

**DECARBONISATION**

**BIODIVERSITY  
PROTECTION**

**WATER  
STEWARDSHIP**

**AIR  
QUALITY**

**CIRCULAR  
ECONOMY**



# ENVIRONMENT

Environmental challenges reached urgent levels in 2024, with record-breaking temperatures and extreme weather events affecting major regions globally. The unprecedented climate patterns across North America, Europe and Asia have underscored the critical importance of comprehensive environmental management strategies that address both immediate impacts and long-term sustainability challenges.

The Group responds to these intensifying environmental pressures through an integrated approach encompassing five key focus areas: decarbonisation initiatives to accelerate climate action in line with global net-zero targets; biodiversity protection to preserve and restore natural ecosystems; water stewardship to ensure responsible resource management amid increasing water stress; air quality improvement to reduce pollution in urban areas; and circular economy practices to minimise waste and resource consumption.

The Group's environmental strategy combines proactive risk management with strategic investments in emerging sustainable technologies and practices, reflecting the heightened global focus on environmental action. Through established policies and frameworks, business units are guided towards sustainable operations while maintaining operational resilience. This comprehensive approach not only strengthens the Group's environmental performance but also positions it to meet evolving regulatory requirements and stakeholder expectations in an increasingly sustainability-focused business landscape.

## GROUP GOALS

- TAKE ACTION ON CLIMATE CHANGE
- PROTECT NATURAL RESOURCES
- PROMOTE A CIRCULAR ECONOMY

## CONTENT IN THIS SECTION

- DECARBONISATION
- BIODIVERSITY PROTECTION
- WATER STEWARDSHIP
- AIR QUALITY
- CIRCULAR ECONOMY

### Linked SDGs



## DECARBONISATION

The Group supports the 2015 Paris Agreement, which aims to mitigate the worst effects of climate change by limiting global warming to below 2 degrees - preferably below 1.5 degrees Celsius. Achieving net-zero GHG emissions by 2050 will require significant transformation of how energy is produced, transported and used, bringing both challenges and meaningful opportunities for the Group.

### Climate Action Strategy

In 2021, the Group identified ten net-zero transition opportunities for climate adaptation and mitigation. Business units integrated this approach into the investment process as part of the decarbonisation strategy, yielding positive results. Notably, investment in and the application of renewable energy, cleaner

fuel and transportation, and other related initiatives have been implemented across the Group's operations. Further details on the "Ten net-zero transition opportunities" and the Group's decarbonisation efforts can be found in the [Sustainable Business Model and Innovation](#) section.



#### Infrastructure

### SUPPORT LOCAL DECARBONISATION

In UK, Wales & West Utilities partnered with key government and energy stakeholders to deliver Powering Wales Renewably, a project aimed at accelerating renewable energy connections across Wales. It is projected to help reduce CO<sub>2</sub> emissions by 2 million tonnes while promoting renewable energy investment and delivering consumer savings.

The project will create a connected digital twin of Wales' energy transmission and distribution network, integrating data and digital technologies into a common interface. This innovation will enhance coordination across the energy system, supporting the integration of renewable generation and reducing reliance on fossil fuels.

Wales & West Utilities' role includes providing critical information on the gas distribution network, such as network capacity and large connections, while offering insights into the future potential of low-carbon gases within the gas network. By addressing energy system challenges, the project will help facilitate Wales transition to net zero.


### GHG Emissions Reduction Targets

With the Group's core businesses having set emissions reduction targets, underpinned by expansive action plans, the Group has established a Group-wide commitment to reduce Scope 1 and 2 emissions by 50% by 2035 from a 2020 baseline. Additionally, the Group is committed to the long-term pursuit of net-zero carbon emissions across its value chain by 2050 and to phase out coal-fired power generation globally by 2035.

#### Division-level progress

Since 2020, the Group has worked closely with core divisions to undertake three key steps towards action on climate change: assessing the pathway to setting science-based targets ideally validated by the SBTi; assessing the pathway to net zero; and calculating Scope 3 emissions. Significant achievements have been made over the past year, with divisions conducting separate assessments, updating work plans and aiming to achieve, or even exceed, their respective reduction targets according to key milestones.

The Group's core businesses have continued to make substantive progress on their respective action plans as detailed below.




### Ports

Hutchison Ports is the first global port operator to receive official approval from SBTi for both near-term greenhouse gas (GHG) emissions reduction and net-zero targets, covering Scope 1, 2, and 3 emissions in 2023. By 2033, Hutchison Ports will achieve the following:

- Reduce Scope 1 and 2 emissions by 54.6% from the 2021 baseline
- Reduce Scope 3 emissions by 32.5% from the 2021 baseline


Hutchisons Ports is also committed to achieving a net-zero emission operation by 2050.



### Retail

The Retail division received the SBTi validation on its near-term reduction targets in 2022, covering Scope 1, 2 and 3 emissions by 2030 compared with a 2018 baseline as follows:


- Reduce Scope 1 and 2 emissions by 50.4%
- Reduce Scope 3 emissions from purchased goods and services, upstream transportation and distribution, and use of sold products by 58% as per Hong Kong dollar value added
- A total of 33% of supplier emissions from purchased goods and services, upstream transportation and distribution will be subject to science-based targets by 2027

### Infrastructure

The Infrastructure division, which accounts for 86% of the Group's total Scope 1 and 2 carbon footprint, is committed to the following:

- Reduce its Scope 1 and 2 emissions by 50% by 2035 from a 2020 baseline
- The pursuit of net-zero emissions by 2050



### Telecommunications

CKHGT received its SBTi validation approval in 2022, covering near-term reduction targets for Scope 1, 2 and 3 emissions by 2030. These targets are the following:

- Reduce Scope 1 and 2 emissions by 50% by 2030 from a 2020 baseline
- Reduce Scope 3 emissions by 42% by 2030 from a 2020 baseline

A long-term target is set to the pursuit of net zero by 2050, including Scope 3 emissions.

