

25th March 2024

Unlocking the power of data: Art, Analysis, Action Part II

Caroline Purkayastha
Marina Ivanow
Lukas Fraser

Julie's Bicycle

CREATIVE • CLIMATE • ACTION

Housekeeping

- Session is being recorded
- CC captioning can be enabled
- Short break
- Q&A
- Presentation will be uploaded & slides shared

Agenda

- JB & ACE overview
- Introduction to Scope 3
- Scopes 3 (within CC Tools)
- Beyond Carbon (incl strategy, digital, commuting)

Unlocking the power of data: Art, Analysis, Action Part I
juliesbicycle.com/event/unlocking-the-power-of-data/

Arts Council England & Julie's Bicycle

Partners since 2012

Environmental Programme 2023-26

creativeclimatetools.com

juliesbicycle.com/our-work/arts-council-programme/

Julie's Bicycle
CREATIVE • CLIMATE • ACTION

Link to the Creative Climate Tools
creativeclimatetools.com

Link to the Arts Council England Programme
juliesbicycle.com/our-work/arts-council-programme/



Introduction to Scope 3

Julie's Bicycle
CREATIVE • CLIMATE • ACTION



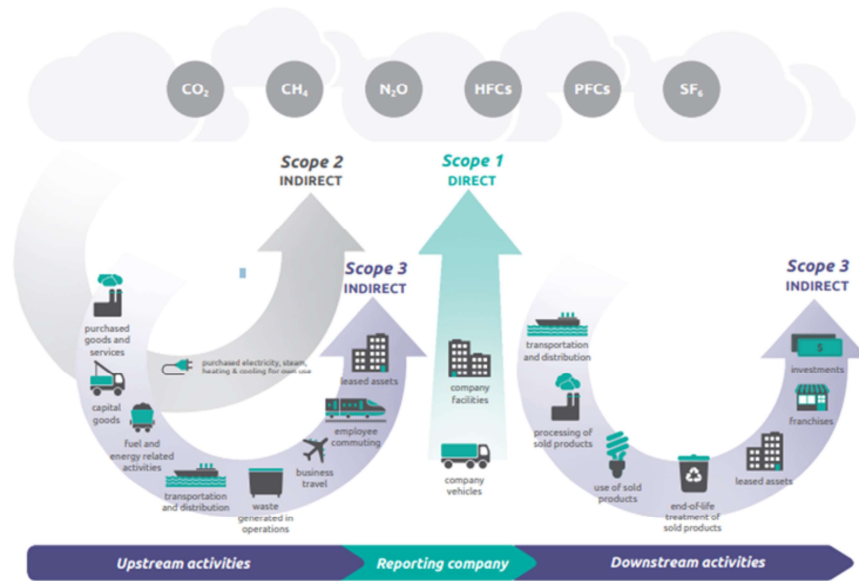
GHGs emissions are usually measured in kilograms (kg) or tonnes (t)

Carbon dioxide - **CO₂**

OR

Carbon dioxide equivalent - **CO₂e**

Figure [1.1] Overview of GHG Protocol scopes and emissions across the value chain



A diagram showing the GHG Protocol scopes

Julie's Bicycle
CREATIVE • CLIMATE • ACTION

Greenhouse Gas Protocol
<https://ghgprotocol.org/>

Scope 1

The emissions from owned or operated assets
(i.e. burning fuel in company-owned vehicles and gas in boilers)

Scope 2

The emissions from purchased electricity, steam,
heating & cooling

Scope 3

The emissions from everything else
(suppliers, distributors, product use, etc.)

