Carbon Reduction Report

2019 - 2022

Orms

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1 Introduction

1.1 Orms

Orms is an architectural practice based in central London.

Across our 40 years of practice, we have delivered best in class projects across a diverse range of sectors including shell and core offices, workplace fitouts, education, residential and hotels / leisure.

Within the past 18 months we have been recognised in the RIBA awards, Civic Trust awards and BCO Awards regionally and nationally and with The Standard Hotel we have been recognised internationally with the Architizer, NLA, AJ Retrofit, Hotel Design and AHEAD awards and listed in the top 10 buildings of the year in the Times 2020.

At Orms, we believe that true innovation is not only in form, but in method. So, we listen. To clients, to each other, and to the individuals that live and work in our buildings. We like to start conversations, to educate and encourage debate, ensuring every voice is heard, and this insight informs our process, it is embedded into our designs, and realised in our structures.

We seek to create sustainable architecture that responds to historic and cultural contexts.

We advocate an ultrapractical architecture and actively seek deep assignments through a series of research projects that inform everything we do.

We are an employee ownership trust that values people as much as our work and believe in our practice as a force for good.

Our sustainability goals focus on building knowledge through targeted research and comprehensive data collection across the practice. This knowledge is shared both within and outside of Orms through our collaboration with project teams and research groups.

“We believe that each project presents a unique opportunity to further this work, and our holistic approach to sustainability is curated to suit the nuances of each project.”

We aim to balance both environmental and social ambitions, by setting realistic targets and encouraging innovation and collaboration to achieve them. We are determined to make continued efforts to improve our performance across all of our activities, and we will encourage our clients and wider stakeholders to join us in this effort.

Every decision we make has an impact, so as design teams we must make an informed choice, changing behaviour and challenging the norm in order to deliver meaningful solutions.

1 Introduction

1.2 Purpose of the report

In June 2019, the UK Government set a national target of achieving net zero emissions of greenhouse gases by 2050. More recently, the UK government has set an additional target to reduce emissions by 78% by 2035 compared to 1990 levels. This is set to make the UK's commitments to reducing emissions the fastest rate of any major economy. In line with this target, all UK businesses will have to play an important role in helping to achieve these carbon reduction targets.

With the latest IPCC report giving a stark warning of "now or never", this is the time to turn commitments into meaningful action. At Orms we are committed to driving down our emissions and making meaningful change both as a business and within the projects we deliver. We wish to demonstrate clear climate leadership to our clients and collaborators in a sector which accounts for 40% of the UK's carbon budget and a quarter of global emissions.

This is our first practice carbon reduction plan, published in 2023 and based on a 2019 baseline and covers our practice footprint for the following years documenting the journey we have been on to understand our emissions, improve their accuracy and ultimately reduce them.

We will publish an updated report annually, tracking our progress against the plan set out here, and updating our process as we learn more about our business and obtain more granular details on our impacts.

Our initial baseline impact was calculated by Eight Versa , the impact of subsequent years has been calculated in house and externally verified by Tunley engineering (to date 2020 and 2021 impacts have been verified and 2022 is pending verification.

A climate crisis requires all levels of cultural change, so what are we doing to address this?

1. We are committed to a reduction target in line with the science based target initiative SME programme and commit to reduce our scope 1 & 2 emissions by 46% over a 2019 baseline, and to measure and reduce our scope 3 emissions. Through hot spot analysis and reduction recommendations we will set actions in motion to reduce our carbon emissions and report these annually. Our target was validated in September 2022.
2. We will offset our scope 1 & 2 emissions. This action is not counted towards our impact reduction. It is a recognition that whilst our efforts are focused on the reduction of our impact, until our impact is Net Zero investment in projects that help address climate inequality and carbon reduction represent a valuable contribution to the fight against climate change.
3. In addition to our science based target we have also joined the SME climate hub committing to set a long term target of becoming a net zero business by 2050. We are continuing to investigate ways in which we can more accurately report our scope 3 impacts including that of the projects we are involved with.
4. All of our projects are mapped against the RIBA sustainable outcomes recommendations and UN sustainable development goals through our in house sustainability toolkit.
5. To support our sustainability toolkit we are also committed to the RIBA 2030 climate challenge. We will endeavour to meet these targets on all new and major refurbishment projects and submit data where available. The RIBA Climate Challenge provides an excellent framework to start this conversation, benchmark our progress and share our knowledge with the wider architectural community in order to help the industry move forwards at pace.

1 Introduction

1.3 Practice Overview

Our green house gas emissions have been measured for our operations in the baseline year of 01/01/2019 to 31/12/2019

An initial GHG Emissions calculation has been undertaken by Eight Versa in line with GHG Protocol requirements and ISO 14064-1:2018.

GHG Protocol establishes comprehensive global standardised frameworks to measure and manage greenhouse gas (GHG) emissions.

These will be used in order to set a baseline for future emissions reductions

Baseline - Key facts

One main office
483.85m2, part of the 4th floor at Oliver's Yard.

One sub-let space
127.67m2

The office space is leased from and operated by Derwent London.

Heating provided by 2 gas boilers with service the entire building with no sub-metering. Therefore Orms consumption is calculated by the landlord based on the proportion of our floor plate.

The electricity for the space is sub-metered from the main building and the electricity for the sub-let space is included within this.

Heating and cooling is provided to the space through ceiling mounted VRF units

In 2019 on-average there were 65 'full time equivalent' roles in the practice, this includes architects and operations staff and and management.

In 2019 the majority of staff worked full time in the office 5 days a week and there was no remote working.

Electricity is supplied from a renewable tariff, however we do not count this towards our reduction goals as no PPA is in place.

Our impact from electricity use is indicated using location based method.

1 Introduction

1.4 Scope Boundaries

Boundaries

- We have calculated our practice footprint for the year 2019, this will act as a baseline for our emissions reductions going forward.
- This year has been chosen as the last year of 'business as usual' due to the pandemic that followed, in accordance with the Science Based Targets initiative recommendations.
- The GHG Protocol sets three scopes of emissions, which companies should report against. Each of the scopes is described on the right-hand side of this page.
- An operational control approach has been taken when calculating emissions
- We have measured all our Scope 1 and Scope 2 emissions from 2019.
- We have also measured as many of our Scope 3 emissions as we can, where we have available data.
- Over subsequent years we will increase the extent of the GHG the emissions we measure, aiming to measure all our scope 1, 2 and 3 emissions by the end of 2023.

Scope 1

All direct greenhouse gas emissions

Direct greenhouse gas emissions are those emissions which arise from sources that are owned or controlled by the business. e.g this could include burning fossil fuels to heat your building and emissions from company vehicles.

Scope 2

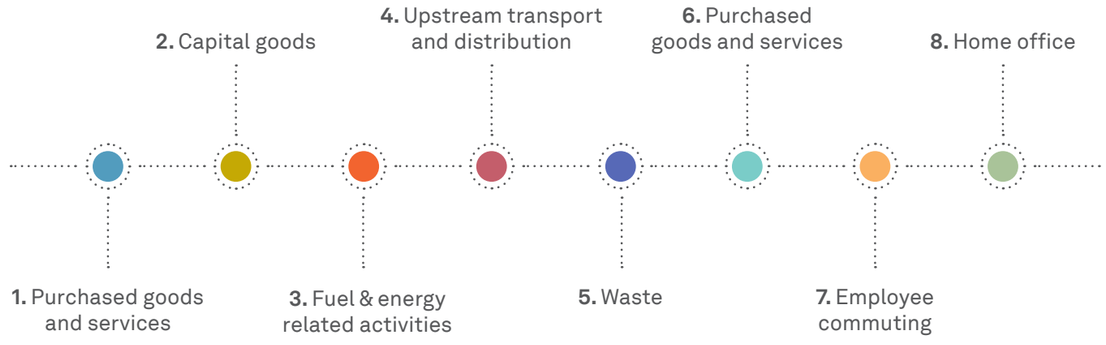
Indirect emissions

Indirect greenhouse gas emissions are emissions that occur due to the activities of the business, but which occur at sources owned or controlled by another entity. E.g the electricity we use to run the office

Scope 3

All other indirect emissions

e.g Employee commuting is an indirect emission as you need to travel to work but we cannot control how you do this and purchased goods - we need buy products such as computers to fufill our roles but we have no control over how these are made.



1 Introduction

1.5 Exclusions

The categories below are currently excluded.

11 All direct greenhouse gas emissions

Direct greenhouse gas emissions are those emissions which arise from sources that are owned or controlled by the business. e.g this could include burning fossil fuels to heat your building and emissions from company vehicles.

4 Upstream transportation and distribution

9 Downstream transportation and distribution

14 Franchises

8 Upstream leased assets

10 Processing of solid producs

15 Investments

12 All direct greenhouse gas emissions

Direct greenhouse gas emissions are those emissions which arise from sources that are owned or controlled by the business. e.g this could include burning fossil fuels to heat your building and emissions from company vehicles.

2 Baseline

2.1 Scopes 1 & 2 - 2019

During 2020 we worked with Eight Versa to calculate our 2019 baseline footprint and intend to produce future footprints annually in house.

Further research undertaken since the footprint was calculated revealed that gas usage was not included within our initial calculation. This has been added to the results produced by Eight Versa using the carbon trust calculator.

Scope 1 Emissions

Use of fossil fuels in premise: As indicated in the adjacent table.

Orms consumption is equivalent to 4.88% of the total building consumption.

Company owned vehicles: None.

Refrigerant leakage: None - units have been serviced and no top up was required in the year 2019.

Scope 2 Emissions

Energy use was taken from meter readings provided by the building manager.

$CO2_e$ emissions are calculated using the Location-Based Method - using the average emission factors for the UK electricity grid.

We understand from the building operator that the building is supplied by renewable tariffs however we have not been able to obtain the REGO certificates for these.

Building performance

In total Orms in-use energy consumption for 2019 was 107391 kwh giving an EUI of 176 kwh/m^2/yr which is well above the RIBA Business as usual benchmark of 130 kWh/m^2/yr making the office very poor performing in terms of energy use.

	Amount (kwh)	Carbon factor *	Tonnes of $CO2_e$
Scope 1	41632 kWh	0.1839	7.65
Scope 2	73444 kWh	0.2556	16.81
Total Scopes 1 & 2			24.46

* Carbon factor from UK Government GHG conversion factors for company reporting, 2019

2 Baseline

2.2 Scopes 3 Emissions - 2019

A description of what has been included within each category is included below:

Category 1: Purchased Goods and services

Invoices from 2019 were analysed by Eight Versa to provide the total carbon emissions for this category.

