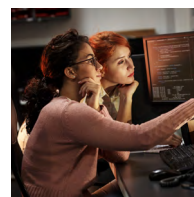
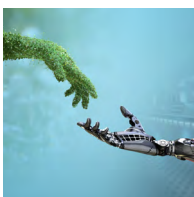
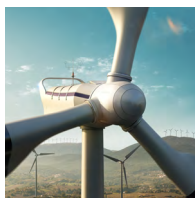


Annual Sustainability Report

2021



Introduction

The Net Zero Technology Centre Sustainability Policy was established in March 2021, with the goal of mitigating the organisation's carbon footprint, and putting us on the path to become a net zero organisation.

50%

50% reduction in emissions by 2025

100%

Net zero organisation by the end of 2030

The Net Zero Technology Centre emissions included in the analysis are associated with staff commuting, heating and electricity use, water use and waste. The Net Zero Technology Centre Sustainability Policy commits the organisation to a 50% reduction in emissions by 2025, and to be a net zero organisation by the end of 2030. This report details the organisation's ongoing efforts to achieve these goals.

Team Members



Sakshi Sircar
Project Engineer
(Offshore Energy 4.0)



Cammy Booth
Technical Assistant
(Innovation Network)



Jess Dunham
Data Analyst
(Business Intelligence)



Kirsty Robertson
People & OD Advisor
(HR)



Simona Petkova
Intern
(Research & Development)

Key Elements

The Sustainability Team is working with a “mitigation first, offsetting second” ethos, to reach net zero by 2030.

We are reducing the organisation’s Scope 1, 2 and 3 emissions, as well as inspiring the Net Zero Technology Centre personnel to look at their own individual impacts, through events such as litter picking, and the use of the carbon footprint tracking and reduction app, Pawprint.

The graphic below provides a breakdown of what’s included under Scope 1, 2 and 3 emissions.

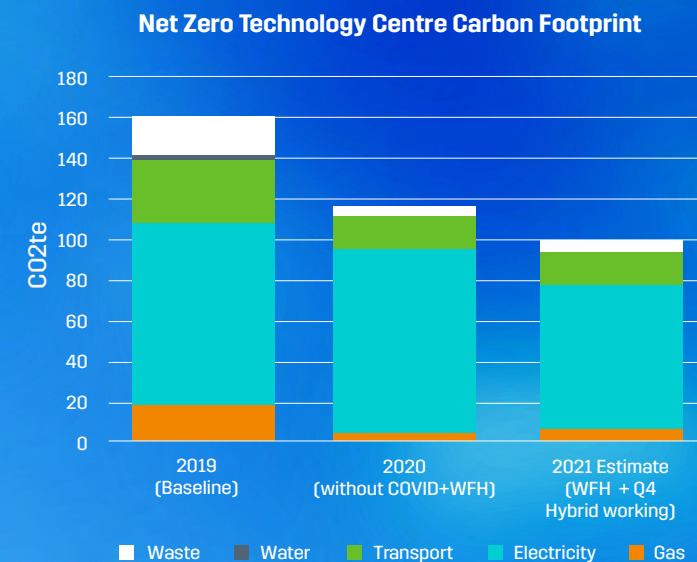


Scope	Emission Type	Definition
Scope 1	Direct Emissions	GHG emissions directly from operations that are owned or controlled by the reporting company
Scope 2	Indirect Emissions	Indirect GHG emissions from the generation of purchased or acquired electricity, steam, heating, or cooling consumed by the reporting company
Scope 3		All indirect emissions (not included in scope 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions

2019 to 2021 Carbon Footprint

The Net Zero Technology Centre calculated its carbon footprint in alignment with Greenhouse Gas (GHG) protocol. Emissions from Scope 1, 2 and 3 sources were considered, along with water and general waste. Our main sources of emissions were utilities and transport (commuting and travel for work), with general waste following behind.