Key to creating your carbon footprint

Good underlying data *(i.e. your energy use - kWh of electricity or tonnes of landfill waste or litres of petrol)*

X

Carbon emission factor *(kg CO₂ per kWh or kg CO₂e per litre)*

Electricity & Gas - government emission factors (DEFRA)

Waste / Materials - more complex, various sources

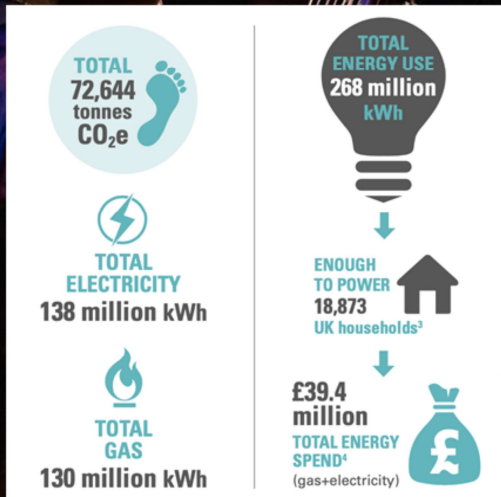
= X,XXX tCO₂e

Julie's Bicycle
CREATIVE • CLIMATE • ACTION

Creative Climate Tools - Methodology Paper

<https://ig-tools.com/resources>

New Carnival Company.
Photo: Tracy Curtis



An infographic about ACE NPO consumption and emissions

2022-23 Reporting Data

- 656 NPOs used CC Tools to submit Environmental data (828 in total)
- 562 NPOs submit Beyond Carbon responses. Providing a much wider lens on environmental action and benefits

Julie's Bicycle
CREATIVE • CLIMATE • ACTION

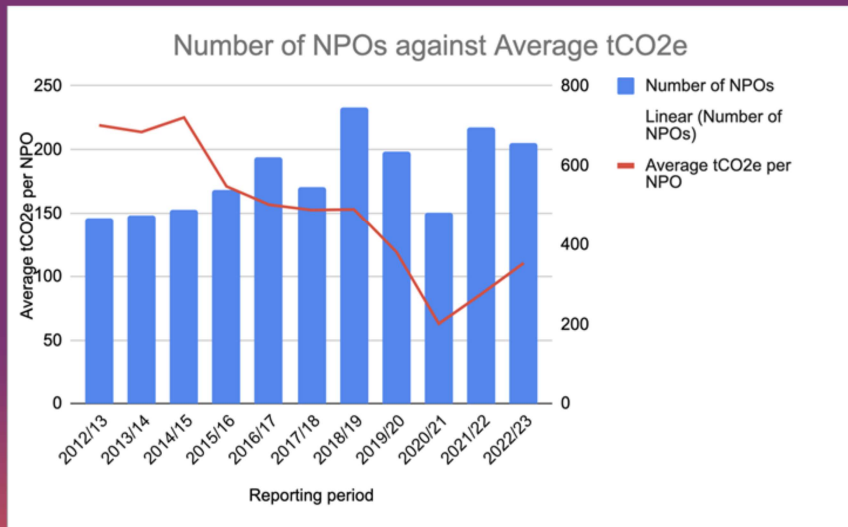
2022-23 Arts Council England Environmental Report
<https://juliesbicycle.com/resource/arts-council-england-environmental-responsibility-report-2022-2023/>

Emissions Reduction

S

Annual reporting data using CC Tools shows that since 2012/13, the average **energy use** emissions per National Portfolio Organisation have reduced by

50%



A graph showing average NPO emissions over time

Julie's Bicycle

CREATIVE • CLIMATE • ACTION



Scope 3 Data Collection

Julie's Bicycle

CREATIVE • CLIMATE • ACTION

Water

- Measured by volume - m³ or less commonly litres
- Usage can be found on water meters or bills.
- Reduce impacts by improving efficiency of equipment, e.g. by finding/fixing leaks, installing efficient toilets/taps, and by installing a meter
- Behaviour and awareness can also be improved with signage e.g. in bathrooms, near taps.



