July)</li> <li>• Virtual Run (October)</li> <li>• Tabata (November)</li> </ul>	<ul style="list-style-type: none"> <li>• Briefing on Tuberculosis (Tibi) and Mantoux Test</li> <li>• Typhoid Vaccination for Selected Staff (WQD and Production)</li> <li>• General Health Screening during HSSE Week 2024</li> <li>• DASS (Depression, Anxiety &amp; Stress Scale) Screening</li> <li>• Health Assessment for Confined Space and PAKAR Workers</li> <li>• Medical Checkups for Confined Space Workers</li> <li>• Fit to Work Programme for Employees Returning from Prolonged Medical Leave</li> <li>• Men's Health Talk: Let's Talk about Prostate Cancer</li> </ul>	<ul style="list-style-type: none"> <li>• HSSE Advisory and HSE Flash</li> <li>• Rakan Prihatin Initiative</li> <li>• Forest Bathing (Shinrin-Yoku)</li> <li>• Massage and Reflexology</li> </ul>

These initiatives reflect our comprehensive approach to employee wellbeing, ensuring that our workforce remains healthy, engaged, and productive. By integrating physical health, mental wellness, and preventive care, we continue to prioritise employee wellbeing as a key component of our sustainable workforce strategy.

## 1.7 Rakan Prihatin Initiative

### Strengthening Peer Support for Mental Wellness

In 2024, we appointed 39 Rakan Prihatin representatives from various departments and regions as part of a strategic initiative to enhance internal support for employee mental wellbeing. This proactive step ensures that employees have access to a compassionate, approachable, and non-judgmental early support system for emotional and psychological assistance.

### Role of Rakan Prihatin

Rakan Prihatin serves as a vital peer support mechanism, playing the following roles:

- **Peer Guide.** A trusted contact point for colleagues facing personal or workplace-related challenges.
- **Referral Channel.** A connector to Air Selangor's Panel of Certified Counsellors for professional intervention.
- **Wellbeing Ambassador.** An advocate for psychological safety and emotional wellbeing in the workplace.

### Capacity Building and Development Programmes

To ensure their effectiveness, Rakan Prihatin representatives participated in structured developmental programmes throughout 2024, focusing on the following areas:

- **Professional Training and Conferences**
  - **Rakan AKRAB National Conference.** Knowledge-sharing sessions by certified counsellors.
  - **Mental Health First Aid (MHFA).** Provided practical response skills for early intervention, conducted by licensed professionals.
- **Strategic Networking**
  - Engagements with certified counsellors across multiple agencies.
  - Platforms for sharing insights on emerging psychosocial risks and effective intervention practices.
- **Awareness and Knowledge-Sharing Events**
  - In conjunction with National Counselling Month 2024, Rakan Prihatin organised several impactful programmes:
    - **Online Talks:**
      - Counselling in the Workplace – Tuan Haji Hushim Haji Salleh
      - Positive Communication in Family – Dr. Noor Aishah Rosli
      - Art to Reduce Stress – Tuan Haji Hairol Kamal Haji Ab Rahman
      - Social Support and the Importance of Mental Health – Tuan Haji Hairol Kamal Haji Ab Rahman
    - **Physical Sessions:**
      - Psychology Intervention Course: You Are Truly Precious – Dr. Rafidah Kastawi
      - Parenting Course – Dr. Rafidah Kastawi
      - Reflection Space for Rakan Prihatin, led by Tuan Haji Hushim Haji Salleh with the Panel of Counsellors

### Counselling Room

To further institutionalise mental health support, we introduced a dedicated counselling room designed to provide a private, calming, and secure environment for both face-to-face and virtual sessions. The room is fully equipped with supportive materials and furniture to ensure confidentiality and comfort. It was officially launched by the CEO as a symbol of our ongoing commitment to employee mental wellbeing.

### Special Event Participation

Rakan Prihatin also represented Air Selangor at Himpunan Aspirasi MADANI Rakan Pembimbing Perkhidmatan Awam. This national gathering recognised the significant role of peer support leaders in nurturing a caring and value-driven public service ecosystem.

14 June 2024 | Officiated by YAB Prime Minister | Theme: "H.E.M.A.T: Menyantuni Hasrat, Membina Citra"

The Rakan Prihatin initiative continues to be part of our holistic employee wellbeing strategy. Through its structured peer support system, professional development, and active engagement with certified counsellors and the wider public sector, it fosters a resilient, empathetic, and psychologically safe workplace culture.



# EMPLOYEE ENGAGEMENT AND DEVELOPMENT

## 2.0 Employee Engagement Programmes

We continue to drive employee engagement through a variety of structured programmes and initiatives. These engagement activities serve as a platform for employees to participate in meaningful discussions, professional development, and volunteer activities that contribute to wellbeing and growth.

### 2024 Key Employee Engagement Events

EVENT	DEPARTMENT
Hydro Heroes Volunteer Programme	Corporate Communication Department
Karnival Sukan Air Selangor (KSAS)	Human Resource Department
LinkedIn Learning	Learning Centre (Human Resource Department)
Leak Report Campaign	Non-Revenue Water Department /Corporate Communication Department
Program Kesihatan & Kesejahteraan Pekerja	Human Resource Department
Rakan Prihatin Expansion (New Recruits)	Human Resource Department
Townhall bersama CEO	Corporate Communication Department/Human Resource Department
ICON 2024	Human Resource Department
HSSE Month	
Tree Planting Programme (1,000 bakau trees)	
River Care	



These initiatives demonstrate our ongoing commitment to fostering a strong culture of engagement, collaboration, and recognition to support a motivated and high-performing workforce.

## 2.1 Employee Benefits

A well-structured benefits system is crucial in ensuring employee satisfaction, work-life balance, and long-term retention. We offer various benefits to support employees' wellbeing, including parental leave, health programmes, and development opportunities.

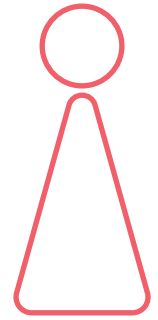
### 2.2 Parental Leave

We recognise the importance of family responsibilities and provide parental leave benefits to eligible employees. The following table outlines parental leave statistics for 2024:

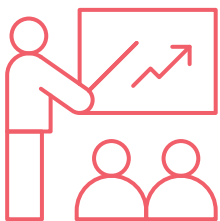
Out of the 49 employees who took parental leave, all 49 remain employed with the company. A total of 42 returned to work upon completion of their parental leave, while the remaining seven (7) continued their parental leave and/or extended leave. Nevertheless, these seven (7) employees are officially still under employment, and thus the retention rate is 100%.



<b>3,285</b>	Total employees entitled to parental leave	<b>763</b>
<b>255</b>	Total employees who took parental leave	<b>49</b>
<b>136</b>	Employees who returned to work after parental leave	<b>42</b>
<b>255</b>	Employees retained 12 months after returning	<b>49</b>



These statistics reflect our continued commitment to providing a supportive and inclusive workplace for working parents, ensuring they can transition smoothly between professional and family life.



### 2.3 Training and Development

In 2024, we continued to provide training programmes to enhance technical expertise, leadership capabilities, and safety awareness among employees.

#### Training Hours by Gender

**112,133.26**  
Hours

**39,200.30**  
Hours

#### Training Hours per Employment Category

**15,400.64**  
Hours

**52,086.67**  
Hours

**83,846.25**  
Hours

## 2.4 Key Training Programmes Conducted in 2024



1

### Water Expert Development Programme

Enhancing technical knowledge in water industry operations.

2

### Sijil Kemahiran Malaysia (SKM) Certification

Strengthening skills certification in relevant work areas.



3

### Lean Six Sigma Training

Improving efficiency and operational excellence.



4

### e-learning Self-Paced Course

Providing employees with flexible learning opportunities.

#### New Compulsory e-Learning Modules

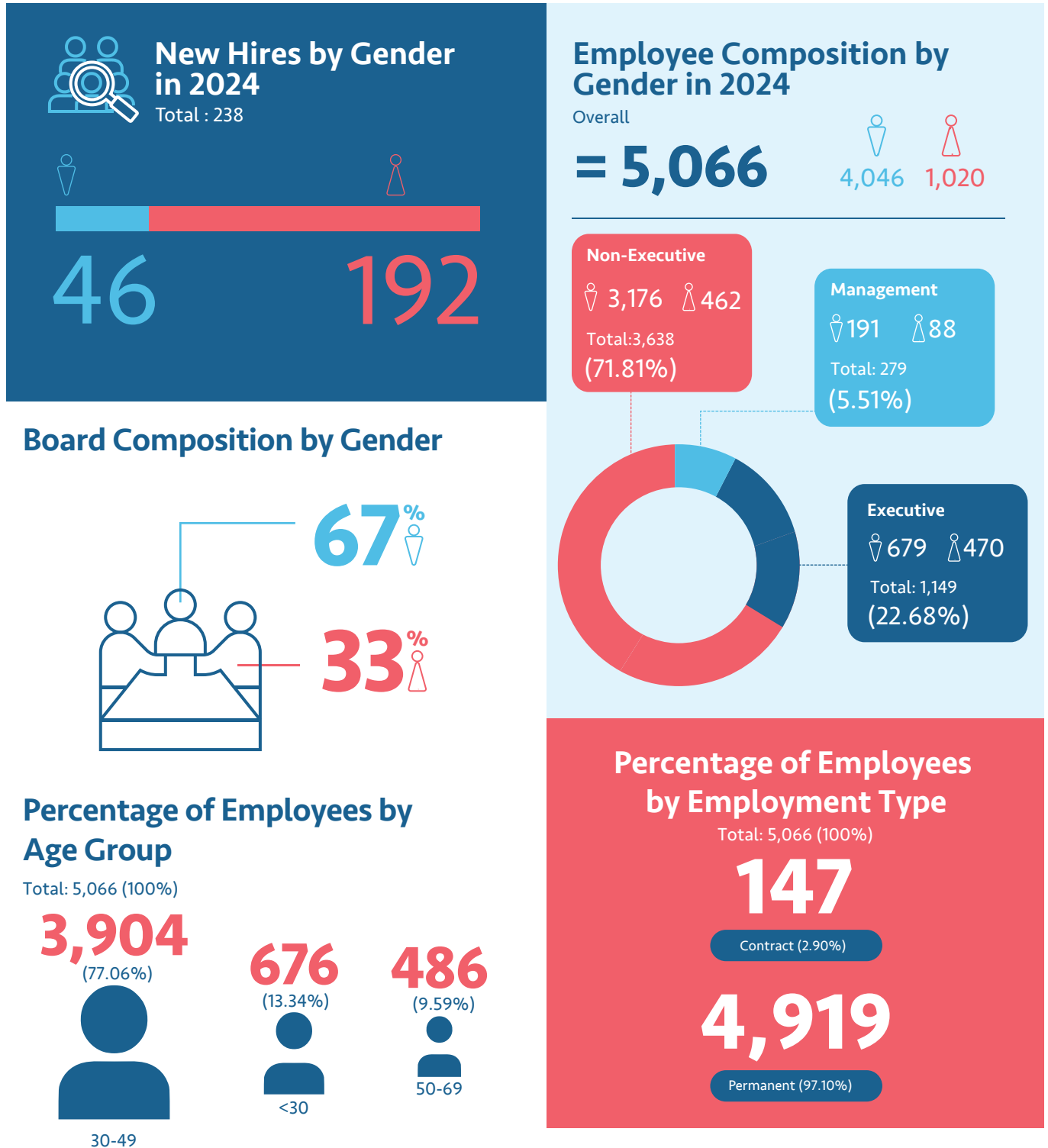
Notes:

Our investments in training and development help maintain a workforce that is competitive, knowledgeable, and adaptable to the evolving demands of the water services industry. It also reaffirms our commitment to fostering a work environment that prioritises employee growth, wellbeing and engagement, contributing to a high-performing and resilient workforce.

