

Alpine.

Net Zero Report.

Carbon Reduction Plan FY 2023



“We have set a target of achieving Net Zero by 2045, reducing our overall energy consumption, reducing fuel usage per head, and reducing the amount of waste we generate”

Steven Nanda

Executive Endorsement.

For the first time, Alpine has set out its commitments towards Net Zero as part of the wider formalisation of Environmental, Social and Governance strategies. This report sets out the baseline, against which, we will measure our progress, as well as an understanding of what improvements and actions are required to meet the necessary trajectory for a 2045 target. It also marks the start of a journey that we are excited to move forward and share with all of our stakeholders, employees, customers and supply chain alike.

Alpine bears a responsibility to do its part to protect our planet and its inhabitants. Part of this responsibility is putting in place commitments to initiatives that positively impact the environment and holding ourselves accountable. We are committed to reducing emissions across all Scopes with a primary focus on emissions created through the supply chain.

With the target of Net Zero by 2045 set, we hope to grow Alpine into a more efficient, profitable, and financially sustainable business through the reduction and elimination of unnecessary carbon emissions.

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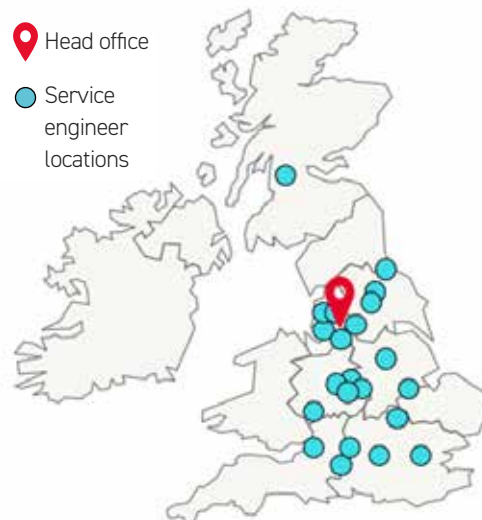
Signed: Steve Nanda

Position: Chief Executive Officer

About us.

Alpine is a market-leading mechanical fire suppression specialist, providing design, project management and maintenance services nationally. We are based in the North West and have service engineers strategically located to complement our customers' areas of operation.

Alpine's design, project and maintenance teams are differentiated by our ability to provide technical expertise, collaboration and value engineering. We continually adapt to changing circumstances in supporting live projects and the ongoing needs of the end user ensuring we deliver an industry-leading customer experience.



Our commitment to Net Zero.

Alpine 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.

Equally, Alpine is dedicated to taking action to reduce our annual emissions and achieving Net Zero emissions by 31st March 2045, five years earlier than the UK Government's target. We will aim to reduce our emissions year-on-year and will achieve:

28%

Reduction in our Scope 1 and 2 emissions by 2030

2030

Offsetting our residual Scope 1 and 2 emissions by 2030 to become carbon neutral via high-quality verified offsets

92%

Overall reduction in all Green House Gas (GHG) emissions across Scopes 1 2 and 3 by 2045 offsetting any residual emissions via high-quality nature-based or direct air capture projects and becoming Net Zero



To achieve these goals, Alpine 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:

Scope 1

- i. Transport and gas
- ii. Refrigerants

Scope 2

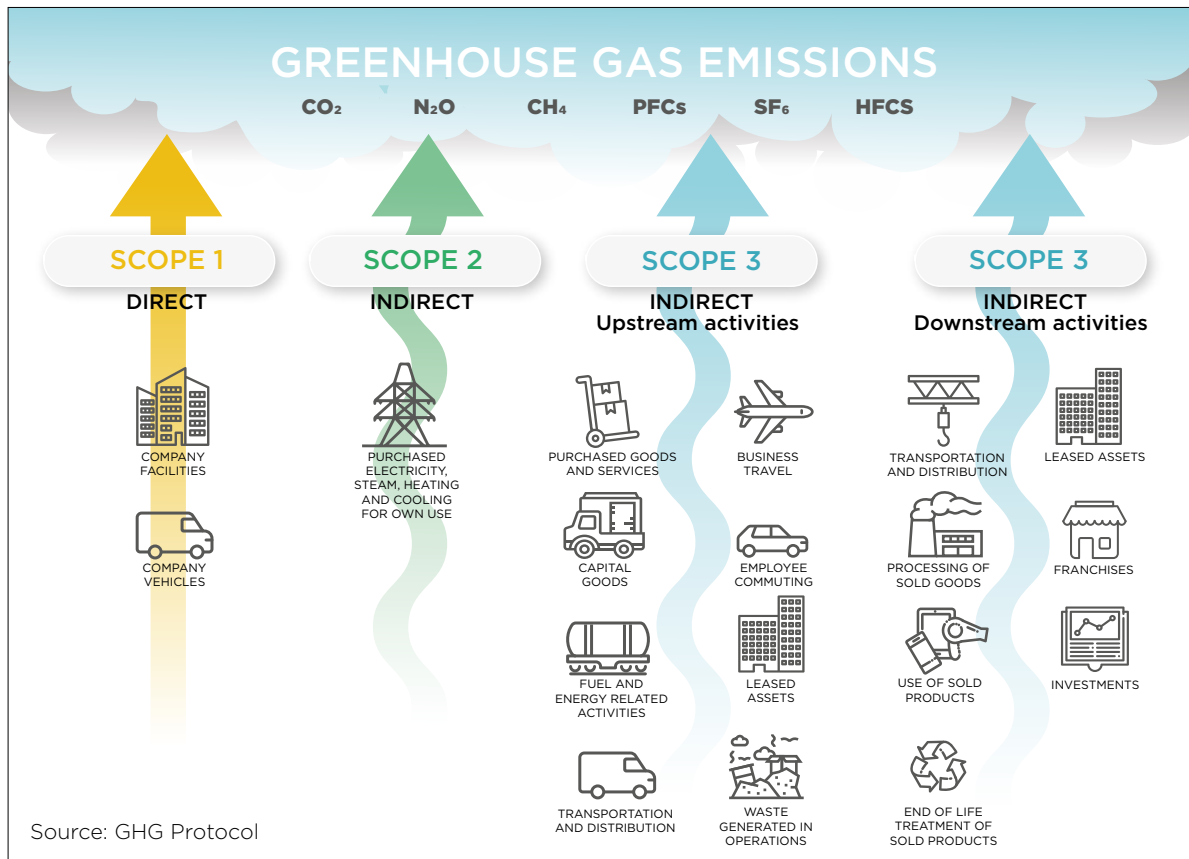
- i. Electricity

Scope 3

Selected categories from the below based on materiality:

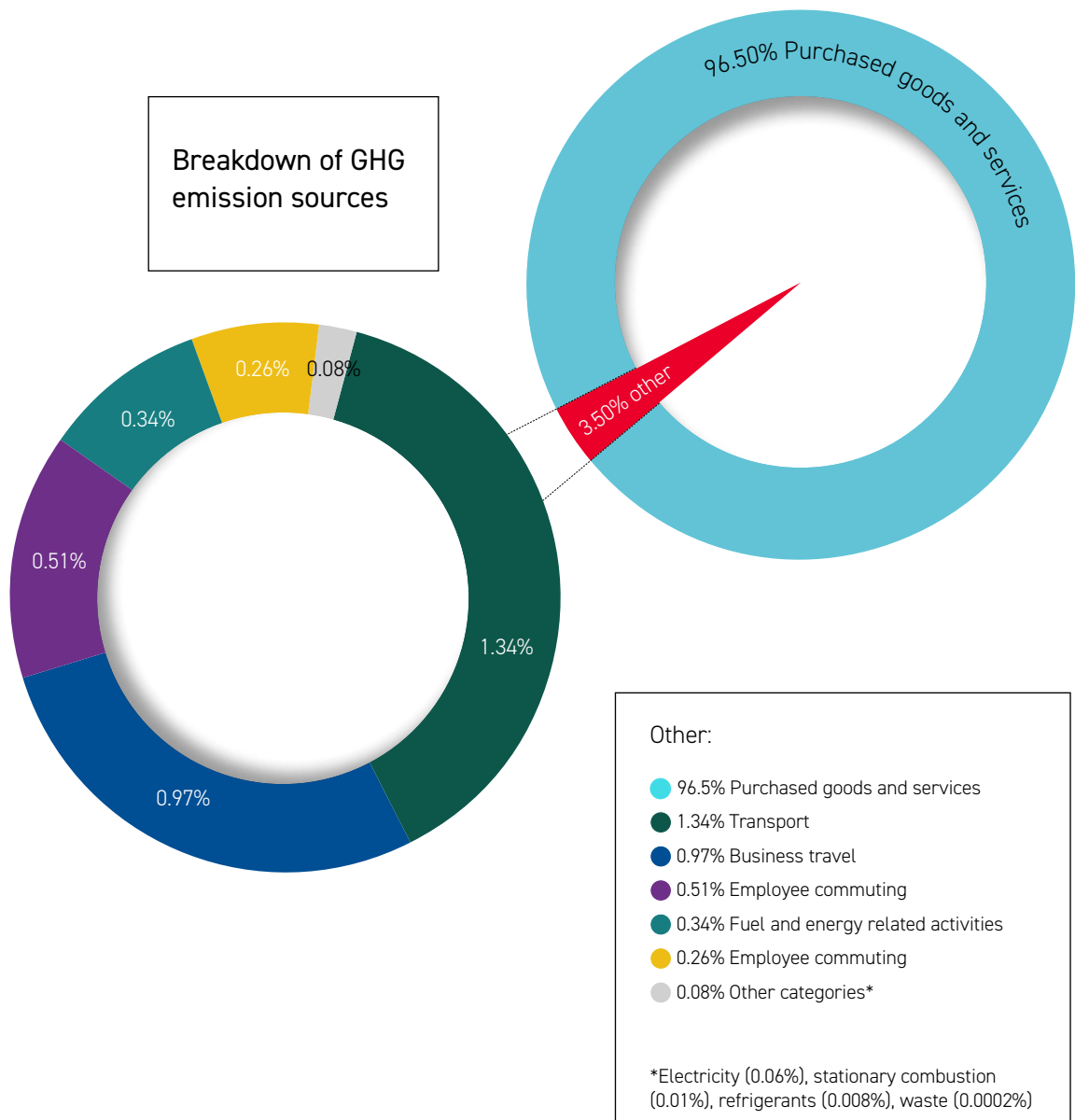
- i. 8 upstream categories
 - ii. 7 downstream categories
3. Created a carbon reduction plan for each scope and selected category
 4. Set the Net Zero date and committed to updating our carbon footprint annually with March 2024 to be the first year post the base year

Overview of GHG Protocol scopes and emissions across the value chain



Baseline emissions footprint.

Baseline emissions are a record of the greenhouse gases that have been produced in the past and were produced prior to the introduction of any strategies to reduce emissions. Baseline emissions are the reference point against which emissions reduction can be measured. Alpine have chosen April 2022 – March 2023 as our baseline year. Alpine's March 2023 baseline carbon emissions footprint is as follows:



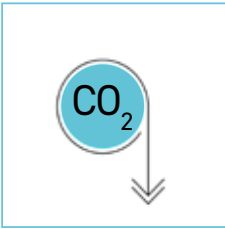
Below is an itemised breakdown showing the amount of carbon emissions (tCO₂e) produced by each scope and category from April 2022 – March 2023 baseline calculation.