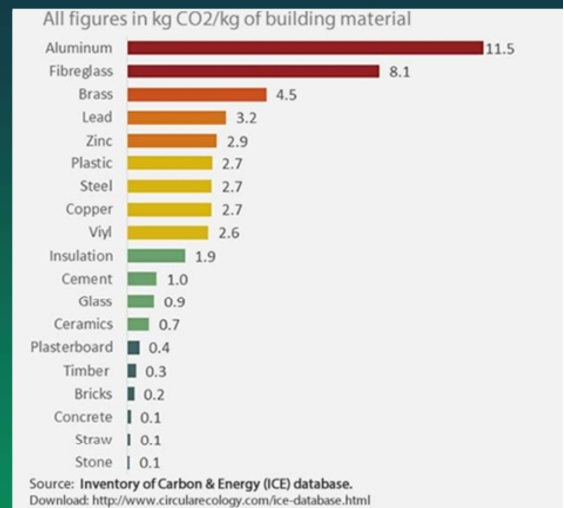
A water meter

Julie's Bicycle

CREATIVE • CLIMATE • ACTION

Materials - Measuring

- All materials have an embodied carbon impact
- Any materials purchased in your operations, e.g. timber, paints, packaging, textiles etc.
- Measured in kg of material used
- Also note the provenance/origin of the material, e.g. virgin, recycled, reused
- Most of this data can be found from invoices, and/or production/building/set managers or designers.



Examples of CO₂e emissions of different materials

Julie's Bicycle

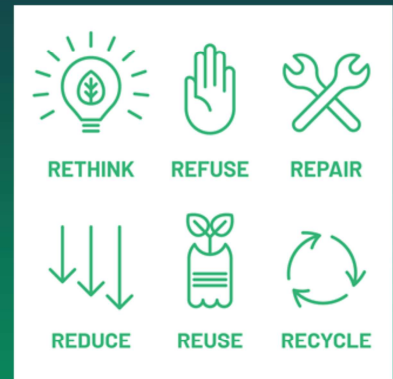
CREATIVE • CLIMATE • ACTION

The ICE Database can be found here:

<https://circularecology.com/embodied-carbon-footprint-database.html>

Materials - Reducing

- Consider the waste hierarchy or the '6 Rs'
- At the **design stage**, prioritise using materials that have a lower carbon footprint and are more re-used/recycled.
- Consider banning materials that have higher impacts
- Think about the longevity of a material and the project it's being used for
- Use the ICE database to understand impacts of materials and alternatives



The '6 Rs' for waste hierarchy

Julie's Bicycle

CREATIVE • CLIMATE • ACTION

More on the 6 Rs: <https://practicalaction.org/the-6-rs/>

The ICE Database can be found here:

<https://circularecology.com/embodyed-carbon-footprint-database.html>

Waste - Measuring

- Measured by tonnes of waste produced plus the end of life treatment (e.g. recycling, landfill, composting).
- Data can be acquired from your waste contractor who can often provide a tonnage, or by estimating a conversion.

The screenshot shows the 'Waste Tonnage Estimator' tool interface. It includes a header with the Creative Climate Tools logo and the tool name. A note explains that the tool is for organizations without exact figures, requiring estimation based on weekly or monthly collections. Below this, there are instructions to select from dropdowns in red cells and enter data in gold cells. The main table has columns for Material Category & Type, Quantity, Unit, and Timescale. The first row shows 'General (residual) waste - Mixed materials' with a quantity of '0', unit of 'Refuse bags', and timescale of 'per Week'. Below the table, there is a text input field containing '0.000 tonnes of waste for the year' and a note to enter this figure into the 'Waste Tab' with units set to 'Tonnes'.

Material Category & Type	Quantity	Unit	Timescale
General (residual) waste - Mixed materials	0	Refuse bags	per Week

0.000 tonnes of waste for the year

Enter the tonnage figure above into the CCTools Waste Tab. When doing this, ensure the "Units" are set to "Tonnes".

The Waste Tonnage Estimator tool for the Creative Climate Tools

Julie's Bicycle
CREATIVE • CLIMATE • ACTION

You can find the waste tonnage estimator in the Creative Climate Tools platform's resource page: <https://ig-tools.com/resources>

Waste - Reducing

- Think about the waste hierarchy/6 Rs
- Consider bans on single use plastic, incorporate reduced landfill and improved recycling across environmental action plans
- Refer to resources for improving waste in the arts for inspiration



Vision25/JB's Sustainable Materials & Waste Toolkit for Festivals

Julie's Bicycle
CREATIVE • CLIMATE • ACTION

Read the sustainable materials & waste toolkit for festivals here:
<https://juliesbicycle.com/resource/sustainable-materials-and-waste-management-toolkit-for-festivals/>

Audience Travel - Measuring

- Measured by the percentage of your audience travelling to you by each mode of transport, the average distance travelled, and the number of people carpooling.
- A significant impact but also overwhelming prospect of collecting this data - but there are various options available
- The best way is to survey audience members at point of ticket sale, or after the event.

