



Aptus Utilities



Net Zero Report

GHG Emissions and Reduction Plan

FY 2023

CHARGE YOUR
ELECTRIC VEHICLE
HERE

Executive Endorsement

As part of our commitment to the utility sector and green infrastructure investment, what we commission impacts the future of the utility networks. We understand the importance of reducing our emissions so that the much-needed services required are also lower in their Green House Gas (GHG) emissions when deployed across the UK. This is our commitment to Net Zero and we will continue to invest in environmental management to help us to reduce these emissions and decouple our growth.

Lisa Kerford, Managing Director



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Name: Lisa Kerford

Position: Managing Director

About Us

Aptus is a multi-utility contractor who provides residential, commercial and industrial developments with installation of gas, water, electricity and street lighting related projects. We service our clients nationwide utilising our end-to-end design and build services.

Commitment to Net Zero

Aptus is committed to ensuring that we play our role in working alongside other UK organisations to achieve the UK Government's Net Zero target of at least a 100% reduction in the net UK carbon emissions by 2050 (based on 1990 levels) for our UK Operations.

Aptus is committed to taking action to reduce our annual emissions and achieving Net Zero emissions by 31st March 2046, four years earlier than the UK Government's target. We will aim to reduce our emissions year-on-year and will aim to achieve:

17%

Reduction in our Scope 1 and 2 emissions by 2030

91%

Overall reduction in all Green House Gas (GHG) emissions across Scopes 1, 2 and 3 by 2046 offsetting any residual emissions via high-quality nature-based or direct air capture projects and becoming Net Zero

To achieve these goals, Aptus has taken the following actions:

1. We have appointed an external specialist carbon consultancy to collate and verify data, calculate carbon emissions and help advise on carbon reduction options
2. Set the base year (April 2022 – March 2023) and calculated our carbon footprint in line with the GHG protocol for that base year:

a. Scope 1

- i. Transport and gas

b. Scope 2

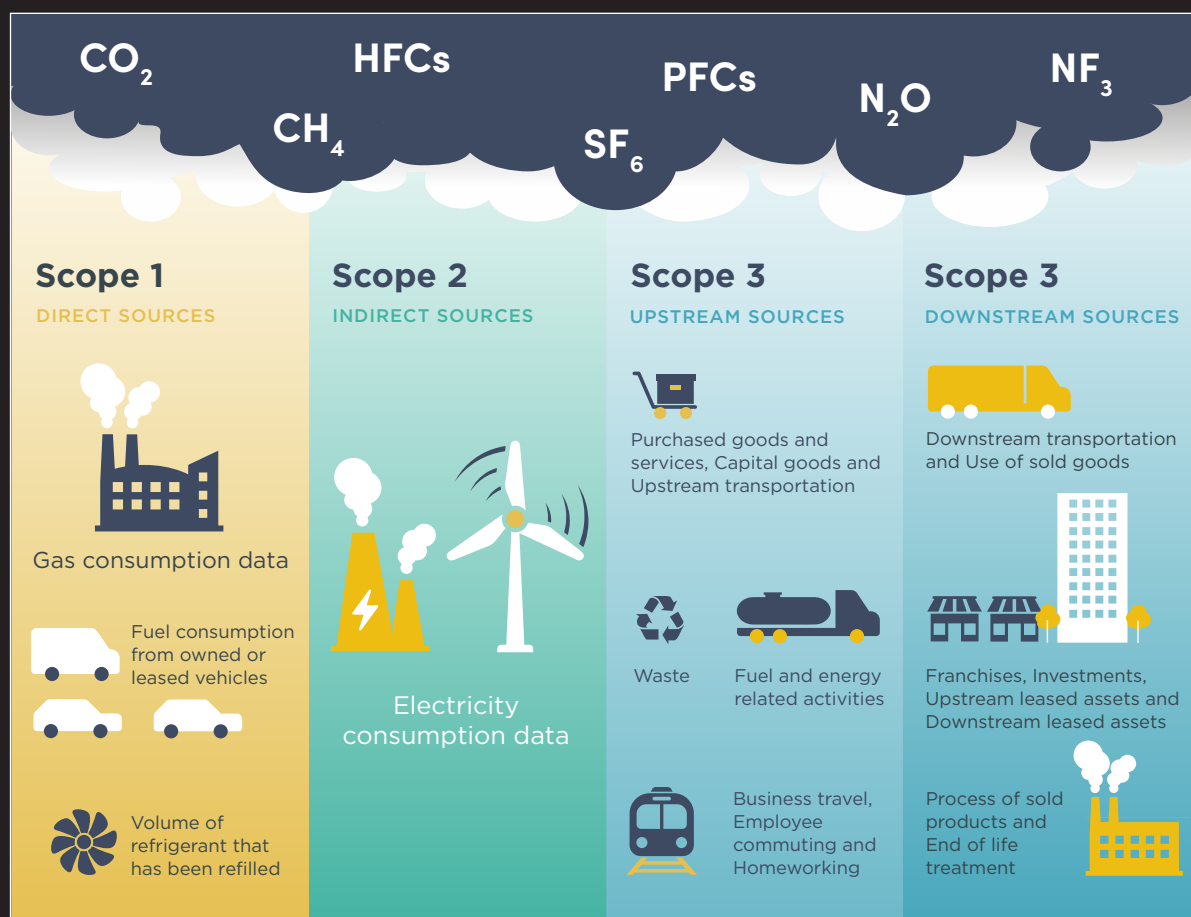
- i. Electricity

c. Scope 3

Of the 15 categories (8 upstream and 7 downstream) we have selected the following:

- i. Category 1 – Purchased Goods and Services
 - ii. Category 2 – Capital Goods and Services
 - iii. Category 3 – Fuel and Energy
 - iv. Category 5 – Waste
 - v. Category 6 – Business Travel
 - vi. Category 7 – Employee Commuting and Working from Home
3. Created a carbon reduction plan for each Scope and category
 4. Set the Net Zero date and committed to updating our carbon footprint annually with March 2024 to be the first year post the base year

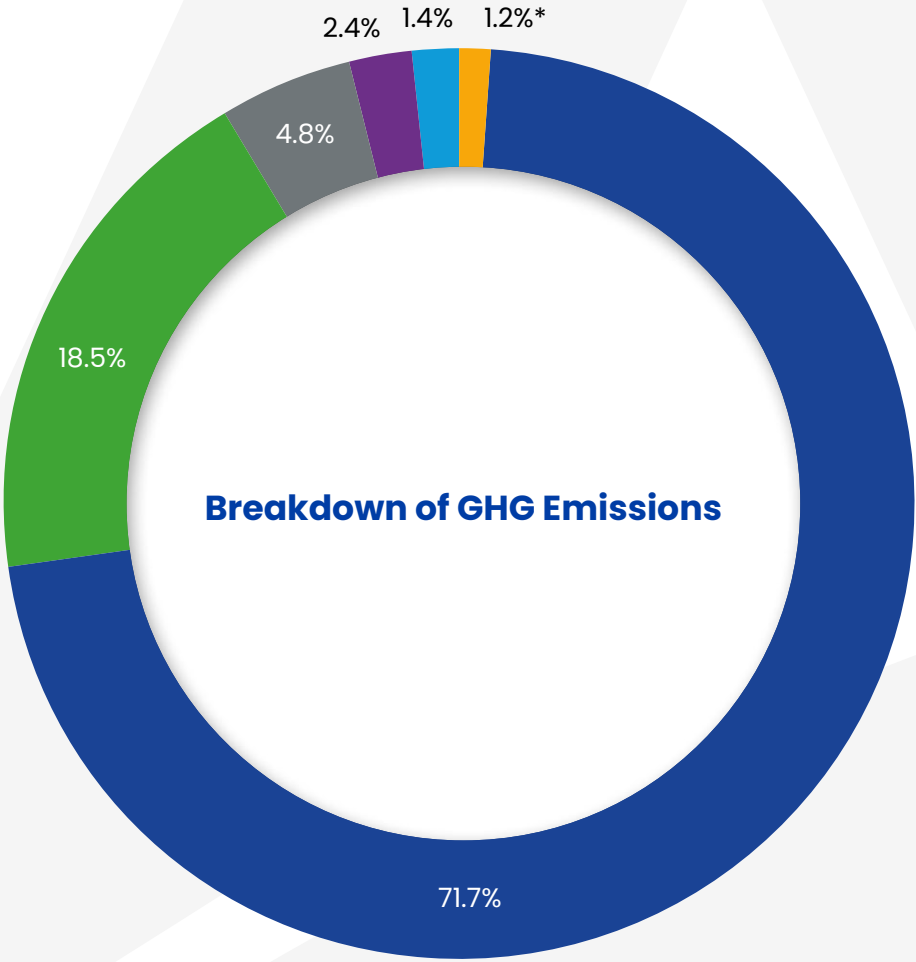
Overview of GHG Protocol scopes and emissions across the value chain