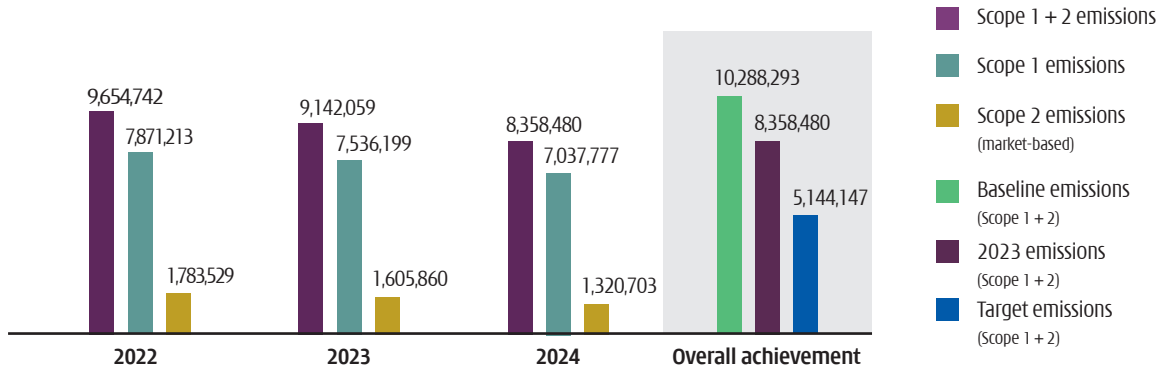


Infrastructure

**Table 11 BUSINESS UNITS' GHG EMISSIONS REDUCTION TARGETS**

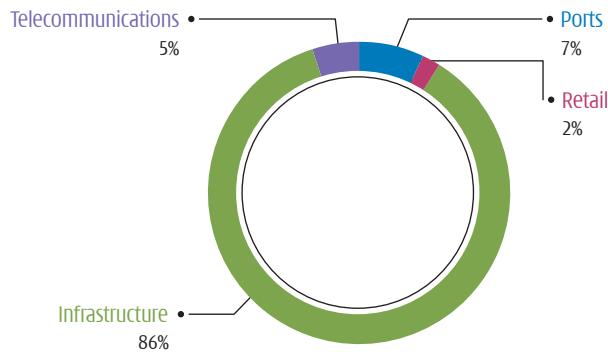
Business Unit	GHG emissions reduction targets
AGIG	Net zero by 2050
Alliance Construction Materials	<ul style="list-style-type: none"> <li>Achieve 30% reduction in Scope 1 and 2 GHG emissions by 2030, from 2018 baseline (SBTi validated)</li> <li>Net zero by 2050</li> </ul>
AVR	<ul style="list-style-type: none"> <li>Achieve 100% reduction of Scope 1 emission</li> <li>Net zero by 2050</li> </ul>
EDL	<ul style="list-style-type: none"> <li>Achieve 50% reduction in Scope 1 and 2 GHG emissions intensity by 2035, from 2021 baseline</li> <li>Target net zero by 2050</li> </ul>
HK Electric	<ul style="list-style-type: none"> <li>Phase out coal-fired generation by 2035</li> <li>Achieve carbon neutrality goal by 2050</li> </ul>
ista	Achieving net zero by 2030 for Scope 1 and 2 emissions
Northern Gas Networks	Net zero by 2050
Northumbrian Water	Net zero, Scope 1, 2 and 3 (upstream) by 2050
Phoenix Energy	<ul style="list-style-type: none"> <li>Achieve &gt;60% reduction in Scope 1 and 2 carbon emissions by 2030 (excluding shrinkage)</li> <li>Achieve &gt;90% reduction in Scope 1 and 2 carbon emissions by 2035 (excluding shrinkage)</li> <li>Net zero (including shrinkage) by 2050</li> </ul>
SA Power Networks	Net zero by 2035
UK Power Networks	Net zero (Scope 1, 2 and 3) by 2040 (SBTi validated)
Victoria Power Networks and United Energy	<ul style="list-style-type: none"> <li>Achieve 30% reduction in Scope 1 and 2 GHG emissions (including distribution line losses) by 2030, from 2019 baseline</li> <li>Net zero (Scope 1 and 2) by 2050</li> </ul>
Wellington Electricity	Achieve 25% reduction in Scope 1 and 2 emissions (excluding line losses) by 2025, from 2019 base year
Wales & West Utilities	<ul style="list-style-type: none"> <li>Achieve 37.5% reduction of GHG emissions by 2034</li> <li>Net zero by 2050</li> </ul>

**Figure 11** Group Scope 1 and 2 GHG emissions (tCO<sub>2</sub>e) 2022-2024



For detail, please refer to [Appendix 1](#)

**Figure 12** Group breakdown of Scope 1 and 2 GHG emissions in 2024



For detail, please refer to [Appendix 1](#)



Telecommunications

### 3 SWEDEN'S SBTi VALIDATED EMISSION REDUCTION TARGETS

In 2024, 3 Sweden's emissions reduction targets were validated by the SBTi. The three climate goals approved by SBTi are the following:

- Reduce GHG emissions within Scope 1 and 2 by 70% by 2030 from the base year 2022, and purchase 100% renewable electricity by 2025
- Reduce GHG emissions within Scope 3 by 42% by 2030 from the base year 2022
- The pursuit of net-zero emissions across the entire value chain by 2040

## Group Carbon Footprint

In 2024, with the committed effort to manage emissions, the Group is on track to achieve its previously set emissions targets. Total Scope 1 and 2 emissions were reduced by almost 20% from the 2020 baseline. These reductions were primarily achieved through the Infrastructure division's transition to less carbon-intensive alternatives in power generation. Other divisions also contributed by replacing traditional fuel with sustainable alternatives and making related investments. For example, the Ports and Retail divisions are implementing low-carbon transition programmes, such as expanding the use of renewable energy, electrifying mobile and stationary equipment, transitioning to green transportation and applying other energy efficiency measures across their operations.

### Scope 3 inventory

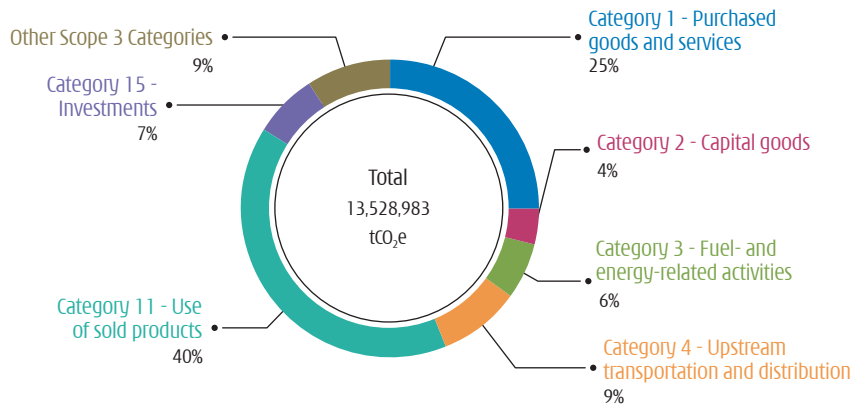
Given the complexity on reporting Scope 3 emissions, the Group implemented a series of measures in 2024 to ensure a comprehensive and accurate inventory, especially for divisions requiring collaboration with their supply chains.

Specialised engagement programmes and workshops continue to be offered to suppliers and stakeholders throughout the value chain, with progress made at different business division levels. The Ports division has been managing and establishing its Scope 3 inventory since 2022, covering eight categories according to the GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard. The Telecommunications division has been engaging with its suppliers on monitoring and setting targets for GHG disclosures, in support of the division's Scope 3 targets. As part of the supply chain strategy, ESG criteria continue to be integrated into the supplier evaluation and tender mechanism, while collecting relevant data points. 3 Ireland and 3 UK are also partnering with independent platform EcoVadis to assess supplier ESG performance.

