Circular Festivals

USER GUIDE

Green Deal Circular Festivals Monitoring Tool

Version 0.1
November 2025

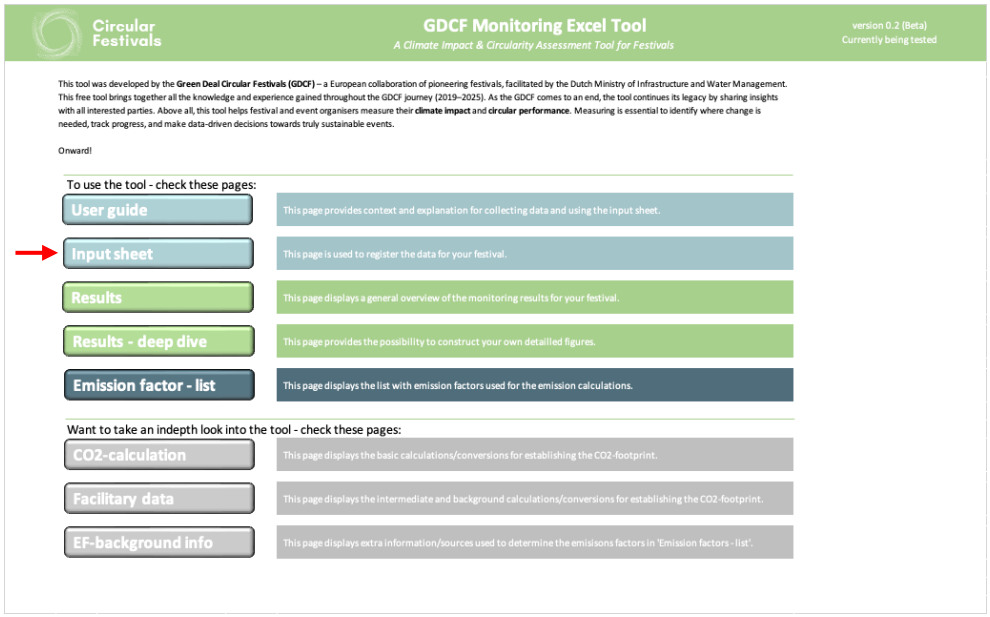
Content

Quick Start Guide | Get Started in 4 Steps

Welcome to the GDCF Monitoring Excel Tool! This practical quick start guide will help you get started with measuring your event's environmental impact right away. Follow the steps below to complete your first assessment.

Step 1: Preparation (Before the Event)

- **Review the input sheet:** Open the **"Input Sheet"** tab in the Excel tool to see what data you will need.



- **Engage your team:** Identify who is responsible for which data (e.g., production, catering, waste, energy).
- **Inform suppliers:** Let them know what data you will need from them after the event (such as fuel consumption, weighbridge tickets, meter readings).

💡 **Tip:** Use a separate spreadsheet to collect raw data per theme before entering it into the Input sheet.

Step 2: Data Collection (During and Right After the Event)

Collect the required data according to the key themes:

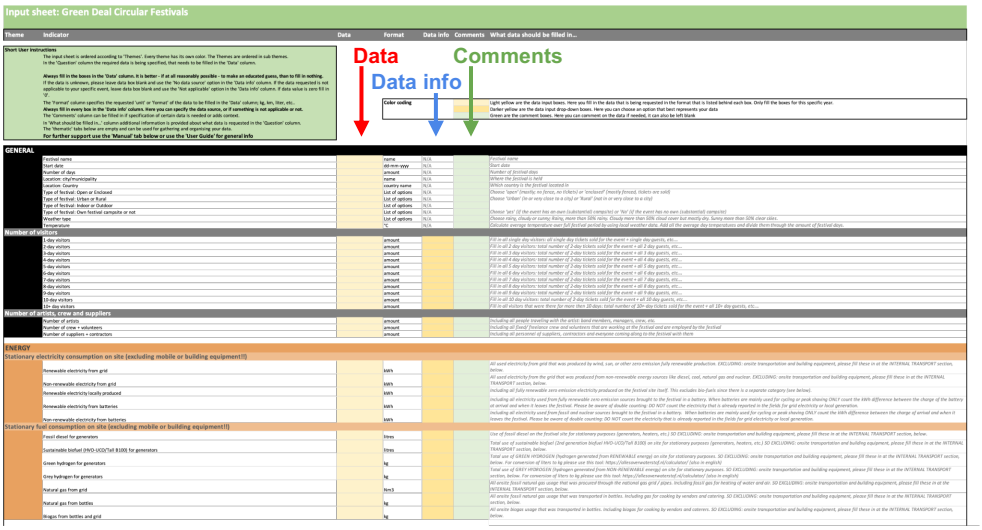
- **Energy:** Meter readings, generator fuel consumption.
- **Materials:** Purchase invoices, tableware use report, weighbridge tickets or invoices for waste streams.
- **Travel & Transport:** Travel data for visitors, artists, and crew (mode of transport, distance).
- **Water & Sanitation:** Water consumption, reuse, and wastewater volumes.
- **Food & Drinks:** Purchase data, sales volumes, origin of products.
- **Overnight Stays:** Number of stays at your festival campsite and external accommodations (hotels, other campsites).
- **Digital Footprint:** Website, e-mail, app, and social media traffic, cloud storage volumes.
- **Carbon Removal:** tonnes of CO2e removed

📋 **Use the 'User Guide' tab:** Consult this for detailed, line-by-line explanations of every data point requested, including tips, tricks and questionnaire lists.

Step 3: Data Entry (After the Event)

1. Go to the **"Input sheet"** tab.
2. Fill in **all yellow cells** in Column D ("Data"). Enter **0** if something is not applicable – do not leave anything blank.
3. For each entered data point, select the **source** from the dropdown in Column F ("Data info").
4. Use Column G ("Comments") for any additional context.
5. Work through the sheet theme by theme: start with "General" and continue through to "Digital Footprint".

