

**Headline Carbon Footprint - 2024** 

Zenitech

March 2025



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# **Zenitech**

Client Name: Sovereign Capital Partners

**Produced:** Ensphere Group Ltd

**Document Reference:** 20-E039-250304

# **Quality Assurance Approval Status**

This document has been prepared and checked in accordance with Ensphere Group Ltd.'s Quality Management System.

Issue:	Version:	Prepared:	Reviewed:	Approved:	Date:
Final	3	Cecilia Langle Garcia	Milly O'Sullivan	Pete Jeavons	March 2025





# **Report Outline**

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# **Executive Summary**

This carbon footprint appraisal has been undertaken to estimate a headline figure for annual greenhouse gas emissions from Zenitech's business activities in the calendar year 2024.

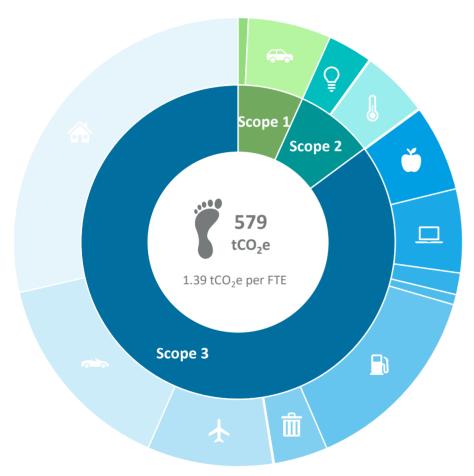


Figure ES.1 – 2024 carbon footprint summary

Table ES.1 – 2024 carbon footprint results

Scope 1			41.85 tCO₂e	7%
N	Stationary Cor	nbustion	4.61	1%
	Mobile Combustion		37.24	6%
	Fugitive Emiss	ions	<0.01	<1%
Scope 2	(Market-Based	i)	50.63 tCO₂e	9%
Q	Purchased Ele	ctricity		3%
	Ν	Narket-Based	19.98	
	L	ocation-Based	20.12	
t <del>en</del>	Electric and Hy	ybrid Vehicle	0.54	<1%
	Heat and Stea	m	30.11	5%
Scope 3			486.76 tCO₂e	84%
-	Category 1	Water Supply	0.50	<1%
Ě		Paper Use	0.13	<1%
<b>Č</b>		Catering	38.69	7%
	Category 2	IT Equipment	9.68	2%
食	Category 3	Transmission and Distribution	5.47	1%
		Well to Tank	80.84	14%
â	Category 5	Waste	24.17	4%
		Wastewater Treatment	0.60	<1%
<u></u>	Category 6	Business Travel	56.32	10%
***	Category 7	Employee Commuting	92.28	16%
		Homeworking	178.08	31%
		Total (Market-Based)	579.24tCO₂e	1.39 tCO₂e/FTE
		Total (Location-Based)	579.38 tCO₂e	1.39 tCO₂e/FTE



This exercise constitutes the fourth such assessment conducted for Zenitech's activities. The initial assessment took place in 2021 but only considered Zenitech's UK-based operations, whereas the following assessments have encompassed emissions from all the company's international offices. Furthermore, normal business was disrupted due to COVID-19 during 2021 and, therefore, 2022 currently serves as a base year for comparison. However, it is noted that there have been improvements in the boundary of Scope 3 emissions since then which should be taken into account when considering year on year trends.

The results show a 22% decrease in emissions since 2023, or an 8% decrease in emissions per full time equivalent employee. However, there has been a 11% increase since the base year, 2022, or a 5% increase in emissions per full time equivalent employee.

During the period, the company has made some good progress, with new data becoming available for waste, allowing for more accurate data across all offices and improving accuracy in assessment of waste arising and landfill diversion. Additionally, reductions in electricity consumption and stationary combustion have contributed to the overall decline in emissions.

Recommendations have been made with respect to a) data quality, and b) decarbonisation:

- Ensphere has identified some areas within the current carbon footprint boundary whereby improved
  data shall improve the accuracy and representativeness of the calculated emissions. Furthermore, it is
  recommended that Zenitech considers conducting a scoping exercise for remaining Scope 3 emissions
  which have not been included within the boundary and considers how data for these emissions can be
  gathered.
- In terms of decarbonisation, it is recommended that the company sets challenging but achievable nearand long-term decarbonisation targets. The company will need to explore strategies to achieve these targets. Depending on the source of emissions, the strategy shall vary; however, it is recommended that a GHG mitigation hierarchy (Figure ES.3) is applied.

The company previously reported some energy-related targets in place for one of its Hungarian offices but, given the changes in these offices, this should be reevaluated to ensure it remains relevant and achievable.

Other targets, such as carbon neutrality or renewable energy targets could also be considered.

Zenitech may wish to consider purchasing offsets for any unabated emissions, which would result in it becoming a carbon neutral company.



Figure ES.2 - Carbon footprint results since 2021 (in total and per full time equivalent)

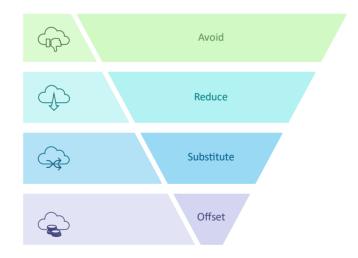


Figure ES.3 - GHG mitigation hierarchy



# 1. Introduction

Ensphere Group Ltd ("Ensphere") has been commissioned by Sovereign Capital Partners to undertake a high-level carbon footprint assessment of Zenitech.

## **Background**

Ensphere is a specialist sustainability consultancy and has been providing support to Sovereign Capital Partners in the development of its ESG (Environmental, Social & Governance) Approach. Part of this work includes a carbon footprinting initiative, whereby an annual headline calculation is undertaken for each portfolio firm.

## The Company

Zenitech is a provider of IT software development, consultancy and solutions. Zenitech's headquarters are in the UK, where employees work from home but have access to serviced office spaces and meeting rooms. The company has offices in Kaunas & Vilnius (Lithuania), Cluj-Napoca (Romania), and Budapest and Miskolc (Hungary).

Further information can be found at the company's website https://zenitech.co.uk/.

## **Report Objectives**

The objective is to estimate the annual greenhouse gas ("GHG") emissions from Zenitech's business activities during 2024, highlighting areas of good practice, and making recommendations for improvement, where appropriate.

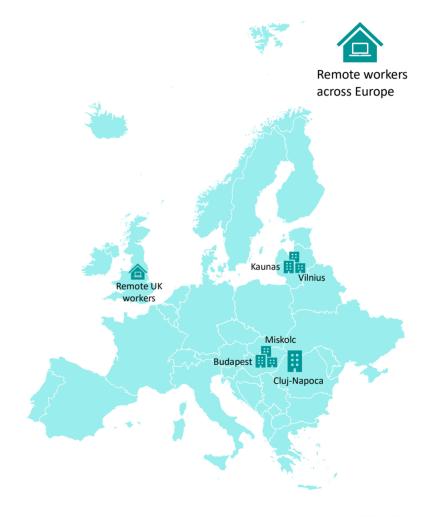


Figure 1.1 – Office locations considered during the exercise



## Methodology

The assessment has been undertaken with consideration of the methodology presented within the *GHG Protocol Corporate Accounting and Reporting Standard* and *British Standard BS EN ISO 14064-1*.

A full methodology has been provided within Appendix C.

## **GHG Inventory Boundary**

An approach based upon **operational control** has been used as the guiding principle to establish the reporting boundary.

Care has been taken to provide a representative view of Zenitech's carbon footprint; however, there are instances where potential sources of emissions have not been accounted for. These have been principally on the basis of (a) absence of data; and / or (b) that most of these sources are likely to be less significant. Over time and subject to improved data, it may be possible to incorporate more of these sources within scope to ultimately assist with their management.

Potential sources of Scope 3 emissions which have not been included within the present assessment include:

- Other purchased goods and services
- Other capital goods
- Investments
- Transportation and distribution
- Assets leased to other parties

## Data

Information has been provided to Ensphere within Sovereign Capital Partners' ESG & Carbon Questionnaire and follow up emails to supplement these responses.

UK-BEIS conversion factors have been used for the corresponding year, unless otherwise specified.

Datasets covering the period 1 January 2024 to 31 December 2024 have been considered.