## 2.5 Diversity and Inclusion

At Air Selangor, we strongly believe in fostering a diverse and inclusive workforce, ensuring equal opportunities for all employees regardless of gender, age, or employment status. Our approach to diversity supports a culture of collaboration and innovation, driving business success while maintaining a fair and inclusive workplace.

The table below outlines talent hiring based on gender composition, employment type, age group, including the Board's composition for year 2024.



This diversity reflects our commitment to maintaining a balanced, inclusive and equitable workforce, positioning Air Selangor as an employer of choice within the industry. Moving forward, we aim to enhance our talent attraction, retention and development strategies to support long-term organisational growth and sustainability.

## Pillar 4

# DELIVERING CUSTOMER SERVICE EXCELLENCE



**6** CLEAN WATER AND SANITATION



**12** RESPONSIBLE CONSUMPTION AND PRODUCTION



**13** CLIMATE ACTION



We are committed to delivering the best customer experience by reducing water supply disruptions, ensuring clear and timely communication about services, and fostering strong customer relationships.

We foster these relationships across multiple channels, including customer service centres, counters, mobile apps, and social media platforms. Information is also shared through the official website and Hydro Hub information platform, among others. These channels are designed to provide customers with easy and convenient access to essential service information.

## WATER SUPPLY AND QUALITY

### 1.0 Highest Standard of Water Quality

Providing exceptional customer service is a core principle for Air Selangor. Ensuring the quality of the water distributed is of utmost importance, as we serve 2.7 million water accounts and approximately 9.6 million consumers across Selangor, Kuala Lumpur, and Putrajaya.

We source surface water from dams and selected rivers, treating it to meet the highest standards of drinkable water in accordance with the Ministry of Health's (MOH) Drinking Water Quality Standards. As of December 2024, we achieved a Drinking Water Quality Index (DWQI) for Selangor, Kuala Lumpur, and Putrajaya of over 80%, earning a classification of 'Good' and 'Excellent' by MOH.

### 1.1 Water Quality Monitoring and Compliance

In 2024, we conducted over 2.4 million water quality analyses across our entire operation. Water quality testing was carried out every two (2) hours at each WTP. In addition, 302,288 water quality analyses were performed across 1,153 sampling stations. Of these, 691 stations (59.9%) are under mandatory monitoring by MOH, 393 stations (34.1%) are monitored by us, and 69 stations (5.98%) are jointly monitored by both Air Selangor and MOH.

All sampling stations are reviewed biannually, with adjustments made based on changes in water supply patterns due to expanding distribution networks driven by new developments. As of December 2024, these sampling stations showed an impressive 99.93% compliance with the National Standard for Drinking Water Quality set by MOH.



## 2024

### Water Quality Highlights

**2.4M+**

*water quality analyses conducted*

**Every 2 hours**

*testing at each WTP*

**302,288**

*sampling station analyses*

**1,153**

*active sampling stations*

**99.93%**

*compliance with national water quality standards*

## 1.2 Water Monitoring Laboratories

Our regional laboratories, located at the Sg Selangor Phase 2 (SSP2) and Sg Labu WTPs, are accredited for both chemical and microbiological testing. The Sg Semenyih and Langat 2 regional laboratories also hold accreditations for chemical testing under MS ISO/IEC 17025 – the international standard for testing laboratories. These accreditations ensure that we adhere to the highest operational standards in water quality management. Additionally, 11 sampling teams, covering ten (10) distribution regions, have secured site-specific accreditations for chemical testing at the SSP2 and Sg Labu regional laboratories.

To maintain the highest standards, our laboratories are equipped with state-of-the-art technologies such as inductively coupled plasma mass spectrometry (ICP-MS) for heavy metal analysis, gas chromatography mass spectrometry (GC-MS) for detecting volatile and semi-volatile organic compounds, ion chromatography (IC) for anion analysis, and liquid chromatography mass spectrometry quadrupole time-of-flight (LCMS Q-TOF) for non-volatile organic compound detection. With the capacity to analyse 105 parameters, including physical, chemical, heavy metals, volatile organic compounds, semi-volatile organic compounds, non-volatile organic compounds, per- and polyfluoroalkyl substances (PFAS), pesticides, pharmaceuticals and microbiological factors, our laboratories provide comprehensive water quality analysis capabilities.

We are committed to enhancing our monitoring of chemicals and contaminants by utilising cutting-edge technology and the expertise of our laboratory professionals. In response to these challenges, we have recently upgraded our regional laboratories, transforming them into diagnostic facilities capable of meeting the growing demands for advanced water quality assessments.

In 2024, our regional laboratories began monitoring additional parameters within the emerging contaminants category, such as industrial solvents and microbiological agents. These laboratories have also developed testing methodologies to assess a variety of factors, including staphylococcus aureus, six (6) volatile organic compounds (VOCs), five (5) semi-volatile organic compounds (SVOCs), two (2) pharmaceutical compounds and two (2) PFAS compounds.



## 1.3 Future Monitoring Plans

As urbanisation and industrialisation continue to transform Selangor, Kuala Lumpur, and Putrajaya, we remain vigilant in addressing the potential risks posed by emerging contaminants in our raw water sources. These contaminants, which are not currently included in the mandatory parameters monitored by MOH, require close attention as they evolve.

By 2030, we aim to monitor a total of 163 compounds, including the 47 parameters already defined by the MOH in the National Standard for Drinking Water Quality. Among the additional compounds to be included are persistent organic pollutants (POPs), persistent bioaccumulative toxic substances (PBTs), industrial solvents, pesticides, pharmaceuticals and drugs. These substances include chemicals identified from previous water pollution incidents, newly discovered compounds, microbes regulated by Malaysian legislation or international standards, and chemicals from MOH's secondary list of parameters, which are not currently required for monitoring.



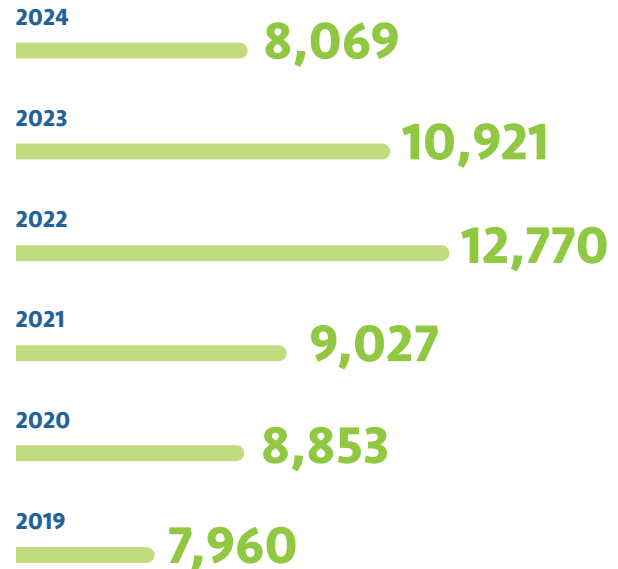
## 1.4 Online Water Monitoring

To ensure the continued safety of drinking water supplied to consumers, post-production water quality management is strategically conducted across the distribution network. This includes optimising technological solutions to monitor and improve water quality. One such innovation is the Hybrid Distribution Water Quality Real-Time Analyser (HYDRA), an online monitoring system designed for treated water distribution. HYDRA is positioned at key locations including treatment plant outlets, balancing reservoirs, and strategic service reservoirs. Currently, 190 HYDRA stations are operational, providing continuous monitoring throughout the distribution system.

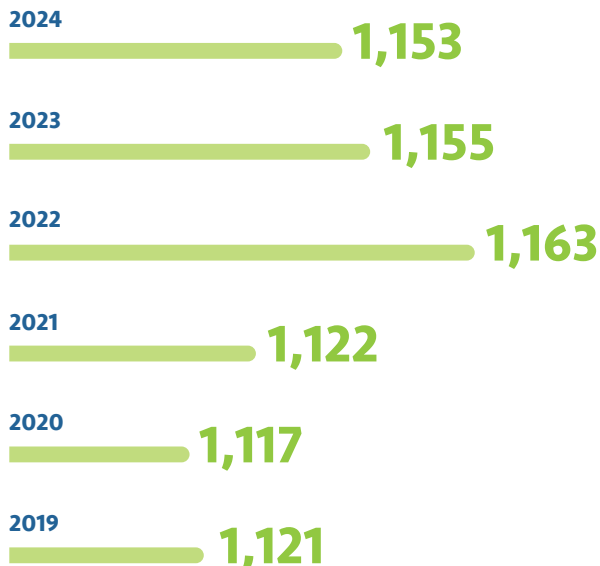
Additionally, the OACIS is used to address low FRC levels within the distribution network. FRC is vital for eliminating pathogens that cause waterborne diseases. Installed in areas where FRC deficiencies are common, OACIS autonomously doses chlorine into the distribution pipelines. As of December 2024, 39 OACIS stations have been constructed at low-FRC reservoir outlets, with zero instances of FRC non-compliance recorded in these areas.

Through these initiatives, we demonstrate our commitment to ensuring the highest standards of water quality, leveraging innovation and continuous improvement to meet the needs of our growing communities.

