

Net Zero Action Plan

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1. INTRODUCTION

NUVIA UK, and its parent company VINCI Group, are committed to cutting its greenhouse gas emissions in line with the 1.5°C scenario of the Paris Climate Accords 2015 ([Paris Agreement: All you Need to Know \(greenly.earth\)](#)). Environmental care has long been important to us. Since 2012, the VINCI Group has reduced its direct CO2 emissions by 30% from 2009 levels. The Group is now targeting a 40% reduction in its direct emissions by 2030 (over its historical scope, compared to 2018) and Net Zero by 2050. At NUVIA UK, this means optimising our energy consumption, switching to renewable sources, considering again how we design projects to be more resilient, carbon-light, and energy-efficient. It also means inventing new services and solutions that will enable our clients to reduce their carbon footprints too. In this way, NUVIA UK is contributing to the collective effort to achieve carbon Net Zero, which is vital in reducing the rise in global temperatures.

2. OBJECTIVES

The following objectives define why we are setting out this strategy to reduce our scope 1, 2 and 3 emissions.

2.1 Reduction in energy consumption and greenhouse gas emissions

Reduction in greenhouse gas emissions is a moral imperative as well as a commercial benefit for us. Consistent reduction in our greenhouse gases footprint is in line with our ethos as an organisation and a demonstration of our commitment to being a responsible organisation. Greenhouse gas reduction initiatives implemented in the past have also contributed significantly to cost reduction in energy bills. Hence, we are motivated to continually look for ways to reduce our emissions and leave a legacy for future generations. NUVIA UK is now targeting.

1. a 40% reduction in its direct emissions (scope 1 and 2) by 2030 (over its historical scope, compared to 2018) and Net Zero by 2050.
2. a 20% reduction in its indirect emissions (scope 3) by 2030 (over its historical scope, compared to 2019 baseline)

2.2 New business generation

Reduction in greenhouse gases is a request in most tenders, especially public sector tenders. Most of our major clients are requesting greenhouse gas reduction plans and strategies which go beyond carbon neutrality. This is an increasing trend fuelled by government PPN 06/21 legislation (on 5th June, the UK Government issued Procurement Policy Note (PPN) 06/21 to encourage suppliers to outline and implement a Carbon Reduction Plan and Net Zero target for 2050 in place) to help contribute to decarbonising UK public procurement) and COP26 ([COP26 - GOV.UK \(www.gov.uk\)](#)). Hence, we are motivated to accelerate our Net Zero plans to meet the needs and expectations of our stakeholders.

2.3 Materiality

Greenhouse gas reduction is a major material issue for existing clients from all sectors. Clients are requesting information which goes beyond compliance. Hence greenhouse gas reduction is a material issue for NUVIA UK. Several clients are requesting Carbon Reduction Plans or Strategies which not only achieve Net Zero by NUVIA UK Net Zero Strategy Ref: NUVIAUK/2021/NZS/001 - Issue 1 Page 3 of 4 2050 but also “carbon neutral by 2030 and Zero Carbon by 2040”. These targets will be included in our overall strategy.

2.4 Legal compliance

NUVIA UK takes its obligations to legal compliance very seriously, hence we have implemented structures and programmes to ensure our continuous compliance to all applicable legislations, example [Energy Savings Opportunity Scheme \(ESOS\) - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/energy-savings-opportunity-scheme-esos) and [Streamlined Energy and Carbon Reporting \(SECR\) for academy trusts - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/streamlined-energy-and-carbon-reporting-secr).

There are a number of environmental legislations which are applicable to NUVIA UK such as The Climate Change Act, as amended in 2019. This commits the UK to ‘net zero’ by 2050, Streamlined Energy and Carbon Reporting (SECR) 2018, and the Energy Savings Opportunities Scheme (ESOS) Regulations 2014. These legislations are focused on carbon and other greenhouse gas emissions.

NUVIA UK’s plan to reduce greenhouse gas emissions is aligned with UK Government targets to Net Zero. The Climate Change Act as amended in 2019, commits the UK to ‘net zero’ by 2050. NUVIA UK aims to reduce its direct emissions (Scope 1 and 2) by 40% by 2030 (against its 2018 baseline of estimated 674t CO2) and 20% reduction of scope 3 by 2030. We will continue to review our plans and trajectory and amend either to achieve an appropriate and timely reduction in line with legislative, customer and moral obligations.