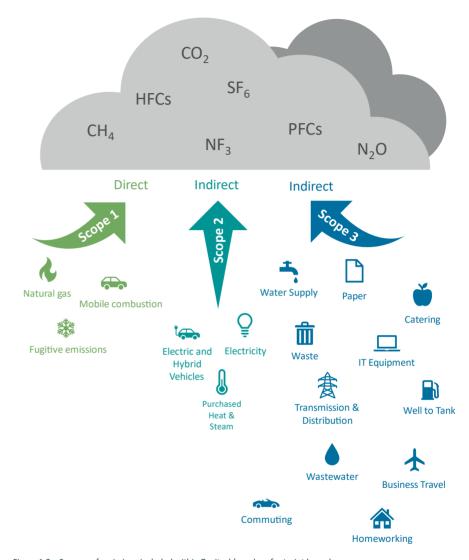


Figure 1.2 – Sources of emissions included within Zenitech's carbon footprint boundary



# 2. Greenhouse Gas Emissions and Removals

# **2024 Carbon Footprint Results Summary**

Since 2021, Zenitech's greenhouse gas (GHG) emissions have increased year over year due to several factors. Notably:

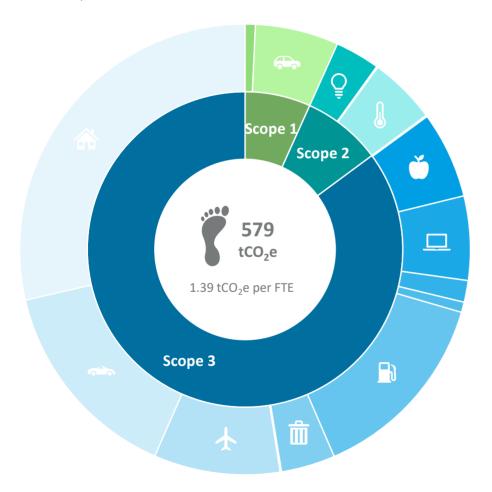


Figure 2.1 - 2024 carbon footprint summary

Table 2.1 - 2024 carbon footprint results

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	Loc	ation-Based	20.12	
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		Total (Location-Based)	579.38 tCO₂e	1.39 tCO <sub>2</sub> e/FTE



- 2021 2022: The 2021 assessment considered only Zenitech's UK-based operations, whereas the 2022
  assessment included emissions from all international offices. This broader scope explains the significant
  increase between the two assessments.
- 2022 2023: Between 2022 and 2023, well-to-tank emissions were added as an additional Scope 3
  emission source in the assessment. Without this new source, Zenitech's emissions would not have
  appeared to increase to the same extent. Furthermore, improved data accuracy and the full-year
  inclusion of the Hungary-Budapest office, compared to just four months in 2022 following its acquisition,
  also contributed to the increase.

This year's results show a 22% decrease in total emissions since 2023 and an 8% reduction in emissions per FTE, but a 11% increase in total emissions and 5% increase in emissions per FTE since 2022, Zenitech's base year. The decline is primarily attributed to the availability of new waste data, which replaced the previously applied benchmark, as well as a reduction in electricity and natural gas consumption across all offices. Other emission sources fluctuated, both increasing and decreasing (see Figure 2.3), however, the overall impact has been a net reduction in emissions. The more significant variations are explored in further detail within this chapter.

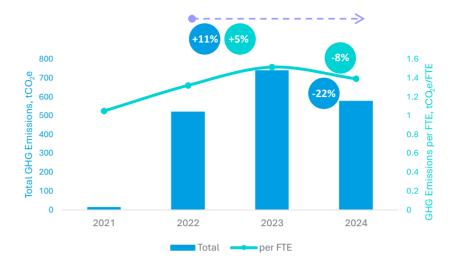


Figure 2.2 - Carbon footprint results since 2021 (in total and per full time equivalent)

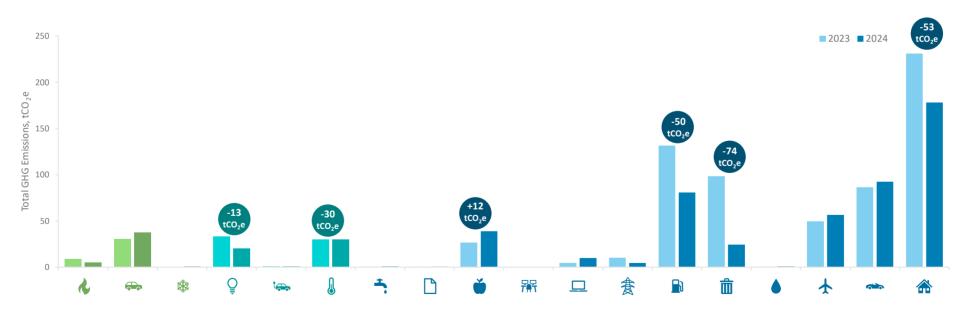


Figure 2.3 - A comparison of GHG emissions by source between 2023 and 2024



## Scope 1

In total, Scope 1 emissions in 2024 amounted to 41.85 tCO $_2$ e, accounting for **7%** of Zenitech's carbon footprint.



Figure 2.4 - Change in Scope 1 emissions between 2023 and 2024

Zenitech's assessment includes three sources of Scope 1 emissions: GHG emissions from stationary combustion, specifically natural gas, mobile combustion (the majority of Scope 1 emissions), and a negligible element of fugitive emissions.

While stationary combustion decreased significantly, there was a 7% increase in total Scope 1 emissions as this was counterbalanced by an increase in mobile combustion (associated with the company's fleet).

#### **Stationary Combustion**

There was a 47% reduction in stationary combustion, mainly due to the lack of contribution from the diesel aggregator in the Hungarian Zrt office, which was not refilled during the appraisal year, along with a decrease in natural gas consumption across all offices compared to 2023.

#### Mobile Combustion

Mobile combustion emissions increased by 22% compared to the previous year. Although diesel vehicles were not used in 2024, greater distances were reported for both hybrid and petrol vehicles.

#### **Fugitive Emissions**

Fugitive emissions were included in this appraisal because a fire extinguisher was refilled in the Romanian office, whereas no refills were reported in the previous year. However, this had a negligible impact on Scope 1 emissions and overall carbon footprint.

## Scope 2

In total, market-based Scope 2 emissions in 2024 amounted to  $50.63 \text{ tCO}_2\text{e}$ , accounting for **9%** of Zenitech's carbon footprint. Its location-based emissions came to  $50.77 \text{ tCO}_2\text{e}$ , which would be also 9% of the total.



Figure 2.5 - Change in Scope 2 emissions between 2023 and 2024

The majority of Scope 2 emission associated with the business relate to purchased energy consumed within its offices (both heat and steam and electricity). However, there are also some emissions related to the use of electric and hybrid vehicles.

There has been a decrease in both electricity consumed and electric and hybrid vehicles emissions, leading to a corresponding reduction in Scope 2 GHG emissions.

#### Electricity

All offices reported lower energy consumption compared to the previous year. Regarding renewable electricity, one office reported that 50% of the building's total electricity comes from renewable sources, which is reflected in the market-based emissions.

Additionally, Hungary Kft office building implemented energy reduction measures, such as lowering heating during weekends, outside of working hours, and even during lunchtime on weekdays. These efforts are understood to have contributed to the decline in their electricity consumption.

## **Electric and Hybrid Vehicles**

While the total distance travelled by hybrid and electric vehicles increased compared to 2023, emissions still decreased due to a lower conversion factor in 2024.

#### Heat and Steam

The Hungarian Zrt office reported district heating, but no data was available for 2024. In the absence of more reliable information, 2023 data has been used as a proxy for the district heating within this office.



## Total Scope 1 and 2 Emissions

While Scope 1 and Scope 2 emissions should be reported separately, it is commonplace for the two to also be considered together, as they represent emissions that companies have more control over. Furthermore, there is an interaction between the two – electrification can result in a decrease in Scope 1 emissions but an increase in Scope 2, which can be addressed by procuring renewable electricity.

It is also good practice to set decarbonisation targets covering both Scope 1 and 2.

In line with this, Hungary Kft had a previously set related target to reduce electricity consumption by 20%. However, it is understood that Hungary Kft has been liquidated, with all employees transferred to Zenitech Consulting Zrt. Additionally, as of January 2025, there will only be one office within the country, which is understood to be a more modern building equipped with individual metering. Consequently, the previously set decarbonisation target should be reevaluated to reflect these recent changes.

These changes will impact both Scope 1 and Scope 2 as the former two offices in Hungary consumed both natural gas and district heating. Notably, the information gap regarding district heating, which in the present exercise was filled with the 2023's data, shall no longer be an issue for the next assessment.

As above, the Hungary Kft office building's electricity consumption was 50% from renewable energy and had implemented heating and cooling controls to reduce consumption, such as limiting heating during weekends, beyond working hours, and during weekday lunchtimes. These measures contributed to reductions in both stationary combustion and electricity consumption.

Bringing it all together, these changes contributed to an overall 10% decrease in Scope 1 and Scope 2 emissions compared to 2023.

## Scope 3

In total, Scope 3 emissions in 2024 amounted to 486.76 tCO<sub>2</sub>e, accounting for **84%** of Zenitech's carbon footprint.

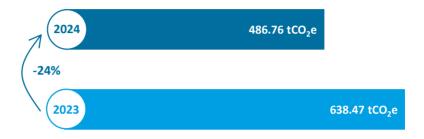


Figure 2.6 - Change in Scope 3 emissions between 2023 and 2024

Scope 3 emissions, by nature of relating to a company's value chain, are broader and tend to be harder for a company to control. The approach, to date, for selecting Scope 3 emissions to include within the carbon footprint has been (a) likelihood of available data; (b) potential to be a large source of emissions; (c) market trends and applicability across Sovereign Capital Partner's portfolio; and (d) other environmental impacts.