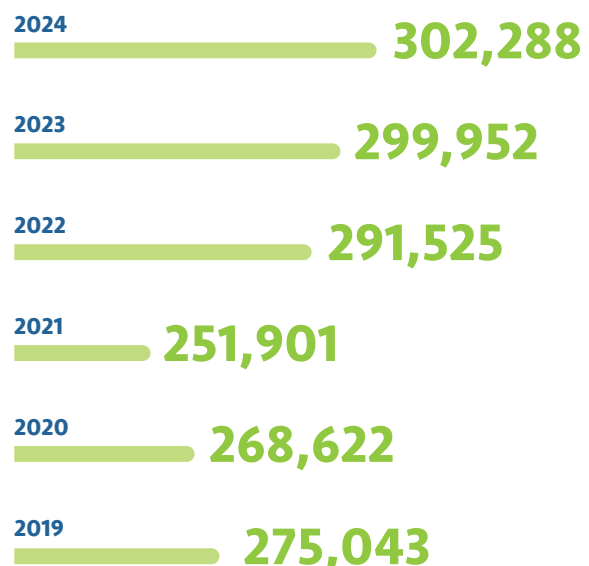
### Total Number of Pipe Cleaning Works



### Total Number of Active Water Sampling Stations

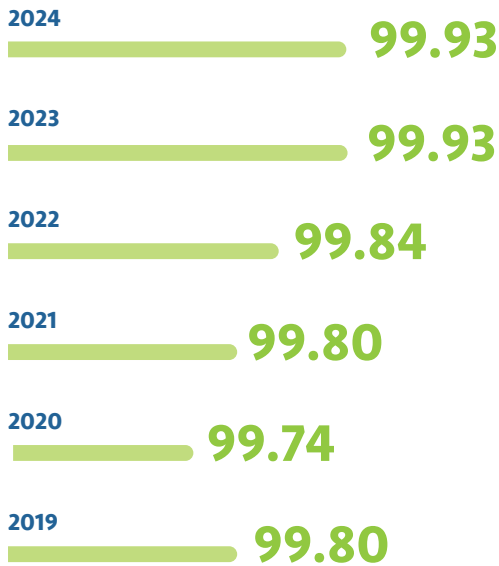


### Total Number of Water Quality Analyses

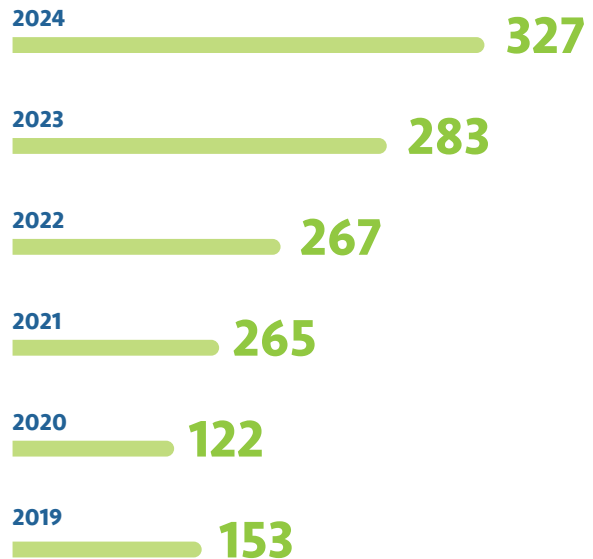




## Average Water Quality Compliance



## Total Number of Reservoir Cleaning Works



### 1.5 Pipe and Reservoir Cleaning

In 2024, we successfully completed approximately 12,100 km of pipe cleaning, covering 8,069 individual pipe cleaning works, to ensure the safe and reliable distribution of treated water to our consumers. These cleaning operations are carried out using both pressurised and non-pressurised methods, selected based on the accessibility and workability of the designated pipe cleaning zones (POLIGON) in each area. In addition to regular pipe cleaning, we also conduct water reservoir cleaning on a six-year cycle to maintain the quality of our water supply.

Since 2019, a total of 1,417 reservoir compartments have been cleaned, with 327 compartments cleaned in 2024 alone. We employ two (2) primary methods for reservoir cleaning – conventional cleaning and commercial diver cleaning. The method chosen depends on the complexity of the water distribution operations and the specific requirements of the cleaning task.

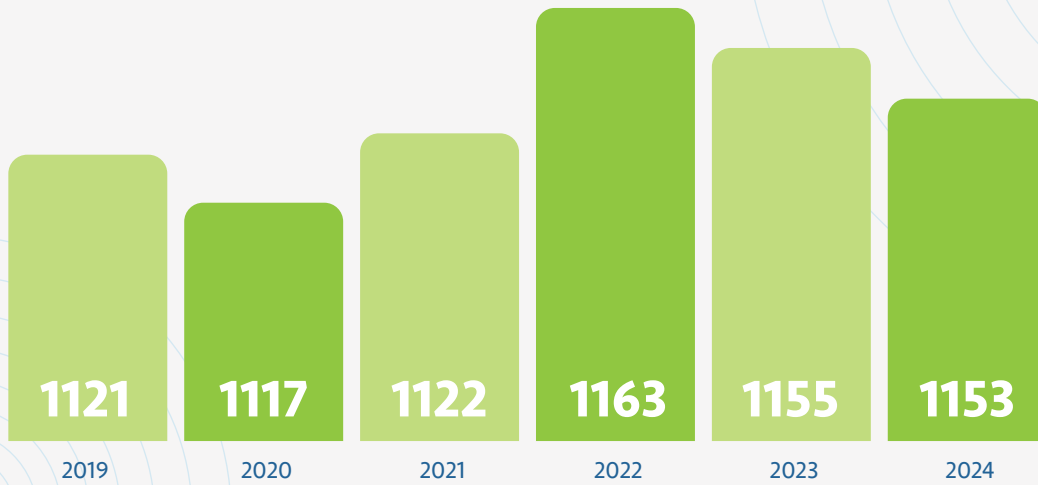
Through these comprehensive cleaning efforts, we ensure that both the water distribution system and reservoirs are maintained to the highest standards, safeguarding the quality of water delivered to our customers.



2024 appx. **12,100KM**  
 pipe cleaning, covering 8,069 individual pipe cleaning works

Since 2019 **1,417** reservoir compartments have been cleaned + In 2024 **327** compartments cleaned

## Number of Active Water Sampling Stations



# CUSTOMER SERVICE EXCELLENCE

## 2.0 Delivering Customer Service Excellence

At Air Selangor, we pride ourselves on upholding the highest standards of service, a cornerstone of our core values. Our unwavering commitment is to deliver an exceptional customer experience by minimising water supply disruptions, ensuring effective and timely communication, and fostering strong, trustworthy relationships with our customers.

To cater to the needs of our 9.6 million consumers, we offer a comprehensive array of communication channels. These include service counters, social media platforms, a mobile application, our website, and other digital and traditional media platforms. By doing so, we strive to provide the best possible experience for all our customers, every single day.

## Our Communication Channels

Contact us for any inquiries or information through our official communication channels:

   Air Selangor Social Media

 Call 15300

Download the Air Selangor App

 Available on the App Store  GET IT ON Google Play  DOWNLOAD ON AppGallery



## 2.1 Communication Platform

At Air Selangor, reliable and trustworthy communication is at the heart of everything we do. To ensure our customers are always well-informed, we are dedicated to continuously enhancing and maintaining our communication touchpoints.

By doing so, we aim to provide clear, accurate, and timely information, reinforcing the confidence our customers place in us.

### Call Centre SLA Achievement



# 89.8%

**f 417,113** Facebook Followers

**X 96,183** X (formerly Twitter) Followers

**Instagram 43,954** Instagram Followers

**6,380,211** Mobile App Downloads

**132,952** AIRRA Chatbot

**160,608** Help Centre Interactions

**949,774** Calls Received

**308,112** Walk-in Customers

## 2.2 Stakeholder Engagement Programmes

In 2024, we involved stakeholders in several programmes and sessions designed to gather feedback on the organisation's top-priority initiatives.

Key milestones include effective ground strategy with the ambition of building an informed community and transforming key influencers into a pool of advocates who will be our eyes, ears and voice on the ground. Our initiatives and programmes earned us a reach of approximately 550,000 individuals in 2024.

# 198

Total Stakeholder Engagement Programmes (FY2024)

## Focus Group Session: Let's Get Candid – Building Bridges Through Open Dialogue

Air Selangor's 'Let's Get Candid' is an annual moderated focus group platform which is a vital initiative designed to foster transparent communication and collaborative engagement with its diverse stakeholders. This platform facilitates direct interaction between stakeholders and Air Selangor's senior management, enabling the exchange of concerns, challenges, and feedback. Simultaneously, it provides a crucial avenue for us to share updates on our latest

initiatives and strategic direction. The programme was successful and highly commended by participants as it sends a message that we are serious about customer excellence and sustainability/climate change.

The programme is structured into four (4) distinct sessions, each tailored to specific stakeholder categories at the Headquarters level, ensuring targeted and relevant discussions:



### Session 1 (March): Business, Industrial, Consumer Groups & Associations

Focused on engaging with key industry players, consumer advocates, and business associations, including the Federation of Manufacturers Malaysia (FMM), Persatuan Pengguna Islam Malaysia, Indian Chambers of Commerce, Persatuan Pengusaha Restoran Muslim Malaysia, and FOMCA.



### Session 3 (August): Logistical & Digital Organisations

Focused on engaging with logistical and digital partners like Gabungan Pertubuhan Teksi, Kereta Sewa, Limosin Dan Teksi Lapangan Terbang Se'Malaysia (GTSM), Smart Selangor, and PLUS Malaysia.



### Session 2 (June): Environmental & Youth NGOs and Government Agencies

Brought together environmental organisations, youth groups, and government representatives, such as the Malaysian Youth Delegation, Human Rights Commission of Malaysia, Engineers Without Borders, Yayasan Hijau Malaysia, Ecolnights, and Alliance of River Three.



### Session 4 (November): International Communities

Focused on international communities and learning and discussing best practices on water management in respective countries. Representatives from the High Commission of Singapore, United Kingdom as well as embassies of Mexico, Hungary, Cuba, Belgium, Indonesia and the United States of America attended.

## Focus Group Session: Let's Get Candid – Building Bridges Through Open Dialogue

We expanded stakeholder engagement efforts through our regional office initiative, 'Let's Get Candid' sessions. These sessions aim to foster direct communication with local authorities, elected constituency members, village heads, resident associations, and other community stakeholders, ensuring localised feedback and collaboration. The programme addresses critical topics such as water tariffs, digitalisation initiatives, water quality management, water conservation and sustainability, non-revenue water reduction, and other Air Selangor projects.