The collective Scope 3 emissions data are consolidated and presented in [Appendix 1](#), with further details provided to enhance the transparency of the Group's efforts in disclosing its Scope 3 emissions.

Learn more here about the Group's approach to [Supply Chain Responsibility](#).

Figure 13 Summary of scope 3 emissions



## BIODIVERSITY PROTECTION

Biodiversity stands as the cornerstone of a healthy and resilient planet. Air, land, water and the intricate web of natural habitats that span the globe are not just resources; they are invaluable assets that form the very fabric of biodiversity. These elements are not only essential for the survival of countless species but also for the well-being and prosperity of humanity.

As a responsible corporate entity operating on a global scale, the Group places the protection of nature and respect for all life on Earth at the heart of its operational strategy. The Group firmly believes that being a good global citizen means more than just conducting business; it means conducting business responsibly, and with the commitment to minimising the Group's environmental footprint. The same principle has been adopted across the Group, as associated practices and management measures are implemented among businesses.

### Governance on Biodiversity

The Group regularly reviews relevant governing policies to meet evolving industry standards. The Biodiversity Policy, published in 2023, is currently under revision to better align with international standards. A four-step assessment and mitigation approach, referencing the LEAP approach from Taskforce on Nature-Related Financial Disclosures (TNFD), is being introduced:

- Locate areas with potential biodiversity-related impacts
- Evaluate and develop a list of risks and opportunities and create an executable mitigation plan
- Assess and review post-management results
- Prepare a monitoring plan and implement supplementary enhancements as needed

Operations are encouraged to apply the same approach as a general guideline in identifying and managing biodiversity-associated risks and opportunities. The Group will periodically disclose the results in subsequent reports.

The Group is also working closely with core divisions, and with the guidance of the principles presented in the Group's Biodiversity Policy, customised biodiversity policies are being developed to better suit their operations. In 2024, the Infrastructure division issued their standalone Biodiversity Policy, outlining strategies to minimise adverse impact on natural habitats and enhance biodiversity protection through stakeholder collaboration. Other core divisions are also working closely in accordance with the Group's [Biodiversity Policy](#) and [Environmental Policy](#) in managing the environmental impact associated with its operations.

### Management Approach and Strategy

Business units across core divisions are operating under relevant guidance to minimise and mitigate their biodiversity footprint, with results already being achieved. In the power transmission and distribution business within the Infrastructure division, biodiversity is appropriately considered during line clearance operations. At Victoria Power Networks and United Energy, the Environmental Planning and Heritage team is standardising

assessment procedures for projects affecting native vegetation, including line clearance, maintenance and customer connections. Automated risk assessment processes introduced in 2024 for line clearance activities provide contractors with standardised controls in protected areas. Detail on targets and progress across the Infrastructure division are set out in the following table:



**Table 12** Business units' biodiversity targets and progress in the Infrastructure division

Business unit	Target	Progress in 2024
Northumbrian Water	Net gain in biodiversity of 10% by 2050 for all of its construction activities	On track
SA Power Networks	Develop an Action Plan for Nature and Biodiversity	Achieved - The Biodiversity Action Plan was developed in 2024, with a detailed framework to be developed in 2025.
	Deploy programme to cover up electrical infrastructure that has high risks of impacting native fauna	On track - The programme has been developed in 2024.
UK Power Networks	Increase the biodiversity of new major substation development by a net gain of 10-20% and at 100 existing sites by a net gain of 30% overall over 2023-2028, compared to the beginning of the period	On track - 25 existing sites received biodiversity improvements, while 1.5 Biodiversity Net Gain units have been purchased for 3 sites.
	Identify and assess an additional 100 sites for biodiversity enhancement by 2028	Achieved - Additional 100 sites identified and assessed.
Wales & West Utilities	Commit to "no net loss" on designated projects between April 2021 and March 2026, and achieve BNG on impacting work from 2026	On track
	Commit to planting five trees for every tree cut down	On track - 3,135 tree were commissioned planting in 2024.
AGIG	Set biodiversity targets by end of 2025	On track
Northern Gas Networks	Plant 20,000 saplings to create 2 miles of new hedgerow by 2031	On track - Project currently in early planning stage.
	Create "Homes for Nature" on 250 of its sites by 2026	On track - Over 110 sites under development.

## Risk and Impact Mitigation Assessment and Measures – Environmental Net Gain

Under the Group's Environmental Policy and Biodiversity Policy, all business divisions are required to assess biodiversity to protect, conserve and restore local biodiversity relevant to their operations.

In 2024, the Group continued to work under the environmental net gain approach, aiming to leave ecosystem services in a measurably better state across all divisions. Positive results have been achieved as biodiversity conservation and environmental protection programmes have been successfully implemented. For example, recognising the close link between water and biodiversity, Northumbrian Water from the Infrastructure division has set a 10% biodiversity net gain target by 2050 for all its construction activities and continues implementing initiatives to achieve this goal. Progress includes transforming 15 hectares of low-diversity grassland into a thriving ecological habitat as part of the £155 million Project Pipeline investment in County Durham and the Tees Valley in the UK. A similar effort is underway at another site situated along the River Gaunless between Shildon and Bishop Auckland, which will be enhanced over a 31-year lease. Key developments include 11 hectares of species-rich grassland,

over 1,000 metres of native hedgerows and new woodland areas. Aquatic habitats will also benefit from pond restoration and the creation of three new water bodies, alongside 140 metres of rehabilitated hedgerows to strengthen ecological connectivity. Both initiatives fully embrace the Biodiversity Net Gain principles, leaving the natural environment in a measurably better state.

In parallel, impactful results have been achieved in reforestation and restoration. As part of the Ports division's Go Green initiative, Hutchison Ports MTT in Myanmar planted 300 trees in a forest reservation area near its facility. Hutchison Ports FCP in the Bahamas participated in the local Mangrove Restoration Project, planting over 6,000 mangrove propagules. Additionally, Wind Tre from the Telecommunications division continues to support the world Wildlife Fund (WWF) "Oasis" project in Italy, having adopted 70,000 m<sup>2</sup> of protected area within the WWF oasis of Macchiagrande near the company's Rome offices. In 2024, employees had the opportunity to book guided tours at one of the three WWF oases: Oropa (Biella), Monte Arcosu (Cagliari), and Capo Rama (Palermo).



Tree planting activity, Hutchison Ports MTT

## WATER STEWARDSHIP

As extreme weather events such as drought and flooding continue to increase in frequency and magnitude, climate change is expected to increase the challenges associated with sustainable water and risk management. The Group operates in multiple industries and understands its impact on water, especially given the reliance on and scarcity of water resources, which is identified as one of the Group's material topics. Being a signatory of the United Nations General Compact since 2021, the Group is committed to "Water Management". An overall approach to water consumption, water risk and a comprehensive water stewardship management plan has been developed and is applicable across operations.