2.5 Roles and Responsibilities

The CEO supported by Business Line /Functional Directors, is accountable for the coordination of the delivery of NUVIA's environmental and net zero carbon objectives at a strategic level. They are responsible for working collaboratively with internal and external stakeholders to ensure productive relationships are in place to deliver NUVIA's environmental commitments.

3.0 HOW DO WE ACHIEVE OUR TARGETS?

Four pillars have been identified to develop the complete Net Zero Strategy. These are shown in Figure 1below.

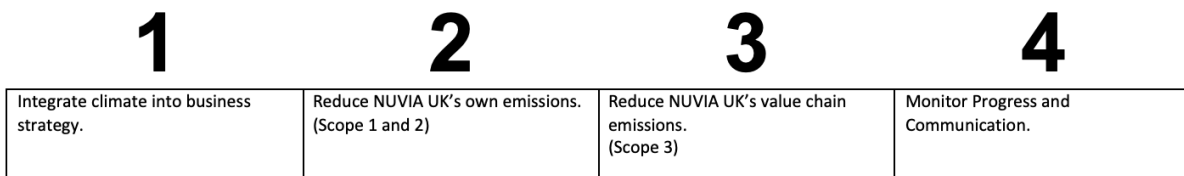


Figure 1-Pillar Model

1. Reducing emissions resulting from our direct activities, aligned with a 1.5°C pathway ([Global Warming of 1.5 °C — \(ipcc.ch\)](https://www.ipcc.ch))- Reduce absolute scope 1 and 2 greenhouse gas emissions by at least 40% by 2030, versus a baseline of our 2018 performance.
2. Reducing emissions within our value chain, aligned with the same goal - Reduce absolute scope 3 greenhouse gas emissions by at least 20% by 2030, versus a baseline of our 2019 performance.
3. Aligning our business strategy with the 1.5°C ambition. It means prioritising products and services that enable reduction and removal of customer and societal emissions, enabling resource- efficient lifestyles and consumption patterns, and suppressing solutions with an adverse climate impact.

4. The fourth pillar describes how to contribute to the 1.5°C ambition beyond the Company. This means, for example, supporting industry initiatives to align with 1.5°C and ensuring that organisations that the company is affiliated with, do not counteract the company’s own actions. It also includes the requirement to help management and employees adopt sustainable practices and funding projects outside a company’s value chain to minimise or avoid emissions.

Scope	Emission type	Definition	Examples
Scope 1	Direct emission	Greenhouse gas emissions resulting from company-owned or controlled resources and activities	<ul style="list-style-type: none"> • Stationary combustion • Mobile combustion • Fugitive emission • Process emissions
Scope 2	Indirect emission	Indirect emissions from purchased energy for own use.	<ul style="list-style-type: none"> • Electricity • Steam • Heat • Cooling systems
Scope 3		Indirect emissions not included in scope 2 that are a result of a company’s operations.	<ul style="list-style-type: none"> • Purchased goods and services. • Waste generated in operations. • Business travel • Employee commuting

Table 1 - Scope 1-3 Emission Types

3.1 Our current position

We have a collected data on our energy consumption from 2016 to 2022:

Year	Gas	Electricity	Vehicle Fuel	TCO2
2016	50	218	573	841
2017	61	202	483	746
2018	59	161	454	678
2019	128	158	384	670
2020	55	98	239	392
2021	50	60	214	324
2022	41	53	209	303