The 'Let's Get Candid' initiative is significant for enhancing transparency and accountability, gathering valuable stakeholder input, strengthening relationships, and fostering

collaboration. It also aims to improve our initiatives and service delivery while facilitating the exchange of international best practices. By creating a platform for open dialogue, we demonstrate our commitment to working collaboratively with stakeholders to achieve a sustainable and efficient water future.

- 'Let's Get Candid' session with Stakeholders – Petaling Jaya Region
- 'Let's Get Candid' session with ADUN Sentosa – Klang Region
- 'Let's Get Candid' session with SJK Tamil Sungai Manggis – Kuala Langat Region
- 'Let's Get Candid' session with Educators – Kuala Selangor

## NGO Collaboration

### Collaboration with Petrosains on the 25th Petrosains Anniversary

We actively participated in Petrosains' 25th Anniversary Celebration Carnival, a three-day event held from 1 March 2024. The collaboration involved the joint effort to disseminate information regarding our initiatives, with a particular focus on showcasing the water filtration process and emphasising the critical need for water conservation and the protection of Earth's vital resources. We established interactive demonstration stations and informational booths throughout the event, attracting over 9,000 visitors, primarily from the Klang Valley region. The demographic of attendees ranged from young children to adults, spanning ages five (5) to 50. We also contributed to the event by delivering public speaking sessions at the main foyer, enhancing public engagement.



### **Air Selangor Collaboration with Alliance of River Three (ART)**

We organised an educational visit, in collaboration with ART, to the Klang Gate Dam and the Wangsa Maju WTP. This visit, led by ART's Kennedy Michael and Syuen, hosted 30 participants from diverse professional backgrounds, including banking and finance, all united by a shared passion for river protection and conservation in Selangor. Participants received comprehensive tours of the dam and the WTP, gaining insights into the dam's functions and history, as well as the processes involved in providing clean and safe treated water to consumers.



### **Know Your Water Workshop with Human Rights Commission of Malaysia (SUHAKAM)**

We conducted a half-day workshop for officers from the Human Rights Commission of Malaysia (SUHAKAM). The workshop's primary objective was to empower SUHAKAM officers with comprehensive water knowledge and facilitate long-term sustainable knowledge transfer. Recognising the fundamental human right to clean and safe water, the workshop aimed to ensure that officers were well-informed about the efforts involved in providing clean drinking water to consumers. The workshop enabled SUHAKAM staff to effectively relay information to the communities and stakeholders they regularly engage with. In total, 40 officers participated in the workshop, which received positive feedback.



### **Air Selangor Collaboration with Tenaga Nasional Berhad (TNB)**

We conducted a knowledge-sharing session for Tenaga Nasional Berhad (TNB) at the Sungai Selangor Phase 2 WTP in July. This session, attended by 40 TNB participants, focused on our initiatives, challenges, and best practices in customer management within the utility industry. The session provided TNB with accurate and specific insights into the clean water treatment process, highlighting various Air Selangor initiatives aimed at enhancing the quality of water supply services for consumers in Selangor, Kuala Lumpur, and Putrajaya.



### River Community Connect Programme Collaboration with Global Environment Centre

In collaboration with the Global Environment Centre, we organised the River Community Connect Programme, aimed to empower and educate approximately 30 participants from over 40 river community groups on the efforts involved in providing clean and safe drinking water. Participants, ranging in age from 35 to over 60, who had initiated their own river protection efforts, gained firsthand experience of water filtration processes and shared knowledge on maintaining and improving river cleanliness. This ongoing programme, with multiple sessions planned for 2025, serves as a platform to showcase the positive impact of community contributions to water sustainability.



### Green-Scaling Programme in Collaboration with Malaysian Youth Delegation, Kolektif Iklim, and Engineers with Borders

We launched the Green-Scaling Programme to engage and educate young engineers aged 18 to 35, from both student and working backgrounds, on the water industry. This programme aimed to empower these engineers with the necessary knowledge to contribute to the industry and foster long-term sustainable knowledge transfer. Air Selangor's experts, Ir. Azlan Abdullah and Ir. Ts. Ahmad Fuad Zainudin, conducted informative sessions on upstream and downstream engineering, respectively. 35 participants joined the programme, which also served as a platform to encourage the development of engineering-based solutions for climate change challenges, particularly in protecting Earth's resources. Multiple sessions of this programme are scheduled for 2025.

### Educational Visit in Collaboration with Petrosains

We hosted an educational visit for 40 members of Petrosains, including senior management and the CEO, to the Semenyih Dam and the Semenyih WTP. This visit provided educational insights into the operational functions of WTPs and dams, including the various stages of water treatment involved in ensuring safe and clean drinking water. This collaboration aims to strengthen future partnerships between Air Selangor and Petrosains in providing engaging and informative public education on water sustainability and environmental protection.



### Kuala Lumpur Eco Film Festival 2024 in Collaboration with Ecoknights

We collaborated with Ecoknights on the Kuala Lumpur Eco Film Festival 2024, which focused on water sustainability. This global event, held in Kuala Lumpur, featured filmmakers showcasing their films on environmental and water sustainability themes. Our representatives participated in forum discussions and established informative booths, emphasising the importance of clean water sources to the approximately 500 attendees over the three-day festival, which began on 24 October 2024.



### Collaboration on Malaysian Local Conference of Youth 2024 Programme with Malaysian Youth Delegation (MYD)

We collaborated with the Malaysian Youth Delegation (MYD) to organise the Malaysian Local Conference of Youth 2024. This conference invited youth from across the country to engage in discussions on various environmental issues. Priscilla Alfred from the Customer Experience Department delivered the opening remarks, emphasising the importance of youth involvement and input on environmental issues, and shared Air Selangor's initiatives. Ts. Munirah Binti Muhammad from the Planning and Capital Works Department participated in a panel forum, sharing insights on water demand initiatives. The conference, held over three (3) days in Putrajaya from 14 September 2024, was attended by 100 participants.

### Collaboration with Free Tree Society – in conjunction Green Token Appreciation Programme

On 30 September 2024, in partnership with Free Tree Society, we hosted the Green Token Appreciation Programme at our Kuala Lumpur (KL) regional office. Our CEO distributed green tokens to representatives from ten (10) regions, who then shared them with consumers. As part of the initiative, 100 plants and trees were given away to promote environmental awareness and highlight the role of tree planting in protecting water sources, particularly rivers.





## Customer Experience Week 2024: A Comprehensive Internal Approach to Enhancing Customer Experience

Air Selangor's inaugural Customer Experience Week (CX Week) 2024 was a six-day programme designed to significantly enhance customer experience by empowering staff with knowledge. Each day was meticulously structured around a specific theme, ensuring a holistic and impactful approach.

### Day 1: CX Launch – Official Commencement and Strategic Partnerships

The Customer Experience Week commenced on 18 November at the Sungai Langat 2 WTP Hall, with an attendance of 100 internal Air Selangor staff. The launch was officiated by CEO Adam Saffian Ghazali, Ir. Abas Abdullah, Director of Planning, and Abdul Halem Mat Som, Head of Customer Experience. Dato' Zainal Abidin Putih, Non-Independent Non-Executive Chairman of Telekom Malaysia, graced the event as the Chief Guest of Honour, sharing valuable insights on the importance of customer experience. A significant highlight of the launch was the signing of Memorandum of Collaboration with the Human Rights Commission of Malaysia, Yayasan Hijau Malaysia, and the Malaysian Youth Delegation, focusing on collaborative awareness and empowerment programmes.

### Day 2: CX Green – Environmental Stewardship and Sustainability Awareness

Day two (2), themed 'CX Green' focused on environmental and sustainability knowledge. Mr. Satpal Singh, Chief Strategy and Sustainability Officer, initiated the day with insightful speaking sessions. Later, YELL-UNDP, conducted an engaging session emphasising the importance of sustainability. Concurrently, 30 Air Selangor staff participated in a site visit to Sungai Melawati, organised by Alliance of River Three, to gain firsthand experience of river ecosystem management.

### Day 3: CX Share – Knowledge Exchange and External Exposure

'CX Share' day facilitated knowledge exchange and external exposure. We collaborated with Petrosains to showcase inventions by two (2) primary schools: Sekolah Kebangsaan Sabtu, Melaka, presented a Waste Water Reuse System, and Sekolah Tinta, Shah Alam, displayed an Eco Wudhu system. Prof Madya Ts Dr Mohd Nor Mamat from UITM delivered a motivational session, emphasising the responsibility of providing clean drinking water. An eco-film festival, organised by Ecolknights, concluded the day, focusing on the importance of protecting water sources.

### Day 4: CX Digital – Digital Innovation and Technological Initiatives

'CX Digital' showcased our digital innovations and assets. Digital booths featured the evolution of the Air Selangor App into a superapp and the Air Selangor ICC Command Centre, providing a digital overview of operations. Buzz App representatives also presented on merging technology with sustainability. Later, Mr. Premesh Chandra, Co-Founder of Asia Mobiliti, discussed new media and technology, while Mr. Murugason R. Thangaratnam, CEO of Novem CS, addressed online personal data protection.

### Day 5: Spread Joy in Every Drop – Customer Interaction Explorace

'Spread Joy in Every Drop' involved 100 participants, divided into ten (10) groups of ten (10), undertaking customer-centric and awareness tasks around Kuala Lumpur via the LRT. This experiential learning allowed staff to interact with customers, gather feedback, and understand customer sentiments, enhancing future customer experience initiatives. Participants distributed goodies to customers who assisted with their tasks.

### Day 6: CX Celebrate – Celebrating Air Selangor Staff

The final day, 'CX Celebrate,' featured a WTP open day for our staff and their families. Educational tours of the WTPs at Sungai Selangor Phase 2 and Sungai Semenyih provided insights into our operations. Indoor games, including colouring contests, quizzes, and sack races, were organised for children and adults. Approximately 200 staff members participated in this event, which concluded the Customer Experience Week 2024.

Feedback from our staff was overwhelmingly positive, with many expressing anticipation for Customer Experience Week 2025. Participants reported enhanced knowledge and increased confidence in customer interactions, highlighting the programme's success in achieving its objectives.

## Briefing Programme for Water Tariff Adjustment

A briefing programme for Members of Parliament (MPs), State Assembly Members (ADUNs), Selangor State Councilors, and representatives from the Selangor State Economic Planning Unit (UPEN) was held in January 2024. The session aimed to provide full transparency on the water tariff adjustments, addressing key topics such as the rationale, importance, and benefits of the new tariffs for consumers. It also included an in-depth Q&A segment to enhance stakeholders' understanding and address their concerns.