Julie's Bicycle

CREATIVE • CLIMATE • ACTION

Audience Travel - Reducing

- Incentivise the use of more sustainable transport methods, e.g. by partnering with transport companies to offer discounted/free travel
- Improving accessibility/comms also helps, e.g. by providing safe walking/public transport routes, or by improving cycle storage on-site.
 - E.g. Lewes Depot have live bus timetables in their foyer
 - Glasgow Music City published a map showing all cycleways and public transport routes combined with all music venues

Julie's Bicycle

CREATIVE • CLIMATE • ACTION

Info on Lewes Depot:

<https://lewesdepot.org/about/sustainability/transport>

Glasgow Towards a Just & Green Music City map of music venues overlaid against public transport & cycleways & public cycle racks:

<https://experience.arcgis.com/experience/753700e6d876493b9c2d3178c619f07e/page/Music-%26-Cycling/>

Business Travel - Measuring

What to measure?

- Mode of transport (air, train, bus, car, etc.)
- Fuel used - if available (Units: litres) or Distance travelled (Units: km/miles)
- Electricity used - electric vehicles only (Units: kWh)

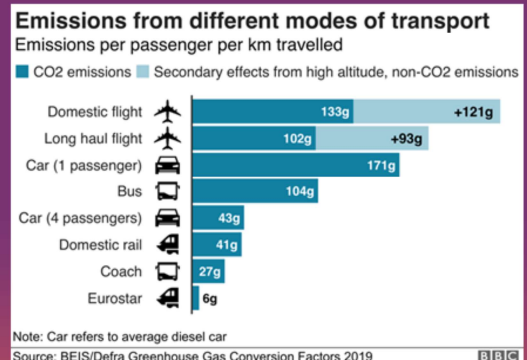
How to measure?

- Ask your travel agent for travel they've booked
- Use travel expenses and/or employee survey (inc. fuel card for company cars)

Business Travel - Reducing

What to do?

- Reduce flights where possible
- Prioritise lower emissions public transport
- Set limits in your travel policy i.e. journeys below X hours will use train as default
- Set travel emissions budget each year
- Consider whether the travel is necessary



Examples of CO2e emissions of different transport methods

Artist/Crew Travel - Measuring

What to measure?

- Mode of transport (air, train, bus, car, etc.)
- Fuel used - if available (Units: litres) or Distance travelled (Units: km/miles)
- Electricity used - electric vehicles only (Units: kWh)

How to measure?

- Ask your travel agent for travel they've booked
- Use documentation from your fleet operator or production team
- Use travel expenses and/or employee survey

Artist/Crew Travel - Reducing

What to do?

- Reduce flights where possible
- Prioritise lower emissions public transport
- Consider which artists need to travel e.g. “touring the art, not the artist”
- Consider slow/deep touring

Julie's Bicycle
CREATIVE • CLIMATE • ACTION

HandleBards: <https://www.handlebards.com/> (example of low carbon travel)

LIFT Concept Touring:

<https://www.liftfestival.com/project/concept-touring/>

Showing without Going:

<https://showingwithoutgoing.live/index.php?p=about>

Katie Mitchell's A Play for the Living in a Time of Extinction:

<https://www.barbican.org.uk/whats-on/2023/event/katie-mitchell-headlong-a-play-for-the-living> (example of touring the art, not the artist)

Accommodation - Measuring

What to measure?

- Number of nights per room in the accommodation (Units: nights)
- Location of accommodation (City, Country)
- Number of hotel stars

GREENVIEW  Hotel Footprinting Tool

<https://www.hotelfootprints.org/>

How to measure?

- Ask your travel agent for accommodation they've booked
- Get the info internally from your operations or production team
- Use travel expenses and/or employee survey

Julie's Bicycle
CREATIVE • CLIMATE • ACTION

GreenView's Hotel Footprinting Tool:

<https://www.hotelfootprints.org/>

Accommodation - Reducing

What to do?