Table 2 - CO2 Emission

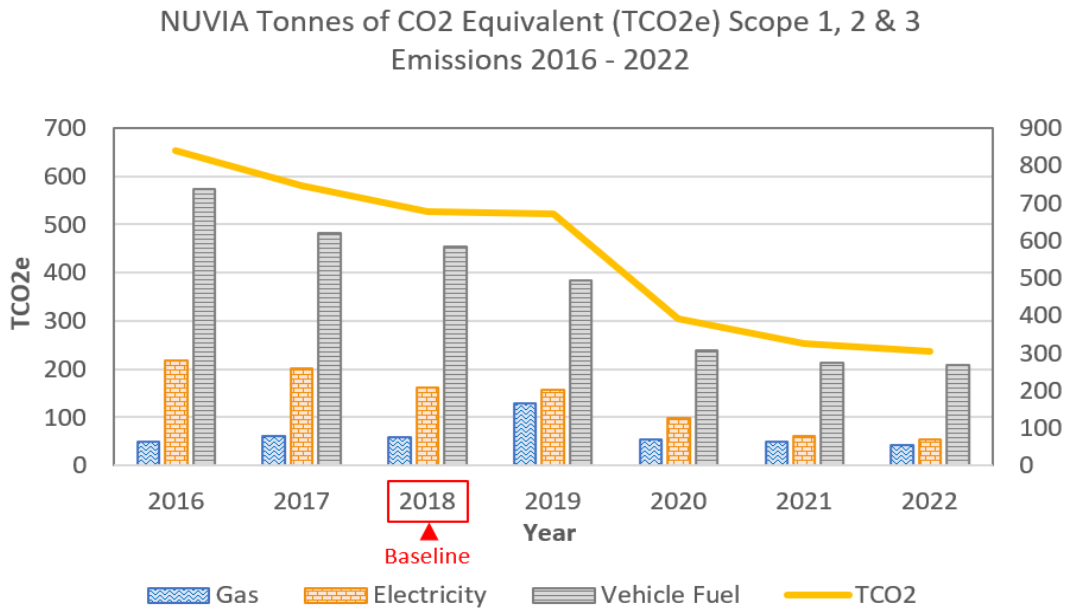


Figure 2 CO2 Emission

The graph above indicates we have achieved more than 40% reduction for 2020 and 2022 emissions. The reduction achieved over 2020/2022 was likely due to mandatory restrictions during the pandemic.

3.2 Carbon Emission Data

NUVIA UK’s carbon emission data demonstrates a continued downwards trend in terms of percentage consumption reduction per year from our baseline year in 2018. The most substantial changes were achieved in the period 2019 – 2020, with a minimum of a 30% reduction achieved over this period. These percentage reductions are supported by our normalised CO2 equivalent emissions data, which further show a downwards trend across all four parameters (Gas, Electricity, Fuel and Total CO2 Equivalent) as shown in tables below:

Nuvia Emissions - Tonnes CO2 Equivalent Normalised Data (TCO2e per Employee)					
Year	Average No. Staff	Gas (TCO2e)	Electricity (TCO2e)	Vehicle Fuel (TCO2e)	Total CO2e Emitted
2016	657	0.08	0.33	0.87	1.28
2017	615	0.10	0.33	0.79	1.21
2018	615	0.10	0.26	0.74	1.10
2019	567	0.23	0.28	0.68	1.18
2020	508	0.11	0.19	0.47	0.77
2021	438	0.11	0.14	0.49	0.74

Table 3 - Annual Emissions/employees Tables

Total Nuvia Emissions - Tonnes CO2 Equivalent Raw Data					
Year	Average No. Staff	Gas (TCO2e)	Electricity (TCO2e)	Vehicle Fuel (TCO2e)	Total CO2e Emitted
2016	657	50	218	573	841
2017	615	61	202	483	746
2018	615	59	161	454	674
2019	567	128	158	384	670
2020	508	55	98	239	392
2021	438	50.26	60.7	214	325