Scope/Category	Item	Total tCO ₂ e	%
SCOPE 1			
Stationary combustion (Gas)	Gas consumed	2.66	0.01%
Transport	Owned and leased vehicles	254.45	1.32%
Refrigerants	HVAC's	1.55	0.01%
SCOPE 2			
Electricity (Location based) ¹	Purchased electricity, steam, heating & cooling for own use	11.90	0.06%
Electricity (Market based) ²	Purchased electricity, for own use (specific contract)	-	0.0%
SCOPE 3			
Cat 1: Purchased goods and services	Goods and services	18,556.35	96.5%
Cat 3: Fuel & energy related activities	WTT (Well-To-Tank) & T&D (Transmission & Distribution losses) from electricity, gas, transport, business travel and employees commuting	64.70	0.34%
Cat 5: Waste	Waste	0.04	0.0002%
Cat 6: Business travel	Land and air travel for business purposes	186.07	0.97%
Cat 7: Employee commuting	Employees commuting to and back from work	97.53	0.51%
Cat 7: Employee homeworking	Employees working from home	50.92	0.26%
Total Gross Emissions (Location based)		19,226.16	100.00%
Less emissions avoided by procurement of renewable electricity		(11.90)	0.06%
Total Gross Emissions (Market based)		19,214.26	99.94%
Less carbon offsets		(0.00)	
Total Net Emissions		19,214.26	99.94%

Emissions	tCO ₂ e	%
Scope1 & 2 (Location Based)	270.56	1.41%
Scope1 & 2 (Market Based)	258.66	1.35%
Scope 3	18,904.68	98.39%

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

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



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	Quantity	Gross Emissions (Location based)	Gross Emissions (Market based)	Net Emissions
tCO ₂ e per employee	97	198.21	198.09	198.09
tCO ₂ e per square meter	5,424	3.54	3.54	3.54
tCO ₂ e per million £ turnover	60,780	0.32	0.32	0.32

When calculating carbon emissions, the GHG Protocol Corporate Accounting and Reporting Standard states that a company must set its organisational boundaries.³ 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, Alpine 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. Alpine's 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
 - DEFRA (Department for Environmental, Food and Rural Affairs)
 - Environmentally extended input-output (EEIO) tables
 - EPA



³<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, fugitive emissions of refrigerant gasses 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 Alpine 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 Alpine 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 Alpine's 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 Alpine 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 Alpine's 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 spend-based method, which involves determining the spend 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 Alpine's offices. Emissions from employee commuting may arise from car, bus, train, or cab 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 – Material exclusions from current numbers:

Scope 3

Category 2: Capital Goods

This has been excluded, CapEx spend, plant and equipment spend have been accounted for in Scope 3 Cat 1 where relevant. As the Net Zero programme develops more detailed data collection will be completed and with greater definition of Scope 3 Cat 2 if appropriate

Category 4: Upstream transportation and distribution

Is excluded from the current numbers as we do not collect data on this, and it is assumed that it will be a small part of our GHG emissions however we plan to collect this data for future reporting

Emissions methodology – Non-material exclusions for FY21 baseline emissions:

Scope 3

Category 8: Upstream leased assets

Is excluded from FY23 baseline emissions, as we do not lease any assets

Category 9: Downstream transportation and distribution

Is excluded from FY23 baseline emissions as we do not have goods transported to customers at the customers expense