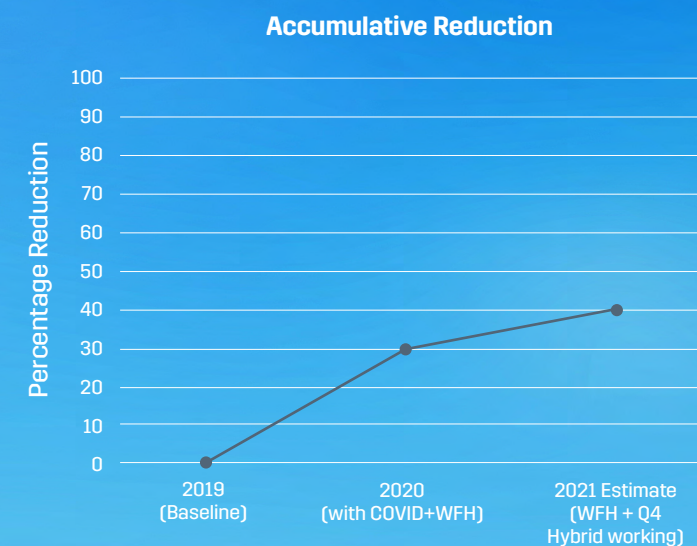
		2019 (Baseline)	2020 (with COVID + WFH)	2021 Estimate (WFH + Q4 Hybrid working)
	Staff Head Count	62	70	74
Scope 1	Gas	19	6	9
Scope 2	Electricity	78	91	71
Scope 3	Transport	51	14	15
Scope 3	Water	1	0	0
Scope 3	Waste	17	5	5
	Total CO2te	165	117	100
	CO2te/pp	2.7	1.7	1.3
	Accumulative Reduction	0.0	30%	40%



The table and graph shows the breakdown of the carbon footprint calculated from each area within Scope 1, 2, 3, with the addition of water and waste. Both Q18 and Q20 office building are included in the evaluation from 2019 onwards.

Utility data is based on Resource Efficient Scotland Surveys in 2019 and actual usage data from utility bills for Q18 and Q20.

All CO2te values are calculated using GHG Protocol Sheet.



Overall our emissions are trending downwards.

During 2020, a number of improvement works were carried out in Q18 and Q20 based on recommendations from the RES Surveys. These improvements were expected to give a reduction of 14.5tCO2e in our Scope 1 and 2. However, what we have observed is an increase in our emissions from this area over 2020, where additionally, for majority of the year the office buildings were not in full use due to the pandemic.

In 2022, we aim to investigate this further to gain some insights behind this evaluation. This can hopefully lead us to implement mitigation actions to sustain are footprint reduction and address any underlying issues.

2021 Actions Updates

| In 2021, the Net Zero Technology Centre Sustainability Team:

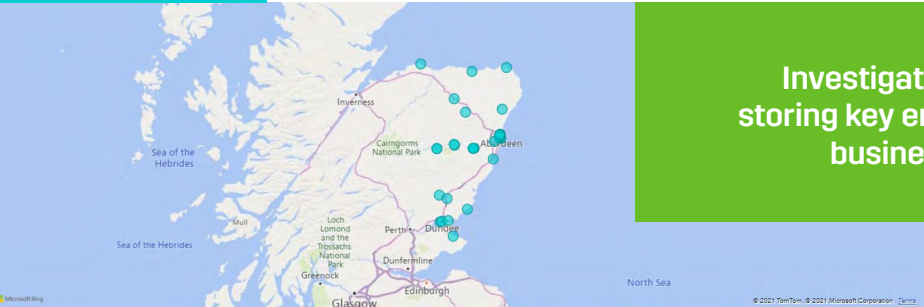


Published Net Zero Technology Centre Sustainability Policy, setting targets for reduction.



Liaised with our facilities contractors to establish a better waste management system, currently an on-going process.

Released a cycling survey and launched a Bike User Group (BUG).



Investigated best options for gathering and storing key emissions data, regarding commuting, business travel and other emissions.



Installed electric vehicle chargers at Q18 and Q20, and finalised a salary sacrifice scheme for electric vehicles.



Built and released a Sustainability Power BI report, Local Business Map and Sustainability SharePoint page and Teams channel.

Name	Address	Business Type	Website
20Twenty	11 Scott Skinner Square, Banchory AB31 5SE	Bike Shop	
A Longer Table	6 High Street, Kirriemuir, Angus DD8 4EY	Zero Waste, Local Produce	
Aberdeenshire Bicycle Works	Unit 3, Aboyne Castle, Castle Business Centre, Aboyne AB34 5JP	Bike Shop	
Alpine Bikes Aberdeen	64-70 Holburn Street, Aberdeen AB10 6BX	Bike Shop	

Know any local sustainable businesses?
Let us know at sustainabilityteam@netzerotc.com

Researched carbon accounting tools including the GHG Protocol spreadsheet, Bilane Carbone, and Impact Forecast.

Researched offsetting options, and reached out to Aberdeenshire Council regarding a collaborative, community-based offsetting initiative.



Implemented Pawprint with 60 out of 74 staff members using the app.



Researched best option for renewable energy provider for Q20 electricity supply.



Staff Engagement through Pawprint eco companion



Pawprint, an app to track your personal and organisational carbon footprint, was officially launched at the Net Zero Technology Centre on 4th June 2021. As of December 2021, over 80% of NZTC staff are registered on the Pawprint app.