Due to the size and scale of this category, the level of detail and description is limited.

Therefore, in order to undertake a carbon foot-printing analysis, appropriate assumptions were selected by Eight Versa, these included:

- Any purchase that had a value lower than £500 was classified as other.
- The data was classified based on the supplier activities due to lack of purchase description.
- The data presented was separated into category 1, 2 and 6 based on the suppliers' activities.

The accuracy of this category will be improved in future years by more thorough internal analysis.

Category 2: Capital Goods

As above capital goods were identified from the annual invoices and categorised by eight versa.

The accuracy of this category will be improved in future years by more thorough internal analysis.

Category 3: Fuel & Energy Related Activities

WTT emissions from gas consumption were calculated using Uk Gov emission factors

T&D losses from electricity consumption were calculated using UK Gov emission factors.

Category 5: Waste

Waste has been calculated using quantities provided by the building operator.

Quantities are for the total building and a percentage share of 10% has been used for Orms calculations.

UK government emissions factors have then been used to calculate emissions.

Water is not currently included within this as data was not available at this time.

Category 6: Business Travel

Data was taken from the invoice records and spend based emission factors applied by Eight Versa

Category 7: Employee commuting

A commuter survey was undertaken and the collated data was used along with the UK government emission factors to calculate the emissions for this category.

The accuracy of this category will be improved in future years by more thorough internal analysis.

Category 13: Downstream leased Assets

The electricity use the leased office space is included within our scope 2 emissions.

Scope 3		Tonnes of $CO2_e$
1 Purchased Goods and services		375.06
2 Capital Goods		66.7
3 Fuel & Energy Related Activities	WTT emissions	1.00
	T&D emissions	1.43
5 Waste		0.16
6 Business Travel		3.95
7 Employee commuting		10.3
Total Scope 3		458.6

2 Baseline

2.3 Understanding our impact

Hotspot 1

Purchased goods and services accounts for the largest majority of emissions in the office footprint. These indirect emissions account for almost 80% of the office's total impact . In order to reduce this area we will look at:

- Working closely with suppliers to ensure that purchases are from companies with more ethical and transparent supply chains, including organisations who have a dedicated carbon reduction plan which shows their commitments to reducing their GHG emissions.
- Streamline data flows across the office track purchases and highlight areas for savings
- Implement green procurement policies for clients and suppliers, thereby only working with those who are committed to reducing their own GHG emissions

Hotspot 2

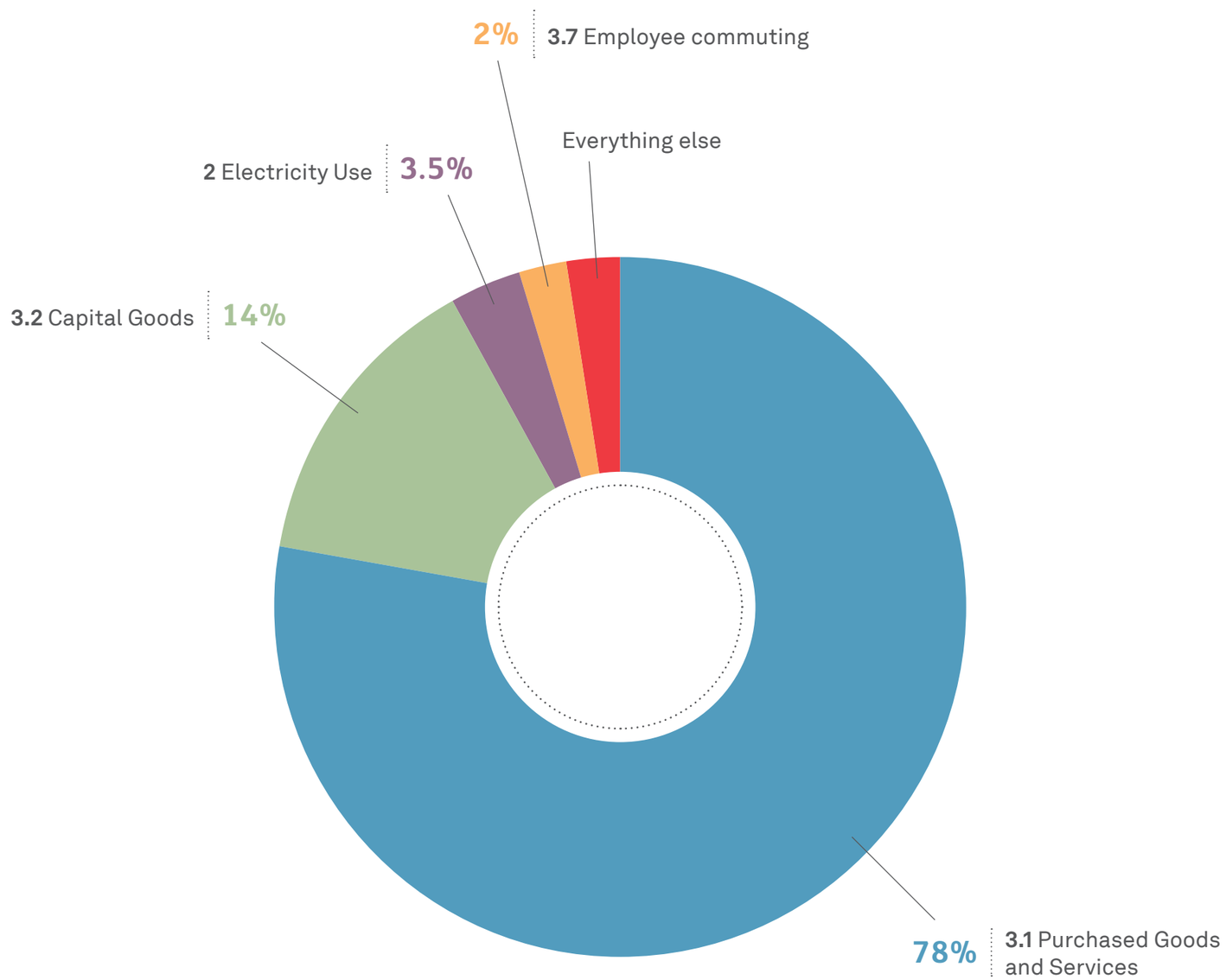
Impacts from this category account for around 14% of Orms total impact. Green procurement policies as mentioned above could assist with reducing this area.

Hotspot 3

Electricity use accounts for around 3.5% of the office's total impact.

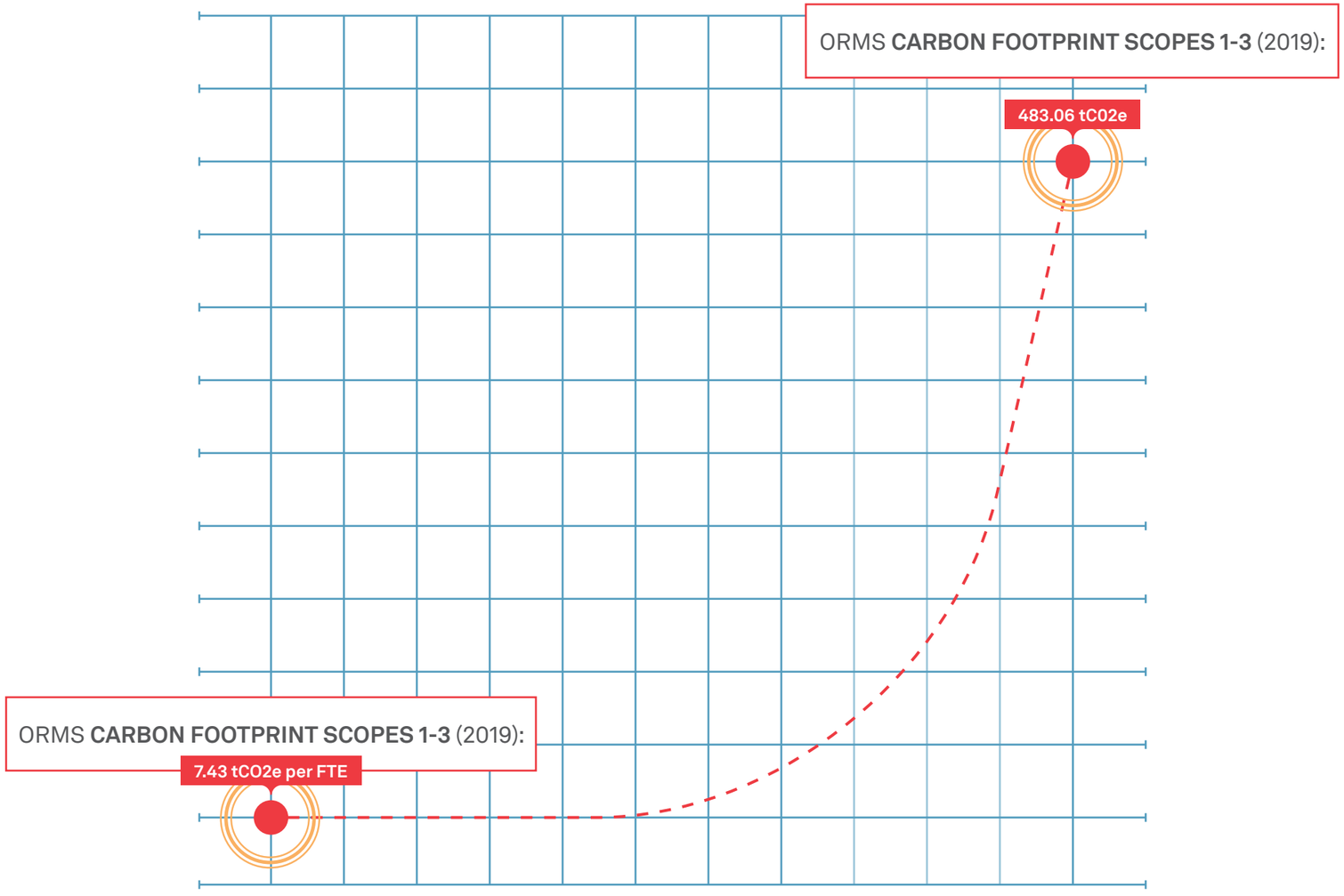
Hotspot 4

Employee commuting accounts for around 2% of the total impact. More accurate data collection in future years is likely to reduce this.



2 Baseline

2.4 Total Emissions



Orms total practice emissions for 2019 are **483.06 tCO2e**

In subsequent years we have been continuing to calculate our impact in-house and delve deeper into different aspects of our business to identify opportunities for reduction.