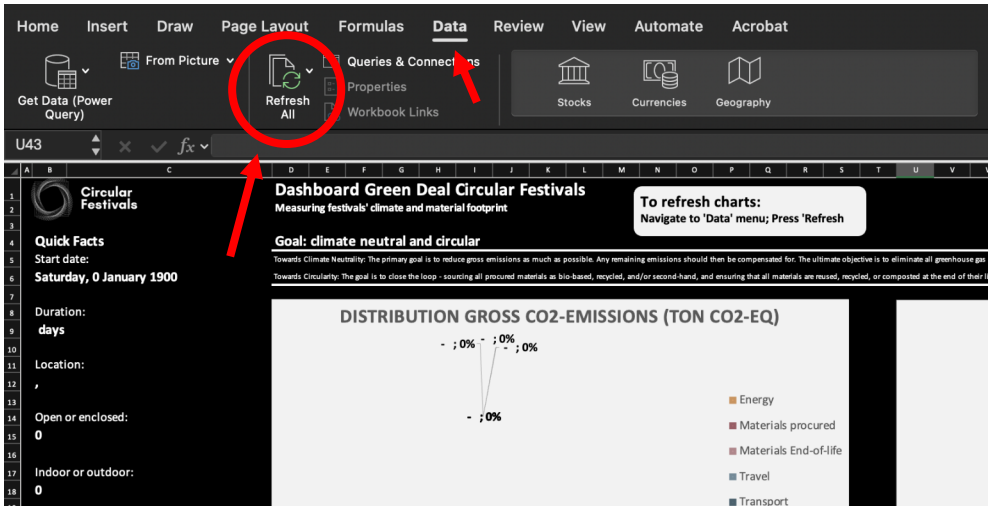
⚠️ **Note:** Do not modify formulas. This can disrupt the calculations.



Step 4: Review Results and Save

- After entering your data, your results will automatically appear in these tabs:
  - **“Results”:** Check your **key results** here, such as your total CO_2 footprint and circularity performance.
  - **“Results - Deep Dive”:** Explore detailed figures for each specific theme here.
- **Review and save:** Check that all yellow cells are filled and all sources are selected. Then save your file.

⚠️ **Note:** After adjusting data in **“Input sheet”** tab don’t forget to navigate to the '**Data**' menu and press **'Refresh all'**, to see your adjusted data updated in the results.



🎉 **Congratulations!** You have now mapped the basic environmental impact of your event. You can use the tool to monitor year-on-year improvement and make informed sustainability choices.

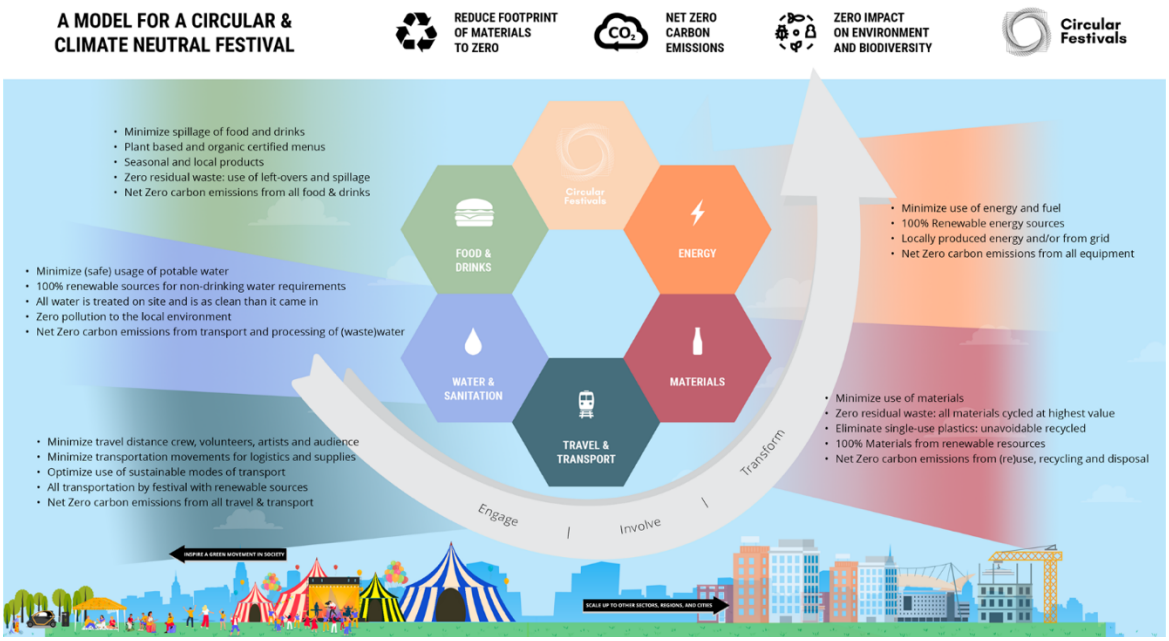
Part 1 | Introduction

This is the User Guide for the Monitoring Tool developed through the Green Deal Circular Festivals (GDCF) programme.

This Excel-based tool enables festivals to measure and monitor their environmental impact across key areas of ***Energy, Materials, Travel & Transport, Water, Food & Drinks, Overnight Stays, Digital Footprint*** *and* ***Carbon Removal***. By using this tool, festivals can track their progress towards **circularity and climate neutrality**, identify key impact areas for improvement, and make data-driven decisions to reduce their environmental footprint.

This tool stands as a key outcome of the multi-year GDCF collaboration, which successfully concluded in 2025. The programme brought together 50+ pioneering European festivals, the Dutch Ministry of Infrastructure and Water Management, the Ministry of Economic Affairs and Climate Policy, and knowledge partners to accelerate the transition towards circular and climate-neutral festivals and sector.

The GDCF programme has formally ended, but its legacy lives on through the many advancements, knowledge, tools, and collaborative spirit it fostered. This monitoring tool is a central part of that legacy. It was first developed and tested in practice in 2022 and refined through successive versions based on user experience and new insights. This User Guide accompanies the final version of the tool, which represents the consolidated methodology and best practices established by the GDCF community.



1.1 The Legacy of the Green Deal Circular Festivals

The GDCF was a pioneering cooperation between the Dutch government and a community of European frontrunner festivals. Their shared mission was to speed up the transition towards circular and climate-neutral festival operations. Together, the partners developed a Model for a Circular and Climate Neutral Festival, which provides the foundational framework and indicators for this monitoring tool.