A 'Sprint' was run in August 2021, and the organisation reduced its footprint by 0.17 tCO₂e. A second Sprint was run in November 2021, and we reduced our organisational footprint by 6 tCO₂e during the month. The Net Zero Technology Centre has ongoing support from Pawprint, meeting with them on a regular basis, and regular training sessions are provided for new starts. Pawprint is also releasing dashboards by the end of 2021, which will be made available to the wider Net Zero Technology Centre, to allow the organisation to easily view the reduction in its footprint.

Offsetting to Net Zero

Whilst the organisation's priority is on the reduction of its carbon footprint first and foremost, the Sustainability Team has assessed possible offsetting options to go the 'last mile to zero'.

We've undertaken analysis of commercial offsetting schemes, both for direct air capture (DAC) technology, and through reforestation schemes. A DAC scheme is offered commercially through Climeworks, but the technology is still very expensive, while tree planting schemes offered vague values for offset emissions and were rarely local.

We have also engaged with Aberdeen City Council, regarding a community offsetting scheme. The council suggested that the Net Zero Technology Centre sponsor an old landfill site for reforestation, where staff would be able to help plant trees. We plan to re-engage with the Council in 2022.

The Impact of Covid-19 on Our Carbon Footprint

In 2020, due to the coronavirus pandemic, the Net Zero Technology Centre had to transition to virtual working, which had the following positive impacts on the organisation's carbon footprint:



Conference attendance also became virtual, which meant that the Net Zero Technology Centre staff were able to attend a wider range of global conferences and webinars, without the associated footprint. Going forward, virtual conference attendance is encouraged.



From March 2020 all staff were working from home before transitioning to hybrid working at half capacity from September 2021. This meant that commuting emissions were practically zero from March 2020 (although the office was open to a small number of staff throughout lockdown).

The TechX Accelerator Program was virtual for Cohort 3 in 2020, resulting in no travel emissions for all, and no commuting emissions for all Pioneers.

The events team transitioned to virtual events, resulting in no food waste or travel to and from the office by attendees and speakers. In addition to this, the Innovation Studio was fully live in 2021 and has provided a pathway for external engagement to be implemented virtually.

We continued our commitment to internships, the Career Ready Mentor programme, and the Kick Starter scheme through the virtual workplace in 2020 and 2021. Conducting these virtually removed any associated commuting emissions.

2022 Outlook

In 2022, the Net Zero Technology Centre's carbon footprint is expected to increase as hybrid working will most likely be implemented throughout the year, resulting in increased use of the office and increase in commuting. The Sustainability Team will continue mitigation efforts with high benefit actions such as completing the Q20 Electricity Supply switch over, accounting for the carbon emission reductions caused by hybrid working and analysing the impact of the EV Chargers and the Salary Sacrifice Scheme.

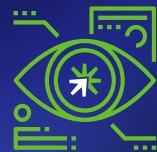
Alongside this we will be working on:



Conducting a Pawprint Evaluation and establishing a plan for the year



Establishing a data capture and reporting system for commuting data (incl. business travel)



Continuing making the office more sustainable, including improving the waste management system



Introducing all staff to how they can get involved with supporting the Net Zero Technology Centres sustainability goals"



Increasing staff engagement

- Through social events (e.g. litter picking, sustainable living workshops, Lunch and Learns),
- Following an established communications plan for speaking at Huddle Cuddles and Townhalls



Investigating a suitable cycling strategy assessing how to improve the cycling facilities at the Net Zero Technology Centre



Working with the Carbon Accounting and ESG teams to ensure no overlap, and that each team's work complements that of the other teams



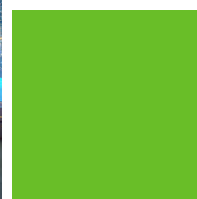
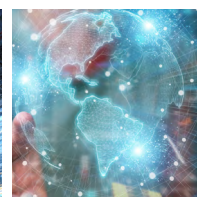
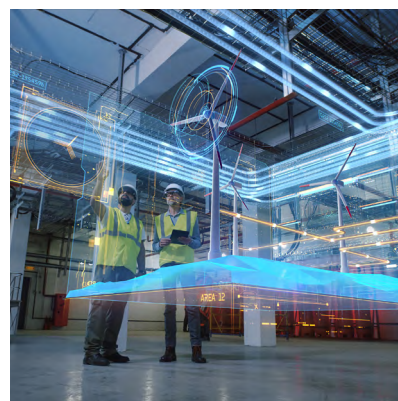
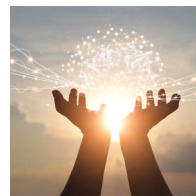
Determining viable offsetting options and forward plan



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Litter Picking in 2021

Any suggestion to reduce the Net Zero Technology Centre emissions footprint is welcome.



Annual Sustainability Report 2021