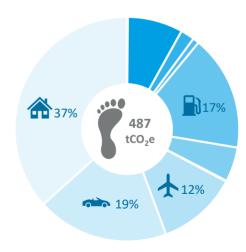


Figure 2.7 – Breakdown of Scope 3 GHG emissions by source



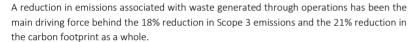
Following this approach, the majority of the company's Scope 3 emissions relate to:

- 1. Homeworking
- 2. Employee commuting
- Well to tank emissions
- Business travel

As depicted within Figure 2.3, certain sources of emissions have experienced more pronounced changes since the previous footprint. This year, while there has been an increase in some Scope 3 emissions sources, this has been counterbalanced by larger reduction in other sources of emissions, leading to an overall 24% decrease in Scope 3 emissions.

Some of the largest changes have been explored below. For a more detailed discussion on the changes and methodology for each source of emissions, please refer to Appendix C.

#### Waste





For the 2023 carbon footprint, waste arisings were benchmarked for all offices with the exception of the Romanian office. However, this year, Zenitech has been able to provide data on the mass of the waste generated for all of its offices and disposal route for these arisings for most of its offices. This new data set provided more accurate information compared to the benchmark, which is significantly lower than the figure used in the previous assessment period.

Furthermore, waste diverted from landfill has significantly lower emissions associated per tonne of waste treated. This data has allowed for consideration of alternative disposal options for the offices with available data within the calculations.

## Homeworking

The number of employees reported to be working from home decreased compared to the previous year, leading to a corresponding reduction in overall emissions. This decline is primarily attributed to a general reduction in employees across all offices.



Additionally to the reduction in employees, the Romanian office reported a reduction in the percentage of employees working fully remote, with more now working on a hybrid basis. This applies similarly to the Hungarian Zrt office as they increased the percentage of employees that spend more days at the office than homeworking.

Finally, for the Hungarian Kft office more accurate data was provided regarding their hybrid system contributing to a reduction in homeworking employees.

#### Well to Tank

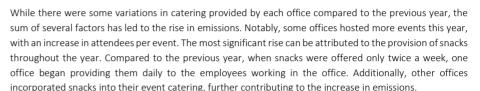
Well-to-tank emissions have decreased this year.



While some variations in well-to-tank emission factors have contributed to this change, the decline is also driven by reduced activity data from other emission sources (such as natural gas and electricity), as they are directly linked.

### Catering

Catering emissions have increased this year.



## **Greenhouse Gas Removals and Sinks**

No GHG removals, or "sinks", have been associated with Zenitech's activities or operations during the assessment period.



# 3. Greenhouse Gas Emissions in Context

# **Sovereign Sustainability Network**

GHG intensity per FTE has been used as a comparison between Zenitech and Sovereign Capital Partners' portfolio. Results for 2023 have been used as a basis for comparison, as this provides a whole dataset. While the carbon appraisal methodology is consistent across portfolio companies, it is important to note that the nature of businesses within the Sovereign Sustainability Network varies. As a result, the scope of emissions sources may differ across companies. Moreover, the conversion factors used within calculations have been updated since 2023. Any comparisons should be understood in this context.

Zenitech sits favourably, under both the mean and median emissions per FTE for the portfolio in 2023.

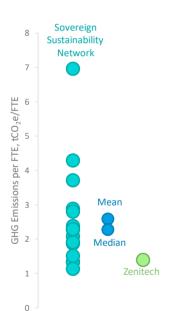


Table 3.1 – A comparison with the Sovereign Sustainability Network's 2023 GHG emissions

Sovereign Sustainability Network 2023	GHG Emissions per FTE (tCO₂e/FTE)
Mean	2.58
Median	2.27
Highest	6.96
Lowest	1.13
Zenitech 2024	1.39

Figure 3.1 – A comparison with the Sovereign Sustainability Network's 2023 GHG emissions

## **Carbon Offsets and Credits**

Carbon offsetting can compensate for emissions by funding or 'purchasing' negative emissions elsewhere. The project should be accredited, and there are currently several schemes which offer this, including 'Gold Standard' projects, which have been used as an indication for the price of an offset

Furthermore, pricings for carbon offsets and carbon credits are predicted to increase in the coming years as demand increases. Please refer to Appendix A for further discussion.

Table 3.2 - Indicative cost of 'compensating' Zenitech 2024 GHG emissions

Gold Standard Market Place	United Kingdom Compliance Market
Approx. £5k - £42k	Approx. £21k

<sup>&</sup>lt;sup>1</sup> Gold Standard Market Place, £8 - £73 per tonne, 11<sup>th</sup> March 2025



United Kingdom Compliance Market, £38 per tonne, 11th March 2025

# 4. Journey Towards Net Zero

Zenitech's carbon footprint has been calculated since 2021, with the boundary of Scope 3 emissions continually increasing. Over the years, the company has started to make progress on its journey towards Net Zero.

The company has reported that it has already been taking actions to reduce its GHG emissions (see Figure 4.1). Indeed, Zenitech has begun to see some reduction in their emissions both due to these initiatives and also improved data quality, allowing for more representative calculations. However, only one related target has been reported for one of the Hungary offices to date.

A typical process that other companies have followed to set targets includes the following:

- Normally, the first step in a journey toward Net Zero is to understand the emissions sources, which Zenitech has been doing since 2021. However, there are still some sources of Scope 3 emissions that are not present within the current appraisal, including those with the potential to materially impact the GHG inventory (e.g., those related to other goods and services).
- A company should set near and long-term (Net Zero) decarbonisation targets, that are challenging but achievable to them. There are several best practice frameworks under which companies can set targets, including the Science Based Targets initiative and ISO's Net Zero Guidelines (IWA 42:2022).
- Other related targets, such as carbon neutrality, renewable energy, or diversion from landfill targets, are also recommended.
  - Zenitech reported a 20% energy-saving target for Hungary Kft, however, it is understood this company has now been liquidated and its employees have been moved under Zenitech Consulting Zrt. As of January 2025, the Hungary office has been relocated to a more modern building equipped with individual metering.
  - While no other targets have been reported, the company has already implemented different actions in all offices to divert waste from landfill, implement energy efficiency measures, and reduce paper consumption.
- 4. Lastly, it is recommended that actions are assessed to ensure the targets are achievable and to facilitate the development of a pathway toward Net Zero. This approach should enable the company to track its year-on-year progress against its targets and adjust them as necessary.

Zenitech's annual GHG emissions to date and an indicative pathway towards a 2050 Net Zero goal have been plotted within Figure 4.2.

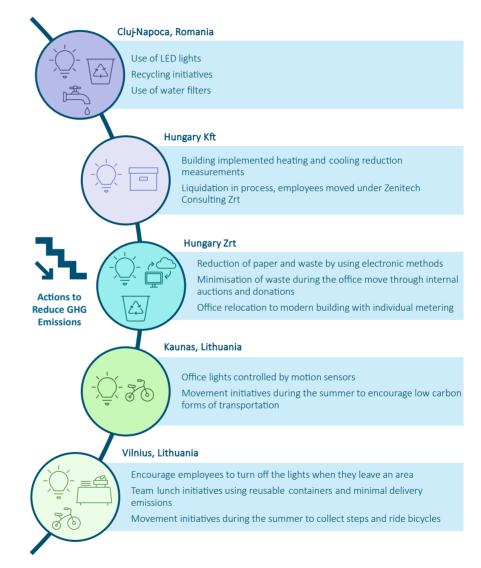
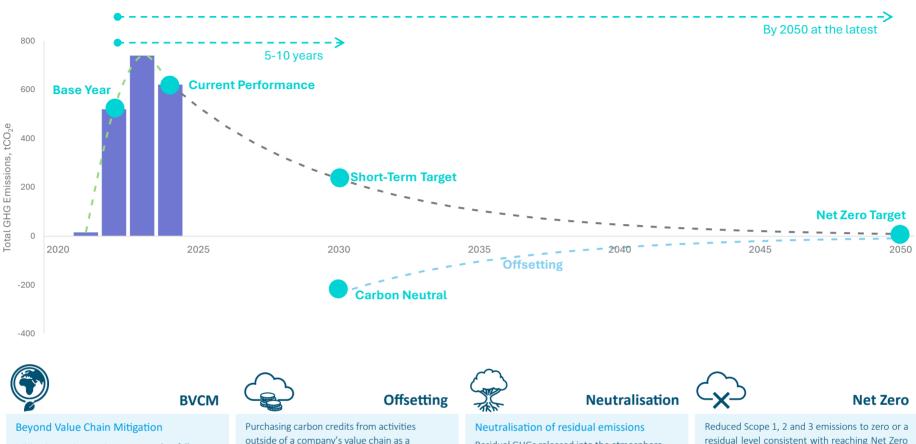


Figure 4.1 – Actions the company has reported were undertaken to reduce GHG emissions





Mitigating actions or investments that fall outside a company's value chain, including activities that avoid or reduce GHG emissions, or remove and store GHGs from the atmosphere.

outside of a company's value chain as a substitute for abating emissions within its value chain.

#### Carbon Neutral

A company can be considered carbon neutral if it has purchased offsets that counterbalance its annual unabated GHG emissions.

Residual GHGs released into the atmosphere when the company has achieved their longterm target are counterbalanced through permanent removal and storage of carbon.

## Neutralisation on the way to Net Zero

Near-term investments to scale carbon removal before long-term target is achieved.

residual level consistent with reaching Net Zero emissions at the global or sector level.

The reduction relates to the long-term target and typically corresponds to a reduction of at least 90%.