During the programme, participating festivals used this model to develop their own sustainability plans, innovate, implement circular solutions, and measure their progress. This monitoring tool was essential for tracking their impact and steering their efforts. By making the methodology and tool publicly available, the GDCF aims to inspire and empower the entire events sector to continue this vital work.

1.2 The GDCF Monitoring Tool

This GDCF Monitoring Tool is the tangible result of the Green Deal Circular Festivals programme. It is designed to be a practical and comprehensive instrument for festivals and other events to measure their environmental impact, specifically focusing on ***circularity and climate neutrality***.

Key benefits of using this tool include:

- **Strategic Insight**: Understand your environmental impact to make more effective and strategic decisions on your path to becoming a circular and climate-neutral event.
- **Practical Application:** Translate broad sustainability goals into specific, measurable, and manageable data points, making circularity a practical part of your operations.
- **Performance Benchmarking:** Track your performance over time to identify trends, measure the effectiveness of your sustainability initiatives, and demonstrate year-on-year improvement to your stakeholders.
- **Enhanced Credibility**: Build trust and transparency with your audience, artists, partners, and local authorities by providing a clear, structured, and verifiable account of your sustainability performance.

- **Future-Proofing Your Event**: Proactively adapt to increasing regulatory pressures and stakeholder expectations regarding environmental reporting by implementing a robust and proven monitoring framework.

The tool measures impact across key themes—Energy, Materials, Food & Drinks, Travel & Transport, Water & Sanitation, and more—using a set of carefully defined indicators aligned with the GDCF Model and current scientific standards. These indicators have been carefully selected and finetuned over the years, in close collaboration with the 50+ participating festivals.

Energy	• Electricity consumption • Fuel consumption • Part renewable / non-renewable energy • CO_2 emissions	*kWh* *MJ / liters / m^3 / kg* *%* *tonnes*
Materials	• Procured / end of life materials • Cup and tableware systems • Residual waste • Total separated materials for recycling • Part treatment pathway for each waste stream • CO_2 emissions	*tonnes* *items* *tonnes* *tonnes* *%* *tonnes*
Food & Drinks	• Food consumed • Drinks consumed • Part of food / drinks sourced locally/ organically • CO_2 emissions	*tonnes* *liters* *%* *tonnes*
Travel & Transport	• Traveler kilometers traveled per modality • Internal transport and building • Fuel consumption of suppliers • CO_2 emissions	*Kilometers* *kWh / liters / kg* *liters / kWh* *tonnes*
Water & Sanitation	• Water consumption • Local water treatment • CO_2 emissions	*liters* *liters* *tonnes*
Other impact sources		
Overnight stays	• Overnight stays at festival campsite and external locations • CO_2 emissions (ton)	*nights* *tonnes*
Digital facilities	• Website visits, and use of e-mail, social media & app's • Data storage • CO2 emissions	*number* *GB data* *tonnes*
Carbon removal	• Carbon removal	*tonnes*

GDCF Monitor is 'open source'

The GDCF Monitoring Tool is built upon an open framework. The core methodology, definitions, and model behind the tool are shared publicly to encourage widespread adoption and further development.

By making this knowledge accessible through the GDCF monitoring tool the program aims to:

- **Promote Harmonization:** Encourage alignment and consistency among the various sustainability tools and monitors used in the festivals and events sector.
- **Accelerate Progress**: Lower the barrier to entry for event organizers and tool developers, speeding up the sector-wide transition towards circularity and climate neutrality.

License and Open Knowledge Sharing

Part 2 | Instructions data collection

Introduction

The GDCF (Green Deal Circular Festivals) Monitoring Tool is a comprehensive Excel-based instrument designed to help festival and event organizers measure and understand their climate impact and circular performance. By inputting data on **energy, materials, travel & transport, food & drinks, water, overnight stays, digital footprint and carbon removal,** you can calculate **your event's carbon and circular footprint** and identify key areas for improvement. This guide will walk you through the tool's structure and functionality.

If you are looking for a **quick start guide**, refer to the beginning of this document. For more elaborate walk through keep on reading below. The tool is organized into two main parts:

Part 1: The Essentials (What You'll Use For Sure)

This is the core of the tool, designed for everyday use. Most festivals will only need these tabs to get started and complete their monitoring.

- **Title Page:** Your starting point, with a table of contents.
- **User Guide:** This section, which provides context and a step-by-step plan for data collection.
- **Input Sheet:** The main worksheet where you enter all your festival's data.
- **Results:** A summary dashboard showing your high-level climate impact and circularity performance.
- **Results - Deep Dive:** Detailed figures that let you explore your results for each specific theme (e.g., Energy, Travel, Waste).
- **Emission Factor List:** A transparent list of all the conversion values used to calculate your carbon footprint.

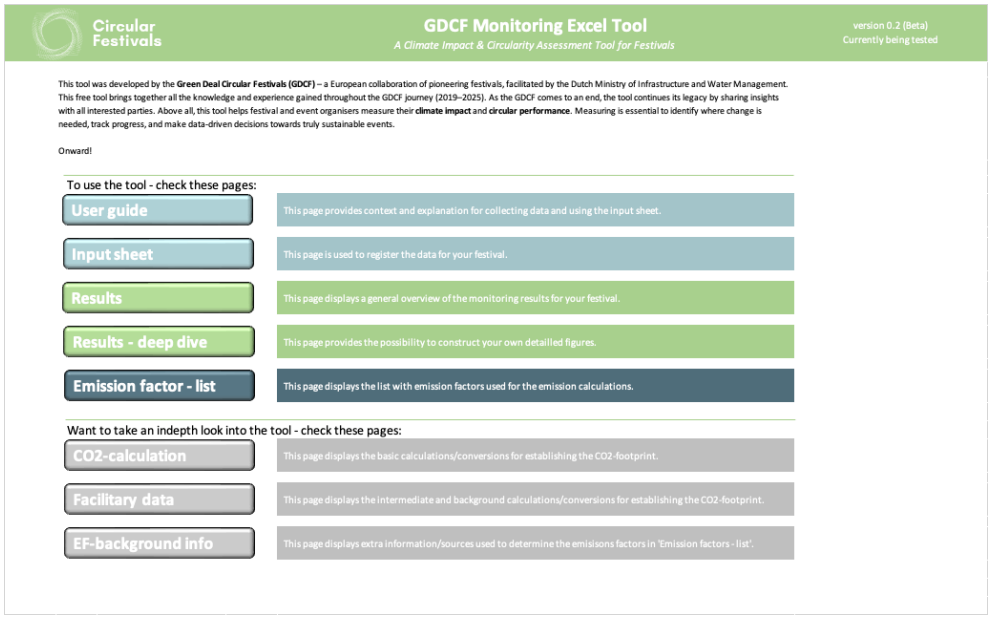
Part 2: The Technical Back-End (For Advanced Use)

You don't need this section for basic operation. It's for those who want to understand the underlying calculations and assumptions or customize the tool for specific situations.