2 Baseline

2.5 Science Based Target

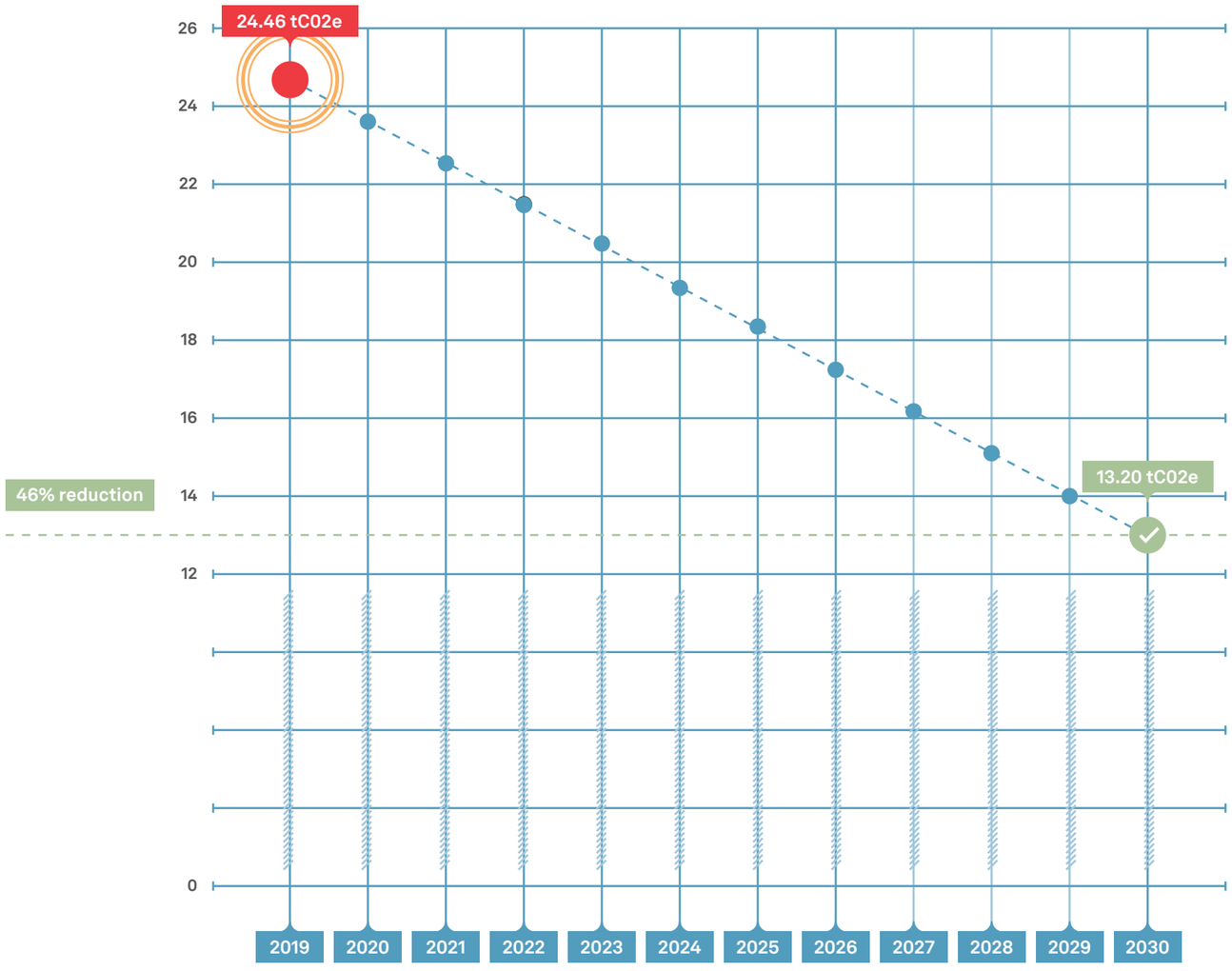
By measuring our carbon footprint annually, we can understand the different ways our business is contributing to climate change and identify ways to reduce it. In addition, it enables us to advocate for others to do the same, and drive change within our industry and those we collaborate with.

It is our hope that this will allow the practice to become a leading organisation in carbon transparency and emission reduction in the built environment sector and inspire further change from organisations within the sector.

A huge part of our impact lies in scope 3, following our initial research we also joined the SME climate hub committing to set a long term target of becoming a net zero business by 2050.

We are continuing to investigate ways in which we can more accurately report our scope 3 impacts including that of the projects we are involved with.

To support these goals as well as ensure we are held to the highest standard as a business we are also undergoing to process to become a certified BCorp.



Through the science based target initiative, Orms have set a short term target and committed to achieving a **46% reduction** in Scope 1 & 2 GHG emissions by 2030 from our 2019 baseline, and to measure and reduce our Scope 3 emissions.

SCIENCE BASED TARGETS

DRIVING AMBITIOUS CORPORATE CLIMATE ACTION

2 Baseline

2.6 Understanding our impact

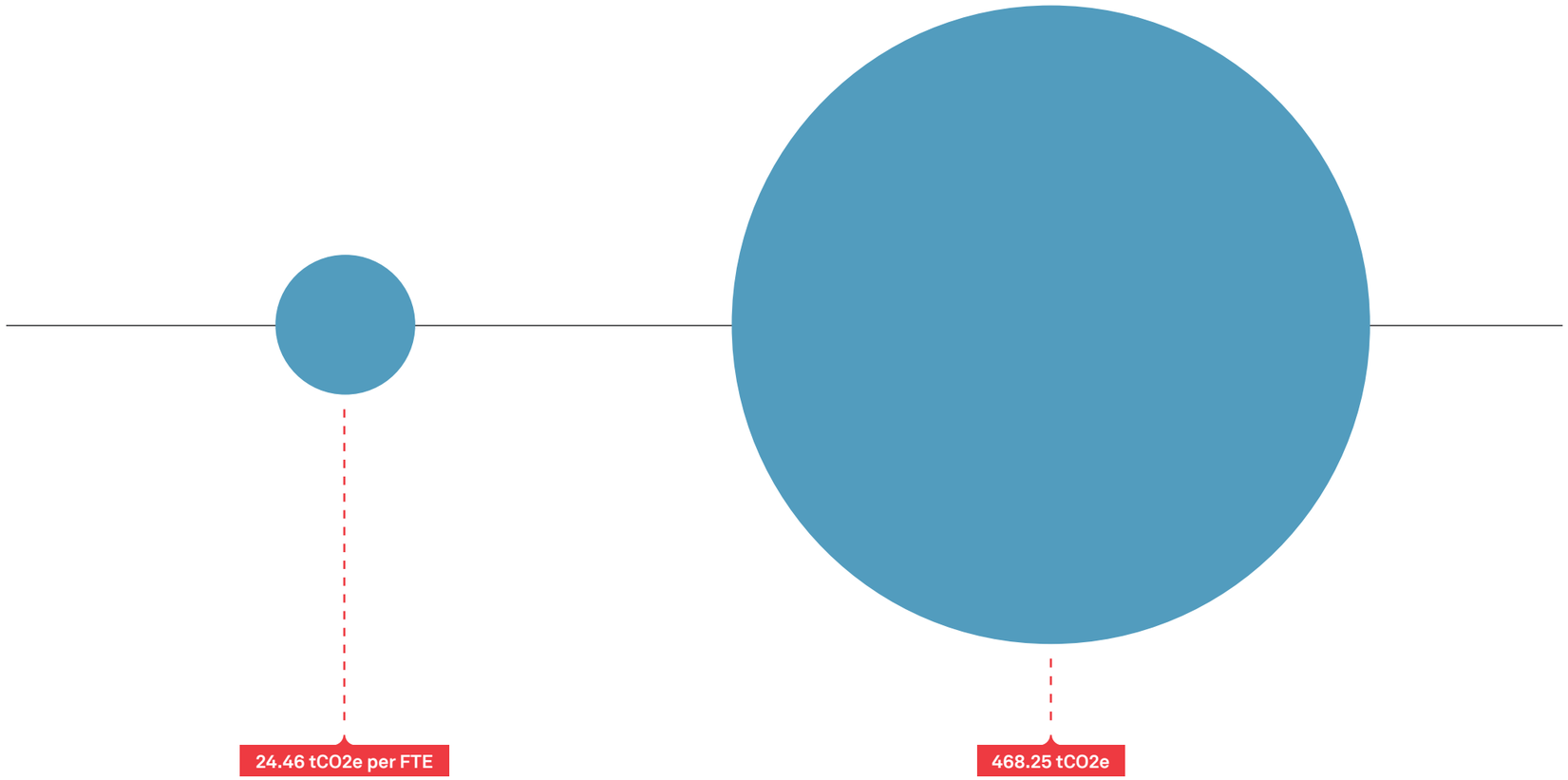
We have committed to measure and reduce this, our next goal to gain greater understanding of our impact through scope 3 activities and commit to an absolute reduction target.

We are committing to measure and reduce this going forwards. Our initial actions will be as follows to allow us to set a net zero target in the first quarter of 2023.

Develop processes for more accurate data collection.

- Work closely with suppliers to request primary emission data associated with individual procured goods and/or services.
- Streamline data flows across the practice to track purchases and highlight areas for savings.
- Develop green procurement policies for clients and suppliers to encourage consciousness surrounding our choice of collaborators.
- Encourage employees to use active travel when commuting to the office.
- Consider the impact of flexible working patterns and home working on our footprint.
- Advocate within our supply chain for those we work with to also commit to footprint calculation and reduction targets.

The breakdown of our footprint shows that around **95% of our footprint is within Scope 3.** Within this, 80% of the Scope 3 emissions are attributed to purchased goods and services.



ORMS 2019 **CARBON FOOTPRINT SCOPES 1 & 2**

ORMS 2019 **CARBON FOOTPRINT SCOPES 1 & 2**

3 Emission Reductions

3.1 Scope 1 & 2 2020

Key facts

- No changes to office floor space or operation from baseline year.
- However during 2020 the world was navigating a global pandemic and changes were required to the way that we work.
- In 2020 on-average there were 65 ‘full time equivalent’ roles in the practice, this includes architects and operations staff and management.
- Remote working was introduced to the practice for the first time therefore the emissions for this need to be included within our footprint.

Changes to calculation methodology

- Emissions were calculated in-house to obtain greater granularity to our scope 3 emissions
- This required a different method of calculating our spend based emissions and the normative business calculator was used for this.
- Emissions were externally verified by Tunley Engineering who have confirmed their accuracy.