## Jelajah Saya Digital Program (JSD 2.0)

The Selangor State Government, in collaboration with the Malaysia Digital Economy Corporation (MDEC), organised the 'Jelajah Saya Digital Program (JSD 2.0)' and extended the invitation to Air Selangor to participate in the exhibition and speaker segment of this initiative. With approximately 500 participants, the event promoted digital adoption by showcasing Smart Selangor applications and other state digital services. Through exhibitions, speaker sessions, and interactive booths, attendees gained insights into digital transformation. The programme successfully raised awareness and encouraged greater engagement with state government digital platforms.



## Malam Apresiasi Rakan Strategik CX Air Selangor

The initiative aims to strengthen relationships and enhance collaboration between Air Selangor and key stakeholders, including government agencies/local councils, industrial/commercial entities, NGOs, resident associations, and community leaders/representatives, while inspiring and motivating them to actively support and advocate for shared goals.



## Bowl Down Barriers!

The Bowl Down Barriers! programme aimed to strengthen relationships between Air Selangor and our stakeholders while promoting a healthy lifestyle through recreational sports activities. Serving as a platform for engagement, it fostered camaraderie and wellbeing among the representatives from local councils across ten (10) regions, along with our employees.



## Other Stakeholder Engagement Sessions

We conducted and organised various other stakeholder engagement sessions throughout the year:

- Stakeholder Engagement with Penjara Kajang – Hulu Langat Region
- Stakeholder Engagement with MP Bandar Tun Razak and RA Desa Cheras, Pangsapuri Seri Perindu and PRIMA Alam Damai – Kuala Lumpur Region
- Stakeholder Engagement with ADUN Sg Pelek – Sepang Region
- Wangsa Maju Water Treatment Plant visit with Gombak Region stakeholders
- Rasa Water Treatment Plant visit with Hulu Selangor Region stakeholders
- SSP2 Bukit Badong Water Treatment Plant visit with Sabak Bernam Region stakeholders (Penghulu and Ketua Kampung)
- Sungai Semenyih Water Treatment Plant visit with Sepang Region stakeholders (Masjid Al-Makmur Management, Kg Giching)
- Klang Gates Dam and Wangsa Maju Water Treatment Plant visits with Kuala Lumpur Region stakeholders



## 2.3 Customer Outreach Programme

There were 58 customer outreach programmes initiated throughout 2024 to build rapport with customers and resident associations, strengthen relationships, educate, and create awareness on water-related matters, whilst addressing issues experienced by customers.

These programmes aimed to enhance public understanding of its services, operations, and the importance of water resources. The initiatives aimed to provide accurate information about our services, ensuring it could be effectively shared with the broader community. Key highlights included introducing digital tools like the Air Selangor app, *e-bil*, and SADE, empowering residents with knowledge and promoting sustainable water usage.



### Customer Literacy Programmes with JPKK Residents of Kampung Batu Tiga

### Customer Outreach Programmes with Resident Representatives of DUN Paya Jaras

### Customer Outreach Programmes with Resident Representatives of Kampung Pandan

### Customer Outreach Programmes with Resident Representatives Kampung Padang Jawa

### Customer Outreach Programmes with Shah Alam City Council (MBSA) & Resident Representatives Zone 7 Shah Alam

### Meet and Greet Programmes

### Meet and Greet Programmes

This initiative aims to strengthen collaboration between Air Selangor and ADUN offices to effectively address water disruption issues in their respective areas:

- Meet & Greet with YB DUN Pelabuhan Klang - Tuan Azmizam Zaman Huri
- Meet & Greet with YB DUN Batu Tiga - Tuan Danial Al-Rashid Haron Aminar Rashid



### Targeted Customer Engagement Programme

The Targeted Customer Engagement Programme focuses on building rapport with specific customer groups, including persistent, appreciative, and repeat customers, addressing their complaints and concerns. The initiative aims to strengthen relationships and enhance cooperation between Air Selangor and our stakeholders. By fostering trust and understanding, the programme nurtures and motivates stakeholders to become 'Friends of Air Selangor', promoting a collaborative approach to improving service delivery and customer satisfaction.



## Air Selangor Net Promoter Score (NPS) and Customer Satisfaction (CSAT) Index

**2024 NPS**

(2023: +4)

# +26

**2024 CSI**

(2023: 83%)

# 80.3%

### 2.4 Customer Complaint Management

We have streamlined our complaint management processes to enhance efficiency. The Help Centre, accessible through both the website and mobile application, empowers customers to post inquiries, submit connection requests, report leaks, check the status of their submitted queries, and file complaints regarding billing, meter issues, and other water services.

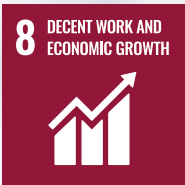
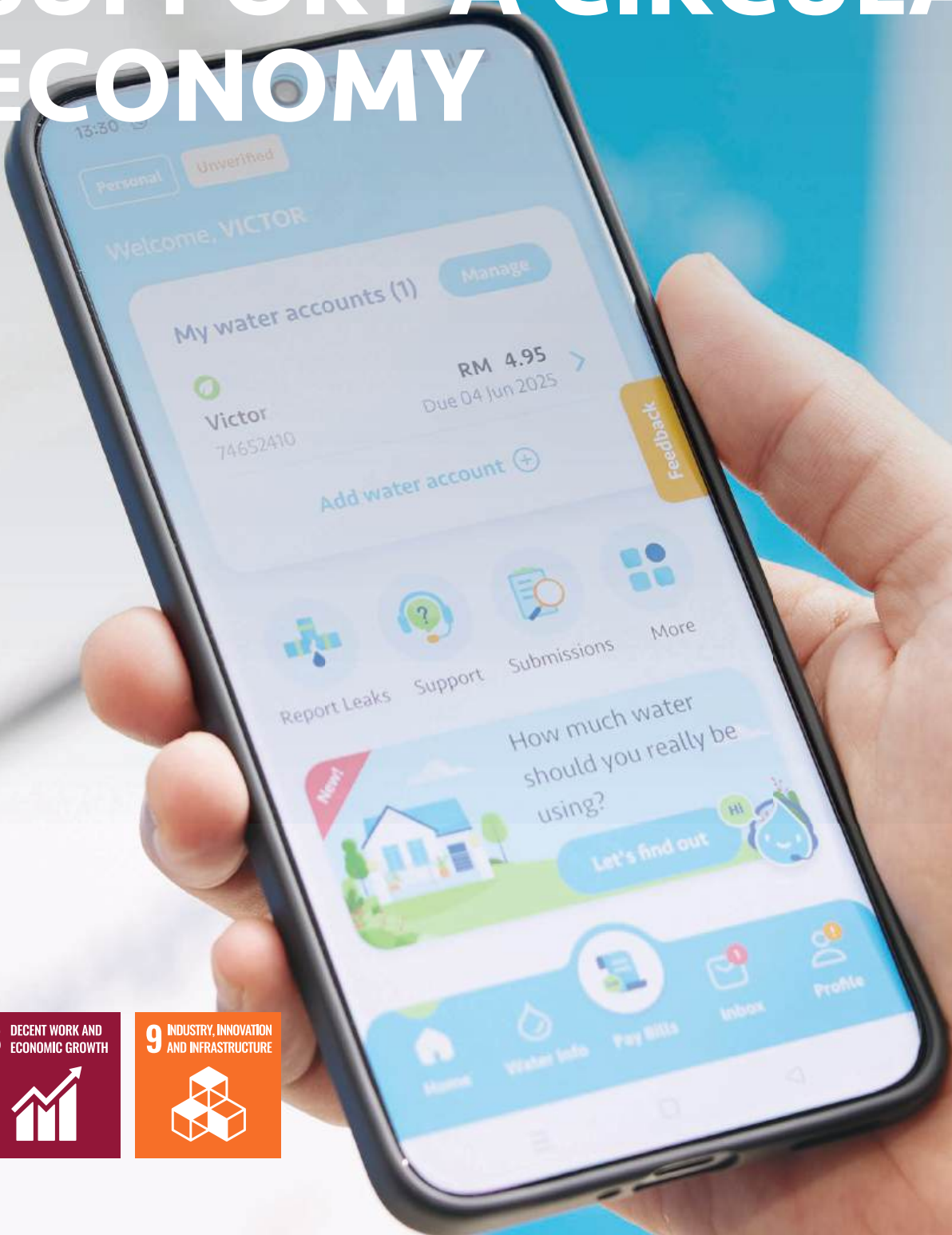
In 2024, we identified three (3) major categories of customer complaints: pipe leaks, meter leaks, and high

water bills. There were a total of 483,383 complaints recorded for these issues, with 248,294 complaints for pipe leaks, 177,375 for meter leaks, and 57,714 for high water bills. In response, we implemented a systematic and proactive complaint management strategy, focusing on identifying root causes, taking corrective actions, and ensuring timely monitoring and intervention, in accordance with ISO 9001:2015 - Clause 10.2 on Non-Conformity and Corrective Action (NCCA).

Description	2019	2020	2021	2022	2023	2024
<b>Customers</b>						
<b>Number of Calls Received</b>	1,693,689	1,591,819	1,478,514	1,209,333	965,001	949,774
<b>Number of Walk-in Customers</b>	486,584	341,575	302,627	363,103	321,118	308,112
<b>Number of Facebook Followers</b>	168,502	313,885	368,341	382,590	400,217	417,113
<b>Number of X (formerly Twitter) Followers</b>	17,880	49,400	64,291	75,019	89,961	96,183
<b>Number of Instagram Followers</b>	7,138	23,500	31,464	34,316	38,806	43,954
<b>Number of Mobile App Downloads</b>	316,584	1,786,736	2,574,915	3,901,737	5,027,000	6,380,211
<b>Number of AIRRA Interactions</b>	-	167,072	134,057	52,342	85,539	132,952
<b>Number of Help Centre Interactions</b>	-	-	120,107	188,081	141,089	160,608
<b>e-Bil Sign-up Rate (%)</b>	18.90	23.70	51.48	65.00	73.00	78.00

## Pillar 5

# LEVERAGING DIGITALISATION TO SUPPORT A CIRCULAR ECONOMY



# BUSINESS INNOVATION AND DIGITALISATION

Embracing digitalisation and technology is crucial in an increasingly digital business landscape, providing a platform to enhance business efficiency. We recognise this need and are proactively adopting digitalisation to drive transformation and seize new opportunities, aligned with our vision of becoming a Digital Utility of the Future.