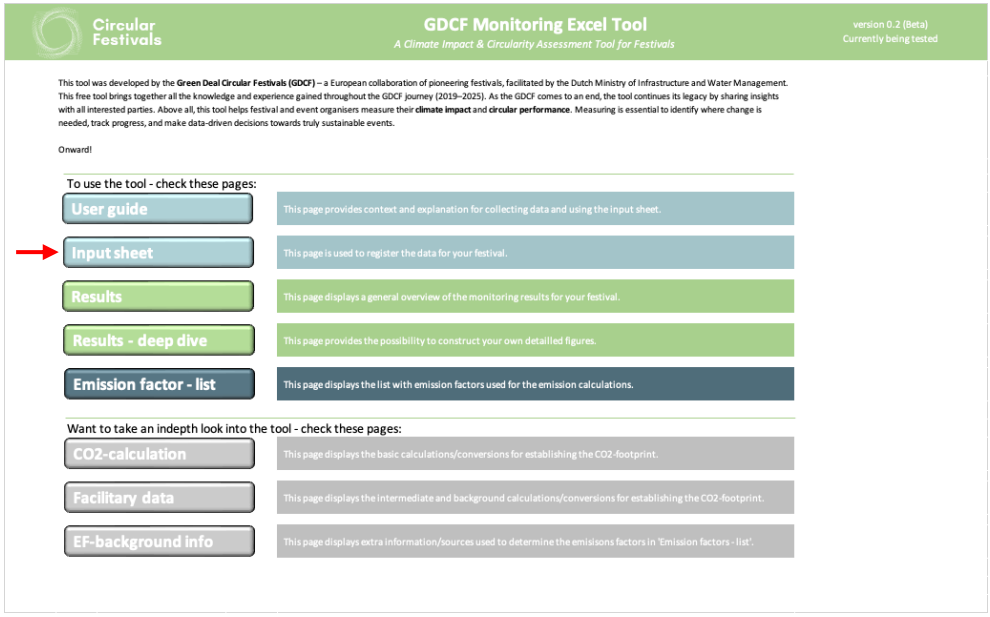
- **CO_2-calculation:** The engine room where all footprint calculations happen.
- **Facilitary Data:** Where background calculations and data conversions are handled.
- **EF-background Info:** Provides the detailed sources and assumptions behind the emission factors.

Quick Overview of the Tool

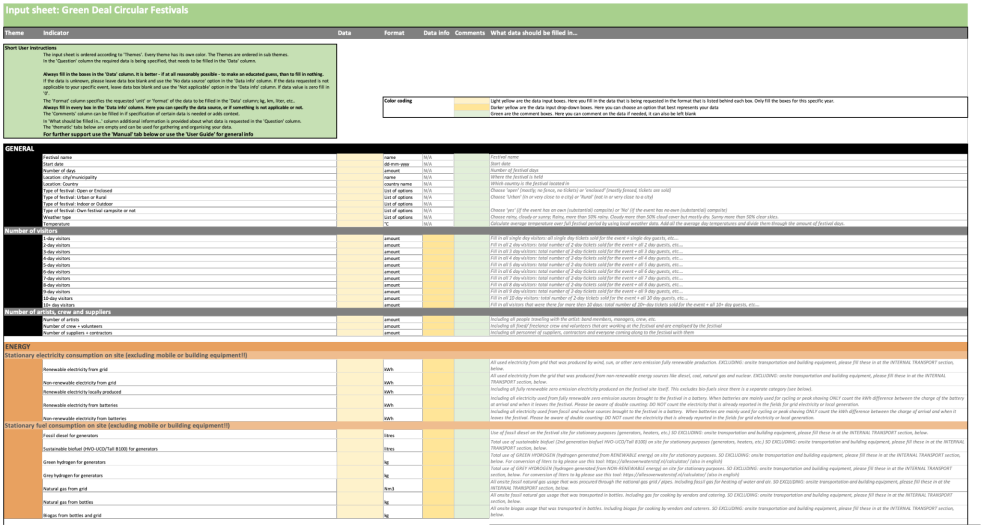
When you open the tool, you arrive on the ***Title Page***. Here you see an overview of all tabs in this tool. The first five (coloured) tabs are the ones relevant for basic use of this tool. Each of these pages is explained more extensively in the following sections of this chapter.



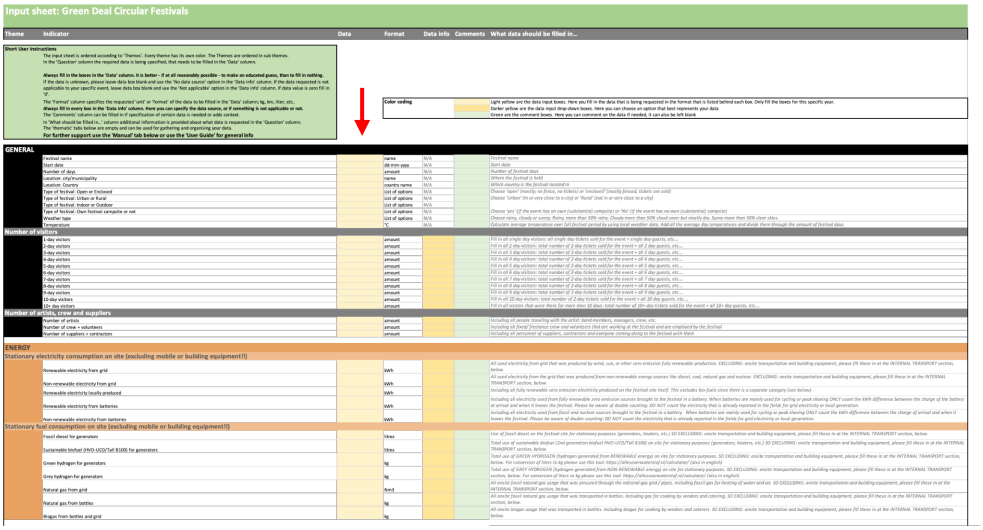
To get started with your calculation or familiarize yourself with the indicators and required data points, navigate to the tab called ***Input sheet***.