Scope 1 Emissions

Use of fossil fuels in premise:

- As indicated in the adjacent table.
- Orms consumption is equivalent to 4.88% of the total building consumption.
- It is interesting to note that although the building was not fully occupied throughout the pandemic, the gas usage increased. This is assumed to be due to the reduction in heat gains from occupiers and equipment causing the boiler to provide more heat to compensate.

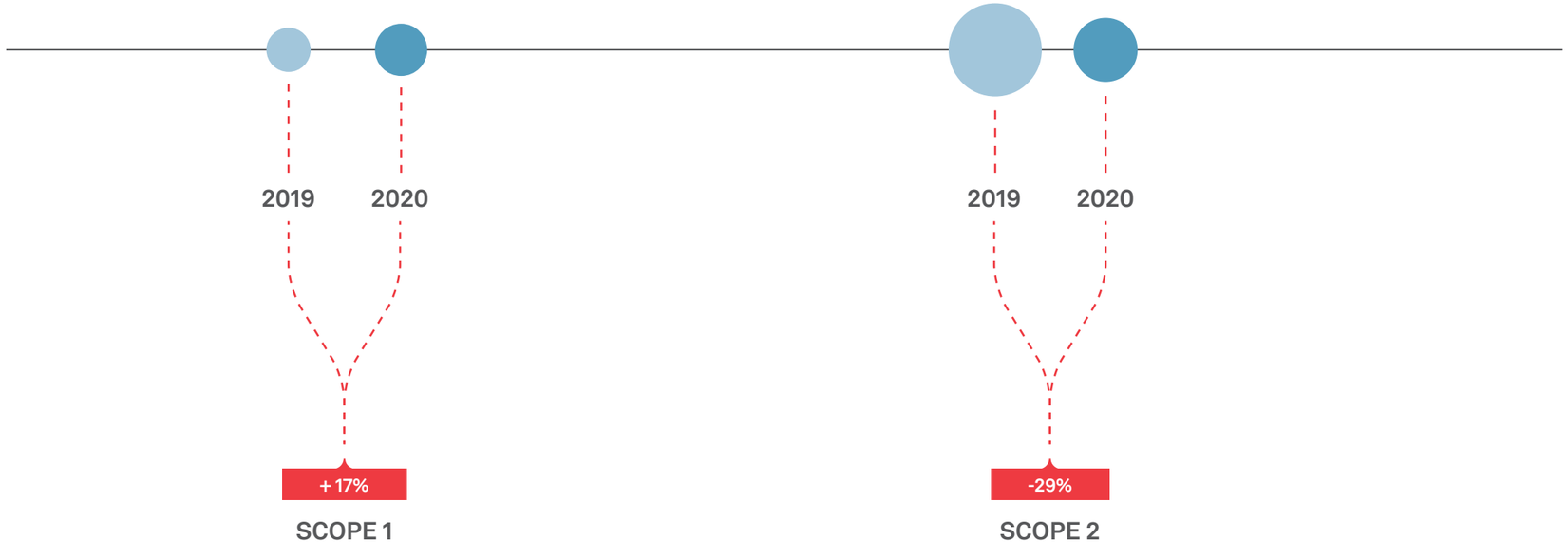
Company owned vehicles:
None

Refrigerant leakage:
None - units have been serviced and no top up was required in the year 2020.

Scope 2 Emissions

- Energy use was taken from meter readings provided by the building manager
- CO2e emissions are calculated using the Location-Based Method - using the average emission factors for the UK electricity grid.
- We understand from the building operator that the building is supplied by renewable tariffs however we have not been able to obtain the REGO certificates for these.
- We note that the large reduction in electricity consumption will be an anomaly in the pathway a due to reduced occupancy throughout the pandemic.

	Amount (kwh)	Carbon factor *	Tonnes of CO2e	Baseline Emissions tCO2e	Percentage Reduction
Scope 1	48877 kWh	0.1839	8.98	7.65	+17%
Scope 2	51026 kWh	0.2331	11.9	16.81	-29%
Total Scopes 1 & 2			20.88	24.46	-15%



3 Emission Reductions

3.2 Scopes 3 Emissions - 2020

A description of what has been included within each category is described here:

Category 1: Purchased Goods and services

- Invoices from 2020 were analysed internally using the normative business carbon calculator.
- This year every purchase was categorised to provide a more accurate result and a significant reduction from the 2019 estimate.
- The reduction in emissions is likely to be due to more accurate internal analysis and less spending due to the pandemic.
- In addition the use of a different calculation method this year makes it difficult to compare.
- Action: Continue to improve accuracy through removing double counting (i.e electricity is double counted through payment to landlord) and liaising with Derwent
- Action: Green supplier policy
- Action: Continue to advocate for the importance of understanding the impact of our purchases and business actions to our suppliers and collaborators.

Category 2: Capital Goods

- As above emissions from capital goods were analysed using the normative business carbon calculator.
- Internal analysis has provided a more accurate result, this alongside a reduction in purchases due to pandemic has produced a significant reduction in emissions.
- Action: Implement conscious purchasing through a green purchasing policy.
- Action: Reusing equipment/furniture where possible.

Category 3: Fuel & Energy Related Activities

- WTT emissions from gas consumption were calculated using Uk Gov emission factors
- T&D losses from electricity consumption were calculated using UK Gov emission factors.

Category 5: Waste

- Waste has been calculated using quantities provided by the building operator.
- Quantities are for the total building and a percentage share of 10% has been used for Orms calculations.
- UK government emissions factors have then been used to calculate emissions.
- Water is not currently included within this as data was not available at this time.
- Significant reduction is seen due to remote working during the pandemic.
- Action: Accuracy is low as currently we are given the figures for the entire building and we apply an occupancy factor to account for this.
- Action: We are asking the cleaners to record the number of bags of waste we produce.

Category 6: Business Travel

- Emissions from capital goods were analysed using the normative business carbon calculator.
- An increase is seen, we can presume this is perhaps due to different modes of travelling during the pandemic and through more accurate internal analysis.
- Action: Investigate green taxis and couriers.

Category 7: Employee commuting

- A commuter survey was undertaken and the collated data was used along with the UK government emission factors to calculate the emissions for this category.
- The accuracy of this category was improved by more thorough internal analysis.
- Remote working throughout the pandemic reduced these emissions significantly. We anticipate that this will level out in 2022 with a more settled pattern.
- There is not much scope for reduction as almost 100% of the office use public transport or active methods.
- Needs to be reviewed in conjunction with working from home emissions.
- Action: Continue to promote the cycle to work scheme.

Category 13: Downstream leased Assets

- The electricity use the leased office space is included within our scope 2 emissions and therefore not shown here.
- Remote Working
- Emissions from remote working were estimated from data collected through a staff survey of the number of days they worked remotely.
- The GHG emissions calculator was used to calculate emissions.
- A number of assumptions are made in this calculation - heating for 8 hours a day October -march when working from home and this could be improve through more detailed survey.

3 Emission Reductions

3.3 Scopes 3 Emissions - 2020

Scope 3		Tonnes of $CO2_e$	Baseline Emissions $CO2_e$	Percentage Reduction
1 Purchased Goods and services		275	375.06	-27%
2 Capital Goods		8.52	66.7	-87%
3 Fuel & Energy Related Activities	**WTT emissions**	1.17	1.00	+17%
	T&D emissions	1.02	1.43	-29%
5 Waste		0.07	0.16	-56%
6 Business Travel		6.13	3.95	+55%
7 Employee commuting		0.78	10.3	-92%
8 Home Office		23.32	-	-
Total Scope 3		316.01	458.6	-31%

3 Emission Reductions

3.4 Summary 2020

Hotspot 1

As with 2019, this category continues to have the largest impact. Our immediate action is improving the accuracy of the data collection for this category.

Hotspot 2

This is the first year that we have attempted to include home working within our footprint. The impact is likely to reduce in future years as new working patterns are established following the pandemic.

Hotspot 3

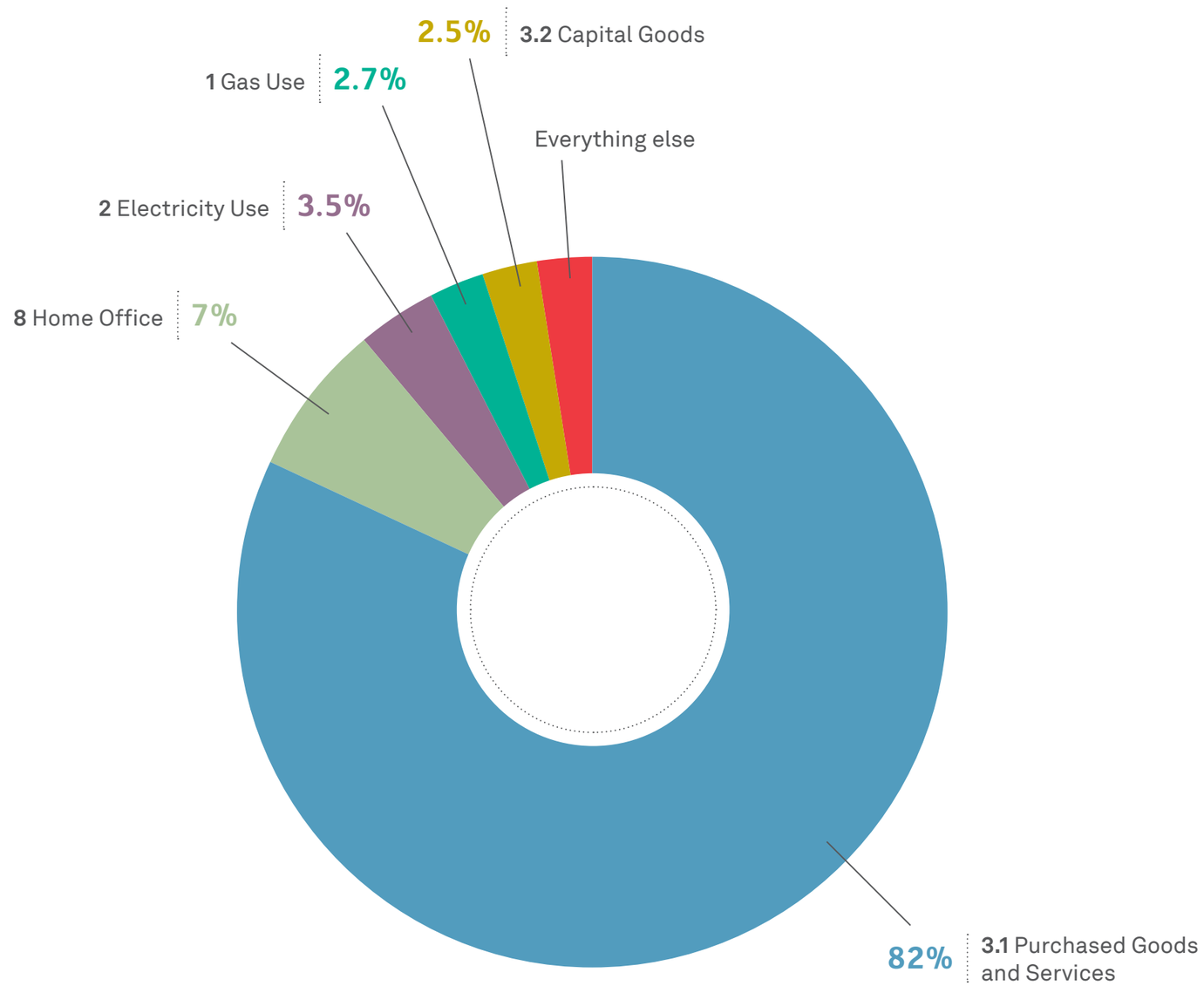
Electricity use accounts for around 3.5% of the office's total impact.