At this point, any residual emissions must be permanently neutralised.

Figure 4.2 – Indicative decarbonisation pathway (Definitions have been based on SBTi guidance).



# 5. Conclusion and Recommendations

## **Key Carbon Footprint Results**

This headline carbon footprinting assessment has been undertaken to estimate a high-level figure for annual carbon emissions from Zenitech business activities in the calendar year 2024.

Table 5.1 – 2024 carbon footprint key results

Total GHG emissions		GHG Emissions per FTE			
<b>579</b> tCO <sub>2</sub> e	Since base year (2022):	+11%	<b>1.39</b> tCO <sub>2</sub> e/FTE	Since base year (2022):	+5%
	Since 2023:	-22%		Since 2023:	-8%

The principal component relates to Scope 3 (Indirect) emissions associated with homeworking, although commuting and well to tank also contribute to a similar extent.

#### **Observations and Recommendations**

#### Data

Year on year, Zenitech has seen an improvement in data quality, which has notably improved the footprint in terms of accuracy. The nature of the new data available for waste this year has resulted in an improvement in terms of the calculated emissions and was a key driving force behind the reduction in both total GHG emissions and emissions intensity. While it remains uncertain whether Zenitech's actual GHG emissions have increased or decreased, the updated approach is now considered a fairer representation of Zenitech's true climate impact.

Nevertheless, some deficiencies remain in the data gathered by or available to Zenitech, preventing a complete understanding of the company's carbon footprint. With respect to the emissions sources already included within the GHG inventory, the following actions are recommended:

- The company should endeavour to gather data on the refill of some air conditioning systems to reflect its fugitive emissions.
- Commuting data has not been reported for the Lithuania office and Hungary Zrt office requiring the use
  of benchmarks based on national averages and previous year data. The company should consider
  conducting a survey to better understand the commuting patterns and move away from benchmarking.
- Similarly, data on district heating was not available for Hungary Zrt office, and therefore previous year
  data has been applied as a benchmark. It is acknowledged that, given the office relocation in early 2025,
  this data gap will not be an issue in future appraisals.
- Some of the business travel data had to be estimated (i.e., taxi trips) during calculations for Hungary Zrt
  office based on last year's data. While these journeys are unlikely to have a material impact on the

carbon footprint, Zenitech should continue to evaluate its travel data collection processes, with the aim of collating a full dataset to avoid underestimation of emissions.

 It is understood that, to date, Zenitech has reported contractors / freelancers within their full-time employee total and, therefore, these workers have been addressed in the same way as an employee.
 Consideration in the future could be given to separating out workers with these types of contracts, which could then be reported under a distinct "Freelancer" category under Scope 3.

For future carbon footprints, it is requested that the data is compiled and submitted in one questionnaire for the company.

Additionally, this report has highlighted potential GHG emission sources outside the current appraisal boundary which may materially contribute to Zenitech's GHG inventory. A scoping exercise is recommended to identify these potential Scope 3 emissions, and to assess their likely impact and the availability of data. This should be undertaken with consideration of the GHG Protocol's Corporate Value Chain (Scope 3) Standard.

At this point, a pragmatic approach to expanding the boundary of Scope 3 should be mapped out. In the short term, increasing the understanding of Scope 3 can result in emissions that appear inflated. However, this is generally understood within the industry.

Ensphere anticipates that the most material, yet challenging, Scope 3 category to incorporate would be Category 1 – Purchased Goods and Services. Some of the data may need to be provided by suppliers. Zenitech may wish to consider proactively engaging with suppliers to signal future expectations in this area.

To date, comparing Sovereign Capital Partners' portfolio companies has been a useful benchmark for contextualising each company's emissions. However, as Scope 3 inventories become more tailored to each company—reflecting the specific goods and services they procure—their GHG inventories are likely to diverge and may result in direct comparisons becoming less meaningful.

#### Decarbonisation

One of the first steps to a decarbonisation journey, after the baseline is established, should be to set targets. The journey to net zero is dependent on many factors and, once a trajectory has been established, Zenitech will be able to monitor its progress year-on-year against its targets.

Zenitech initially reported a 20% energy-saving target for Hungary Kft. However, going forward, there will be only one Hungarian office, located in a more modern building, so this target may need to be reevaluated.

There have already been some actions taken towards decarbonisation, and its office consolidations and relocations are considered to be good steps. For future actions, it is recommended that Zenitech considers the GHG Mitigation Hierarchy (see Figure 5.1).



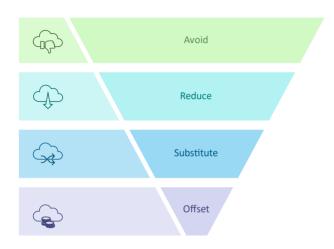


Figure 5.1 - GHG Mitigation Hierarchy

#### Scope 1 and 2

Zenitech is already taking steps as going forward, there will be only one Hungarian office, officially named Zenitech Consulting Zrt, located in a more modern building. Hungary Zrt office is relocating to this building with individual metering while the Hungary Kft office is being liquidated, and its employees have been moved under Zenitech Consulting Zrt. Additionally, energy efficiency measures have been implemented in some offices, such as LED lighting and motion sensors.

Hungary Kft reported the implementation of operational efficiency measures, including reducing heating in office areas during weekends, outside working hours, and during weekday lunch breaks from 11:30 to 13:00. However, this building will not be occupied in the next appraisal period as discussed above.

Potentially, further office relocations and more widespread adoption of similar good practice measures at other sites could be considered.

As a long-term solution, it would also be prudent to transition away from fossil fuel combustion and ensure all heating is electric. In practice this would mean either retrofit of the office (which would potentially need to be driven by a landlord) or office relocation. This change is particularly relevant for the Romanian office, where Scope 1 emissions would shift into Scope 2. Its applicability to the new Hungarian office will depend on the specifics of the relocation and the extent to which Scope 1 emissions exist.

Carbon savings can also be achieved in the shorter term. Whilst decarbonisation of electricity supply in the different countries Zenitech operates may take decades, "green tariff" energy is available now which does not contribute to the GHG inventory, when using a market-based approach. It is recommended that all possible offices adopt a green tariff or implement on-site renewable energy production. While Hungary Kft previously reported that 50% of its energy came from renewable energy, it will have to be determined if renewable energy will continue to be used based on the new office building.

#### Scope 3

The significant majority of Zenitech's carbon footprint relates to Scope 3 emissions. These emissions are inherently more challenging to control, but reduction opportunities will be present across the various sources – some more obvious than others.

For example, though most companies must undertake at least some business travel, it is clear that minimising the number of trips and selecting lower carbon methods of transport will reduce emissions.

For other sources, the means by which they can be reduced can be somewhat more challenging and are likely to require engagement and collaboration with stakeholders. Engaging and encouraging employees to participate in emissions reductions can be a strategy to not only reduce a company's emissions, but also their employees' carbon footprints outside of work.

Although it may not always be feasible to implement, promoting public transport use and cycle-to-work schemes can be effective in reducing employee vehicle use, which currently accounts for the highest transport mileage compared to lower carbon alternatives. Zenitech has reported that in Lithuania, movement initiatives are already implemented during the summer to encourage employees to walk more and ride bicycles. Expanding such initiatives to other offices could further support sustainable commuting.

In addition to internal efforts, Zenitech should also consider engaging with external stakeholders, such as clients and supply chain partners, to further drive emissions reductions across its broader network.

In some cases, it may be possible to select suppliers which would have lower associated emissions. For instance, Vilnius, Lithuania has already taken steps in this direction by sourcing team lunches from suppliers within the same building, who deliver meals on foot using mobile racks.

Beyond the broader environmental benefits that collective efforts bring, an active engagement approach will also be required to improve Zenitech's understanding of its emissions (see data quality section above). Encouraging those responsible for Scope 3 emissions to measure and reduce their GHG emissions should, in the long run, contribute to lowering Zenitech's overall carbon footprint as third-party GHG emissions decrease.

#### Base Year

To establish a better basis for comparison, Zenitech may wish to consider redefining its base year when it comes to setting its targets. Currently, 2022 is understood to be the base year since the 2021 appraisal only



included the UK location, however, additional sources of emissions have been included in subsequent appraisals.

Redefining the base year should provide a fairer comparison and a way to better track progress in decarbonisation and carbon neutrality efforts.

## **Carbon Neutrality**

The last rung in the GHG Mitigation Hierarchy is to offset and, indeed, increasingly companies are looking to mitigate their impacts, while they are on the decarbonisation pathway. At least in the short term, there will be emissions that the company cannot entirely reduce or control, a company's unabated emissions, especially those where there is a dependence on third parties to decarbonise.

Offsetting carbon emissions would result in a state of carbon neutrality – where a company's GHG emissions have been counterbalanced by investing in projects outside the company's value chain. Though offsetting should not be used as a strategy for decarbonisation, purchasing offsets can go some way towards compensating against the company's climate impact. As such, it is recommended that any external messaging around carbon offsetting be considered carefully.

Should this be of interest, it is recommended that offsetting options be explored in detail to ensure they are credible and aligned to the company's ethos.