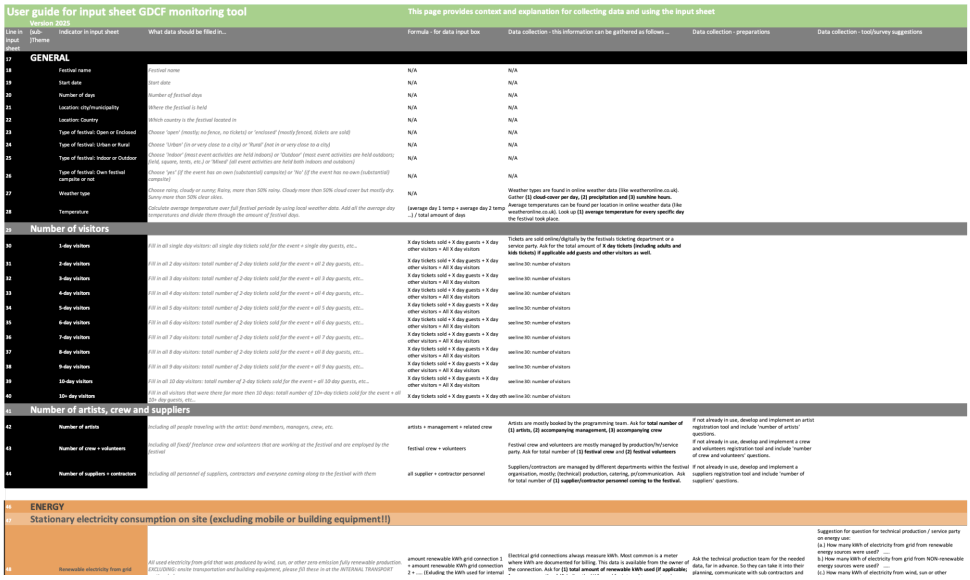
Now you are on the ***Input sheet***, where you can enter all the relevant data for your festival or event. The Input sheet is divided in nine categories: General, Energy, Materials, Travel & Transport, Water, Food & Drinks, Overnight Stay, Digital Footprint, and Carbon Removal.



In the Input sheet you fill in your data in column D, labeled “Data” (see arrow in screenshot below). More detailed explanation about the data categories and the different data columns on this page can be found in Section 2.3 Input Sheet Tab.



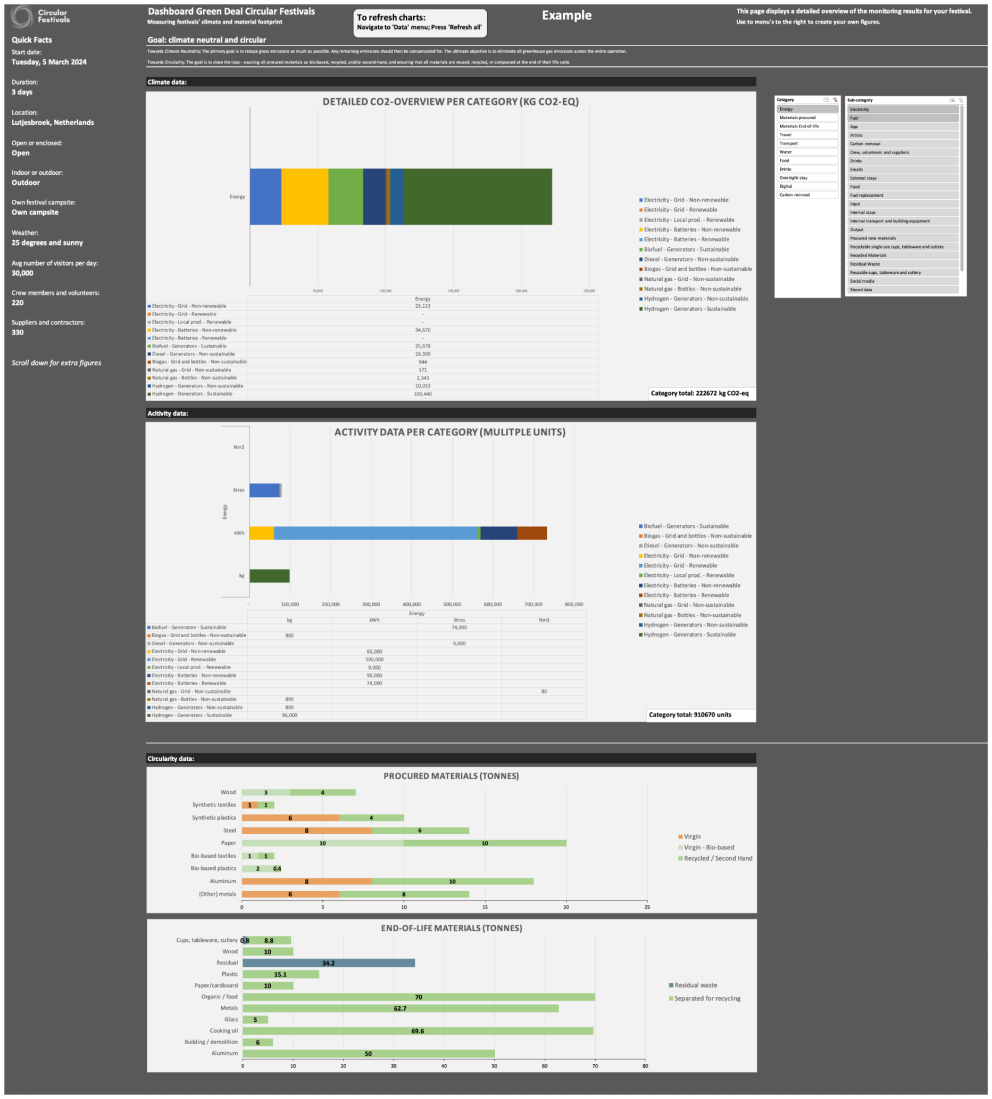
For each of the indicators in the Input sheet, there is a row with additional information, data collection tips, and example questions in the ***User manual*** tab.