Hotspot 4

Due to the lack of sub-metering in the building it is difficult for us to determine accurate impact in this category. As previously noted, the building gas use increased in 2020 to compensate for a reduced occupancy.

Hotspot 5

Impacts from this category account for around 2.5% of Orms total impact. This is a significant reduction from the 2019 footprint likely due to decreased purchases during the pandemic.



3 Emission Reductions

3.5 Scope 1 & 2 2021

Key facts

- No changes to office floor space or operation from baseline year.
- However during 2021 the world was still navigating a global pandemic and changes were required to the way that we work.
- In 2021 on-average there were 65 ‘full time equivalent’ roles in the practice, this includes architects and operations staff and and management.
- Remote working was retained within the practice for the first time therefore the emissions for this need to be included within our footprint.
- Emissions were calculated in-house to obtain greater granularity to our scope 3 emissions
- Emissions were externally verified by Tunley Engineering who have confirmed their accuracy

Changes to calculation methodology

At the advice of Tunley engineering the scope 3 category 1/2 and 6 emissions have been calculated using the DEFRA spend based emissions and classified by SIC codes.

Scope 1 Emissions

- Use of fossil fuels in premise:
- As indicated in the adjacent table.
- Orms consumption is equivalent to 4.88% of the total building consumption.
- As with 2020, the gas usage increased. This is assumed to be due to the reduction in heat gains from occupiers and equipment causing the boiler to provide more heat to compensate.

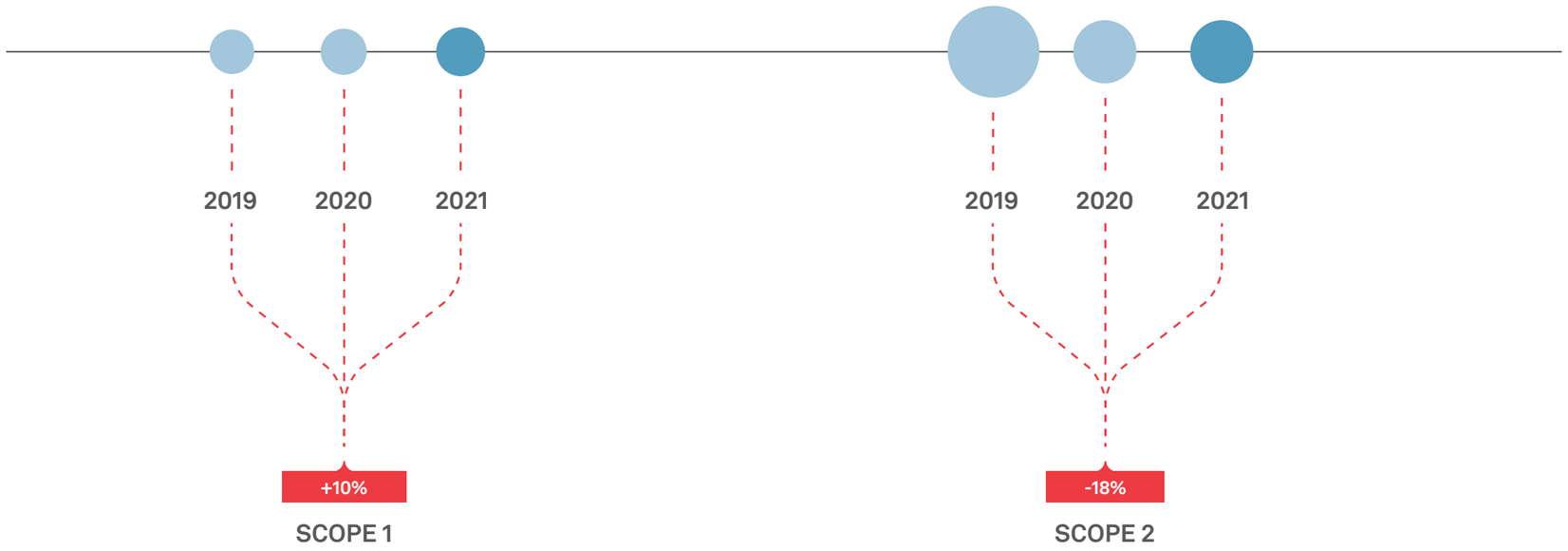
Company owned vehicles:
None

Refrigerant leakage:
None - units have been serviced and no top up was required in the year 2021

Scope 2 Emissions

- Energy use was taken from meter readings provided by the building manager
- $CO2_e$ emissions are calculated using the Location-Based Method - using the average emission factors for the UK electricity grid.
- We understand from the building operator that the building is supplied by renewable tariffs however we have not been able to obtain the REGO certificates for these.
- We note that the reduction in electricity consumption could still be an anomaly in the pathway a due to reduced occupancy throughout the pandemic.

	Amount (kwh)	Carbon factor *	Tonnes of CO2e	Baseline Emissions tCO2e	Percentage Reduction
Scope 1	45846 kWh	0.1832	8.4	7.65	+10%
Scope 2	65098 kWh	0.2123	13.82	16.81	-18%
Total Scopes 1 & 2			22.22	24.46	-9%



3 Emission Reductions

3.6 Scopes 3 Emissions - 2021

A description of what has been included within each category is included below:

Category 1: Purchased Goods and services

- Invoices from 2021 were analysed by Tunley Engineering using the DEFRA spend based emissions factors and SIC classification.
- This has again produced a more accurate result and this method will be for future calculations
- Action: Green supplier policy
- Action: Continue to advocate for the importance of understanding the impact of our purchases and business actions to our suppliers and collaborators.

Category 2: Capital Goods

- As above emissions from capital goods were analysed using the DEFRA spend based emissions factors.
- Internal analysis has provided a more accurate result, this alongside a reduction in purchases due to pandemic has produced a significant reduction in emissions.
- Action: Implement conscious purchasing through a green purchasing policy.
- Action: Reusing equipment/furniture where possible.

Category 3: Fuel & Energy Related Activities

- WTT emissions from gas consumption were calculated using Uk Gov emission factors
- T&D losses from electricity consumption were calculated using UK Gov emission factors.

Category 5: Waste

- Waste has been calculated using quantities provided by the building operator.
- Quantities are for the total building and a percentage share of 10% has been used for Orms calculations.
- UK government emissions factors have then been used to calculate emissions.
- Water is not currently included within this as data was not available at this time.
- Significant reduction is seen due to remote working during the pandemic.
- Action: Accuracy is low as currently we are given the figures for the entire building and we apply an occupancy factor to account for this. We are asking the cleaners to record the number of bags of waste we produce.

Category 6: Business Travel

- Emissions from capital goods were analysed using the DEFRA spend based emissions
- An increase is seen, we can presume this is perhaps due to different modes of travelling during the pandemic.
- Action: Investigate green taxis and couriers.

Category 7: Employee commuting

- A commuter survey was undertaken and the collated data was used along with the UK government emission factors to calculate the emissions for this category.
- The accuracy of this category was improved by more thorough internal analysis.
- Remote working throughout the pandemic reduced these emissions significantly.
- Action: Continue to promote the cycle to work scheme.

Category 13: Downstream leased Assets

- The electricity use the leased office space is included within our scope 2 emissions and therefore not shown here.

Remote Working

- Emissions from remote working were estimated from data collected through a staff survey of the number of days they worked remotely.
- The GHG emissions calculator was used to calculate emissions.
- A number of assumptions are made in this calculation - heating for 8 hours a day October -march when working from home and this could be improve through more detailed survey.
- Emissions from this category were almost double 2020 despite shorter lockdown periods, however this is because the lockdown occurred in colder months when staff were heating their homes.

3 Emission Reductions

3.7 Scopes 3 Emissions - 2021

Scope 3		Tonnes of $CO2_e$	Baseline Emissions $CO2_e$	Percentage Reduction from baseline
1 Purchased Goods and services		197.47	375.06	-48%
2 Capital Goods		13.76	66.7	-80%
3 Fuel & Energy Related Activities	**WTT emissions**	1.44	1.00	+44%
	T&D emissions	1.22	1.43	-15%
5 Waste		0.06	0.16	-62.5%
6 Business Travel		13.00	3.95	+329%
7 Employee commuting		1.47	10.3	-86%
8 Home Office		46.27	23.32	+98%
Total Scope 3		274.69	458.6	-40%

3 Emission Reductions

3.8 Summary 2021

Hotspot 1

As with 2019, this category continues to have the largest impact. The accuracy of this category has been further improved this year through the use of DEFRA factors.

Hotspot 2

The impacts from home working this year increased largely due to the winter lockdown when it has been assumed more home gas usage by staff.