# Appendices

# A. Background Information

The carbon footprint calculations have been undertaken with consideration of the methodology presented within the GHG Protocol Corporate Accounting and Reporting Standard and British Standard BS EN ISO 14064-1:2019 Greenhouse gases Part 1: Specification with auidance at the organisation level for quantification and reporting of greenhouse gas emissions and removals.

## **Organisational Boundary**

The GHG Protocol allows for two distinct approaches to be used to consolidate GHG emissions: (a) the equity share approach; and (b) the control approach. Control can be defined in either financial or operational terms; and when reporting GHG emissions in this manner, the organisation should choose between either criterion.

A financial control approach aligns more closely to financial reporting (assets and operations tend to be included on an entity's balance sheet), whereas operational control best reflects the ability you have to affect GHG emissions from assets and operations.

Some degree of flexibility is present in this regard. However, if the reporting company fully owns all its operations, its organisational boundary should remain consistent regardless of the approach taken.

Table Appendix A.1 – Approaches for setting organisational boundaries

#### Equity Share Approach Control Approach An organisation accounts for GHG emissions from GHG emissions are considered from operations over operations according to its share of equity in the which an organisation has control. Control is defined as operation. either: Typically, the share of economic risk and rewards in an Operational operation is aligned with the organisation's percentage ownership. An organisation has the An organisation can influence the financial authority to introduce and operational policies and implement operating policies at the operation. of an operation or asset gains economic from benefits activities.

#### **Direct and Indirect Emissions**

Within the relevant Standards, GHG emissions are generally distinguished as being either "direct" or "indirect".

In GHG Protocol terminology, emissions have been broken down into three "Scopes" – Scope 1, Scope 2, and Scope 3 – to help delineate direct and indirect emission sources, improve transparency, and provide a framework for different types of organisations, climate policies and business goals.

Scope 3, emissions associated with a company's 'value chain' is further divided into 15 Categories of emissions. These can be "upstream" (Categories 1 - 8) or "downstream" (Categories 9 - 15) to an organisation.

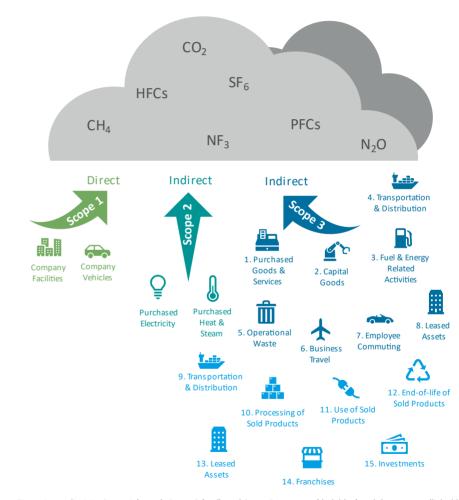


Figure Appendix A.1 - Scope 1 (green), Scope 2 (teal), and Scope 3 upstream (dark blue) and downstream (light blue) emissions, as defined by the GHG Protocol



### **Carbon Offsets and Credits**

**Carbon offsetting** can compensate for emissions by funding or 'purchasing' negative emissions elsewhere. Considering the cost that would be required to completely offset GHG emissions, resulting in <u>carbon</u> neutrality, can be one way to put carbon footprints into perspective.

The price of offsetting per  $tCO_2e$  can vary depending on the quality and project type. There are several credible offset programmes (PAS 2060 compliant) which verify projects using strict criteria, for instance Gold Standard, Verified Carbon Standard and UK Woodland Carbon Code.

However, it should be noted that there is much discussion surrounding the price of carbon and the true value of offsetting mechanisms and even some of the biggest providers have been subject to criticism.

Furthermore, the above estimations not only provide a simplistic view of carbon offsetting, which may not necessarily reflect the true net loss (or, indeed, gain in the worst-case scenario) when considering all knock-on effects of the project. In addition, there are a finite number of projects that can be used to offset carbon. Often, the most cost-effective projects will be utilised first, but with many companies committed to Net Zero, there is a possibility that less cost-effective projects would need to be turned to in order to offset. In fact, it would not be unexpected for carbon offset prices to be up to two or three hundred pounds per tonne, if not higher.

Conversely, Emissions Trading Systems, such as the EU ETS, are 'cap and trade' systems which set a limit on the total amount of GHGs that can be emitted by regulated companies. **Carbon trading** is the buying and selling of such permits and credits. Carbon credits and the carbon trade are authorised by governments with the primary goal of gradually reducing overall carbon emissions.

There are voluntary markets, however, there is scepticism around the quality of credits within these markets.

Research conducted by University College London has predicted that demands for carbon credits will increase five to ten-fold in the next decade due to the number of pledges to achieve Net Zero, thus driving the price for carbon higher.....<sup>2</sup>In addition, if governments are able to reduce emissions through domestic policies successfully, fewer carbon credits will be available to businesses through the voluntary market.

The prices presented within Chapter 3 of the present report should be considered representative and for contextual purposes. They are not intended as a recommendation.



Figure Appendix A.2 – Typical offsetting processes for offsetting

 $<sup>^2\,\</sup>underline{\text{https://www.ucl.ac.uk/news/2021/jun/ten-fold-increase-carbon-offset-cost-predicted},\,accessed\,12th\,February\,2025.$ 



# **B.** Acronyms and Definitions

# Acronyms

CH₄	Methane
CIBSE	Chartered Institution of Building Services Engineers
CIRIA	Construction Industry Research and Information Association
CO <sub>2</sub>	Carbon Dioxide
CO <sub>2</sub> e	Carbon Dioxide Equivalent
EPC	Energy Performance Certificate
ESG	Environmental, Social & Governance
FTE	Full Time Equivalent
GHG	Greenhouse Gas
GWP	Global Warming Potential
HFCs	Hydrofluorocarbons
ISO	International Standards Organisation
NF <sub>3</sub>	Nitrogen Trifluoride
N₂O	Nitrous Oxide
PFCs	Perfluorocarbons
SBT	Science Based Targets
SF <sub>6</sub>	Sulphur-hexafluoride
T&D	Transmission and Distribution
UK-BEIS	Department for Business, Energy & Industrial Strategy (UK)
UNFCCC	United Nations Framework Convention on Climate Change
WRAP	Waste and Resources Action Programme
WTT	Well to tank

# **Definitions**

Cradle-to-Gate Inventory	A partial life cycle of a product, from material acquisition through to when the product enters the reporting company's facility
Cradle-to-Grave	Removals and emissions of a studied product from material acquisition through to end-of-life $$
Control Approach	Under the control approach, a company accounts for 100% of the GHG emissions from operations over which it has control. It does not account for GHG emissions from operations in which it owns an interest but has no control. Control can be defined in either financial or operational terms.
Conversion Factor	A factor allowing GHG emissions to be estimated from a unit of available activity data (e.g., tonnes of fuel consumed) and absolute GHG emissions
CO₂ equivalent (CO₂e)	The universal unit of measurement to indicate the GWP of each of the six GHGs, expressed in terms of the GWP of one unit of carbon dioxide. It is used to evaluate releasing (or avoiding releasing) different GHGs against a common basis
Direct GHG Emissions	$\label{thm:equiv} \mbox{Emissions from sources that are owned or controlled by the reporting company.}$
Downstream	GHG emissions or removals associated with processes that occur in the life cycle of a product subsequent to the processes owned or controlled by the reporting company
Equity Control Approach	Under the equity share approach, a company accounts for GHG emissions from operations according to its share of equity in the operation. The equity share reflects economic interest, which is the extent of rights a company has to the risks and rewards flowing from an operation.
Extrapolated	Data specific to another process or product that has been adapted or customised to resemble more closely the conditions of the given process.
Financial Control	The company has financial control over the operation if the former can direct the financial and operating policies of the latter with a view to gaining economic benefits from its activities.
Fugitive Emissions	Emissions that are not physically controlled but result from the intentional or unintentional releases of GHGs. They commonly arise from the production, processing transmission storage and use of fuels and other chemicals.
Gate-to-Gate	The emissions and removals attributable to a product while it is under the ownership or control of the reporting company.
Greenhouse Gases	For the purposes of this standard, GHGs are the seven gases listed in the Kyoto Protocol: $CO_2$ , $CH_4$ , $N_2O$ , HFC, PFCs, SF $_6$ , and $NF_3$ .