Category 10: Processing of sold products

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

Category 11: Use of sold products

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

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

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

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

Category 14: Franchises

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

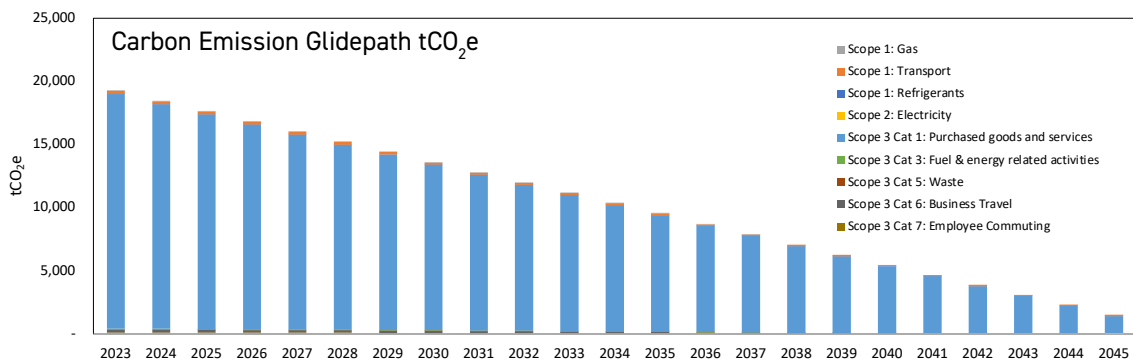
Category 15: Investments

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

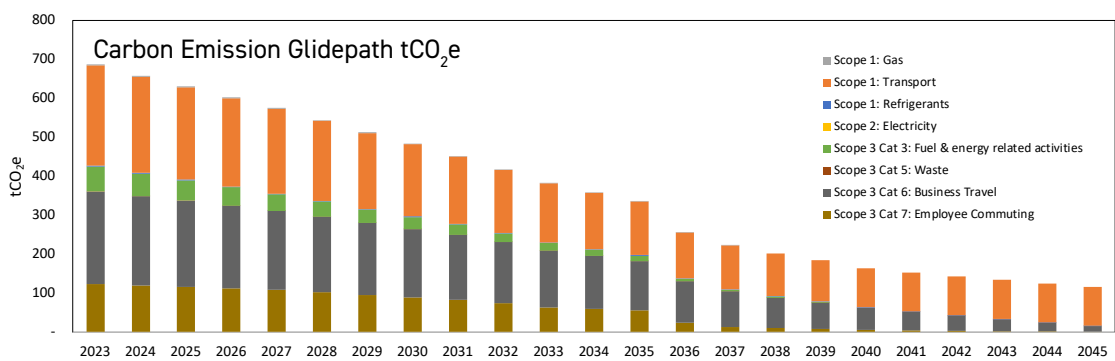
Emission reduction targets.

In order to continue our progress toward 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
- ✔ 29% absolute reduction in emissions by 2030 from 2023 baseline levels
- ✔ 50% absolute reduction in emissions by 2035 from 2023 baseline levels
- ✔ 72% absolute reduction in emissions by 2040 from 2023 baseline levels
- ✔ 92% absolute reduction in emissions by 2045 from 2023 baseline levels



Total Scope 1, 2 & 3 emissions



Total Scope 1, 2 & 3 emissions, excluding purchased goods and services

Alpine's 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 Alpine will use our purchase power and choice of suppliers to encourage the correct carbon reducing behaviour within our supply chain.

Our emissions reduction plan.

As a responsible business, Alpine 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 Alpine 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)

- Progressively replace brown gas consumption with renewable gas consumption
- Reduce reliance on gas use and replace gas boilers with electrical heating systems such as air source heat pumps, infra-red panels, electric storage heaters etc. where practicable
- Investigate new technologies as they become available and install these where practicable (e.g., hydrogen powered boilers)
- Ensure that our facilities use minimal heating by making sure buildings are fully insulated
- Continue to perform energy surveys to identify capital expenditure (CapEx) opportunities



SCOPE 1: Transport (owned and leased vehicles)

- Move 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
- Provide driver training on how to drive more efficiently to reduce emissions
- Continue to roll out the installation of telematics where feasible to gather granular data on driver performance to issue further guidance
- Continue to review the feasibility of EVs as part of the fleet, over time vehicle performance and local infrastructure will improve.
- 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 it is assumed fugitive emissions from refrigerant gases continue, we will endeavour to reduce our impact where possible by:

- Avoid emissions through improved leak tightness; consider fitting leak-detection systems and following a regular maintenance schedule
- Ensure correct end-of-life treatment of refrigerant gases; recover and dispose of refrigerant gases correctly when maintaining, upgrading or decommissioning a system
- Substitute refrigerants with other less harmful substances e.g., refrigerant gas with zero ozone depletion potential (ODP) and low global warming potential (GWP)
- When renewing HVAC system, choose the most efficient systems:
 - Investigate systems using the least damaging refrigerant gasses with low potential leakage
 - Installing new systems may offer energy savings as well as next-generation refrigerants (HFOs (hydrofluoro-olefins) and natural refrigerants)
- Where possible Limit use of refrigeration / air conditioning systems