Hotspot 3

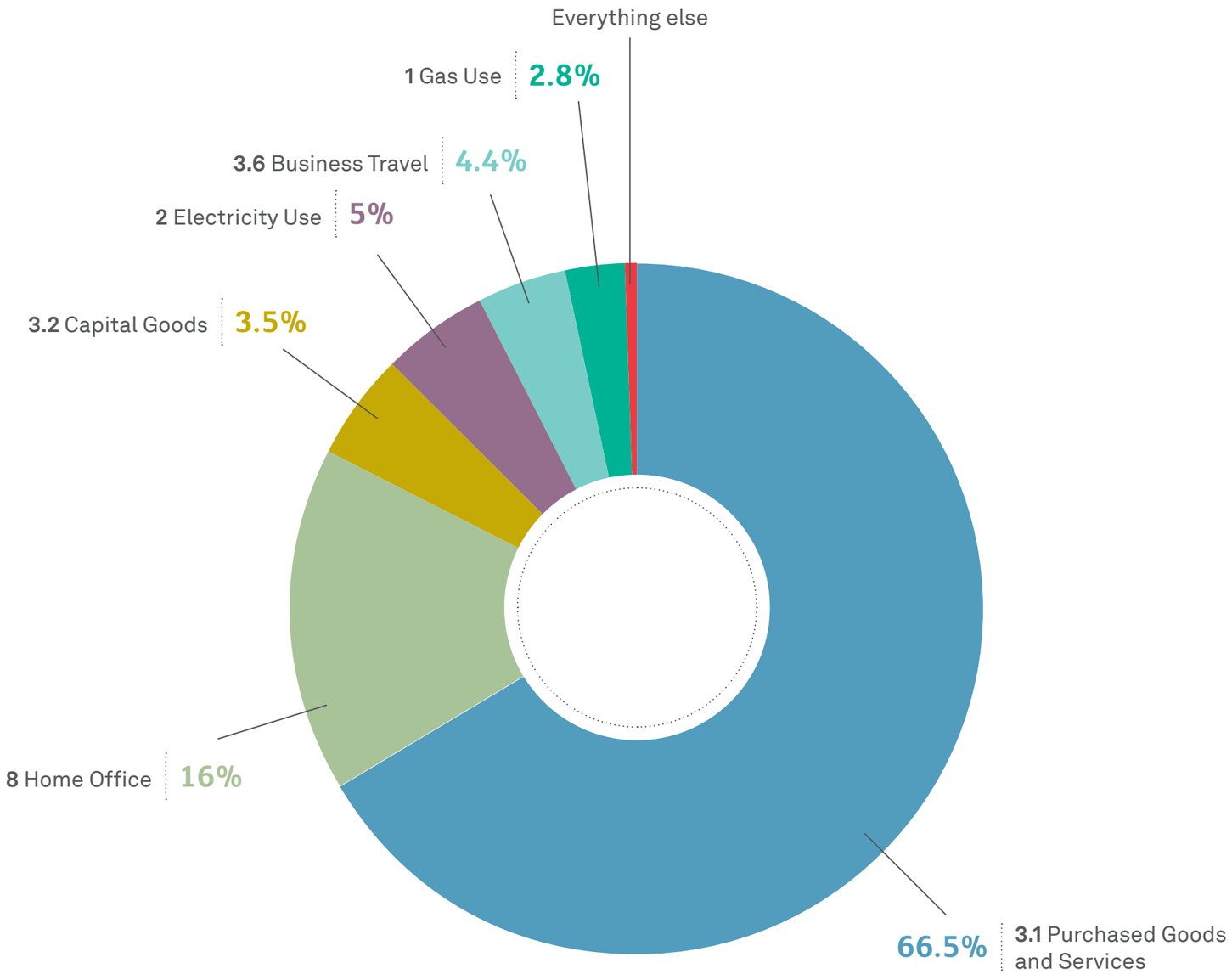
Electricity use accounts for around 3.5% of the office's total impact.

Hotspot 4

Electricity use accounts for around 3.5% of the office's total impact and we are continuing to investigate more efficient use of our equipment. Staff have been educated to turn off screens when they leave the building as we estimate power off as opposed to sleep mode should have a significant saving based on 13/14 hours of sleep mode.

Hotspot 5

It is likely that the calculated impacts from this category have increased due to more accurate categorization and increased travel following the pandemic.



3 Emission Reductions

3.9 Scope 1 & 2 2022

Key Facts

- Additional floor space was added in September 2022 when Orms took the Pavilion into their lease, this increased the floor space by 68m2 to 551.85m2
- A remote working pattern was established in 2022 of working 1 or 2 days remotely.
- In 2021 on-average there were 56 'full time equivalent' roles in the practice, this includes architects and operations staff and management.
- Emissions were calculated in-house to obtain greater granularity to our scope 3 emissions taking on the advice from Tunley Engineering and the final emissions from 2022 are yet to be externally verified.

Changes to calculation methodology

- No changes to the methodology used in 2021

Scope 1 Emissions

- Use of fossil fuels in premises: as indicated in the adjacent table.
- Orms consumption is equivalent to 4.88% of the total building consumption.
- We have seen a decrease in gas use, however due to the lack of sub-metering we cannot identify if this is due to the measures we have put in place have had an impact.
- Orms have produced a manual on how to control the air conditioning within the office and can log into the system to change the temperature set points.

Company owned vehicles:
None

Refrigerant leakage:
None - units have been serviced and no top up was required in the year 2020

Scope 2 Emissions

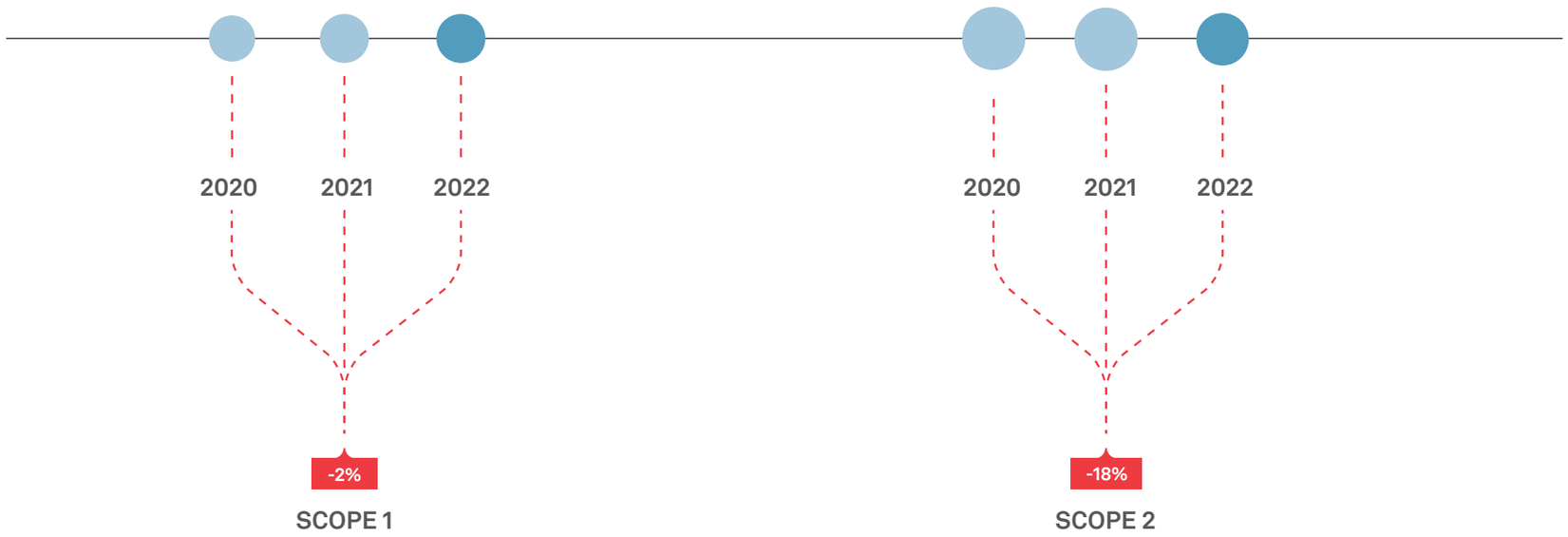
- Energy use was taken from meter readings provided by the building manager
- CO2e emissions are calculated using the Location-Based Method - using the average emission factors for the UK electricity grid.
- We understand from the building operator that the building is supplied by renewable tariffs however we have not been able to obtain the REGO certificates for these.
- We note that the reduction in electricity consumption in kWh has increased from our baseline year, a new building manager has been appointed and he has done a due diligence review of metering in the building.

	Amount (kwh)	Carbon factor*	Tonnes of CO2e	Baseline Emissions tCO2e	Percentage Reduction
Scope 1	41004 kWh	0.1825	7.48	7.65	-2%
Scope 2	73444 kWh	0.1934	14.2	16.81	-18%
Total Scopes 1 & 2			21.68	24.46	-11%

* Carbon factor from UK Government GHG conversion factors for company reporting, 2019

3 Emission Reductions

3.9 Scope 1 & 2 2022



3 Emission Reductions

3.10 Scopes 3 Emissions - 2022

A description of what has been included within each category is included below:

Category 1: Purchased Goods and services

- Invoices from 2022 were analysed by Orms using the DEFRA spend based emissions factors and SIC classification.
- This appears to be consistent with last year numbers and shows a small decrease in emissions.
- Action: Green supplier policy
- Action: Continue to advocate for the importance of understanding the impact of our purchases and business actions to our suppliers and collaborators.

Category 2: Capital Goods

- As above emissions from capital goods were analysed using the DEFRA spend based emissions factors.
- This category is likely to fluctuate due to the service life of products.
- Action: Implement conscious purchasing through a green purchasing policy.
- Action: Reusing equipment/furniture where possible.

Category 3: Fuel & Energy Related Activities

- WTT emissions from gas consumption were calculated using Uk Gov emission factors
- T&D losses from electricity consumption were calculated using UK Gov emission factors.

Category 4: Upstream Transportation and distribution

- Upon review of the invoices it was determined that couriers were used for transportation of printed documents and models. Emissions resulting from this are now classified using DEFRA spend based emissions factors.

Category 5: Waste

- Waste has been calculated using quantities provided by the building operator.
- Quantities are for the total building and a percentage share of 10% has been used for Orms calculations.
- UK government emissions factors have then been used to calculate emissions.
- Water is not currently included within this as data was not available at this time.
- Action: Accuracy is low as currently we are given the figures for the entire building and we apply an occupancy factor to account for this. We are asking the cleaners to record the number of bags of waste we produce.

Category 6: Business Travel

- Emissions from capital goods were analysed using the DEFRA spend based emissions factors and are consistent with 2021.
- Action: Investigate green taxis and couriers.
- Action: Record distances travelled for more accurate result.

Category 7: Employee commuting

- A commuter survey was undertaken and the collated data was used along with the UK government emission factors to calculate the emissions for this category.
- The accuracy of this category was improved by more thorough internal analysis.
- Remote working has now stabilising into a regular pattern.
- Action: Continue to promote the cycle to work scheme.