Table 4 - Annual Emissions/employees Tables

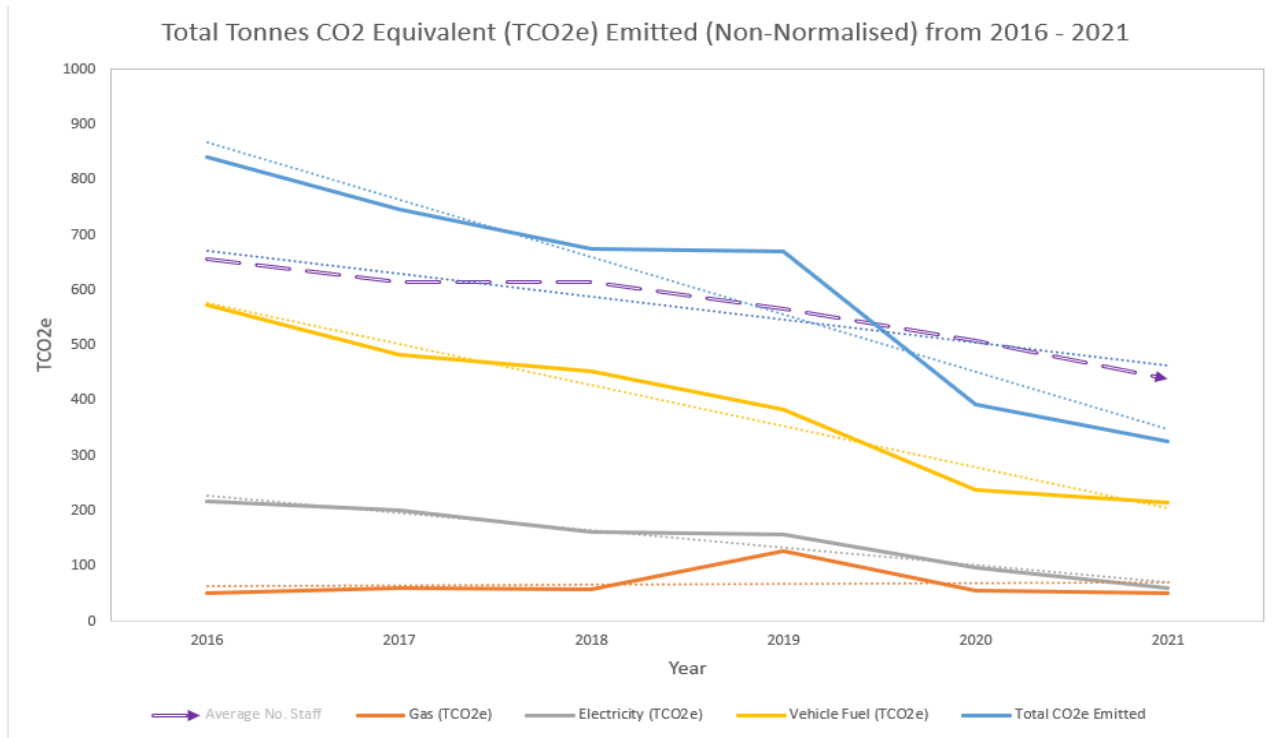


Figure 3 - Tonnes of CO2 Emitted 2016-2021

The graphs above show that even though energy consumption has increased slightly due to increased occupancy of our offices following lockdown, that we are still demonstrating a progressively negative trend in terms of CO2 generation – particularly when looking at Total CO2e emissions. The only exception is gas consumption, the data indicates a very slight increase in consumption.

3.3 Progress to date

As a result of improved data collection practices and the subsequent introduction of a number of energy reduction measures, across the business more than 40% carbon reduction was achieved over a reporting period of 2019-2022

These measures were.

- Agile working such as Working from home and Microsoft Teams Meetings introduced, thereby reduced commuting to work.
- The use of virtual meeting resulting in a reduction of business travel.
- The replacement of fluorescent light fittings with LED lighting.
- Electric vehicles introduced to replace petrol/diesel for staff private vehicles via Vinci Fleet
- ESOS Phase 1&2 compliance.
- Environment and Sustainability Manager appointed to lead Net Zero Strategy and oversee SECR compliance and manage the Net Zero and Sustainability Working Group set up to develop Net Zero Projects.

3.4 What we want to achieve?

To meet our Net Zero target by 2050, for scope 1 and 2 emissions we aim to achieve a total of **404TCO₂e** by 2030: representing a 40% reduction on the 2018 baseline of **674TCO₂e**.

The data collected and included in the above tables indicates that the major contributor to our scope 1 and 2 CO₂ emissions is from vehicle fuels. That will be our focus to reduce our emissions.

Section 4 details the measures that will be employed to achieve these ambitions.

4. **PILLAR 1: INTEGRATE CLIMATE IN YOUR BUSINESS STRATEGY**

NUVIA will integrate climate risk in our operations. We will do this by:

- Considering how to reduce carbon emissions.
- Developing our Environment Action Plan that will guide our activities and enable us to take a whole life approach to mitigating carbon, and ensure due consideration is given to issues such as waste and recycling, sustainable sourcing of products and materials, and the objective of developing a circular economy.
- In addition, NUVIA will incorporate other environmental objectives in our organisational strategies. This includes the delivery of mandatory requirements, such as biodiversity net gain, but also wider environmental benefits such as better air, water, and soil quality, consistent with the UN Sustainable Development Goals
- Develop an Environment Risk Register that identify environment aspect and impacts of projects and corporate actives and identify management procedures in line with ISO:14001 to address them.