The Group's core divisions operate across industries, each are developing or developed their respective strategies that are suitable and applicable to their specific business operations. These strategies cover the following:

- Water risk identification and assessment
- Performance monitoring
- Management measures

### Water Risk Identification and Assessment

The Group is regularly reviewing the potential impact of its water-related activities, especially with divisions that rely heavily on water consumption for their operations. With reference to the TCFD report recommendations, the Group aims to provide best practice guidelines applicable across its operation, strengthening adaptation responses to climate change and associated water risks, and ultimately formulating an overall water stewardship strategy. Implementation of the approach across business divisions is set out below.

In the Retail division, integrating risk assessment outcomes into business strategy enhances Watson's water sustainability and resilience. By identifying water-related risks, the company prioritises investments in advanced water-saving technologies and allocates resources effectively. This approach improves operational efficiency through investing in advanced devices to reduce water leakage and loss in the production process and closed-loop systems that minimise discharge. It also informs community engagement strategies to boost awareness of sustainable practices.

To evaluate water risk in a more systemic manner, Watson's Water developed a water risk assessment framework with reference to the TCFD and Enterprise Risk Management framework, involving assessments of risk likelihood and impact from physical, regulatory and reputational risks. In parallel, the Retail division

also incorporated elements such as water scarcity, water quality, flooding and results from the WWF's Water Risk Filter self-assessed risk rating as part of its risk assessment. Annual reviews will ensure the assessment results are up to date, and increase resilience for potential water risks. Additionally, a CDP assessment comprising water risk was conducted in 2024, with results to be reviewed upon receiving feedback.

Business units in the Ports division also monitor their water-related activities. To align with the Water Environment Conversation Act, Hutchison Ports Busan in South Korea consistently monitors changes related to water resources to ensure full compliance with legal requirements, and it performs regular water quality assessments and the results are reported to the local authority. Hutchison Ports UK tracks water-related physical, regulatory and reputational risks within its Environmental Management System and Environmental Aspects Register. Frameworks such as Oil Spill Contingency Plans, Business Continuity Plans and environmental discharge permits are in place to ensure that associated risks are well documented and managed.



Infrastructure

## WATER QUALITY MANAGEMENT IN NORTHUMBRIAN WATER

Northumbrian Water, which accounts for approximately 90% of the Group's water consumption, understands its potential environmental impact and consistently monitors its water performance. In July 2024, Northumbrian Water was awarded a three-star "Good" status in the UK Environment Agency's assessment for its outstanding environmental performance, showing no serious pollution over the past 12 months (and none since 2021). Northumbrian Water has also been rated 100% in several assessments, including in the Water Industry National Environment Programme targets, sludge treatment, and supply and demand standards.

In addition, Northumbrian Water is implementing immediate remediation and precautionary measures to ensure water quality for its customers. These measures include installing a smart sewer network to reduce storm overflows, using AI technology to improve river quality, deploying drones to measure water quality, converting green ammonia into fuel, and using pipe-robots to inspect the health of its assets. Between 2020 and 2025, Northumbrian Water plans to invest over £80 million to reduce storm overflows and upgrade the wastewater network. This will be followed by a further £1.7 billion investment from 2025 to 2030 in a massive environmental programme aiming to stop storm overflow spills and improve the environment.

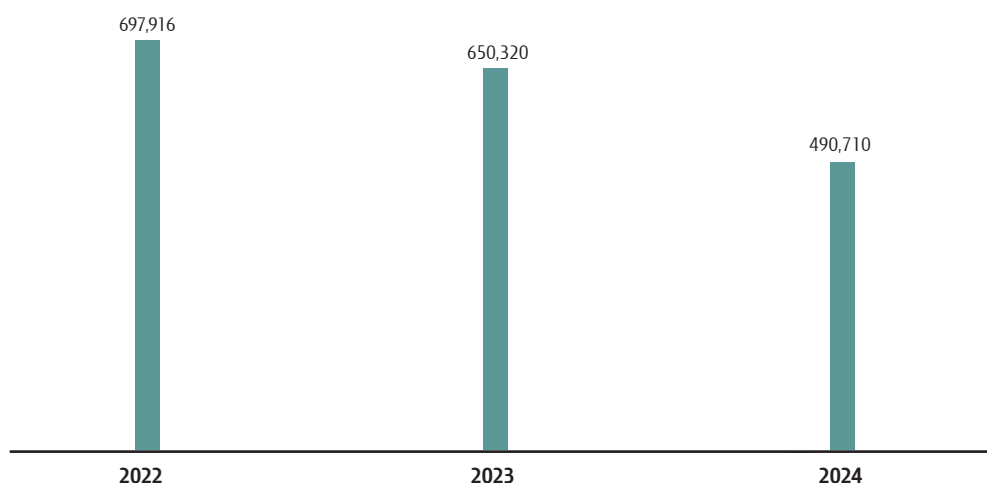
## Performance Monitoring

In the pursuit of sustainable operations, the Group's core businesses emphasise prudent water resource management. The majority of water consumption within the Group is dedicated to critical functions such as the cleaning and cooling assets and facilities, as well as delivering services and products to customers. Notably, over 95% of the Group's total water consumption is attributed to the Infrastructure division, primarily due to Northumbrian Water's operations under the Group's portfolio. As a key player in the sector, Northumbrian Water undertakes the responsibility of sourcing water, which is subject to rigorous treatment processes,

ensuring that it meets the highest quality standards before it is supplied for consumers' use. In the north-east of England, Northumbrian Water also collects wastewater, which is treated at sewage treatment works to meet strict environmental standards before returning to the environment.

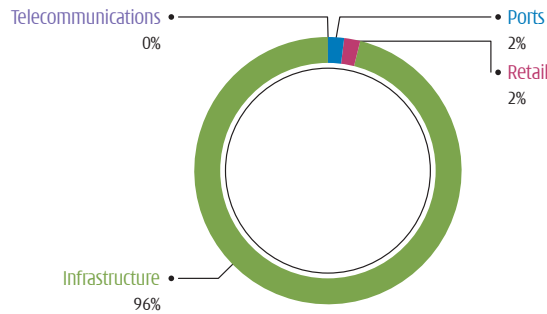
This approach aligns with the Group's broader sustainability goals, demonstrating the dedication to responsible stewardship of natural resources.

Figure 14 Group water withdrawal ('000m) 2022-2024



For detail, please refer to [Appendix 1](#)

Figure 15 Group breakdown of water consumption in 2024



For detail, please refer to [Appendix 1](#)

## Management Measures

The Group understands the importance of cherishing natural resources and always reminds business units to consume responsibly. This principle has been fully embraced by the divisions. In addition to water risk identification and assessment, measures such as efficiency enhancement, water recycling and reuse, monitoring and water awareness campaigns are all part of the Group's water stewardship strategy to enhance overall water consumption efficiency.