- Reduce the amount of stays
- Consider alternatives to hotels e.g. homestays, staying with friends
- Consider hotels with green credentials
- Adopt good practices when staying

Freight - Measuring

What to measure?

- Mode of transport (truck, van, air, sea, rail)
- Distance travelled (Units: km/miles)
- Weight transported (Units: tonnes)

How to measure?

- Use documentation from your fleet operator or production team
- Estimate weight through vehicle capacity or average equipment weight



Freight - Reducing

What to do?

- Reduce air freight
- Make sure your route makes logistical sense to minimise distance travelled
- Reduce amount transported where possible
- Choose freight suppliers based on their credentials

Gallery Climate Coalition's Sustainable Shipping campaign:

<https://galleryclimatecoalition.org/ssc/>

Homeworking - Measuring

What to measure?

- Total number of working hours using home heating and home office equipment

How to measure?

- Conduct an internal survey
- Estimate based off of your policy and number of employees

Example: Policy encouraging employees to come in 3 time a week.

Assume 2 days WFH which is around 16 hours a week per employee. 48 working weeks a year.

No. of employees x 48 x 16 = WFH hours per year

Homeworking - Reducing

What to do?

- Encourage sustainable practices at home
- Incentivise switch to green tariff

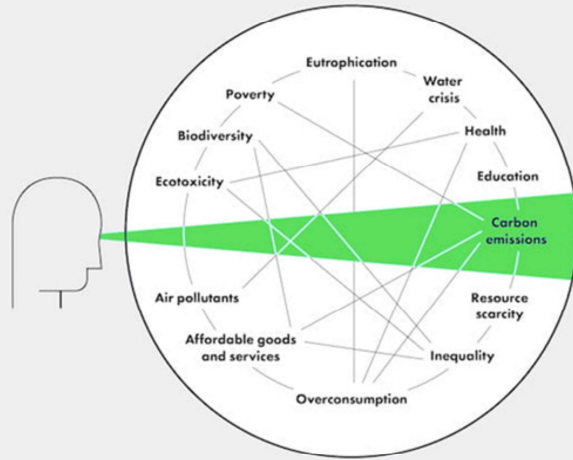


Beyond Carbon

Julie's Bicycle

CREATIVE • CLIMATE • ACTION

Carbon tunnel vision



Sustainability transition

NEW PERSPECTIVE

Julie's Bicycle
CREATIVE • CLIMATE • ACTION

CREATIVE CLIMATE TOOLS **Beyond Carbon Survey** Home Julie's Bicycle

Our tools need a little more information about you or your organisation. We need your help, can you please visit your [Organisation Details](#) and make sure your profile is up to date.

2023-24 at a Glance

Total Carbon Footprint
76,046
tonnes CO₂e

[View Results](#)

Category	Percentage
Business Travel	49.24%
Waste	50.64%
Audience Travel	0.01%
Fleet Travel	0.02%
Energy	0.09%
Water & Sewage	0.00%

Footprints [View Footprints](#)

- QA Test (O)
- QA Test (O)
- QA Test (T)
- QA Test (VCB)
- QA Test (VCB)

Documents [View Documents](#)

[Get in Touch](#)

Home
Results
Data
Beyond Carbon
Documents

Creative Green Certification
Forecasting
ROI Calculator
Links
Admin

Finance

- Dedicated environmental budget
- Green banks - bank.green/
- Ethical pensions - makemymoneymatter.co.uk/
- [Equity For A Green New Deal](#)

Looking for a greener banking option?