Delivery of projects and programmes is essential to improving carbon and sustainability outcomes, and NUVIA will deliver clients projects and programmes by adopting the following strategies:

- Improved designs that require fewer materials, and which are produced to support higher levels of reuse and recycling.
- Designs that deliver improved energy and heat performance, and which allow the use of new and more sustainable products and materials.

Accurate monitoring, quantification and reporting of carbon emissions, and the comparison of projects and programmes, identifying best practice and supporting performance improvement.

5 **PILLAR 2: REDUCE NUVIA UK OWN EMISSIONS (Scope 1 and 2)**

5.1 Key targets

- Reduce absolute scope 1 and 2 greenhouse gas emissions by at least 40% by 2030, versus a baseline of our 2018 performance.

It is our intent to use 2019 data for our baseline for setting reduction targets, as this is most representative of our current 'business as usual'.

5.2 Proposed Strategy - Fuel Consumption

- Fuel consumption – this will be our target area for reducing consumption, as this will have the largest impact on our Scope 1 and 2 emissions. It is also an area *all NUVIA UK employees* can contribute to
- Our SMART objective is as follows: **4.167% reduction target set.**
 - **Specific** – We will target the reduction of fuel consumption for business travel via hire cars across all business lines and at all levels. We will also target and promote the acquisition of electric hybrid vehicles where suitable. We will promote policies to support colleagues commuting using public transport, and colleagues using bicycles.
 - **Measurable** – Our target is broken down into 10-year periods, allowing us to adjust our strategy according to current performance and business requirements. Fuel consumption will be monitored on quarterly basis to ensure we remain on target, or if further action is required.
 - **Achievable** – This reduction will be achieved through the hire of electric vehicles for business travel where practicable. This can be supported by making the hire of electric vehicles a ‘mandatory’ setting on the hire car forms. Diesel/ petrol vehicle hire shall be by exception.
 - **Realistic** – Due to the uncertainty in the requirement for business travel in the current economic climate and lasting effects of the pandemic, 4.167% reduction is considered achievable. Our strategy for reviewing every 10 years will ensure that our aims are realistic and achievable to 2050. It also allows us to increase our ambitions if data shows that we are consistently exceeding our targets.
 - **Time-bound** – We aim to achieve the first reduction in fuel consumption by 2025.

We recognise that the above figures are targets and not limits. Therefore, we will endeavour to exceed these targets as far as practicable.

5.3 Proposed Strategy - Electricity and Gas Consumption

- NUVIA UK’s buildings are green-energy users. However, we recognize that we still have a responsibility to act sustainably and reduce our energy consumption as far as practicable. This can be achieved through optimise use of our office spaces and an improved sustainability culture within our teams.
- A small number of NUVIA-UK owned facilities (e.g., Piddlehinton) consumes natural gas to provide heating (in addition to green electricity)
- We have identified several objectives to help realize NUVIA UK’s ambition of continuous improvement in environmental performance.

5.3.1 We will reduce our energy consumption through optimise use of existing office space.

- Our SMART objective is as follows:
 - **Specific** – Due to reduced staff numbers and hybrid working, NUVIA UK’s offices (Risley, NUVIA House and Harwell) are currently poorly utilised (approximately three quarters dead space). It is therefore our intent to relocate staff in Harwell and Risley to a reduced/ concentrated area, so that a much smaller area requires heating and lighting during the day. Using this approach, we envisage that we can reduce our electricity consumption by ~20% each year

- **Measurable** – This objective can be measured by recording desk changes by members of staff, and by reviewing energy consumption data which can be assessed on a 3-monthly or annual basis as data availability allows.
- **Achievable** – This objective is readily available, as there are many empty desks that could be easily repurposed. Once achieved, entire rooms and/ or wings of buildings could be taken out of service.
- **Realistic** – This objective will take some time to organize and implement, as it would be useful to develop an updated seating plan that allows grouping by discipline or project as appropriate. Moving desks will be dependent on the availability of SFIT staff (NUVIA UK staff are not normally allowed to move their own IT equipment) and the staff being relocated having some down-time that won't affect their ability to deliver work.
- **Time-Bound** – Revised seating plans to be completed by December 2022. Staff relocation to be achieved by March 2023.