Baseline Emissions Footprint

Baseline emissions are a record of the greenhouse gases that were produced in a previous [financial] year prior to the introduction of any strategies to reduce emissions. Baseline emissions are the reference point against which emissions reduction can be measured. Aptus have chosen April 2022 – March 2023 as our baseline year. Aptus’ March 2023 baseline carbon emissions footprint is as follows:

- Purchased goods & services 71.7%
- Transport 18.5%
- Fuel & energy related activities 4.8%
- Capital goods 2.4%
- Employee commuting 1.4%
- Other* Purchased electricity (0.5 %), Employees working from home (0.3 %), Business travel (0.2 %), Stationary combustion (0.2 %) and Waste (0.03 %)



Below is an itemised breakdown showing the amount of carbon emissions (tCO₂e) produced by each Scope and category from March 2023 baseline calculation⁶.

Scope/Category	Item	Total tCO ₂ e	%
SCOPE 1			
Stationary combustion	Gas consumed	16.91	0.2%
Transportation	Owned and leased vehicles	2,082.04	18.5%
Refrigerants	HVAC's	0.00	0.0%
SCOPE 2			
Electricity (Location based) ¹	Purchased electricity, for own use (grid average)	57.33	0.5%
Electricity (Market based) ²	Purchased electricity, for own use (specific contract)	57.33	N/A
SCOPE 3			
Cat 1: Purchased goods and services	Goods and services	8,062.79	71.7%
Cat 2: Capital goods	Capital expenditure	268.61	2.4%
Cat 3: Fuel & energy related activities	WTT ³ & T&D losses ⁴ from electricity, stationary combustion of fuels and transport	535.34	4.8%
Cat 4: Upstream transportation	Transport between tier 1 suppliers or paid transport for goods (upstream & downstream) WTW ⁵	0.00	0.0%
Cat 5: Waste generated in operations	Waste	3.01	0.0%
Cat 6: Business travel	Land and air travel and hotel stays for business purposes WTW	27.20	0.2%
Cat 7: Employee commuting	Employees commuting to and back from work WTW	161.00	1.4%
Cat 7: Employee working from home	Employees working from home	35.71	0.3%
Total Gross Emissions (Location based)		11,249.94	
Less emissions avoided by procurement of renewable electricity		(0.00)	
Less emissions avoided by procurement of renewable electricity		(0.00)	
Total Gross Emissions (Market based)		11,249.94	
Less carbon offsets		(0.00)	
Total Net Emissions		11,249.94	

¹Location based represents emissions from electricity consumption based on grid average emissions

²Market based represents emissions from electricity consumption based on specific energy contracts

³WTT – Well-to-tank emissions. Emissions associated with the extraction refinement and transport of fuels before consumption

⁴T&D losses – Transmission and distribution losses. Emissions associated with the energy lost during the transmission of electricity through the network

⁵WTW – Well-to-wheel emissions. Includes emissions associated with the extraction, refinement, transport, and consumption of fuels

⁶These numbers differ in some instances from those published in Aptus' Energy and Carbon Report on page 8 of its Annual Report 2022-23 because of differences in methodologies and, in some cases, conversion factors

To further understand our emissions, we have also recorded them using intensity ratios as this will allow us to track our emissions as our business grows and develops.