The boundaries that determine the direct and indirect emissions associated with **GHG Capture** Collection of GHG emissions from a GHG source for storage in a sink. Operational Boundaries operations owned or controlled by the reporting company. This assessment allows a **GHG Credit** GHG offsets can be converted into GHG credits when used to meet an externally company to establish which operations and sources cause direct and indirect imposed target. A GHG credit is a convertible and transferable instrument usually emissions, and to decide which indirect emissions to include that are a consequence bestowed by a GHG program. of its operations. **GHG Offset** Offsets are discrete GHG reductions used to compensate for (i.e., offset) GHG Operational Control A company has operational control over an operation if the former or one of its emissions elsewhere, for example to meet a voluntary or mandatory GHG target or subsidiaries has the full authority to introduce and implement its operating policies cap. Offsets are calculated relative to a baseline that represents a hypothetical at the operation. This criterion is consistent with the current accounting and scenario for what emissions would have been in the absence of the mitigation reporting practice of many companies that report on emissions from facilities. project that generates the offsets. To avoid double counting, the reduction giving which they operate (i.e., for which they hold the operating license). rise to the offset must occur at sources or sinks not included in the target or cap for which it is used Organisational Boundaries The boundaries that determine the operations owned or controlled by the reporting company, depending on the consolidation approach taken (equity or control GHG Protocol Initiative A multi-stakeholder collaboration convened by the World Resources Institute and approach). World Business Council for Sustainable Development to design, develop and promote the use of accounting and reporting standards for business. Renewable Energy Energy taken from sources that are inexhaustible, e.g., wind, water, solar, geothermal energy, and biofuels. GHG Protocol Corporate The GHG Protocol Corporate Accounting and Reporting Standard provides Accounting and Reporting requirements and guidance for companies and other organisations preparing a Science Based Targets Provides a clearly defined pathway for companies to reduce greenhouse gas Standard Initiative emissions, helping prevent the worst impacts of climate change and future-proof corporate-level GHG emissions inventory. business growth. Targets are considered 'science-based' if they are in line with what **GHG Protocol Project** An additional module of the GHG Protocol Initiative addressing the quantification of the latest climate science deems necessary to meet the goals of the Paris **Quantification Standard** GHG reduction projects. This includes projects that will be used to offset emissions elsewhere and/or generate credits. Scope Defines the operational boundaries in relation to indirect and direct GHG emissions **GHG Removals** Absorption or sequestration of GHGs from the atmosphere. Scope 1 inventory A reporting organisation's direct GHG emissions. **GHG Sink** Any physical unit or process that stores GHGs; usually refers to forests and underground/deep sea reservoirs of CO2. Scope 2 inventory A reporting organisation's emissions associated with the generation of electricity, heating/cooling, or steam purchased for own consumption. **GHG Sources** Any physical unit or process which releases GHG into the atmosphere. A reporting organisation's indirect emissions other than those covered in scope 2. Scope 3 inventory Global Warming Potential A factor describing the radiative forcing impact (degree of harm to the atmosphere) of one unit of a given GHG relative to one unit of CO2. Uncertainty A general and imprecise term which refers to the lack of certainty in emissionsrelated data resulting from any causal factor, such as the application of non-Indirect GHG Emissions Emissions that are a consequence of the operations of the reporting company but representative factors or methods, incomplete data on sources and sinks, lack of occur at sources owned or controlled by another company. transparency etc. Reported uncertainty information typically specifies a quantitative estimate of the likely or perceived difference between a reported value and a Inventory A quantified list of an organisation's GHG emissions and sources. qualitative description of the likely causes of the difference. An imaginary line that encompasses the direct and indirect emissions that are Inventory Boundary GHG emissions or removals associated with processes that occur in the life cycle of Upstream included in the inventory. It results from the chosen organisational and operational a product prior to the processes owned or controlled by the reporting company. boundaries. Value Chain The series of stages involved in producing a product or service that is sold to ISO 14064-1 Specifies principles and requirements at the organisation level for quantification consumers, with each stage adding to the value to the product or service: and reporting of GHG emissions and removals. It includes requirements for the design, development, management, reporting and verification of an organisation's Value Chain Emissions Emissions from the upstream and downstream activities associated with the GHG inventory. operations of the reporting company. Kvoto Protocol Operationalises the United Nations Framework Convention on Climate Change by Verification An independent assessment of the reliability (considering completeness and committing industrialised countries and economies in transition to limit and reduce accuracy) of a GHG inventory. GHG emissions in accordance with agreed individual targets.



# C. Detailed Results and Methodology

# Methodology

## **General Methodology**

The methodology has been based on the guidance presented within the GHG Protocol Corporate Accounting and Reporting Standard and British Standard BS EN ISO 14064-1:2019 Greenhouse gases Part 1: Specification with guidance at the organisation level for quantification and reporting of greenhouse gas emissions and removals.

The following formula has been applied to calculate GHG emissions:

Activity Data x GHG Conversion Factor = GHG Emissions

## Reporting

Reported emissions have been expressed in terms of carbon dioxide equivalent ( $CO_2e$ ), which considers GHG emissions from all seven of the greenhouse gases, as defined by the Kyoto Protocol:

CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFC, PFCs, SF<sub>6</sub>, and NF<sub>3</sub>.

Where conversion factors are available, the emissions have been presented for each of the types of gases, within the data summary in Appendix D.

## **Facilities**

The following facilities have been considered within the assessment:

- Kaunas, Lithuania: Magnum verslo centras, Karaliaus Mindaugo pr. 38, 44307, Kaunas
- Vilnius, Lithuania: City verslo centras, Žalgirio g. 90, 09300 Vilnius
- Cluj-Napoca, Romania: Bulevardul 1 Decembrie 1918, 400699 Cluj-Napoca
- Miskolc, Hungary: Arany János tér 1. C- D épület, Hungary, 3526 Miskolc
- Budapest, Hungary: Gábor Dénes utca 4. Infopark "C". ép., 1117 Budapest
- UK: No physical office

#### Limitations

This assessment comprises a "headline" calculation for the purposes of establishing a ballpark carbon footprint, intended as a basis for further works. It is limited by the allocated time for the assessment and the availability of data.

Where there have been instances whereby data is not available from the company and, in such cases, where deemed appropriate, a reasonable benchmark has been applied based on national and / or industrial averages.



# **Stationary Combustion**



Table Appendix C.1 - GHG emissions associated with natural gas consumption

Facility	Consumption (m³)	GHG Emissions (kgCO₂e)
Romania	1,742	3,564
Hungary Kft	510	1,043
		4,607

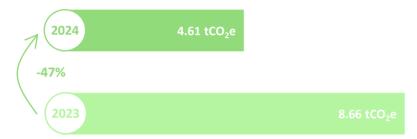


Figure Appendix C.1 - Change in stationary combustion emissions between 2023 and 2024

Table Appendix C.2 – Methodology and discussion regarding GHG emissions associated with stationary combustion

Conversion Factor	UK-BEIS 2024
Data Source	SCP ESG Carbon Questionnaire
Methodology	The consumption in cubic meters was provided, which has been converted to $\mbox{kgCO}_2\mbox{e}.$
Discussion	There has been a 47% decrease in natural gas consumed compared to 2023. This is primarily due to the diesel aggregator in the Hungary Zrt office, which was not refilled during the appraisal year.
	Additionally, both offices that reported lower natural gas consumption compared to the previous year.

# **Mobile Combustion**



Table Appendix C.3 - GHG emissions associated with mobile gas consumption

Facility	Type of Fuel	Distance (km)	GHG Emissions (kgCO₂e)
Hungary Zrt	Hybrid	66,738	8,414
Hungary Zrt	Petrol	175,232	28,826
			37,239

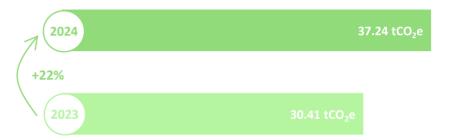


Figure Appendix C.2 - Change in mobile combustion emissions between 2023 and 2024

Table Appendix C.4 – Methodology and discussion regarding GHG emissions associated with stationary combustion

Conversion Factor	UK-BEIS 2024
Data Source	SCP ESG Carbon Questionnaire
Methodology	The distance per type of fuel in km was provided, which has been converted to kgCO2e.
Discussion	There has been a 22% increase in emissions associated with fuel used within the company's fleet compared to 2023. Although diesel vehicles were not used in 2024, the increased distances travelled by both hybrid and petrol vehicles contributed to this rise.



# **Fugitive Emissions**



Table Appendix C.5 - GHG emissions associated with fugitive emissions

Facility	Refrigerant Type	Quantity (kg)	GHG Emissions (kgCO₂e)
Romania	Carbon Dioxide	1	1
			1

Table Appendix C.6 – Methodology and discussion regarding GHG emissions associated with fugitive emissions

Conversion Factor	UK-BEIS 2024
Data Source	SCP ESG Carbon Questionnaire
Methodology	The quantity gas refilled in kg was provided.
Discussion	Fugitive emissions have been accounted for in this appraisal due to the refilling of a refrigerant suppressant in the Romanian office.

# **Purchased Electricity**



Table Appendix C.7 – GHG emissions associated with purchased electricity

Facility	Consumption (kWh)	GHG Emissions (kgCO <sub>2</sub> e)	
		Market-Based	Location-Based
Romania	27,926	7,769	7,769
Vilnius Lithuania	20,260	3,328	3,328
Kaunas Lithuania	9,800	1,610	1,610
Hungary Kft	1,208	140	281
Hungary Zrt	30,686	7,135	7,135
		19,982	20,122



Figure Appendix C.3 - Change in purchased electricity emissions between 2023 and 2024

Table Appendix C.8 – Methodology and discussion regarding GHG emissions associated with purchased electricity

Conversion Factor	UK-BEIS 2024
Data Source	SCP ESG Carbon Questionnaire
Methodology	Data in kWh has been provided for all offices and converted to kgCO₂e.
Discussion	Both market-based and location-based emissions have decreased since 2023, primarily due to reduced electricity consumption reported across all offices.