We undertook a range of digitalisation initiatives in 2024 aimed at creating improved value for stakeholders, including key initiatives around data analytics, ICC, HydroSmart, Garis and MyWater Operation Mobile Application (OMA).

## Digital and Analytics Centre

Digitalisation provides a powerful tool to enhance circularity at Air Selangor. Recent updates have further enhanced the Digital and Analytics Centre's (DAC) capabilities, ensuring that data-driven insights are even more comprehensive and actionable.



## Enhanced Enterprise Data Lake

Our data oversight now incorporates an even wider range of data sources. This enriches the value of our enterprise data lake, ensuring that a single source of truth not only captures more granular details but also improves the accuracy and reliability of insights derived from raw data.



## Upgraded ASPIRE Dashboard

The ASPIRE Dashboard has been upgraded to leverage additional datasets that provide deeper, more nuanced insights. This empowers better-informed decision-making at strategic, tactical, and operational levels.







## Expansion of OBI Dashboards

Additional OBI dashboards have been introduced to further support operations. These dashboards deliver timely information across various facets of business operations, enhancing responsiveness and operational efficiency.

## 1.0 Customer Management Initiatives (CMI)

Air Selangor 2.0 app and web platforms were officially launched for public use in December 2024.

The public release included a whole new look and feel to our web and app offerings – showcasing a more futuristic and sustainable feel.

Process digitalisation was at the forefront on our first release, with CMI focused on ensuring our customers were able to complete transactions online without having to visit a physical counter or office. Key processes such as change of ownership (COO) – previously offered at our counters – were moved online, with customers able to submit their requests at a click of a button.

Internally, a new backend fronting system was introduced to assist staff with the verification, approvals, and quality

## Enhanced Support for the WISDOM Dashboard

The WISDOM dashboard has been updated using new data for improved mid-term and long-term forecasting on water supply and demand. This upgrade supports more robust, location-specific predictive models, ensuring that water resource management is both proactive and aligned with future needs.

Collectively, these updates underscore our commitment to leveraging digitalisation for optimal resource utilisation, enhanced transparency, and continuous innovation, driving the circular economy forward.



assurances processes. This system, which is proprietary to Air Selangor, will be further developed over the next year. These improvements will aim to provide reporting dashboards, and also introduce the ability to switch between automated and manual processes through simple system configurations.

As this was a progressive release strategy, business processes are scheduled to be improved in phases, reducing the 'digital shock' to customers used to the traditional practice of visiting our offices. Aside from this phased approach, the CMI also provided customers with in-depth FAQs and tutorials on how to utilise the new processes/services.

Our new app and web solutions introduce significant improvements that support our ongoing efforts in managing NRW. One key enhancement is the "Report Leaks" feature, which enables customers to directly report water leaks, a critical component in addressing NRW. This function complements the existing customer complaint features, ensuring a seamless and user-friendly experience.

Beyond its refreshed look and feel, the upgraded CMI platform now includes spam detection capabilities, reducing unnecessary workload on internal teams and allowing faster, more focused responses to genuine reports. This improvement helps us better allocate resources and respond more efficiently to issues impacting water sustainability.

Through 2024, the CMI also turned its focus on showcasing sustainable practices to better inform customers. These include measurements of litres per capita per day consumed which customers can access. Working with the internal sustainability team, CMI was able to conceive a fun and interactive way for consumers to be more aware of their water consumption and its impact to the environment. This new feature is scheduled for release in February 2025.



Looking forward into 2025, the CMI will continue its focus on digitalisation, with the aim to digitise and automate all counter processes. This will provide customers with the opportunity to fully complete all their requirements with Air Selangor 100% online. This will further support efforts to reduce our carbon footprint through offering an ecosystem of online services.

2025 will also feature further enhancements to our current processes with the Lifestyle feature scheduled for release from April 2025 onwards. This feature will offer our customers an avenue to engage with us not only as a water utility company but also as a company committed to amplifying sustainable practices through education, fun and entertainment – all offered through our enhanced app and web.

## 1.1 Air Selangor's Digital Transformation Journey: The Data and Digital Ambassador (DDA) Immersion Programme

We are embarking on a digital transformation aimed at breaking down silos and enhancing communication through the DDA Immersion Programme – a key initiative to establish Air Selangor as a cutting-edge data-driven organisation (DDO).

### 1.2 Core Pillars of the Programme

The DDA Immersion Programme is anchored on three (3) fundamental pillars that guide its vision and execution:

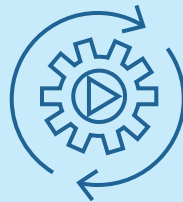
- **Customer-at-the-Heart** – Prioritising customer experience by leveraging data to enhance service delivery.
- **Ways of Working Reimagined** – Encouraging innovative digital practices that streamline processes and boost efficiency.
- **Digital DNA** – Cultivating a mindset that embeds digital proficiency and data-centric thinking throughout the organisation.

### Air Selangor's DDA Immersion Programme



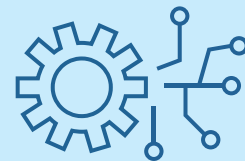
#### Customer-at-the-Heart

Prioritising customer experience by leveraging data to enhance service delivery.



#### Ways of Working Reimagined

Encouraging innovative digital practices that streamline processes and boost efficiency.



#### Digital DNA

Cultivating a mindset that embeds digital proficiency and data-centric thinking throughout the organisation.

## 1.3 Empowering a Digital Culture

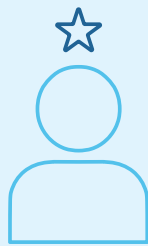
A central goal of the DDA Immersion Programme is to inspire employees to embrace a digital working culture. Through the adoption of modern digital platforms and tools, our workforce is empowered to collaborate seamlessly, work smarter, and achieve higher productivity.

We aim to position our DDA participants as key spokespersons and influencers driving data analytics and digital initiatives – not just within their own departments, but across the entire organisation.

### Strategic Outcomes

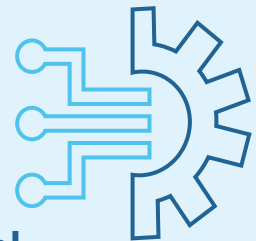
#### Leadership in Digital Transformation

DDA participants will champion digital activities and innovations, leading the change within their teams and across the organisation.



#### Expanded Digital Adoption

The programme aims to significantly boost the adoption and usage of data analytics and digital projects, in close collaboration with the DAC and other Operational Data Stewards (ODS).



## 1.4 Comprehensive Learning Modules

To equip participants with the necessary skills and knowledge, the programme offers five (5) targeted modules:

1. Data Management
2. Mobile/Web Development
3. Data Science
4. Data Engineering
5. Customer Management



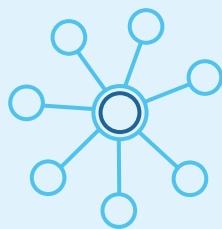
Through these modules, employees will gain the latest information in key areas that drive our digital future, ensuring that we remain at the forefront of innovation.

Ultimately, the DDA Immersion Programme aims to not only transform the way we work, but lay the groundwork for a robust, data-driven future at Air Selangor.



## 1.5 Data and Digital Hackathon

In May 2024, we organised the company's first Data & Digital Hackathon. This event was open to both the public and internal staff, and included 149 teams. The hackathon delivered significant benefits:



### Fostering Innovation

Foster creativity and innovation by bringing together individuals with diverse skills and backgrounds to solve problems or create new solutions using data and digital solutions to improve water efficiency, sustainability, and resiliency.

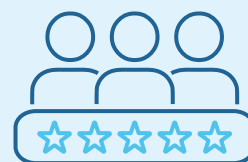


### Strengthening Industry Leadership

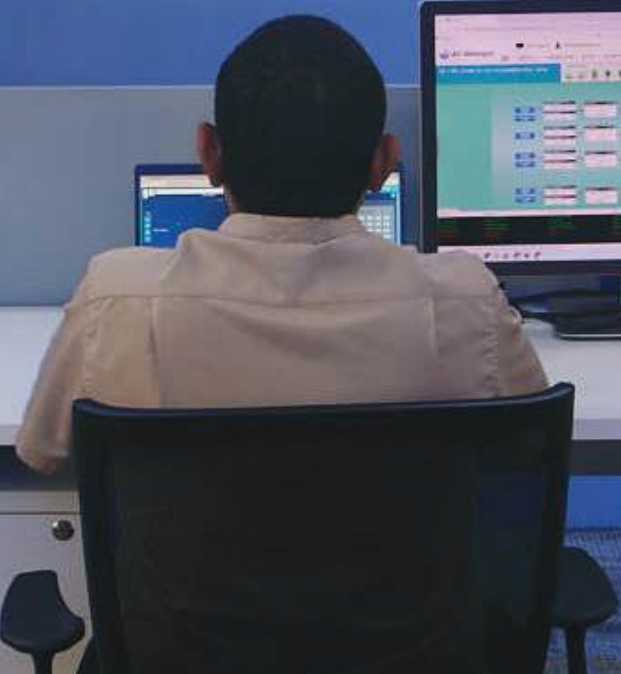
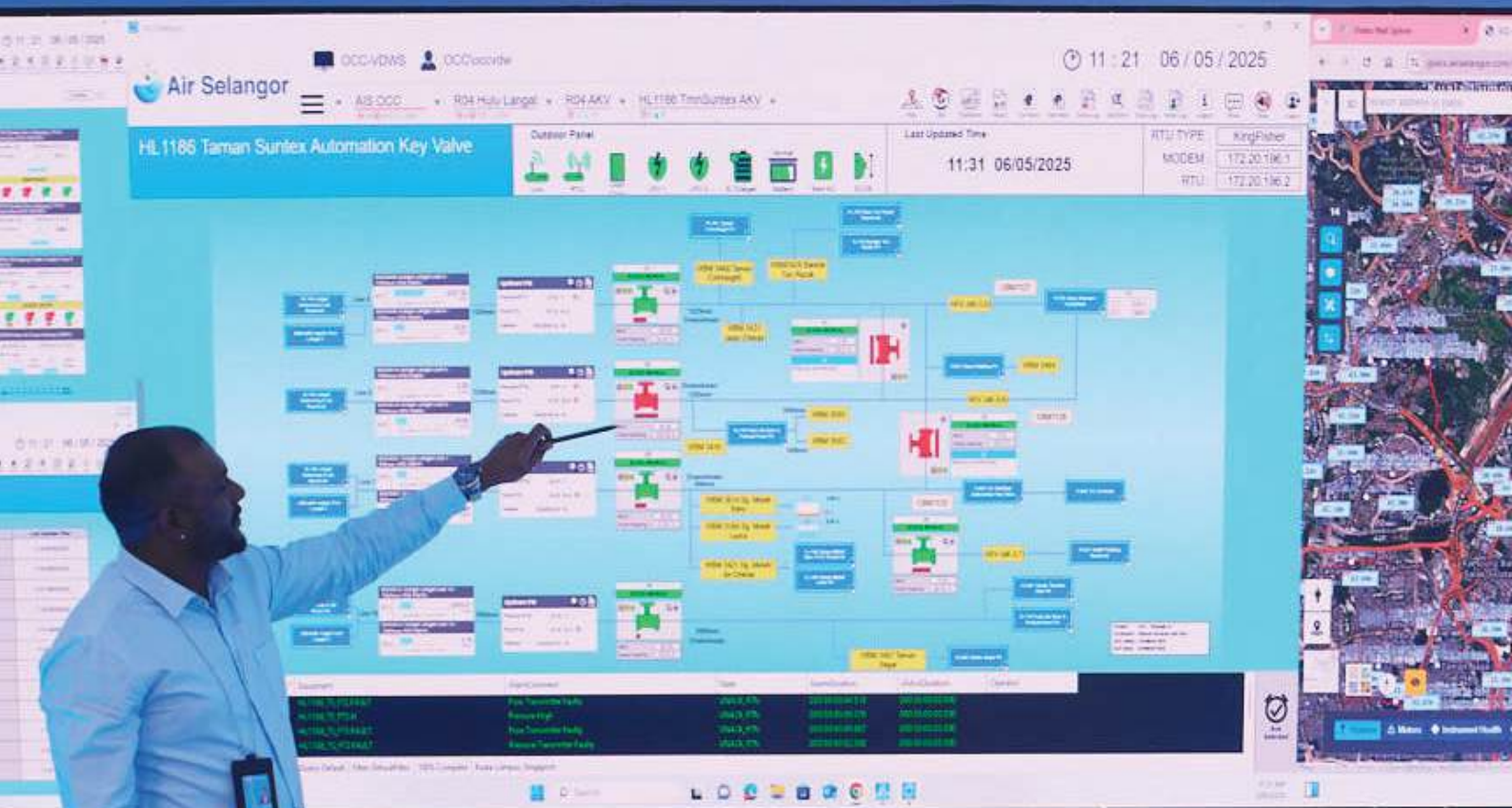
Enhanced our reputation as a leader in digital transformation and innovation.