SCOPE 2: Electricity

All our electricity contracts are 100% green however we will still endeavour to reduce our electricity consumption via the following:

- Energy efficiency guides will be issued to all site staff to facilitate positive behavioural change
- Green champions at each site will be gathering up-to-date monthly energy performance data to provide feedback
- Ensure we use energy efficient systems wherever possible e.g., replacing lights with LED and using passive infra-red sensors (PIRs) where possible
- Energy champions to be appointed gather ideas from colleagues across our organisation. These ideas will be collated and shared, supplemented by what we consider to be best practices
- Investigate opportunities to install green energy production facilities onsite where practicable (e.g., solar panels, wind turbines)





SCOPE 3 Category 1: Purchased goods and services

Alpine 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 to the category especially as it accounts for 96.5% of our total emissions.

Our carbon emissions in this category are predominantly due to purchased metal goods and the associated emissions. The global metal and steel manufacturing industry is beginning to set targets towards Net Zero by 2050. For steel, this will be made possible with the increase in green technology and movement away from blast-oxygen furnaces (BOF's) to Electric Arc Furnaces (EAF). Sourcing of products which have greener carbon credentials will be a critical area of focus for us as part of our emission reduction programme.

To take ownership of our emissions, and try to enact positive change within our supply chain, we will:

- Engage with tier 1 suppliers to first understand their carbon footprint (scopes 1 and 2) by sending out carbon surveys.
- Request life cycle assessments or carbon footprint assessments for products purchased. Using this information actively choose lower-emission products where provided.
- Be selective about working with sophisticated carbon suppliers, and additionally, support suppliers to reduce their emissions through ongoing engagement.
- To become aware of supplier and product emissions from our direct suppliers (Tier 1) to their suppliers (Tier 2) and so on through engagement.
- Prefer local suppliers where possible, reducing emissions from transport.



SCOPE 3 Category 5: Waste

- Alpine already follows the waste hierarchy where a preference is given in order to:
 - Reduce the waste generated
 - Re-using / recycling as much as possible
 - Residual general waste is incinerated to with zero waste 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



SCOPE 3 Category 6: Business travel

- COVID-19 has taught us that video conferencing tools such as Teams and Zoom can very successful for hosting meetings. We are encouraging our staff to continue to embrace this technology to minimise travel
- Where travel is required, we will prioritise carbon-reducing travel modes, choosing rail over air and / or cars
- Encourage the uptake of EV vehicles by paying favourable mileage reclaim rates and considering the installation of EV charging points at our site, where practical
- We will also begin collecting more granular data on hotel stays to better calculate our GHG emissions in future years



SCOPE 3 Category 7: Employee commuting & employee working from home

We recognise that we cannot massively influence what modes of travel our employees use. That said we need to do all we can to encourage them to join us on our sustainable journey. We will endeavour to achieve 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

Regarding working from home, we will:

- Collect granular data by sending a survey to all employees working from home to understand their energy, waste and water usage during working hours
- Implement an awareness campaign for reducing working from home carbon footprint:
 - Encourage switching to renewable energy tariffs where possible
 - Install SMART meters
 - Reduce energy consumption of home appliances
 - Reduce, reuse, recycle, limit waste sent to landfill

Conclusion.

Alpine has taken the important first step in assessing our carbon footprint across our business, we will recalculate our carbon footprint annually for each year ending 31st March with 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. Alpine 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 as well as taking a holistic approach to new technologies that come to market in the years to come.



Alpine.



An intelligent approach to energy, waste & sustainability

Sustainable Advantage

Hersham Place Technology Park

Molesey Road, Hersham

Walton-on-Thames

Surrey

KT12 4RS

0203 544 2020

info@sustainable-advantage.com

sustainable-advantage.com