Category 13: Downstream leased Assets

- The electricity use the leased office space is included within our scope 2 emissions and therefore not shown here.

Remote Working

- Emissions from remote working were estimated from data collected through a staff survey of the number of days they worked remotely.
- This year additional questions were asked in the home working survey to determine how staff heat their home and for how long when they are working remotely.
- Assumptions from the UN GHG calculator of the energy use per day for heating homes (5kWh) and equipment (0.15kWh) were used.
- UK Government emissions factors for gas and electricity were then used.

3 Emission Reductions

3.11 Scopes 3 Emissions - 2022

Scope 3		Tonnes of $CO2_e$	Baseline Emissions $CO2_e$
Category 1: Purchased Goods and services		184.9	375.06
Category 2: Capital Goods		32.55	66.7
Category 3: Fuel & Energy Related Activities	**WTT emissions**	1.44	1.00
	T&D emissions	1.22	1.43
Category 4: Upstream Transportation and distribution		0.24	-
Category 5: Waste		0.11	0.16
Category 6: Business Travel		12.97	3.95
Category 7: Employee commuting		2.99	10.3
8 Home Office		1.23	23.32
Total Scope 3		237.65	458.6

3 Emission Reductions

3.12 Summary 2022

Hotspot 1

As with previous years, this category continues to have the largest impact. The accuracy of this category has been further improved this year through the use of **DEFRA factors.**

Hotspot 2

It is considered that impacts from this category will naturally fluctuate, the accuracy has also been improved through the use of the DEFRA emission factors.

Hotspot 3

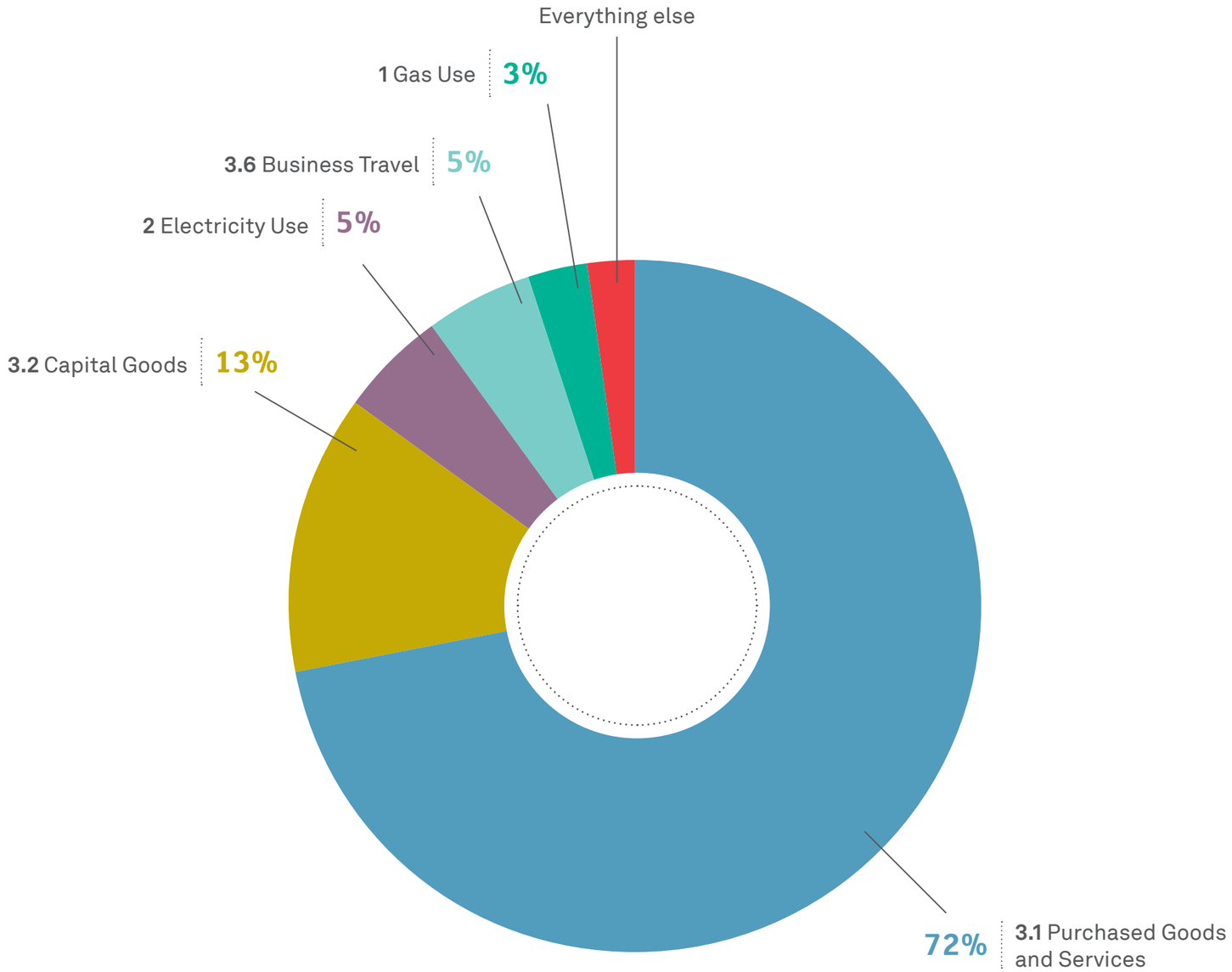
Electricity use accounts for around 5% of the office's total impact and we are continuing to investigate more efficient use of our equipment. Consumption has increased following a review from the building manager of the site wide metering.

Hotspot 4

It is likely that the calculated impacts from this category have increased due to more accurate categorization and increased travel following the pandemic

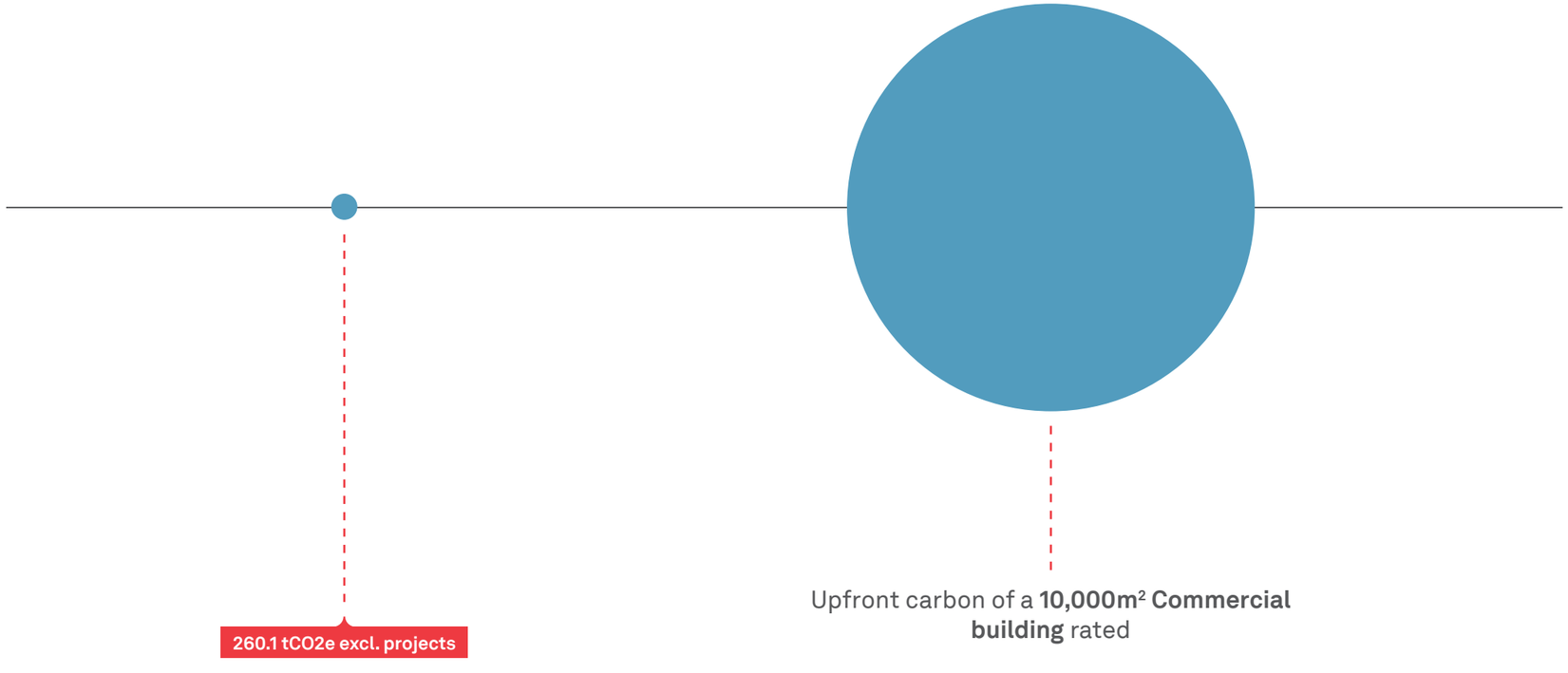
Hotspot 5

We have seen a reduction in actual usage this year, and the landlord is investigating removing the gas boilers from the premises and the works associated with this.