# **Electric and Hybrid Vehicles**



Table Appendix C.9 - GHG emissions associated with electric and hybrid vehicles consumption

Facility	Vehicle Type	Consumption (km)	GHG Emissions (kgCO <sub>2</sub> e)
Hungary Zrt	Battery Electric	12,400	540
			540



Figure Appendix C.4 - Change in electric and hybrid vehicles emissions between 2023 and 2024

Table Appendix C.10 – Methodology and discussion regarding GHG emissions associated with electric and hybrid vehicles

Conversion Factor	UK-BEIS 2024
Data Source	SCP ESG Carbon Questionnaire
Methodology	The consumption in km was provided, which has been converted to $\mbox{kgCO}_2\mbox{e}.$
Discussion	While the consumption in km increased compared to 2023, there has been a minor decrease in emissions due to a lower conversion factor in 2024.

# **Purchased Heat and Steam**



Table Appendix C.11 - GHG emissions associated with heat and steam consumption

Facility	Consumption (kWh)	GHG Emissions (kgCO₂e)
Hungary Zrt	167,599	30,109
		30,109



Figure Appendix C.5 - Change in purchased heat and steam emissions between 2023 and 2024

Table Appendix C.12 – Methodology and discussion regarding GHG emissions associated with purchased heat and steam

Conversion Factor	UK-BEIS 2024
Data Source	SCP ESG Carbon Questionnaire (2023)
Methodology	No information was available for 2024, therefore and in the absence of more appropriate information, 2023 data (kWh) has been applied as a benchmark and has been converted to $kgCO_2e$ .
Discussion	Given Hungary Zrt's relocation in January 2025, the information gap regarding district heating should no longer be an issue for the next assessment



# **Water Supply**



Table Appendix C.13 – GHG emissions associated with water supply

Facility	Consumption (m³)	GHG Emissions (kgCO₂e)
Cluj-Napoca, Romania	95	15
Vilnius, Lithuania	340	52
Kaunas, Lithuania	81	12
Hungary Kft	6	1
Hungary Zrt	470	72
Homeworking	2257	346
		498



Figure Appendix C.6 - Change in water supply emissions between 2023 and 2024

Table Appendix C.14 – Methodology and discussion regarding GHG emissions associated with water supply

Conversion Factor	UK-BEIS 2024
Data Source	SCP ESG Carbon Questionnaire CIRIA
Methodology	Data in m <sup>3</sup> has been provided for all offices and converted to kgCO <sub>2</sub> e.  For the purposes of benchmarking, it has been assumed that employees working from home operate in the same way as those in the office and therefore associated emissions are equivalent.  CIRIA Key Performance Indicators for Water Use in Offices (W011) has been used to derive a benchmark for water use (m³/FTE/year) for the UK homeworkers.

	For international homeworkers, based on the water consumption at these offices, a benchmark for water supply per employee has been derived per office and applied to the homeworking FTE. $ Consumption \ in \ m^3 \ has \ been \ converted \ to \ kgCO_2e. $
Discussion	With the exception of the Lithuanian offices, all other offices reported lower water consumption compared to 2023. However, the inclusion of homeworking employees' water consumption, estimated using a benchmark, resulted in an increase in associated emissions.



# **Paper Use**



Table Appendix C.15 – GHG emissions associated with paper use

Consumption (reams)	Material Source	GHG Emissions (kgCO <sub>2</sub> e)
39	Primary material production	127
		127



Figure Appendix C.7 - Change in paper use emissions between 2023 and 2024

Table Appendix C.16 – Methodology and discussion regarding GHG emissions associated with paper use

Conversion Factor	UK-BEIS 2024
Data Source	SCP ESG Carbon Questionnaire
Methodology	The consumption was provided in reams, and a series of benchmarks were implemented in order to convert to tonnes. This has, in turn, been converted to $kgCO_2e$ .
Discussion	There was a decrease in emissions due lower paper use reported, even though there was a higher conversion factor in 2024.

# Catering



Table Appendix C.17 – GHG emissions associated with catering

Type of Meal	Number of Meals	GHG Emissions (kgCO₂e)
Average Meal	1,609	7,562
Vegetarian Meal	1,893	5,397
Non-alcoholic Beverage	510	102
Alcoholic Beverage	510	954
Snack	12,218	24,679
		38,693

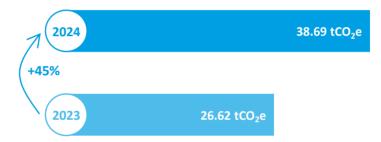


Figure Appendix C.8 - Change in catering emissions between 2023 and 2024

Table Appendix C.18 – Methodology and discussion regarding GHG emissions associated with catering

Conversion Factor	Carbon Footprint Methodology for the Olympic Games, International Olympic Committee, December 2018
Data Source	SCP ESG Carbon Questionnaire
Methodology	Romania has reported to provide snack daily, and Lithuania reported a weekly team lunch. Therefore, an estimation of the "FTE" of office workers (Scope 3 –Homeworking) has been converted into to a number of meals with reference to the number of working days per year. The catering provided during the various events held by Zenitech's offices has also been converted into a number of meals / beverages, based on the number of attendees.  The number of meals has been converted to kgCO <sub>2</sub> e using appropriate conversion factors.
Discussion	Some offices held more events this year, with an increase in attendees per event. However, the main driver of the rise in emissions was the increased provision of snacks. One office began offering them daily compared to twice a week last year, and they were also included as part of some events.



Zenitech has included freelancers / contractors within their FTE data and, therefore, there are no emissions included under this categorisation.

# IT Equipment

Table Appendix C.19 – GHG emissions associated with IT equipment purchased

Item	Number	GHG Emissions (kgCO₂e)
Desktop computer	1	249
Laptop	59	4,401
Monitor	3	840
Printer	4	1,452
Scanner	1	174
Small items	133	376
Television	4	2,188
		9,680



Figure Appendix C.9 - Change in purchased IT equipment emissions between 2023 and 2024

 $Table\ Appendix\ C.20-Methodology\ and\ discussion\ regarding\ GHG\ emissions\ associated\ with\ IT\ equipment\ purchased$ 

Conversion Factor	UK-BEIS 2024
Data Source	SCP ESG Carbon Questionnaire Sustainability Exchange
Methodology	The number of items of IT equipment purchased during 2024 has been provided and converted to tonnage using benchmarks of weight per item. The purchases in tonnes have been converted to $kgCO_2e$ .
Discussion	There has been an increase in the associated emissions due to more reported items purchased.



# **Transmission and Distribution**



Table Appendix C.21 – GHG emissions associated with transmission and distribution of electricity

Item	Activity Data	GHG Emissions (kgCO₂e)
Office working	89,880 kWh	2,343
Remote working	78,781 kWh	2,038
Electric Vehicle Hungary Zrt	12,400 km	48
District Heater Hungary Zrt	167,599	1,039
		5,468



Figure Appendix C.10 - Change in transmission and distribution emissions between 2023 and 2024

Table Appendix C.22 – Methodology and discussion regarding GHG emissions associated with transmission and distribution

Conversion Factor	UK-BEIS 2024
	Carbon Footprint Ltd's GHG Emission Factors for International Grid Electricity
Data Source	SCP ESG Carbon Questionnaire
	EcoAct Homeworking Emissions Whitepaper
Methodology	Activity data calculated for Scope 2 – Purchased Electricity, Scope 2 – Electric and Hybrid Vehicles, Scope 2 – Heat and Steam, and Scope 3 – Homeworking outside the UK have been directly considered. For remote working within the UK, consideration has been paid to the methodology within EcoAct's whitepaper to convert working hours to consumption of electricity in kWh.  Consumption in kWh has been converted to kgCO <sub>2</sub> e.
Discussion	Transmission and distribution emissions decreased due to lower electricity and electric vehicle consumption, and fewer remote workers.

## Well to Tank



Table Appendix C.23 – Well to tank GHG emissions

Source	GHG Emissions (kgCO <sub>2</sub> e)
Fuels	27,216
Company Vehicle	10,401
Electricity	9,013
Heat and Steam	5,894
Business Travel	4,760
Commute	23,558
	80,841



Figure Appendix C.11 - Change in well to tank emissions between 2023 and 2024

Table Appendix C.24 – Methodology and discussion regarding well to tank GHG emissions for fuel and electricity

Conversion Factor	UK-BEIS 2024
	Carbon Footprint Ltd's GHG Emission Factors for International Grid Electricity
Data Source	SCP ESG Carbon Questionnaire
	EcoAct Homeworking Emissions Whitepaper
Methodology	Activity data calculated for stationary combustion, mobile combustion, purchased electricity, electric and hybrid vehicles, purchased heat and steam, business travel, commuting, and international homeworking have been directly considered. For remote working within the UK, consideration has been paid to the methodology within EcoAct's whitepaper to convert working hours to consumption of electricity and gas in kWh. Activity data has been converted to kgCO <sub>2</sub> e.
Discussion	Overall emissions have decreased due to reductions in all categories, except for commuting.