### Driving Customer-Centric Solutions

Enabled the development of solutions focused on improving customer experience.



Post-hackathon collaboration with the winning team is ongoing to develop their unique solution, and the project is scheduled to commence in Q2 2025.




Pillar 6

# GIVING BACK TO COMMUNITY



**16** PEACE, JUSTICE  
AND STRONG  
INSTITUTIONS

 Air Selangor®

*Box of Hope*

Joy in Every Drop  
[www.airselangor.com](http://www.airselangor.com)

We are dedicated to fostering a sustainable and thriving community by integrating meaningful CSR initiatives into our operations. Recognising that a resilient water ecosystem is intrinsically linked to the wellbeing of the people we serve, we will continue to strengthen engagement with communities through impactful programmes aimed at providing long-term benefits.

Sesama Mara, which means 'Together We Move Forward', is the overarching theme for Air Selangor's CSR initiative.

The initiative consists of grassroots activities to give back to surrounding communities and strengthen our ties with local communities, residential associations, local authorities, and non-governmental organisations.

Through strategic collaborations and partnerships, we strive to uplift the low-income groups and underserved communities in Selangor, Kuala Lumpur, and Putrajaya by enhancing water-related education, and promoting environmental stewardship.

As we move forward in 2024, we remain committed to deepening our engagement and broadening the reach of our CSR programmes. By continuously innovating our approaches, we seek to enhance community resilience, support local development, and contribute to the overall sustainability of the water industry.

## Sesama Mara Overview



### Box of Hope

1,800 boxes distributed



### Festive CSR

RM119,598.34 to  
2,438 recipients



### Empowering Online Learning

Benefitted 240 students



### Hydro Heroes

720 volunteer hours across  
17 events with 199 volunteers



# COMMUNITY ENGAGEMENT PROGRAMMES

## 1.0 Box of Hope

Box of Hope continues to be a crucial programme aimed at easing the financial burden of underprivileged households by providing essential provisions. Through a collective effort, this programme has significantly impacted families across Selangor, Kuala Lumpur, and Putrajaya, reinforcing our commitment to social welfare.

As of December 2024, the programme has successfully supported families, demonstrating year-on-year growth in outreach and impact. To facilitate public contributions, we continued our partnership with a major retail chain, Village Grocer, to establish donation collection points at key Village Grocer outlets, including outlets in MyTown, 1MontKiara, Melawati Mall, i-City Mall, and Tamarind Square. This initiative enables a wider audience to contribute towards the wellbeing of those in need.

We also collaborate with Yayasan Food Bank Malaysia, which plays a pivotal role in packing and distributing the provision boxes at B40 areas. Our digital donation platform, launched in 2022, continues to gain traction, allowing seamless public contributions and ensuring a steady supply of essential goods for distribution.

In 2024, the Box of Hope programme successfully distributed 1,800 provision boxes, reaching B40 families across 12 locations. This is an increase on the 1,700 boxes delivered in 2023. The total amount spent on beneficiaries under this initiative was RM157,956.00.



## 1.1 Festive CSR for the Underprivileged



We remain committed to fostering a spirit of generosity and inclusivity through its Festive CSR for the Underprivileged. This programme provides essential aid during seven (7) key celebrations: Chinese New Year, Ramadan, Hari Raya Aidilfitri, Merdeka, Air Selangor's Anniversary, Deepavali, and Christmas.

In 2024, we distributed provisions and conducted engagement programmes worth RM119,598.34 to 2,438 recipients across 19 welfare homes/B40 areas. Through structured planning and impactful collaboration, we will continue to expand this initiative, enhancing the positive impact on underprivileged communities.

Beyond material assistance, we extend plumbing support and maintenance services to welfare homes, ensuring that these communities have uninterrupted access to clean and safe treated water. This effort aligns with our broader mission of improving water accessibility and infrastructure for underserved groups.

In addition, in collaboration with SAPOT, a social support platform, we organised two (2) mental health workshops at Rumah Kebajikan Anbu Illam, Kuala Lumpur, and Rumah Kebajikan Karunai Illam, Kuala Lumpur. These workshops aimed to raise awareness of mental health among children and teenagers while also featuring various engaging activities.

Through strategic planning and collaboration, the Festive CSR for the Underprivileged continues to grow, reinforcing our dedication to a supportive community environment.

## 1.2 Empowering Online Learning for Underprivileged Communities

We collaborated with Pandai Education (Pandai) to provide digital educational resources for B40 students preparing for SPM examinations. This programme is an extension of the Empowering Online Learning effort introduced in 2020, ensuring continued access to quality education for children from low-income families.

In 2024, the programme expanded with four (4) onboarding sessions, benefitting 240 secondary school students from the B40 group. The total investment for this initiative amounted to RM110,000.00.

### Breakdown of Beneficiaries

**72**

children of our employees from B40 category

**40**

students from SMK Padang Tembak

**60**

students from SMK Puchong

**13**

students from Rumah Kebajikan Kasih Harmoni Paya Jaras

**55**

students from basic users of the Pandai Premium application

Pandai Premium offers comprehensive educational tools, including practice questions, tests, notes, one-on-one chat assistance, online tutoring and exam question samples, ensuring students have uninterrupted access to learning materials.

The collaboration with Pandai is the second-year initiative of the Empowering Online Learning programme. To date, we have sponsored a total of 415 students as recipients of the app subscription, including 175 students last year.



## 1.3 Hydro Heroes Volunteer Programme



The Hydro Heroes Volunteer Programme serves as a platform to cultivate a culture of volunteerism among our employees, allowing them to actively engage in community service initiatives.

In 2024, we successfully organised 17 volunteering events, accumulating 720 volunteer hours and mobilising 199 Hydro Heroes volunteers.

Through Hydro Heroes, volunteers participated in various activities aimed at benefiting local communities, from environmental conservation efforts to direct engagement with underserved groups. The total investment in this programme amounted to RM19,077.50, reinforcing our mission to drive impactful community engagement.



# STRATEGIC COMMUNITY INVESTMENT

## 2.0 Skim Air Darul Ehsan (SADE)

SADE is a Selangor State Government initiative aimed at ensuring equal access to clean and safe water for low-income households. Under this scheme, 20m<sup>3</sup> of water is provided free of charge to eligible recipients, reinforcing our commitment to water accessibility and affordability.

In 2024, 39,801 new registrations were recorded – an increase of 13% from 2023 – making the total approved recipients to 324,257 since the scheme's inception. This marks a continued effort to expand the programme's reach and ensure that more low-income households benefit from this essential service.

To qualify for SADE, applicants must meet the eligibility criteria and submit the necessary documentation through Air Selangor's official application platform. The initiative plays a vital role in reducing the financial burden on underserved communities while promoting sustainable water consumption practices.