### Ports

## WATER MANAGEMENT

Operations across the Ports division have engaged external service providers and to help implement various initiatives to enhance its overall water consumption efficiency. For example, Hutchison Ports ICARE in Mexico uses recycled water that meets specific quality parameters to wash port equipment. Also in Mexico, Hutchison Ports EIT reports annual water usage to the local authority to establish a Water Usage Baseline for comparison with the next year.

Wastewater is also well managed. In Hutchison Ports UK, effluent contained within storage tanks is measured and discharged in accordance with written consent parameters, and it is subject to periodic monitoring through sampling and analysis by relevant regulators. Hutchison Ports MITT in Myanmar conducts biannual assessments on the quality of discharged water for

reporting to the Myanmar local authority. They ensure that all parameters fall within the prescribed National Environmental Quality Guidelines. Hutchison Ports Thailand has also reduced wastewater generation by using efficient rinsing methods, improving equipment efficiency, and modifying processes to use less water.



Assessment of water quality, Hutchison Ports MITT



## Retail

## WATER STEWARDSHIP IN RETAIL BUSINESSES

AS Watson Industries has implemented a range of initiatives to enhance water stewardship and promote sustainability. Key efforts include water reclamation to reuse wastewater, the installation of automatic water saver taps to minimise wastage, and regular discharge water testing to ensure compliance with quality standards.

Since 2021, AS Watson Industries has committed to the “Enterprises Cherish Water Campaign”, organised by the Hong Kong Water Supplies Department and co-organised by the Green Council. This commitment includes measures such as participating in water efficiency benchmarking and promoting the adoption of efficient water-consuming devices. With this commitment in mind, AS Watson Industries is constantly exploring solutions to achieve these goals.

AS Watson Industries will continuously improve water efficiency and other effluent management measures.

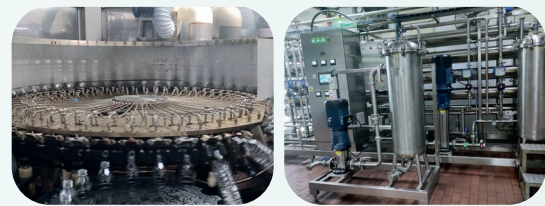
### Water Efficiency Improvement

- Reduce water leakage and waste by implementing advanced water-saving technologies and practices in operations: In 2024, two projects were initiated to save both water and electricity: (1) the Electronic Liquid Fillers (ELF) Improvement Projects, including a filling head with a volumetric sensor and modifications to the bottle washer, which can save 21 tonnes of water per operational day, and (2) the Consumer Pack (CP) Line Improvement Project, involving rinsing water pressure reduction and concentrated water reduction, which can save 55 tonnes of water per operational day.
- Water reusing system: a closed-loop water system has been implemented in carboy water production to minimise discharge by recycling water within production processes. For example, water used to wash carboy bottles will be reused as flush water in the office bathrooms.

AS Watson Industries has set a target to achieve a water efficiency ratio of 0.42 by 2025, and 0.44 by 2030. The relevant strategy for managing water risks will be reviewed together with the risk assessment in 2024, with specific targets to be set in 2025.



ELF Improvement Project (filling head with volumetric sensor, and bottle washer modification)



CP Line Improvement Project (rinsing water pressure reduction and concentrated water reduction for bottled water)

### Community Engagement and Education

- AS Watson Industries increases community awareness and participation in sustainable water management practices by delivering community talks and school visits under the 3RS Green Alliance (Recycle, Reuse, Reduce) Programme.





Infrastructure

## NORTHUMBRIAN WATER WATER COMMITMENT

Northumbrian Water from the Infrastructure division has committed significant resources to protect the water environment and has a comprehensive strategy setting out its approach.

The "Restore and Regenerate: Our Environment Strategy to 2050" for Northumbrian Water outlines its vision of making a positive difference by operating efficiently and investing prudently, to maintain a sustainable and resilient business. The Strategy comprises the following five priorities:



Northumbrian Water is addressing the dual challenges of climate change and population growth through strategic investments in infrastructure and sustainable water resource management.

The company has invested over £175 million in two major pipeline projects, to upgrade and futureproof its water supply network.

More than 200,000 customers across the south of County Durham and into the Tees Valley are benefitting from a £155 million pipeline investment. The programme involves installing entirely new pipelines and replacing sections of the network that have served the area for over 100 years. This multi-year project will improve resilience and allow Northumbrian Water to continue to deliver for the people of the area for generations to come.

Essex and Suffolk Water (part of Northumbrian Water) are also constructing a pipeline to transfer untreated water from Layer-de-la-Haye Water Treatment Works to the existing reservoir at Langford Water Treatment Works, providing enhanced resilience during drought and hot weather periods. This £20 million investment will install 19.5 km of new pipeline, linking and balancing the use of water resources in the northern part of Essex with those in the south of the county. The pipeline will add resilience to supply for more than 370,000 customers and will be capable of carrying up to 50 million litres of water a day.

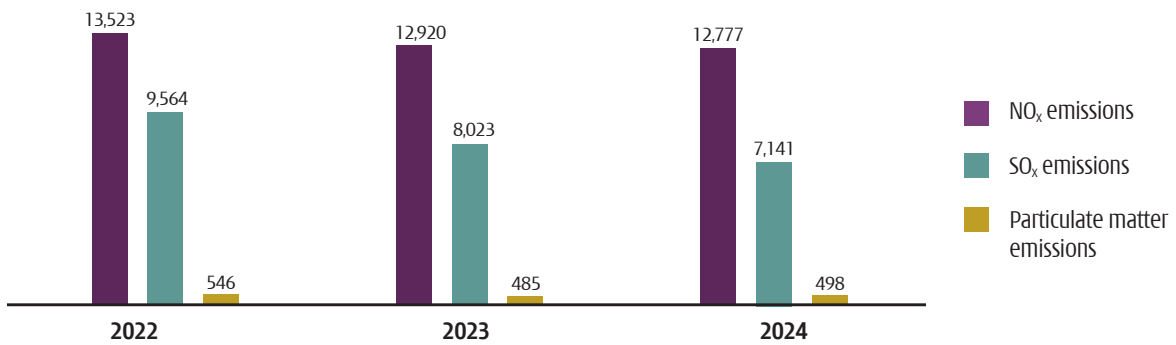
## AIR QUALITY

The Group is committed to minimising air emissions from its business operations. Dedicated efforts have been made to monitor and manage local emissions such as Nitrogen dioxide (NO<sub>x</sub>), Sulphur dioxide (SO<sub>x</sub>) and volatile organic compounds (VOCs) throughout operations. The management approach to improving air quality is also linked with decarbonisation, particularly through electrification and switching to greener energy sources.