Intensity Ratios	Gross Emissions (Location based)	Gross Emissions (Market based)	Net Emissions
tCO ₂ e per employee (start of year)	34.30	34.30	34.30
tCO ₂ e per square meter	1.92	1.92	1.92
tCO ₂ e per million £ turnover	153.58	153.58	153.58

When calculating carbon emissions, the GHG Protocol Corporate Accounting and Reporting Standard states that a company must set its organisational boundaries⁷. This can be done either by an “Equity Share” or “Control” approach. The Equity Share approach reflects a company’s economic interests and percentage ownership of companies or subsidiaries to assign GHG emissions. The Control approach can follow two routes and defines the boundary by looking at either how much Financial or Operational Control a company has. To fully cover all of its operations and subsidiaries, Aptus has selected the Operational Control method when setting our organisational boundary. The Operational boundary will include all three Scopes as outlined by the GHG Protocol. Aptus’ emissions are reported in tCO₂e and have been calculated utilising the following formula:

Source emissions data x conversion factor* = total source emissions

Source unit x (tCO₂e/unit) = tCO₂e

* Conversion factors are primarily derived from the latest:

- UK Government GHG conversion factors for Company Reporting
- DEFRA (Department for Environmental, Food and Rural Affairs)
- Environmentally extended input-output (EEIO) tables
 - Environmental Protection Agency (EPA)

⁷<https://ghgprotocol.org/corporate-standard>

Emissions Methodology – Inclusions within Current Numbers:

Scope 1

Scope 1 sources included in the inventory are onsite (or “stationary”) natural gas combustion, refrigerant emissions from HVAC’s and mobile fuel combustion from leased and owned vehicles

Scope 2

Purchased electricity was the only identified Scope 2 emissions source. However, per the GHG Protocol Scope 2 Guidance, Scope 2 emissions have been calculated and reported using two separate methodologies:

A location-based method reflecting the average emissions intensity of grids on which energy consumption occurs

A market-based method reflecting emissions from the electricity that Aptus has purposefully chosen via our energy procurement activities. This accounts for energy purchased from green energy suppliers

Scope 3

Category 1: Purchased goods and services

Includes all upstream (i.e., cradle-to-gate) emissions from the production of goods purchased or acquired by Aptus in the reporting year

Category 2: Capital goods

Includes all upstream (i.e., cradle-to-gate) emissions from the production of capital goods purchased or acquired by Aptus in the reporting year.

Category 3: Fuel and energy-related services

This relates to transportation and distribution losses and the well-to-tank emissions for all fuels consumed as a result of Aptus’ operation.

- Well-to-tank emissions account for all the emissions related to the extraction, production and shipping of fuels excluding only the direct combustion of the fuel. (e.g., fuel consumed by Aptus owned or leased vehicles)
- Transmission losses account for all the energy that is lost between the electricity production in the powerplant and when it is used (e.g., resistance in power lines)

Category 5: Waste

Includes emissions from third-party disposal and treatment of waste generated in Aptus’ owned or controlled operations in the reporting year

- We have utilised the ‘waste-type-specific’ method, which involves using emission factors for specific waste types and waste treatment methods

Category 6: Business travel

Includes emissions from the transportation of employees for business-related activities in vehicles owned or operated by third parties, such as aircraft, trains, buses and passenger cars. This also includes emissions resulting from hotel stays resulting from business-related trips

- We have used the distance-based method, which involves determining the distance and mode of business trips and then applying the appropriate emission factor for the mode used where possible
- We have used the number of nights stayed in hotels to calculate the emissions

Category 7: Employee commuting

Includes emissions from the transportation of employees between their homes and Aptus’ offices. Emissions from employee commuting may arise from car, bus, train or taxi travel. We have also included energy consumption and waste production which occur from employees working from home in this category

- Where appropriate we have used the average-data method, which involves estimating emissions from employee commuting based on average (e.g., national) data on commuting patterns
- We will in future years supplement the above with employee travel surveys which collect data from employees on commuting patterns (e.g., distance travelled and mode used for commuting) and apply the appropriate emission factors for the modes used using the distance-based method