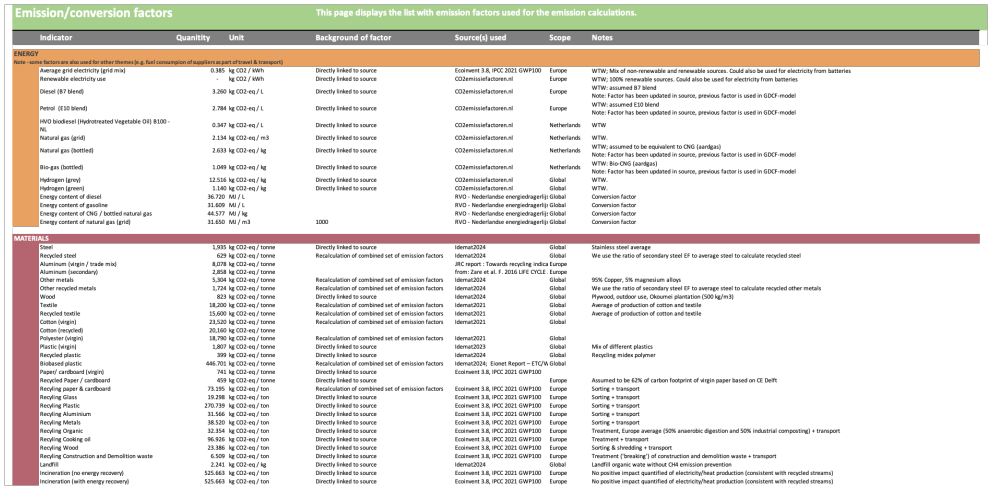
User guide for input sheet GDCF monitoring tool Version 2025			This page provides context and explanation for collecting data and using the input sheet			
Line in input sheet	(sub-)Theme	Indicator in input sheet	What data should be filled in...	Formula - for data input box	Data collection - this information can be gathered as follows ...	Data collection - preparations	Data collection - tool/survey suggestions
17	**GENERAL**						
18		Festival name	*Festival name*	N/A	N/A		
19		Start date	*Start date*	N/A	N/A		
20		Number of days	*Number of festival days*	N/A	N/A		
21		Location: city/municipality	*Where the festival is held*	N/A	N/A		
22		Location: Country	*Which country is the festival located in*	N/A	N/A		
23		Type of festival: Open or Enclosed	*Choose 'open' (mostly; no fence, no tickets) or 'enclosed' (mostly fenced, tickets are sold)*	N/A	N/A		
24		Type of festival: Urban or Rural	*Choose 'Urban' (in or very close to a city) or 'Rural' (not in or very close to a city)*	N/A	N/A		
25		Type of festival: Indoor or Outdoor	*Choose 'indoor' (most event activities are held indoors) or 'Outdoor' (most event activities are held outdoors; field, square, tents, etc.) or 'Mixed' (all event activities are held both indoors and outdoors)*	N/A	N/A		
26		Type of festival: Own festival campsite or not	*Choose 'yes' (if the event has an own (substantial) campsite) or 'No' (if the event has no own (substantial) campsite)*	N/A	N/A		
27		Weather type	*Choose rainy, cloudy or sunny. Rainy, more than 50% rainy. Cloudy more than 50% cloud cover but mostly dry. Sunny more than 50% clear skies.*	N/A	Weather types are found in online weather data (like weatheronline.co.uk). Gather **(1) cloud-cover per day, (2) precipitation and (3) sunshine hours.**		
28		Temperature	*Calculate average temperature over full festival periode by using local weather data. Add all the average day temperatures and divide them through the amount of festival days.*	(average day 1 temp + average day 2 temp + ...) / total amount of days	Average temperatures can be found per location in online weather data (like weatheronline.co.uk). Look up **(1) average temperature for every specific day** the festival took place.		
29	**Number of visitors**						
30		1-day visitors	*Fill in all single day visitors: all single day tickets sold for the event + single day guests, etc...*	X day tickets sold + X day guests + X day other visitors = All X day visitors	Tickets are sold online/digitally by the festivals ticketing department or a service party. Ask for the total amount of **X day tickets (including adults and kids tickets) if applicable add guests and other visitors as well.**		
31		2-day visitors	*Fill in all 2 day visitors: totall number of 2-day tickets sold for the event + all 2 day guests, etc...*	X day tickets sold + X day guests + X day other visitors = All X day visitors	see line 30: number of visitors		
32		3-day visitors	*Fill in all 3 day visitors: totall number of 2-day tickets sold for the event + all 3 day guests, etc...*	X day tickets sold + X day guests + X day other visitors = All X day visitors	see line 30: number of visitors		
33		4-day visitors	*Fill in all 4 day visitors: totall number of 2-day tickets sold for the event + all 4 day guests, etc...*	X day tickets sold + X day guests + X day other visitors = All X day visitors	see line 30: number of visitors		
34		5-day visitors	*Fill in all 5 day visitors: totall number of 2-day tickets sold for the event + all 5 day guests, etc...*	X day tickets sold + X day guests + X day other visitors = All X day visitors	see line 30: number of visitors		
35		6-day visitors	*Fill in all 6 day visitors: totall number of 2-day tickets sold for the event + all 6 day guests, etc...*	X day tickets sold + X day guests + X day other visitors = All X day visitors	see line 30: number of visitors		
36		7-day visitors	*Fill in all 7 day visitors: totall number of 2-day tickets sold for the event + all 7 day guests, etc...*	X day tickets sold + X day guests + X day other visitors = All X day visitors	see line 30: number of visitors		
37		8-day visitors	*Fill in all 8 day visitors: totall number of 2-day tickets sold for the event + all 8 day guests, etc...*	X day tickets sold + X day guests + X day other visitors = All X day visitors	see line 30: number of visitors		
38		9-day visitors	*Fill in all 9 day visitors: totall number of 2-day tickets sold for the event + all 9 day guests, etc...*	X day tickets sold + X day guests + X day other visitors = All X day visitors	see line 30: number of visitors		
39		10-day visitors	*Fill in all 10 day visitors: totall number of 2-day tickets sold for the event + all 10 day guests, etc...*	X day tickets sold + X day guests + X day other visitors = All X day visitors	see line 30: number of visitors		
40		10+ day visitors	*Fill in all visitors that were there for more then 10 days: totall number of 10+-day tickets sold for the event + all 10+ day guests, etc...*	X day tickets sold + X day guests + X day oth	see line 30: number of visitors		
41	**Number of artists, crew and suppliers**						
42		Number of artists	*Including all people traveling with the artist: band members, managers, crew, etc.*	artists + management + related crew	Artists are mostly booked by the programming team. Ask for **total number of (1) artists, (2) accompanying management, (3) accompanying crew**	If not already in use, develop and implement an artist registration tool and include 'number of artists' questions.	
43		Number of crew + volunteers	*Including all (paid/ freelance crew and volunteers that are working at the festival and are employed by the festival*	festival crew + volunteers	Festival crew and volunteers are mostly managed by production/m/service party. Ask for total number of **(1) festival crew** and **(2) festival volunteers**	If not already in use, develop and implement a crew and volunteers registration tool and include 'number of crew and volunteers' questions.	
44		Number of suppliers + contractors	*Including all personnel of suppliers, contractors and everyone coming along to the festival with them*	all supplier + contractor personnel	Suppliers/contractors are managed by different departments within the festival organisation, mostly: (technical) production, catering, pr/communication. Ask for total number of **(1) supplier/contractor personnel coming to the festival.**	If not already in use, develop and implement a suppliers registration tool and include 'number of suppliers' questions.	
45	**ENERGY**						
46	**Stationary electricity consumption on site (excluding mobile or building equipment!!)**						
47		Renewable electricity from grid	*All used electricity from grid that was produced by wind, sun, or other zero emission fully renewable production. (EXCLUDING: onsite transportation and building equipment, please fill these in at the INTERNAL TRANSPORT*	amount renewable kWh grid connection 1 + amount renewable kWh grid connection 2 + ... (Excluding the kWh used for internal	Electrical grid connections always measure kWh. Most common is a mater where kWh are documented for billing. This data is available from the owner of the connection. Ask for **(1) total amount of renewable kWh used (if applicable)**	Ask the technical production team for the needed data, far in advance. So they can take it into their planning, communicate with sub contractors and	Suggestion for question for technical production / service party on energy use: (a.) How many kWh of electricity from grid from renewable energy sources were used? ..... b.) How many kWh of electricity from grid from NON-renewable energy sources were used? ..... (c.) How many kWh of electricity from wind, sun or other