bank.green/

Pensions, banking and insurance,

<https://makemymoneymatter.co.uk/>

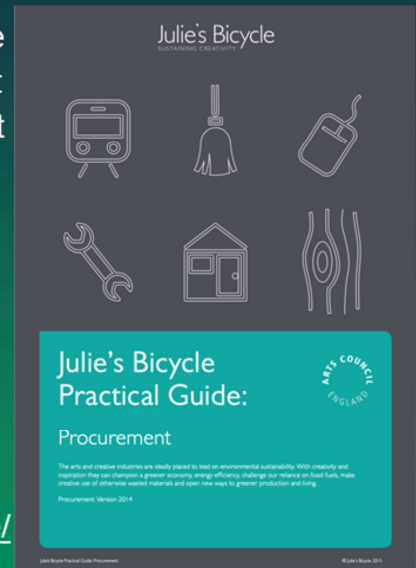
[Equity For A Green New Deal](#)

Procurement

- Supplier questionnaires
- Procurement scorecard
- % KPIs
- Risk register
- Appraisal of biggest spend

<https://juliesbicycle.com/resource/sustainable-procurement-guide/>

Julie's Bicycle
Practical Guide:
Procurement



Julie's Bicycle
CREATIVE • CLIMATE • ACTION

Julie's Bicycle Practical Guide - Procurement

<https://juliesbicycle.com/resource/sustainable-procurement-guide/>

HOME Manchester case study

<https://www.businessgrowthhub.com/case-studies/home>

Employee Commuting

- Creative Carbon Scotland
[creativecarbonscotland.com/carbon-management/tools-and-resources/](https://creativecommons.org.uk/carbon-management/tools-and-resources/)
- Custom emissions

Creative Carbon Scotland's Employee commuting resource
[creativecarbonscotland.com/carbon-management/tools-and-resources/](https://creativecommons.org.uk/carbon-management/tools-and-resources/)

Digital

- Customs emissions tab
- Range & complexity of factors
- Lack of transparency across digital sector
- Signpost to other tools

Digital

sustainable-screen.juliesbicycle.com/actions-categories/digital-tech

- Deactivating old accounts
- Actively unsubscribing from irrelevant marketing
- Keep regularly used software updated
- Switching to green web hosting
- Closing unused browsers & tabs
- Download & delete, rather than stream (or select SD over HD)
- Compressing file sizes

Julie's Bicycle
CREATIVE • CLIMATE • ACTION

On the JB website there are some tips and recommendations on what actions you can begin taking immediately.

sustainable-screen.juliesbicycle.com/actions-categories/digital-tech

Digital

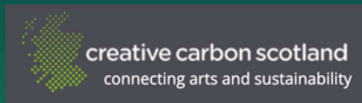
Julie's Bicycle - Environmental Sustainability in the Digital Age of Culture



Julie's Bicycle
CREATIVE • CLIMATE • ACTION

There is also a downloadable guide called 'Environmental Sustainability in the Digital Age of Culture'.
<https://juliesbicycle.com/resource/briefing-report-environmental-sustainability-in-the-digital-age-of-culture/>

Digital



GREEN WEB
FOUNDATION



WHOLEGRAIN digital



Website Carbon Calculator

Julie's Bicycle
CREATIVE • CLIMATE • ACTION

EarthSpeakr - <https://juliesbicycle.com/resource/carbon-footprint-for-earth-speakr/>

Green Web Hosting -

<https://www.thegreenwebfoundation.org/tools/directory/>

Website Calculator - <https://www.websitecarbon.com/>

Creative Carbon Scotland -

<https://www.creativecarbonscotland.com/resource/creative-carbon-scotlands-guide-to-your-digital-carbon-footprint/>

<https://www.w3.org/blog/2023/introducing-web-sustainability-guidelines/>

Wholegrain Digital - Digital Declutter Toolkit for Businesses

<https://www.wholegraindigital.com/digitaldeclutter/>

The Networked Condition - <https://thenetworkedcondition.com/>

Fast Familiar Digital Climate Action Sitebuilder -

<https://fastfamiliar.com/climate-action/sitebuilder/>



Coming up...

REPORTING WINDOW OPEN

Wednesday 1st May - Friday 28th June

DROP-IN SESSION

Thursday 6th June

Julie's Bicycle
CREATIVE • CLIMATE • ACTION



Q&A

juliesbicycle.com/sign-up-for-our-newsletter/

juliesbicycle.com



@Julies_Bicycle



f in

@JuliesBicycle

Julie's Bicycle

CREATIVE • CLIMATE • ACTION