### Air Emissions

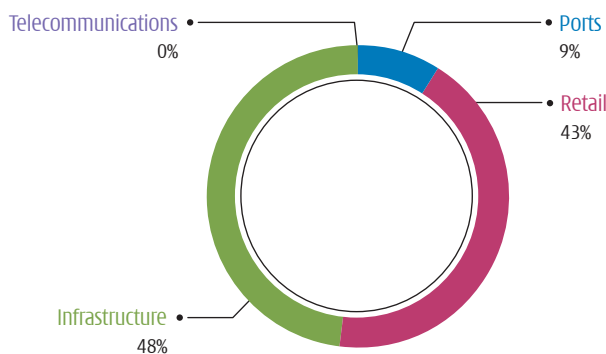
Recognising air quality as one of the key material topics, the Group prioritises this area and works with business units to better manage, monitor and report on air quality-related issues. Robust guidelines have been established to ensure continuous and effective air quality monitoring. Where material, divisions are committed to investing in clean technologies to mitigate their impact on air quality. Additionally, the Group's comprehensive initiative to transition away from high-carbon assets and implement clean transportation solutions is contributing to the reduction of local air pollutants. For further details, please refer to the [Clean Technology Adoption](#) section of this report.

Figure 16 Group air emissions (tonnes) 2022-2024



For detail, please refer to [Appendix 1](#)

Figure 17 Group breakdown of air emissions in 2024



For detail, please refer to [Appendix 1](#)





Ports

## PROTECTING AIR QUALITY DURING OPERATIONS

The Group has identified air pollutants such as NO<sub>x</sub>, SO<sub>x</sub> and particulate matter as side-products generated from its operations. In the Ports division, through equipment electrification and other cleaner fuel efforts, business units are reducing reliance on fossil fuels, resulting in a 6.3% reduction in diesel consumption per TEU compared with 2023. Across the division, there has been notable progress in working towards better air quality management. Hutchison Ports UK has adopted air quality strategies to identify sources of emissions, calculate emissions inventories, recommend monitoring strategies and establish available options to reduce air pollutants. To convert pollutants into harmless substances, Hutchison Ports Busan in Korea has installed diesel particulate filters and selective catalytic reduction in the engines of conventional equipment.

Hutchison Ports Thailand has also been closely monitoring air quality, with measurements being taken biannually. The results are shared with employees through email, Environment, Health and Safety committee meetings, and bulletin boards.



Solar-powered air quality monitoring unit, Hutchison Ports UK



Infrastructure

## CLEANER AIR EMISSIONS FROM BUSINESS

HK Electric has adopted cleaner fuels such as natural gas and low-sulfur coal while employing continuous flue gas monitoring at the LPS to ensure compliance with government emissions standards. The company utilises advanced technologies to manage air emissions, including Selective Catalytic Reduction systems for NO<sub>x</sub> control, low NO<sub>x</sub> combustion technologies, flue gas desulfurisation plants, and high-efficiency electrostatic precipitators.

UK Power Networks tested hybrid diesel-battery generators in 2024 for low-power demand periods. Tests showed that these hybrid systems reduced fuel use by 25-40%, lowered noise and decreased NO<sub>x</sub> emissions.

UK Power Networks is now replacing diesel generators with hybrid systems and requesting suppliers to use low-carbon fuels and Stage V engines.

Data from a recent job shows the hybrid generator used 15 litres of fuel, compared to 52 litres when using a standard diesel generator - a 71% reduction in fuel use. UK Power Networks is adding software to measure fuel use across all hybrid generators. This will help track actual savings compared to diesel-only operations and improve emissions reporting. UK Power Networks will also collect customer feedback for sites where hybrid generators are used.

Table 13 Summary of infrastructure division's targets on air quality control

Business unit	Target
HK Electric	Commission new gas-fired unit L12 in early 2024, with advanced emissions control technology installed for reducing NO <sub>x</sub> emissions
UK Power Networks	Reduce 33% of NO <sub>x</sub> emissions between 2023/24 and 2028/29
Phoenix Energy	Eliminate all air pollution emissions from SO and Particulate Matters (PM2.5 and PM10) by 2035 Eliminate all but residual emissions of NO <sub>x</sub> by 2048



Lamma Power Station, HK Electric

## CIRCULAR ECONOMY

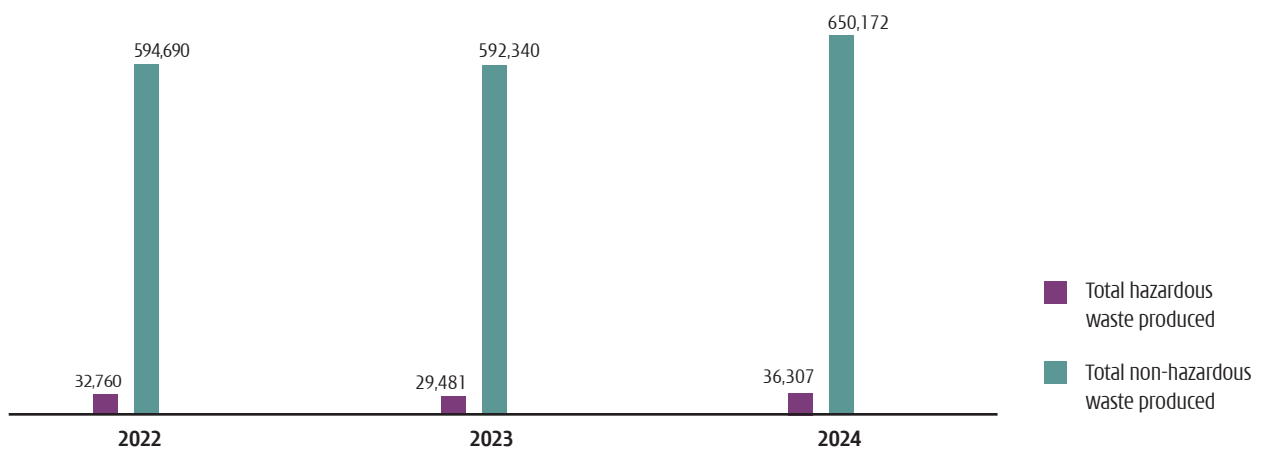
"Promoting a Circular Economy" is recognised as one of the eight key goals in the Group Sustainability Framework. The Group is dedicated to improving waste mitigation and seeks to redesign its products, systems and services to make resources more durable, reusable, repairable and recyclable.

The Group is committed to minimising waste, substituting high-impact materials with lower-impact alternatives, reusing materials wherever possible, and recycling when other options have been exhausted. This management approach to the circular economy is closely integrated with other material topics and content in this report, including the following:

- [Supply Chain Responsibility](#)
- [Sustainable Product Choices](#)
- [Decarbonisation](#)

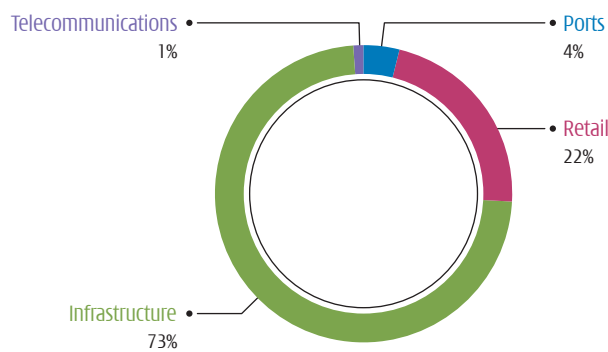
## Waste Data

Figure 18 Group waste produced (tonnes) 2022-2024



For detail, please refer to [Appendix 1](#)

Figure 19 Group breakdown of waste in 2024



For detail, please refer to [Appendix 1](#)

## Waste Management Services

The Group is consistently identifying sustainable investment opportunities and exploring ways of transitioning to a more sustainable operation model. Resource recovery and waste minimisation is an established and growing business area for the Infrastructure division and notably for its two waste management services providers, Enviro NZ and AVR.