When you have entered all your data into the Input sheet, you can view the results of your calculation on the ***Results*** tab. This tab shows the main climate and circularity metrics and key figures for some of the activity categories.

More detailed information about your footprint can be found on the ***Results - deep dive*** tab. This page provides a breakdown of your carbon footprint per category, for each of the indicators as well as a breakdown of the circularity metrics.



If you are interested in the emission and conversion factors used by the tool, these are presented in the tab ***Emission factors - list***.



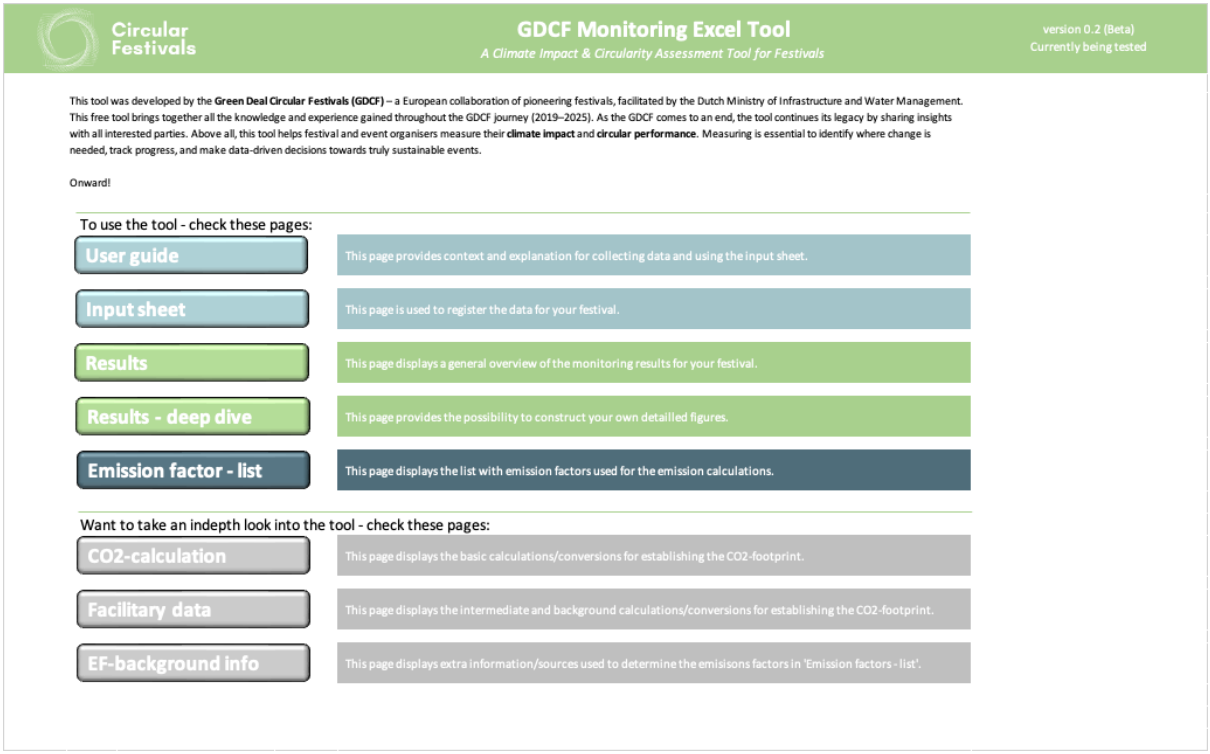
Emission/conversion factors

This page displays the list with emission factors used for the emission calculations.