5.3.2 We will reduce our energy consumption through relocation to modern office facilities.

- Our SMART objective is as follows:
 - **Specific** – It is NUVIA UK's intent to relocate its Harwell and Risley teams to new office facilities at these sites. As part of the selection criteria, environmental performance will be a significant element. An appropriately sized office to accommodate current staffing levels and planned growth will also be considered. It is assumed we will source our electricity for the new offices from green energy suppliers as per the current arrangement.
 - **Measurable** – The full impact of relocation cannot yet be determined as work is still in progress to identify suitable offices. However, once suitable office spaces have been confirmed, it will be possible to compare current energy performances of The Library and Chadwick House against the new facilities. Electricity consumption data from the new and old office spaces will be compared and monitored annually moving forward.
 - **Achievable** – Both the Harwell and Risley campuses are areas of growth, with new purpose-built office spaces available.
 - **Realistic** – This strategy has been approved at Board Level, with the necessary resource to progress this strategy now invested.
 - **Time Bound** – It is envisaged that Risley staff will be relocated first followed by the Harwell team.

5.3.3 We will reduce our energy consumption through revitalising the sustainability culture within NUVIA UK

- Our SMART objective is as follows:
 - **Specific** – NUVIA UK's working culture has a very strong safety focus. It is our intent to expand this to consider environmental and wider sustainability aspects. This will be achieved by maintaining an ongoing campaign to raise awareness and get staff buy-in
 - **Measurable** – Achievement of this goal will be measured by recording the number of incidences of staff engagement through different mechanisms each year.
 - **Achievable** – This objective will be achieved through an ongoing programme of communications (e.g., NuNews, In Good Company, Environmental Focus sessions in Team Briefs, Quizzes and other interactive sessions)

- **Realistic** – This objective is already gaining momentum through the establishment of the Net Zero and Sustainability steering groups.
- **Time Bound** – This is an ongoing objective that will evolve over time. The first staff engagement session is to be realized on Earth Day 2022, with a quiz and series of emails, posters, and bulletins.

5.3.4 We will reduce our gas consumption at our Piddlehinton facility.

Piddlehinton facility only source of gas is the 3 gas bottles that uses LPG and because of the remote location of the site there is no other sources of energy. The three bottles are filled with LPG to run the facility and it contributes immensely to our scope 2 emissions.

- Our SMART objective is as follows:
 - **Specific** – The Piddlehinton facility utilises natural gas for heating. It is our aim to find alternative heating mechanisms for this facility that will progressively reduce consumption. For example, use of electric heaters in office spaces
 - **Measurable** – Gas consumption will be measured quarterly to monitor progress.
 - **Achievable** – Further work is required to explore the feasibility of introducing alternative measures to reduce the need for gas-powered heating. Not just use of electric heaters (which may overall be less efficient for the space in which it will be working), but improved insulation and use of double/ triple glazing.
 - **Realistic** – A risk assessment and impacts of using alternative heating sources will be explored to establish the viability of this objective.
 - **Time Bound** – It is envisaged that a feasibility study will be completed by November 2023, with mobilization for implementing actions by February 2024.
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6 PILLAR 3: REDUCE EMISSIONS WITHIN SUPPLY CHAIN (Scope 3)

NUVIA has set 2019 as the baseline year for scope 3 and plan to achieve 20% reduction by 2030 and Net Zero by 2050. Out of the 15 scope 3 emissions defined by the GHG protocol we have **identified 4 categories** that are relevant to our operations. See the table below:

Category of emissions	TCO ₂ eq	Methodology
1. Purchases of goods and services		Data on economic value of goods and services purchased (amount spent on a particular goods and services) This includes all upstream emissions, that is from the products purchased during the reporting year. Products include both goods (physical products) and services (intangible products).
5. Waste		Usual approach (quantities of waste x EF by disposal method?)
6. Business travel		Emissions directly provided by the travel agencies
7. Employee travel		Calculated according to the employee’s movement profile (average distance, mode of transport, etc.)