Enviro NZ regularly seeks out opportunities to partner with local businesses and companies to support local circular economy efforts. Focusing on three streams of diversion infrastructure, which include organic waste, mixed recycling, and construction and demolition waste, Enviro NZ's resource recovery facilities were capable of diverting over 150,000 tonnes of waste from landfill in 2024. These activities are also key to reducing GHG emissions. For example, the diversion of over 70,000 tonnes of organic waste (food waste, green waste and timber) in 2024 is equivalent to

avoiding over 6,000 tonnes of CO<sub>2</sub>e from landfills with high gas capture rates. Enviro NZ is expanding the number of resource recovery facilities in New Zealand to make low-carbon circular solutions more accessible.

Specialising in processing residual waste streams such as paper pulp residue, waste wood, household and commercial waste, and hazardous waste to achieve maximum recovery of energy and materials, AVR is an important contributor towards Dutch and European goals on climate and energy by supplying sustainable process steam, district heating and electricity. The smart incineration technology utilised is capable of transforming over 0.89 million tonnes of unrecyclable waste into 3.4 PJ of energy a year. The process is further certified with the ISO 50001 standard in energy management. Large-scale carbon capture and storage is the next step in AVR's journey, which will act as a crucial part of its net-zero transition plan.



Resource recovery facilities, Enviro NZ

## Diverting Waste from Landfill

Cutting the amount of waste sent to landfill is a key priority for many local authorities, who are imposing regulations and financial penalties to decelerate landfills reaching capacity and having to construct new ones. Across the Group, business units support the movement and have ambitious targets to divert waste from landfill.

Table 14 Summary of waste management across the Group

 <p><b>Alliance Construction Materials</b></p> <ul style="list-style-type: none"> <li>Reduce solid waste extracted from plant yard washout to 0.02T/m<sup>3</sup> of concrete produced </li> </ul>	 <p><b>SA Power Networks</b></p> <ul style="list-style-type: none"> <li>Embed circular principles across its activities and its value chain with the goal of becoming a net-zero waste organisation by 2050 </li> </ul>
 <p><b>Enviro NZ</b></p> <ul style="list-style-type: none"> <li>10% increase in the quantity of organic waste processing by 2025 </li> <li>5% increase in the quantity of materials for resource recovery by 2025 </li> </ul>	 <p><b>UK Power Networks</b></p> <ul style="list-style-type: none"> <li>Recycle 80% of office, and depot and network waste by 2028 </li> <li>Recycle 99.5% of streetworks waste by 2028 </li> <li>No recoverable waste to landfill by 2025 </li> </ul>
 <p><b>HK Electric</b></p> <ul style="list-style-type: none"> <li>Reduce production of ash and gypsum at LPS by 37% in 2024 as compared to 2019 </li> <li>Reduce total waste generation of its key office premises by 10% in 2025 as compared to 2020 </li> <li>Collect 5,000 kg of used lead-acid batteries for recycling by local recyclers each year during the period from 2024 to 2028 </li> </ul>	 <p><b>Wellington Electricity</b></p> <ul style="list-style-type: none"> <li>25% less office waste diverted to landfill </li> </ul>
 <p><b>Northern Gas Networks</b></p> <ul style="list-style-type: none"> <li>Send less than 0.1% of excavation spoil by mass to landfill annually by 2026 </li> <li>Reduce amount of office and depot waste created by 20% between 2018 and 2026 </li> <li>Use no more than 2.5% virgin aggregate annually by 2026 </li> <li>0% waste to landfill by 2031 </li> </ul>	 <p><b>Wales &amp; West Utilities</b></p> <ul style="list-style-type: none"> <li>Send less than 20% of total excavated spoil materials to landfill by 2026 as compared to 2019 </li> <li>Send a maximum of 20% waste to landfill by 2026 </li> <li>Become zero-waste by 2050 </li> </ul>
 <p><b>Northumbrian Water</b></p> <ul style="list-style-type: none"> <li>Achieve zero business waste by 2025 </li> </ul>	 <p><b>Hutchison Ports Sohar</b></p> <ul style="list-style-type: none"> <li>100% waste recycling at the terminal </li> </ul>
 <p><b>Reliance Home Comfort</b></p> <ul style="list-style-type: none"> <li>Recycle 70% of residential and commercial waste </li> </ul>	 <p><b>3 Hong Kong</b></p> <ul style="list-style-type: none"> <li>Reduce paper usage by 60% by 2030 as compared to 2018 </li> <li>Reduce printing paper usage by 20% by 2030 as compared to 2022 </li> </ul>

 Achieved

 On track

To ensure terminal waste is being stored, transferred and disposed of responsibly in accordance with relevant legislation, the Ports division has established a consistent approach across all ports and terminal operations worldwide through a Waste Management Standard and periodic monitoring of waste reduction performance. Hutchison Ports Sohar has implemented a waste management programme to analyse waste generated for disposal and recycles on a quarterly basis, achieving a 95% recycling rate in 2024. Hutchison Ports Ajman United Arab Emirates has collaborated with Shredex Documents to collect wastepaper and was awarded the Destruction Certificate and Environmental Certificate for paper recycling, saving 520 kwh of energy.

In the Telecommunications division, 3 UK started a new project to increase recycling in retail stores. 3 UK is a “zero to landfill” business, but previously a lot of waste was sent for energy recovery rather than recycling. Site waste segregation rates have increased by around 20% since the beginning of 2024. 3 Hong Kong has a target to achieve a recycling rate of 35% for general office waste produced by the Hong Kong operation by 2030. 3 Austria organised Sustainability Days where workshops were provided to all employees to educate them about the importance of waste management and waste sorting.

The Retail division is also committed to minimising its generated waste by working towards a “zero waste to landfill” operation direction by 2030. To achieve this, all operational waste from warehouses, stores and offices must either be recycled, reused or converted into energy, if technically feasible. A total of 96.7% of operational waste was diverted from landfill in 2024.