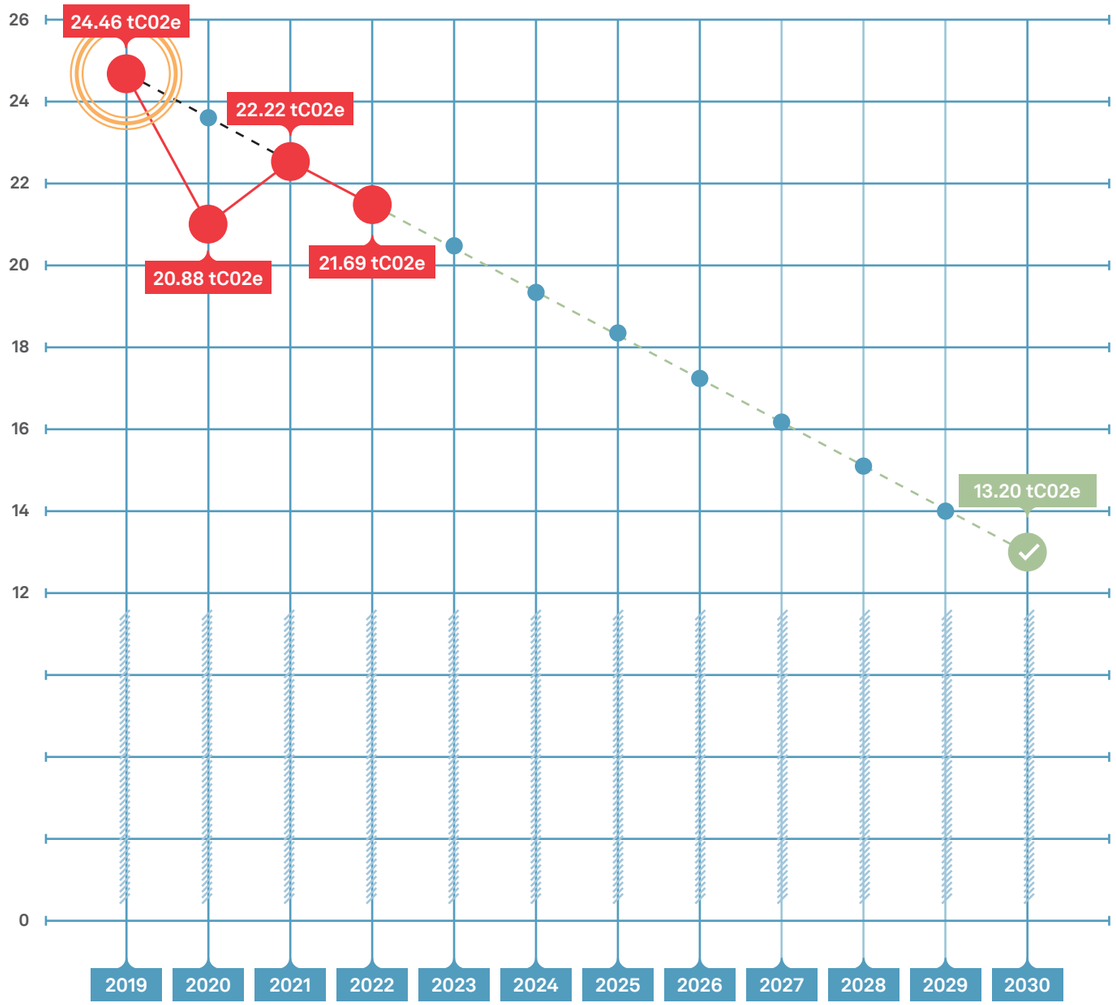
4 Understanding the scale of our impact

We recognise that the impact of our projects which could be included within our scope 3 emissions is significant and in future years we will look to include these impacts within our impact report.



5 Summary

5.1 Progress against our near term target



Progress against our near term SBT

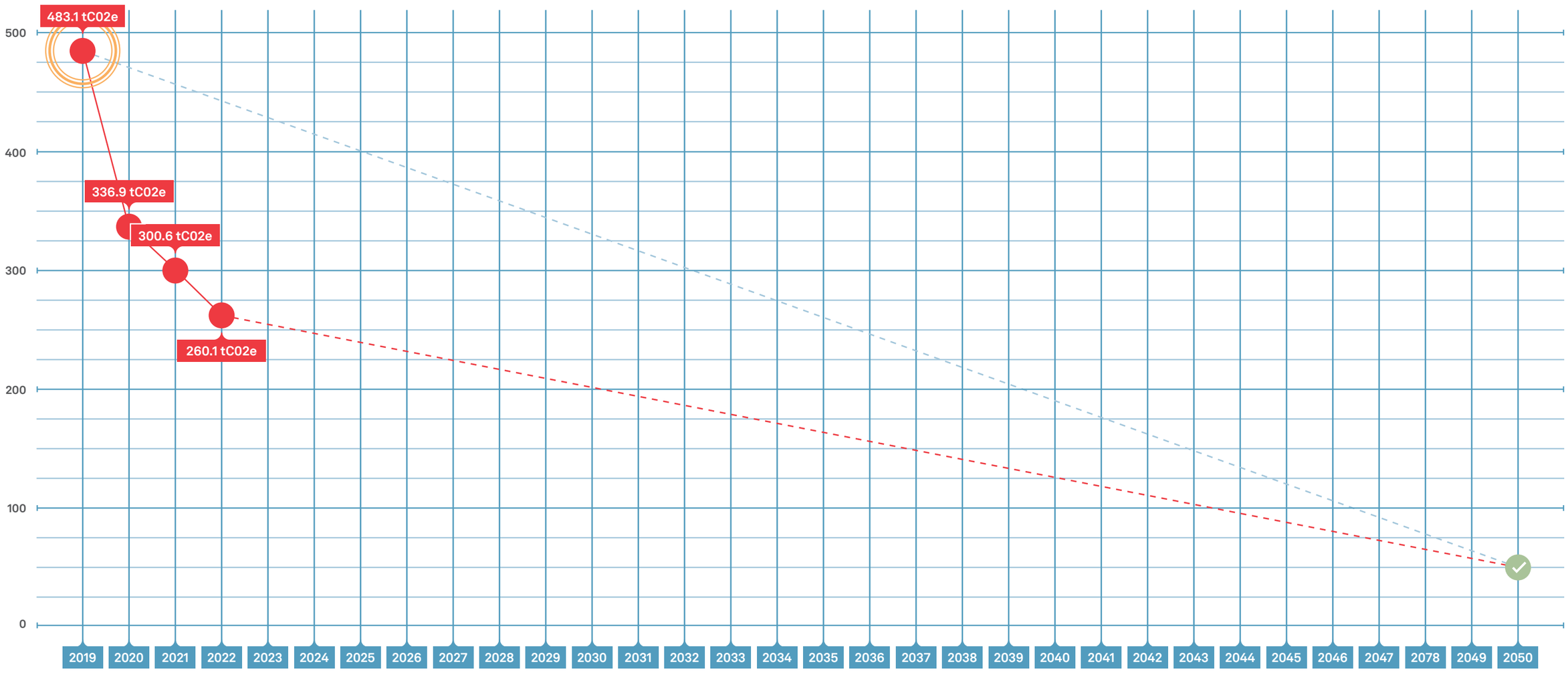
Orms are currently on track for this target and have achieved an 11% reduction.

We are continuing to liaise with our landlord about removing gas supply from the building and implement efficiency changes in electricity consumption where possible .

A significant energy reduction could be achieved through the alteration of our lighting to LED fittings.

5 Summary

5.2 Progress against our long term target



6 Summary

6.1 Carbon Removals Strategy

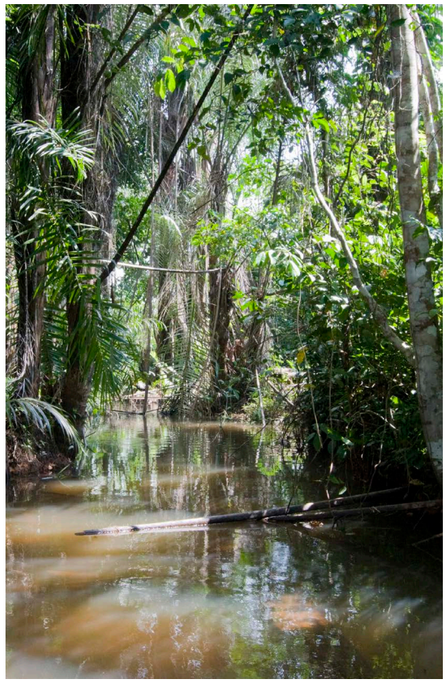
Following the calculation of our 2019 baseline carbon footprint, Orms began to offset part of our Scope 1 & 2 emissions. The total offsets we have purchased so far equateS to 43 tonnes and around 63% our scope 1 & 2 footprint.

This action is not counted towards our impact reduction. It is a recognition that whilst our efforts are focused on the reduction of our impact, until such a time when our impact is Net Zero, Orms want to invest in projects that help address climate inequality and carbon reduction.

A number of potential offsetting projects which meet the best practice criteria were identified. These were then put to an office vote and the below projects were selected.

Future Carbon Removals

For 2023 Orms are looking into setting an internal carbon fund which can be used for investment in Carbon removal projects following the Oxford principles.



Project 01 (Avoidance)
Gola Rainforest Project

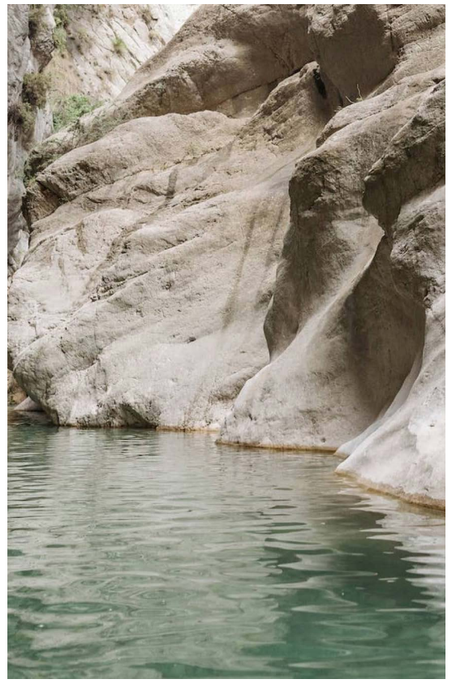
8 tonnes purchased

Project 02 (Removal)
Yarra Yarra Biodiversity Project

6 tonnes purchased

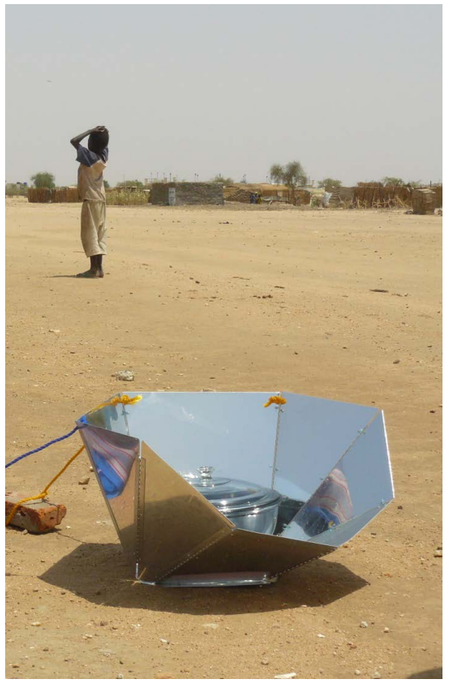
Project 03 (Avoidance)
Terraclear - Clean water access

18 tonnes purchased



Project 04 (Avoidance)
Betulia Hydroelectric Project in Honduras

5 tonnes purchased



Project 05 (Avoidance)
Solar Cooking for Refugee Families in Chad

6 tonnes purchased

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