Emissions Methodology – Non-Material Exclusions for FY23 Baseline Emissions:

Scope 3 Category 8: Upstream Leased Assets

Is excluded from FY23 baseline emissions as this is included in our Scope 1 and 2 emissions

Scope 3 Category 9: Downstream Transportation and Distribution

Is excluded from FY23 baseline emissions as we do not transport any goods to customers

Scope 3 Category 10: Processing of sold products

Is excluded from FY23 baseline emissions as we do not manufacture products

Scope 3 Category 11: Use of sold products

Is excluded from the FY23 baseline emissions as we do not sell physical products

Scope 3 Category 12: End-of-life treatment of sold products

Is excluded from FY23 baseline emissions as we do not sell physical products

Scope 3 Category 13: Downstream Leased Assets

Is excluded from FY23 baseline emissions as we do not own any leased assets that we lease to other businesses

Scope 3 Category 14: Franchises

Is excluded from FY23 baseline emissions as we do not operate franchises

Scope 3 Category 15: Investments

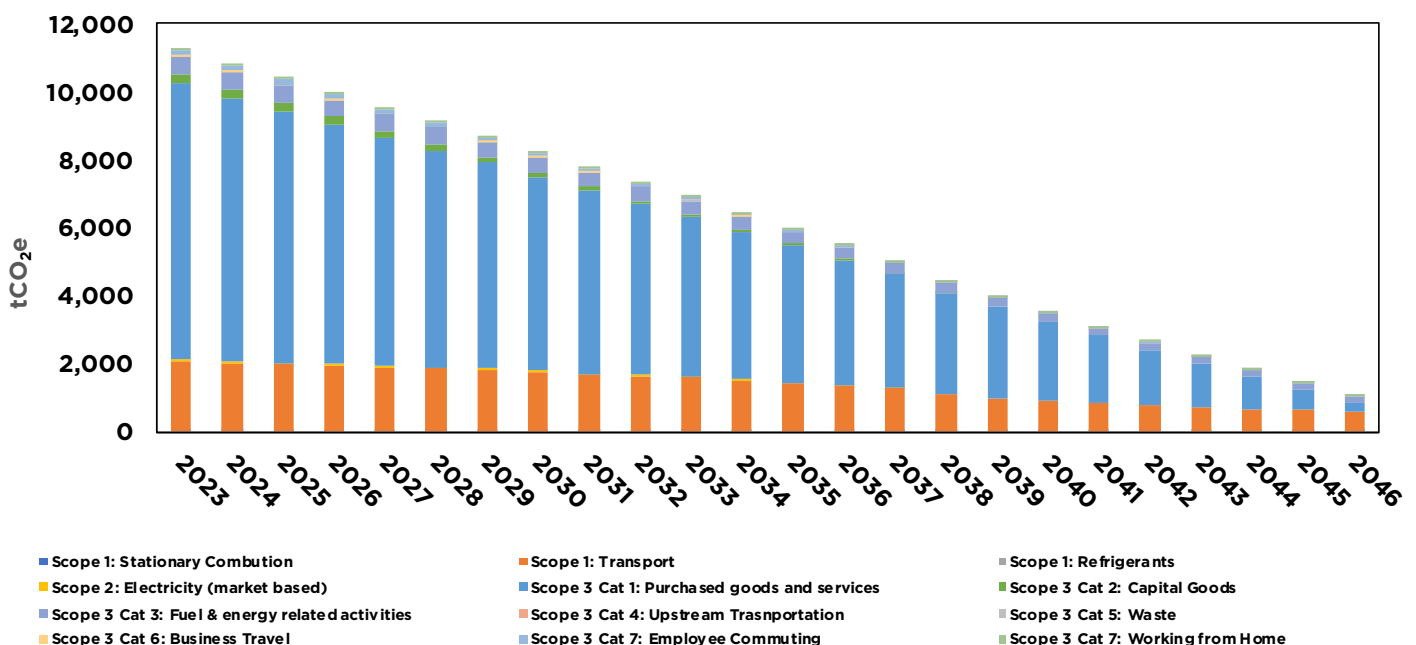
Is excluded from FY23 baseline emissions as we do not have any investments whereby we provide capital or offer financing as a service