## Responsible and Circular Devices and Accessories

The Telecommunications division generates waste from network equipment and mobile devices. 3 UK and 3 Ireland have partnership arrangements in place to recover and reuse old network equipment. For mobile products and services, Wind Tre offers a wide range of Device Post Sales Services to customers, including warranty and out of warranty repairs, fixed device substitution and device protection solutions. The objective is to improve customer satisfaction and extend the device lifecycle by providing options to reuse and repair products. Malfunctioning devices and equipment are recycled, and the raw materials are recovered by specialised companies. 3 UK updated the Waste from Electrical and Electronic Equipment device take-back and battery disposal guidance to better educate their retail employees. 3 Sweden presented its circular offerings in a pop-up area at one of its retail stores, where 3Atervinn (take-back scheme) and 3Begagnat (refurbished devices) were highlighted and introduced to customers to demonstrate how a phone's lifetime can be extended.

## Focus on E-Waste

The Group places strong emphasis on the responsible management of substances with hazardous properties, including e-waste. This increasing waste stream poses a major issue as it can lead to the buildup of toxic substances in the soil, air, water and living organisms.

Reducing e-waste is also a focus for the Telecommunications division, with various initiatives conducted across operations within the division. For example, 3 Austria, in collaboration with Amdocs, has launched a fully digital eSIM solution “up 3”, marking a significant step towards reducing e-waste. By fostering eSIM use and enabling digital-only activation, 3 Austria supports its sustainability goals while simplifying the customer experience through instantaneous digital SIM deployment.

Both 3 UK and 3 Ireland launched an integrated retail trade-in solution implementing a circular product take-back and recovery service in stores in 2024. Customers can return old devices, reducing the end-of-life environmental impact of handsets. Similar trade-in programmes are also offered by 3 Demark, specifically the “Like New” programme, which presents customers with fully refurbished devices offering exceptional second-life products to save money while reducing e-waste.

Other e-waste reduction initiatives include Wind Tre replacing about 34% of non-functioning modems with pre-owned products that have been refurbished by specialised companies, thus allowing fixed network customers to obtain perfectly functional products, while limiting e-waste production. To decrease its primary source of hazardous waste related to network equipment, Wind Tre has implemented a programme to sell and reuse dismissed network equipment or part of dismissed network equipment as spare parts. In addition, 3 Hong Kong continues to engage with Hong Kong Battery Recycling Centre Limited to recycle waste lead-acid batteries. 3 Austria uses special boxes for small Li-Ion batteries, collecting electronic devices, business to business and business to consumer devices to further recycling or reuse. Through partnership with specialised recycling companies, valuable materials and reusable parts are systematically extracted from network equipment waste, resulting in approximately 70 tonnes of e-waste were collected and recycled in 2024.



### Telecommunications

## DONATIONS FOR SECOND LIFE

3 Austria's social initiative - Drei Hilft has partnered with PCs for All, to systematically channel its used corporate hardware into a second lifecycle. This includes laptops, tablets, screens and various IT accessories from both corporate inventory and employee donations. The refurbishment process, managed by PCs for All, ensures that devices meet quality standards before being distributed free of charge to beneficiaries including schools, non-profit organisations, apprentices and students. Routers are also donated to educational institutions such as Mosaik GmbH and Teaching for Austria to supporting digital inclusion. Over a two-year period, approximately seven tonnes of electronic waste has been prevented from entering landfills.



## Focus on Plastics

The use of plastic is an unavoidable issue for operations across the Group. There is an increasing global focus on the role of circular solutions, and divisions across the Group are exploring and implementing mitigation measures. The Retail division, in particular, has been working consistently to minimise its generated waste. The division has developed its "Own Brand Sustainable Packaging Policy and Guideline", guiding employees to source products with packaging that is made from materials that support responsibly managed forests, and packaging made with either recycled plastic,

metal or glass. In the Ports division, Hutchison Ports UAQ in United Arab Emirates is also exploring solutions to reduce its plastic waste by installing reverse osmosis (RO) water filter equipment to reduce the use of 5-gallon plastic bottles.

As a signatory to the New Plastics Economy Global Commitment of the Ellen MacArthur Foundation, AS Watson discloses its performance on an annual basis against several targets including:



100% of plastic packaging to be reusable, recyclable or compostable by 2025 (including Exclusive Brand product packaging, e-commerce parcels and in-store carrier bags)

2023 status



**60%** achieved  
(55.4% in 2022)



20% of recycled plastic content in Exclusive Brand packaging by 2025

2023 status



**12.4%** achieved  
(11.4% in 2022)



## Retail

## SMALL ACT, BIG SMILES

In 2024, Watsons Hong Kong collaborated with Colgate to launch the first toothpaste tube take-back programme, "Small Acts - Big Smiles". This programme aims to collect toothpaste tubes from any brand for recycling, transforming them into valuable resources. Recyclable components will be converted into stationery for underprivileged children, while non-recyclables will be repurposed into building materials, making a positive impact on the environment.



## Retail

## SUSTAINABLE PRODUCT CHOICES

To expand customers' purchasing options for more sustainable products, Watsons has launched Naturals by Watsons' Special Edition Blue Beauty range. This collection features bottles made from 100% recycled ocean-bound plastic, marking an important milestone in the Group's ongoing sustainability efforts.

The Naturals by Watsons' Special Edition Blue Beauty range includes shower gel, body lotion, shampoo and conditioner. Each product is formulated with over 94% natural origin ingredients, and every bottle is crafted from 100% recycled ocean-bound plastic.







Retail

## INTRODUCING REFILL AND TAKE-BACK SERVICES

In 2024, the Retail division continued to collect and recycle empty containers for personal care and cosmetics products, and water bottles. In partnership with major brands, such as Proctor & Gamble and L'Oréal, it introduced take-back schemes in both the Asia and Europe markets. Over 500 refill stations of Selective Brands and Supplier Brands are available in various operation locations.

Market	Collection of empty containers	In-store refill*
<b>Asia</b>		
Hong Kong Watsons, PARKnSHOP	✓	✓
Indonesia Watsons	✓	
Malaysia Watsons	✓	✓
Philippines Watsons	✓	✓
Singapore Watsons	✓	✓
<b>Europe</b>		
Belgium ICI Paris XL	✓	
Netherlands ICI Paris XL	✓	
UK Superdrug, The Perfume Shop	✓	✓

\* For a selection of products.

In Hong Kong, Watsons has implemented plastic packaging collection and recycling for cosmetic and makeup products in all stores city-wide under its "Beauty for the Future" campaign. In 2024, it collected over 29.2 tonnes of empty containers, mainly glass (57%) and plastic containers (43%). The division also launched a city-wide plastic bottle container collection programme, placing reverse vending machines in public spaces throughout the city.

Watsons Philippines has partnered with Greecycle Innovative Solutions, Inc. (GIS), a local waste collecting, recycling and diverting company, to recycle plastic waste. In compliance with the Extended Producer's Responsibility Law, Watsons Philippines diverted and upcycled a total of 370,000kg of plastic waste for industrial use. GIS is also the official recycling partner for the year-round Recycle for Rewards Programme. Across AS Watson, over 3,000 tonnes of empty containers (mainly plastic) were collected and recycled in 2024.



Recycling initiative in Watsons store