TOTAL		
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Table 5 identified scope 3 categories that is relevant our operation.

Baseline Year: 2019		
Additional Details relating to the Baseline Emissions calculations.		
Scope 3 (Included Sources)	Purchased goods and services	5834.3
	Processing of sold products	Not applicable
	Waste generated in operation	30.01
	Employee commuting	801.87
	Business travel	367.67
Total Emissions TC02e	7033.9	

Table 6 2019 Scope 3 baseline year data

6.1 Proposed Strategy to reduce our emissions within the supply chain.

Carbon Net Zero – Scope 3 Emissions – NUVIA Limited

The NUVIA supply chain consists of over 500 companies, comprising of specialist consultants, subcontractors, and suppliers of commercially off-the-shelf goods and services, for both operational and corporate spend.

In terms of operational spend, this is dependent on the scope of our projects, all of which are unique. Accordingly, we often go several years between placing one order with a company, until the next available opportunity. For this reason, it is extremely difficult to form any long-lasting, symbiotic relationships, where we can have a significant influence.

In addition, for some specialist works (particularly in remote locations), the available supply chain can be small, or even a monopoly can exist. This further impacts our opportunity to impart influence over the supply chain.

For these reasons, we are not in a position to dictate to the available supply chain that they must have a Carbon Reduction Action Plan in place, because it is not a statutory requirement, unless they bid for public contracts directly to an estimated value over £5 million. More particularly, we are not in a position to insist that our supply chain works towards the VINCI target of reducing Scope 3 emissions by 20% by 2030, compared to 2019.

In terms of corporate spend, this covers fees and professional services orders for items such as rates, insurances, and legal costs, as well as small value orders for items such as advertising, training, and stationery. Due to the nature of these providers (local councils, providers of professional services, and small consumable suppliers), they have no statutory requirement to have a Carbon Reduction Plan in place, and again, we are not in a position to insist they work towards the VINCI target of reducing Scope 3 emissions by 20% by 2030, compared to 2019.

Supply Chain Management and Assessment

Notwithstanding, the foregoing, we encourage our supply chain to actively work towards reducing their carbon emissions, and part of our prequalification process for new suppliers (excluding suppliers of commercially off-the-shelf goods and services) includes verifying if they have a Carbon Reduction Action Plan in place.

We currently have our own bespoke supplier prequalification process but are working towards transitioning to an externally managed system to assess our subcontractor supply chain during 2023, utilising the Common Assessment Standard, or similar. This standard also includes questions and assessments on carbon reduction as part of the supplier approval process. However, the advantages of a system such as this over our current process, is that all our subcontractors will be captured in terms of their carbon reduction strategies (rather than just new subcontractors), and the fact that the database is constantly reviewed and updated.

As well as the foregoing, we intend to revise our procedures during 2023, so that as part of the assessment process for the awarding of operational subcontract packages over £100,000, we review and retain any available carbon emissions data for the successful subcontractor.

7 PILLAR 4. MONITOR PROGRESS AND COMMUNICATION

By our commitment to net zero we will set expectation that will require sharing our targets and the actions we take to achieve targets.

The monitoring will cover emissions reduction across the lifetime of our commitment and report on our progress annually.

Customers, business partners, staff and other interested parties will expect our transparency. This openness can also improve our business brand and help to demonstrate the importance of net zero actions to our industry and society.

Ongoing monitoring and reporting can allow Nuvia to regularly evaluate our results, plus help us take any corrective actions and make updates to our plan as situation change.

NUVIA will also influence and work with customers and suppliers, employees, industry beyond your own business interests. We will promote behavioural change, contributing to climate awareness among leaders, employees and customers sharing best practices within the industry and community.

We will achieve this by:

- Educating our board, management, employees and business network on climate, the SDGs ([Sustainable Development Goals | United Nations Development Programme \(undp.org\)](https://www.undp.org)) and our company's alignment and contribution
- Helping our management and employees to reduce their own emissions and adopt 1.5°C lifestyles, e.g., through sharing educational materials, and personal climate calculators and supportive policies.
- Developing, defining, and driving the required strategies and actions for halving emissions and reaching net zero through the value chain, in collaboration with customers, suppliers and other partners.