Emission Reduction Targets

In order to continue our progress to achieving Net Zero, we have mapped out and planned a number of positive actions to achieve the following carbon reduction targets:

- ✓ **8% absolute reduction in emissions by 2025 from 2023 baseline levels**
- ✓ **27% absolute reduction in emissions by 2030 from 2023 baseline levels**
- ✓ **47% absolute reduction in emissions by 2035 from 2023 baseline levels**
- ✓ **69% absolute reduction in emissions by 2040 from 2023 baseline levels**
- ✓ **87% absolute reduction in emissions by 2045 from 2023 baseline levels**
- ✓ **91% absolute reduction in emissions by 2046 from 2023 baseline levels**

Carbon Emission Glidepath tCO₂e



Aptus' approach is to always focus our efforts on reducing our own emissions, with significant planning and finances set aside to do this. However, a large proportion of our carbon emissions lie within Scope 3; it is difficult to reduce these emissions within the short term as these are within our supply chain where we have influence but not control. To try and reduce these emissions, Aptus will use our purchasing power and choice of suppliers to encourage the correct carbon reducing behaviour within our supply chain.

Environmental Management Measures / Emission Reduction Plan

As a responsible business, Aptus has for many years had a focus on the environment and reducing our carbon emissions. To drive this to the next level, we engaged the services of Sustainable Advantage to advise the Aptus Board on global best practices on carbon reduction. We have a detailed carbon emissions reduction plan, the key actions of which are summarised below:



SCOPE 1: Stationary Combustion (Natural Gas)

Only one of our leased sites (Westhoughton) uses natural gas for heating and so we will engage with the landlord to support lower carbon heating, the activities include:

- Evaluating the supply of gas contracts and considering switching to biogas when the contract comes to an end
- Utilising our ESG committee to perform the initial investigation into the fabric of Westhoughton and collaborating with the landlord to improve its insulation
- Consider if Westhoughton needs further energy surveys to understand if energy efficiency improvements can be undertaken
- Use this energy survey to understand if air source heat pumps, infra-red panels and electric storage heaters could be used instead of gas heating



SCOPE 1: Transport (owned and leased vehicles)

We have a fleet size of approximately 200 vehicles which support our infrastructure engineers to deliver service to our clients. Since this is a relatively high proportion of our emissions we will:

- Continue to switch our diesel and petrol-owned and leased vehicles to electric vehicles (EV) as soon as is practical
- Where moving to EV's is not practical switch to hybrid vehicles, providing they are suitable for the workforce needs
- Provide driver training on how to drive more efficiently to reduce emissions
- Install telematics where feasible to gather granular data on driver performance to issue further guidance
- Ensure EV's are charged using green electricity sources where possible including installing charging points at our sites which are supplied with green electricity contracts



SCOPE 1: Refrigerants

Whilst our fugitive emissions from refrigerant gases are zero as there were no leaks reported, we will endeavour to continue to minimise refrigerant related impacts by engaging with our landlords:

- To continue to monitor the emissions from HVAC units
- When leaks are observed, contact building engineers to improve the tightness of the valves and refill the refrigerant gases
- For future years when HVAC systems are replaced or new buildings are leased ensure that any historic HVAC systems are upgraded to more efficient systems. Ensuring that the refrigerant gases are recovered and disposed of in the correct way
- Collaborate with the landlord to best understand where there is opportunity to substitute the refrigerants for less harmful refrigerant gases e.g., refrigerant gases with zero ozone depletion potential (ODP) and low global warming potential (GWP)
- Collaborate with stakeholders at site level to understand if air conditioning can be used less in summer months
- Discuss with the landlord potential changes to fixtures and fittings which can help to provide more shade and cool the building down in summer months



SCOPE 2: Electricity

All our electricity contracts are all brown. We reduce our electricity's emissions by:

- Progressively switching our contracts to green when the contracts come to an end

We will also engage with the landlord to better understand opportunities in:

- The installation of green energy production facilities onsite where practicable (e.g., solar panels, wind turbines)

We will endeavour to reduce our electricity consumption by:

- Appointing green champions to gather up to date monthly electricity data that will enable tighter control and monitoring of our consumption
- Utilising green champions to collate energy efficiency ideas and share them across our organisation, enabling best practice organisation wide
- Investing in energy efficient computer equipment



SCOPE 3 Category 1 and 2: Purchased goods and services and Capital Goods

Aptus realises that much of the GHG reductions in this category will happen because of our suppliers reducing their carbon emissions and becoming more carbon aware as the UK progresses towards a Net Zero 2050. However, that does not mean that we will take a passive approach as these categories account for approximately 74% of our total emissions. To try and enact positive change on our suppliers we will:

- Engage with tier 1 suppliers to first understand their carbon footprint (Scopes 1 and 2) by sending out carbon surveys
- Be selective about working with sophisticated carbon suppliers (where possible), and additionally, support suppliers to reduce their emissions
- Work with suppliers to collaboratively set carbon emissions reductions targets
- Request life cycle assessments for products purchased and choose lower emission products



SCOPE 3 Category 5: Waste

Aptus already follows the waste hierarchy where a preference is given in order to:

- Reduce waste generated
- Re-using / recycling as much as possible
- Residual general waste to be incinerated to limit the volume of waste that goes to landfill
- Staff training programmes will be rolled out to provide clear, consistent training and information to minimise waste and maximise recycling
- We will track the disposal methods of our various waste streams and encourage waste management companies to change suppliers who send waste to landfill
- Aptus is currently sending zero waste to landfill for this reporting year (2023)



SCOPE 3 Category 6: Business travel

We will do everything we can to control and replace them by:

- Choosing hotels that are more sustainable by engaging with the hotels over there sustainability credentials
- Choosing taxi providers that provide the choice of EV's or hybrid vehicles
- Encouraging the use of rail and buses over cars for longer distances where taxis would be impractical and expensive
- Encouraging carpooling to reduce the total volume of miles where rail is not possible



SCOPE 3 Category 7: Employee commuting

While we cannot directly change the ways in which our employees travel to work, we will do everything we can to help them to travel in the most sustainable way available. We will do this by:

- Sending a travel survey to each one of our employees to understand how they currently get to and from work
- Putting in place initiatives to include:
 - Cycle-to-work schemes
 - Encouraging carpool arrangements
 - Providing information on public transport alternatives
 - Installing EV charge points at our office location
 - Paying favourable mileage reclaim rates to EV vehicles



SCOPE 3 Category 7: Working from Home

Whilst controlling employees energy use at home can be challenging, we will implement strategies that will help them to reduce their emissions, which include:

- Reduce waste generated
- Re-using / recycling as much as possible
- Residual general waste to be incinerated to limit the volume of waste that goes to landfill
- Conducting a commuting survey to understand employees use of renewable electricity
- Helping employees to switch to green electricity
- Sharing educational documents that support the reduction of energy at home

Conclusion

Aptus is managing our environmental impact through ongoing environmental management systems that are also ISO 14001 accredited. This is helping us to reduce our environmental impact and stay compliant with the regulated environment that we work in. However, this is our first Net Zero Report, and there is still a lot more work that can be undertaken in specific Scope 3 categories where our emissions are significant.

We will continue to work on our path to Net Zero by recalculating our carbon footprint annually for each year starting from this baseline year of FY 2023 with FY 2024 being the first post-base year. We will track how we are performing vs our targets and adjust our methods to ensure we stay on track to hit our Net Zero target. Aptus will continue to do all we can to minimise our emissions and do our part to minimise the negative effects of climate change on the planet.



SUSTAINABLE ADVANTAGE
Hersham Place Technology Park
Molesey Road, Hersham
Walton-on-Thames
Surrey
KT12 4RS

info@sustainable-advantage.com

sustainable-advantage.com

0203 544 2030