## Waste



Table Appendix C.25 – GHG emissions associated with waste disposal

Facility	Waste (tonnes)	End of Life Treatment	GHG Emissions (kgCO₂e)
Offices	2.51	Diversion from landfill	16
	9.18	Landfill	4,755
Homeworkers	37.28	Landfill	19,396
			24,167



Figure Appendix C.12 - Change in operational waste emissions between 2023 and 2024

Table Appendix C.26 – Methodology and discussion regarding GHG emissions associated with waste disposal

Conversion Factor	UK-BEIS 2024
Data Source	SCP ESG Carbon Questionnaire
Methodology	Zenitech has provided waste arisings and disposal method for all offices  Based on the waste arisings at these offices, and assuming working from home employees generate the same waste, a benchmark for waste arisings per employee has been derived per office and applied to the homeworking FTE. As further information on the destination has not been provided, a worst-case scenario of landfill has been applied.
Discussion	This year has been the first year that Zenitech has been able to provide information on waste disposal for all its offices, with the total amounts per office being lower than the average benchmark previously applied. Furthermore, the conversion factors for diversion from landfill are significantly lower than that for landfill.

## **Wastewater Treatment**



Table Appendix C.27 – GHG emissions associated with wastewater treatment

Facility	Consumption (m³)	GHG Emissions (kgCO <sub>2</sub> e)
Cluj-Napoca, Romania	95	18
Vilnius, Lithuania	340	63
Kaunas, Lithuania	81	15
Hungary Kft	6	1
Hungary Zrt	470	87
Homeworking	2257	419
		604



Figure Appendix C.13 - Change in wastewater treatment emissions between 2023 and 2024

Table Appendix C.28 – Methodology and discussion regarding GHG emissions associated with wastewater treatment

Conversion Factor	UK-BEIS 2024
Data Source	SCP ESG Carbon Questionnaire CIRIA
Methodology	It has been assumed that wastewater treated is equivalent to water supplied. Therefore, please refer to the methodology within Water Supply above. $ Consumption\ in\ m3\ has\ been\ converted\ to\ kgCO_2e. $
Discussion	This year there has been an increase in emissions associated with water supply. This has principally been driven by all homeworking employees being taken into consideration for water consumption.



# **Business Travel**



Table Appendix C.29 – GHG emissions associated with business travel

Transport Method	Activity Data	GHG Emissions (kgCO₂e)
Taxi	1,467 km	305
Employee Vehicle / Hire Car	2,523 km	421
Rail	16,740 passenger.km	560
Flights	207,591 passenger.km	36,031
Hotel Stays	1,013 room nights	18,999
		56,316



Figure Appendix C.14 - Change in business travel emissions between 2023 and 2024

Table Appendix C.30 – Methodology and discussion regarding GHG emissions associated with business travel

Conversion Factor	UK-BEIS 2024
Data Source	SCP ESG Carbon Questionnaire  Hotel Footprints
Methodology	Distances per method of transport were reported, which have been converted to $kgCO_2e$ . The number of hotel room nights was provided by country, which have been converted to $kgCO_2e$ . Where the UK-BEIS database did not include a conversion factor for the specific country, attention has been paid to factors presented at https://www.hotelfootprints.org/.
Discussion	Even though all distances per transport method have decreased compared to the previous year, the 14% increase is due to the increase in overall nights reported within hotels.

# **Employee Commute**



Table Appendix C.31 – GHG emissions associated with employee commuting

FTE Commuting	GHG Emissions (kgCO₂e)
142	92,281
	92,281



Figure Appendix C.15 - Change in commuting emissions between 2023 and 2024

Table Appendix C.32 – Methodology and discussion regarding GHG emissions associated with employee commuting

Conversion Factor	UK-BEIS 2024
Data Source	SCP ESG Carbon Questionnaire
	Department for Transport's National Travel Survey
Methodology	Hungary Kft: Data in km per transport method has been provided.
	Romania: One-way commute distances and the percentage of employees using each transport method have been reported. The total "FTE" number of office workers calculated was used to calculate the total distances per transport method per year.
	Hungary Zrt: No data was provided. Last year's data was used as a benchmark to estimate the percentage of employees and total distances travelled per transport method. The total "FTE" number of office workers calculated was used to calculate the total distances per transport method per year.
	Lithuania: Zenitech do not monitor employee commute The total "FTE" number of office workers calculated was used to calculate the total distances per transport method per year and the data reported for the Department of Transport's National Travel Survey has been used to derive a benchmark of distance travelled by method of transport.
	All distances per method of transport have been converted to $kgCO_2e. \\$
Discussion	The increase in emissions had been driven by a higher number of FTE calculated to commute to the office in most of the offices.



# Homeworking



Table Appendix C.33 – GHG emissions associated with homeworking

Facility	FTE Homeworking	GHG Emissions (kgCO₂e)
All offices	273.55	53,984
		178,082

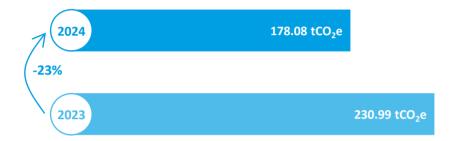


Figure Appendix C.16 - Change in homeworking emissions between 2023 and 2024

Table Appendix C.34 – Methodology and discussion regarding GHG emissions associated with homeworking

Conversion Factor	UK-BEIS 2024
Data Source	SCP ESG Carbon Questionnaire
Methodology	The percentage split of employees working remotely, working on a hybrid basis and working full time in the office has been provided for all offices. This data has been used to estimate a total "FTE" number of home workers within each location during the assessment period.  The data has, in turn, has been converted to homeworking hours and, subsequently, the country-specific conversion factor applied to calculate kgCO <sub>2</sub> e.
Discussion	The decrease in emissions has been primarily driven by a lower number of FTEs. Additionally, changes in employee breakdown, hybrid systems, and the availability of more accurate data contributed to the reduction in FTEs, consequently lowering homeworking emissions.



# D. Data Summary

Scope	Source		Greenhouse Gas Emissions (tCO₂e)			Percentage	
			Total	of CO <sub>2</sub>	of CH <sub>4</sub>	of N₂O	
Scope 1			41.85				7%
4	Stationary Comb	ustion	4.61	4.60	0.01	0.00	1%
	Mobile Combusti	on	37.24	37.04	0.08	0.12	6%
	Fugitive Emission	s	<0.01	-	-	=	<1%
Scope 2	(Market-Based)		50.63				9%
Ŷ	Purchased Electri	city					
	Mar	ket-Based	19.98	0.00	0.00	0.00	3%
	Loca	ition-Based	20.12	0.00	0.00	0.00	(3%)
<b>t</b>	Electric and Hybr	id Vehicles	0.54	0.53	0.00	0.00	<1%
	Heat and Steam		30.11	29.82	0.20	0.09	5%
Scope 3			486.76				84%
<b>-</b>	Category 1	Water Supply	0.50	-	-	-	<1%
		Paper Use	0.13	-	-	-	<1%
Ď		Catering	38.69	-	-	-	7%
FAR		Freelancers	-	-	-	-	-
	Category 2	IT Equipment	9.68	=	=	=	2%
食	Category 3	Transmission and Distribution	5.47	1.07	0.01	0.01	1%
		Well to Tank	80.84	-	-	-	14%
â	Category 5	Waste	24.17	-	-	-	4%
		Wastewater Treatment	0.60	=	=	=	<1%
<b>★</b>	Category 6	Business Travel	56.32	37.13	0.00	0.19	10%
<del>~~</del>	Category 7	Employee Commuting	92.28	91.62	0.10	0.56	16%
		Homeworking	178.08	-	-	-	31%
		Total (Market-Based)	579.24	201.81	0.40	0.97	1.39 tCO₂e/FTE
		Total (Location-Based)	579.38	201.81	0.40	0.97	1.39 tCO₂e/FTE



# E. SECR Data

Under the Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013 and the Companies (Directors' Report) and Limited Liability Partnerships (Energy and Carbon Report) Regulations 2018, large unquoted companies and LLPs must report their energy consumption data for gas, electricity, and transport fuel usage, as a minimum, associated with the company's activities in the UK, including offshore area, based on the Streamlined Energy and Carbon Reporting (SECR) requirements.

Zenitech is understood to meet the criteria for compliance with SECR.

In adherence to these guidelines, Ensphere has assessed and calculated the relevant consumption figures, which are presented in the table below.

Energy Source	Consumption (MWh)	GHG Emissions (tCO₂e)
Gas	0	0
Electricity	0	0
Transport	0	0
		0

Based on the calculated consumption figures, Zenitech's total consumption for any UK and offshore operations is below the 40MWh threshold set by the SECR guidance and, consequently, the company qualifies as a low energy user under these regulations.



# F. General Note

The report is based on information available at the time of the writing and discussions with the client during any project meetings. Where any data supplied by the client or from other sources have been used it has been assumed that the information is correct. No responsibility can be accepted by Ensphere Group Ltd for inaccuracies in the data supplied by any other party.

The review of planning policy and other requirements does not constitute a detailed review. Its purpose is as a guide to provide the context for the development and to determine the likely requirements of the Local Authority.

No site visits have been carried out, unless otherwise specified.

This report is prepared and written in the context of an agreed scope of work and should not be used in a different context. Furthermore, new information, improved practices and changes in guidance may necessitate a re-interpretation of the report in whole or in part after its original submission.

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www.enspheregroup.com

+44 (0) 20 7846 9040

United Kingdom | 55A Catherine Place, London, SW1E 6DY

España | Oficina 35, Centro de Negocios Independencia Cn, Paseo de la Independencia, 8 Duplicado, 50004 Zaragoza