# Glossary and Indexes

## Association Memberships

1. Malaysian Employers Federation (MEF)
2. MECA Consulting Sdn. Bhd. (MECA)
3. Senior Utility Advisory Group, Smart Water Network (SWAN) Forum, UK
4. Contact Centre Association of Malaysia (CCAM)
5. Transparency International Malaysia
6. Customer Experience Professionals Association
7. International Water Association (IWA)
8. Malaysian Association of Risk and Insurance Management (MARIM)
9. Malaysia Auxiliary Police Association

## GRI Content Index

<b>Statement of Use</b>	Air Selangor has reported in accordance with the GRI Standards for the period between 1 January to 31 December 2024.
<b>GRI Used</b>	GRI 1: Foundation 2021
<b>Applicable GRI Sector Standard(s)</b>	Not applicable

<b>GRI Disclosure</b>	<b>Description</b>	<b>Page(s)</b>
<b>GRI 2: General Disclosures 2021</b>		
2-1	Organisational details	22, Back Page
2-2	Entities included in the organisation's sustainability reporting	2
2-3	Reporting period, frequency and contact point	2
2-4	Restatements of information	41, 72 - 74, 81, 91 - 92
2-5	External assurance	N/A
2-6	Activities, value chain and other business relationships	25 - 35
2-7	Employees	16 & 32
2-8	Workers who are not employees	106
2-9	Governance structure and composition	50
2-10	Nomination and selection of the highest governance body	N/A

GRI Disclosure	Description	Page(s)
<b>GRI 2: General Disclosures 2021</b>		
2-11	Chair of the highest governance body	60
2-12	Role of the highest governance body in overseeing the management of impacts	12 - 21
2-13	Delegation of responsibility for managing impacts	12 - 21
2-14	Role of the highest governance body in sustainability reporting	N/A
2-15	Conflicts of interest	N/A
2-16	Communication of critical concerns	57
2-17	Collective knowledge of the highest governance body	12 - 21
2-18	Evaluation of the performance of the highest governance body	50
2-19	Remuneration policies	N/A
2-20	Process to determine remuneration	N/A
2-21	Annual total compensation ratio	N/A
2-22	Statement on sustainable development strategy	4 - 10, 42 - 47
2-23	Policy commitments	50 - 62, 66 - 68
2-24	Embedding policy commitments	50 - 56
2-25	Processes to remediate negative impacts	50, 56
2-26	Mechanisms for seeking advice and raising concerns	50, 56
2-27	Compliance with laws and regulations	50 - 56
2-28	Membership associations	140
2-29	Approach to stakeholder engagement	45 - 46
2-30	Collective bargaining agreements	N/A
<b>GRI 3: Material Topics 2021</b>		
3-1	Process to determine material topics	42 - 43
3-2	List of material topics	42 - 43
3-3	Management of material topics	42 - 43

GRI Disclosure	Description	Page(s)
<b>Topic Standards</b>		
<b>Procurement Practices 2016</b>		
204-1	Proportion of spending on local suppliers	66
<b>Anti-corruption 2016</b>		
205-1	Operations assessed for risks related to corruption	56 - 57
205-2	Communication and training about anti-corruption policies and procedures	50 - 56
<b>Materials 2016</b>		
301-1	Materials used by weight or volume	91 - 92
<b>Energy 2016</b>		
302-1	Energy consumption within the organisation	77 - 78
302-3	Energy intensity	78
302-5	Reductions in energy requirements of products and services	75 - 78
<b>Water and Effluents 2018</b>		
303-2	Management of water discharge-related impacts	79 - 82
303-3	Water withdrawal	79 - 82
303-5	Water consumption	79 - 82
<b>Emissions 2016</b>		
305-1	Direct (Scope 1) GHG emissions	72 - 74
305-2	Energy indirect (Scope 2) GHG emissions	72 - 74
305-4	GHG emissions intensity	72 - 74
<b>Waste 2020</b>		
306-1	Waste generation and significant waste-related impacts	83 - 84
306-2	Management of significant waste-related impacts	83 - 84
306-3	Waste generated	83 - 84
306-4	Waste diverted from disposal	83 - 84
306-5	Waste directed to disposal	83 - 84



GRI Disclosure	Description	Page(s)
<b>Topic Standards</b>		
<b>Effluents and Waste 2016</b>		
306-3	Significant spills	83 - 84
<b>Employment 2016</b>		
401-1	New employee hires and employee turnover	104
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	104
401-3	Parental leave	104
<b>Occupational Health and Safety 2018</b>		
403-1	Occupational health and safety management system	94 - 99
403-3	Occupational health services	94 - 99
403-4	Worker participation, consultation, and communication on occupational health and safety	94 - 99
403-5	Worker training on occupational health and safety	96 - 97
403-6	Promotion of worker health	94 - 99
403-9	Work-related injuries	94 - 99
<b>Training and Education 2016</b>		
404-1	Average hours of training per year per employee	103 - 105
<b>Diversity and Equal Opportunity 2016</b>		
405-1	Diversity of governance bodies and employees	12 - 21, 106
<b>Local Communities 2016</b>		
413-1	Operations with local community engagement, impact assessments, and development programmes	135 - 139
<b>Customer Health and Safety 2016</b>		
416-1	Assessment of the health and safety impacts of product and service categories	108 - 111

## SASB Content Index

Code	Description	Unit of Measure	Page(s)	Remarks	
<b>Sustainability Disclosure Topics &amp; Accounting Metrics</b>					
IF-WU-130a.1	Energy Management	(1) Total energy consumed (2) Percentage grid electricity (3) Percentage renewable Gigajoules (GJ) Percentage (%)	77 - 78, 91 - 92	N/A	
IF-WU-140a.1	Distribution Network Efficiency	Water main replacement rate	Rate	36	Air Selangor reports in kilometres per year
IF-WU-140a.2		Volume of non-revenue real water losses	Thousand cubic metres (m <sup>3</sup> )	40, 89 - 90	Air Selangor reports this in percentage
IF-WU-140b.1	Effluent Quality Management	Number of incidents of non-compliance associated with water effluent quality permits, standards, and regulations	Number	68	N/A
IF-WU-140b.2		Discussion of strategies to manage effluents of emerging concern	N/A	N/A	
IF-WU-240a.1	Water Affordability & Access	Average retail water rate for (1) residential, (2) commercial, and (3) industrial customers	Rate	<a href="https://www.airselangor.com/faq/">https://www.airselangor.com/faq/</a>	
IF-WU-240a.2		Typical monthly water bill for residential customers for 10 Ccf of water delivered per month	Reporting currency	<a href="https://www.airselangor.com/faq/">https://www.airselangor.com/faq/</a>	
IF-WU-240a.3		Number of residential customer water disconnections for non-payment, percentage reconnected within 30 days	Number, Percentage (%)	Not disclosed	
IF-WU-240a.4		Discussion of impact of external factors on customer affordability of water, including the economic conditions of the service territory	N/A	37 -38	N/A

Code	Description	Unit of Measure	Pages(s)	Remarks	
<b>Sustainability Disclosure Topics &amp; Accounting Metrics</b>					
IF-WU-250a.1	Drinking Water Quality	Number of (1) acute health-based, (2) non-acute health-based, and (3) non-health-based drinking water violations	Number	40	N/A
IF-WU-250a.2		Discussion of strategies to manage drinking water contaminants of emerging concern	N/A	108 - 111	N/A
IF-WU-420a.1	End-Use Efficiency	Percentage of water utility revenues from rate structures that are designed to promote conservation and revenue resilience	Percentage (%)	Not disclosed	
IF-WU-420a.2		Customer water savings from efficiency measures, by market	Cubic metres (m <sup>3</sup> )	Not available	
IF-WU-440a.1	Water Supply Resilience	Total water sourced from regions with High or Extremely High Baseline Water Stress, percentage purchased from a third party	Thousand cubic metres (m <sup>3</sup> )	Not available	
IF-WU-440a.2		Volume of recycled water delivered to customers	Thousand cubic metres (m <sup>3</sup> )	Not available	
F-WU-440a.3		Discussion of strategies to manage risks associated with the quality and availability of water resources	N/A	87, 108 - 111	N/A
IF-WU-450a.1	Network Resiliency & Impacts of Climate Change	Wastewater treatment capacity located in 100-year flood zones	Cubic metres (m <sup>3</sup> ) per day	N/A	
IF-WU-450a.2		(1) Number and (2) volume of sanitary sewer overflows (SSO), (3) percentage of volume recovered	Number, Cubic metres (m <sup>3</sup> ), Percentage (%)	N/A	
IF-WU-450a.3		(1) Number of unplanned service disruptions, and (2) customers affected, each by duration category	Number	88	N/A

Code	Description	Unit of Measure	Page(s)	Remarks	
<b>Sustainability Disclosure Topics &amp; Accounting Metrics</b>					
IF-WU-450a.4	Network Resiliency & Impacts of Climate Change (cont.)	Description of efforts to identify and manage risks and opportunities related to the impact of climate change on distribution and wastewater infrastructure.	N/A	71	Air Selangor reports its framework
<b>Activity Metrics</b>					
IF-WU-000.A	Number of: (1) residential, (2) commercial, and (3) industrial customers served, by service provided	Number	23	N/A	
IF-WU-000.B	Total water sourced, percentage by source type	Cubic metres (m <sup>3</sup> ), Percentage (%)	86 - 87	Cubic metres (m <sup>3</sup> )	
IF-WU-000.C	Total water delivered to: (1) residential, (2) commercial, (3) industrial, and (4) all other customers	Thousand cubic metres (m <sup>3</sup> )	Not disclosed		
IF-WU-000.D	Average volume of wastewater treated per day, by (1) sanitary sewer, (2) stormwater, and (3) combined sewer	Cubic metres (m <sup>3</sup> ) per day	N/A		
IF-WU-000.E	Length of (1) water mains and (2) sewer pipe	Kilometres (km)	36	Length of water mains only	

## Glossary

<b>CAPEX</b>	Capital Expenditure
<b>Carbon Neutral</b>	Achieving balance between the amount of greenhouse gas emissions produced and the amount of emissions removed from the atmosphere
<b>CePBFO</b>	Certified Environmental Bag Filter Operation
<b>CePIETSO</b>	Certified Environmental Industrial Effluent Treatment Systems Operation
<b>CePSO</b>	Certified Environmental Scrubber Operation
<b>CePSWAM</b>	Certified Environmental Scheduled Waste Management
<b>CeIO</b>	Certified Integrity Officer
<b>Co<sub>2</sub>em<sup>3</sup></b>	Carbon dioxide emissions per cubic metre
<b>GgCO<sub>2</sub>e/GWh</b>	The amount of greenhouse gases (in gigagrammes of carbon dioxide equivalent) emitted for every gigawatt hour of electricity generated.
<b>GJ</b>	Gigajoule
<b>GRI</b>	Global Reporting Initiative
<b>GWh</b>	Gigawatt-hour
<b>kgCO<sub>2</sub>e/m<sup>3</sup></b>	Kilogram of carbon dioxide equivalent per cubic metre
<b>km</b>	Kilometres
<b>kWac</b>	Kilowatt Alternating Current
<b>kWh</b>	Kilowatt-hour
<b>LCD</b>	Litres per capita per day
<b>m<sup>3</sup></b>	Cubic metre
<b>mil.m<sup>3</sup></b>	Million cubic metre
<b>MJ/m<sup>3</sup></b>	Megajoule per cubic metre
<b>MLD</b>	Million litres per day
<b>MT</b>	Metric tonne
<b>MWac</b>	Mega-Watt Alternating Current
<b>tCO<sub>2</sub>e</b>	Tonne of Carbon Dioxide Equivalent







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