Indicator	Quantity	Unit	Background of factor	Source(s) used	Scope	Notes
ENERGY						
Note - some factors are also used for other themes (e.g. fuel consumption of suppliers as part of travel & transport)						
Average grid electricity (grid mix)	0.385	kg CO2 / kWh	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	WTW; Mix of non-renewable and renewable sources. Could also be used for electricity from batteries
Renewable electricity use	-	kg CO2 / kWh	Directly linked to source	CO2emissiefactoren.nl	Europe	WTW; 100% renewable sources. Could also be used for electricity from batteries
Diesel (B7 blend)	3.260	kg CO2-eq / L	Directly linked to source	CO2emissiefactoren.nl	Europe	WTW; assumed B7 blend Note: Factor has been updated in source, previous factor is used in GDCF-model
Petrol (E10 blend)	2.784	kg CO2-eq / L	Directly linked to source	CO2emissiefactoren.nl	Europe	WTW; assumed E10 blend Note: Factor has been updated in source, previous factor is used in GDCF-model
HVO biodiesel (Hydrotreated Vegetable Oil) B100 - NL	0.347	kg CO2-eq / L	Directly linked to source	CO2emissiefactoren.nl	Netherlands	WTW
Natural gas (grid)	2.134	kg CO2-eq / m3	Directly linked to source	CO2emissiefactoren.nl	Netherlands	WTW.
Natural gas (bottled)	2.633	kg CO2-eq / kg	Directly linked to source	CO2emissiefactoren.nl	Netherlands	WTW; assumed to be equivalent to CNG (aardgas) Note: Factor has been updated in source, previous factor is used in GDCF-model
Bio-gas (bottled)	1.049	kg CO2-eq / kg	Directly linked to source	CO2emissiefactoren.nl	Netherlands	WTW: Bio-CNG (aardgas) Note: Factor has been updated in source, previous factor is used in GDCF-model
Hydrogen (grey)	12.516	kg CO2-eq / kg	Directly linked to source	CO2emissiefactoren.nl	Global	WTW.
Hydrogen (green)	3.140	kg CO2-eq / kg	Directly linked to source	CO2emissiefactoren.nl	Global	WTW.
Energy content of diesel	36.720	MJ / L		RVO - Nederlandse energiedragerlijs	Global	Conversion factor
Energy content of gasoline	31.609	MJ / L		RVO - Nederlandse energiedragerlijs	Global	Conversion factor
Energy content of CNG / bottled natural gas	44.577	MJ / kg		RVO - Nederlandse energiedragerlijs	Global	Conversion factor
Energy content of natural gas (grid)	31.650	MJ / m3	1000	RVO - Nederlandse energiedragerlijs	Global	Conversion factor
MATERIALS						
Steel	1,935	kg CO2-eq / tonne	Directly linked to source	Idemat2024	Global	Stainless steel average
Recycled steel	629	kg CO2-eq / tonne	Recalculation of combined set of emission factors	Idemat2024	Global	We use the ratio of secondary steel EF to average steel to calculate recycled steel
Aluminum (virgin / trade mix)	8,078	kg CO2-eq / tonne		JRC report - Towards recycling indica	Europe	
Aluminum (secondary)	2,858	kg CO2-eq / tonne		from: Zare et al. F. 2016 LIFE CYCLE	Europe	
Other metals	5,304	kg CO2-eq / tonne	Recalculation of combined set of emission factors	Idemat2024	Global	95% Copper, 5% magnesium alloys
Other recycled metals	1,724	kg CO2-eq / tonne	Recalculation of combined set of emission factors	Idemat2024	Global	We use the ratio of secondary steel EF to average steel to calculate recycled other metals
Wood	823	kg CO2-eq / tonne	Directly linked to source	Idemat2024	Global	Plywood, outdoor use, Okoumé plantation (500 kg/m3)
Textile	18,200	kg CO2-eq / tonne	Recalculation of combined set of emission factors	Idemat2021	Global	Average of production of cotton and textile
Recycled textile	15,600	kg CO2-eq / tonne	Recalculation of combined set of emission factors	Idemat2021	Global	Average of production of cotton and textile
Cotton (virgin)	23,520	kg CO2-eq / tonne	Recalculation of combined set of emission factors	Idemat2021	Global	
Cotton (recycled)	20,160	kg CO2-eq / tonne				
Polyester (virgin)	18,790	kg CO2-eq / tonne	Recalculation of combined set of emission factors	Idemat2021	Global	
Plastic (virgin)	1,807	kg CO2-eq / tonne	Directly linked to source	Idemat2023	Global	Mix of different plastics
Recycled plastic	399	kg CO2-eq / tonne	Directly linked to source	Idemat2024	Global	Recycling mixtex polymer
Biobased plastic	446.701	kg CO2-eq / tonne	Recalculation of combined set of emission factors	Idemat2024; Elonet Report – ETC/W	Global	
Paper/ cardboard (virgin)	741	kg CO2-eq / tonne	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100		
Recycled Paper / cardboard	459	kg CO2-eq / tonne	Directly linked to source		Europe	Assumed to be 62% of carbon footprint of virgin paper based on CE Delft
Recyling paper & cardboard	73.195	kg CO2-eq / ton	Recalculation of combined set of emission factors	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	Sorting + transport
Recyling Glass	19.298	kg CO2-eq / ton	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	Sorting + transport
Recyling Plastic	270.739	kg CO2-eq / ton	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	Sorting + transport
Recyling Aluminum	31.566	kg CO2-eq / ton	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	Sorting + transport
Recyling Metals	38.520	kg CO2-eq / ton	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	Sorting + transport
Recyling Organic	32.354	kg CO2-eq / ton	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	Treatment, Europe average (50% anaerobic digestion and 50% industrial composting) + transport
Recyling Cooking oil	96.926	kg CO2-eq / ton	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	Treatment + transport
Recyling Wood	23.386	kg CO2-eq / ton	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	Sorting & shredding + transport
Recyling Construction and Demolition waste	6.509	kg CO2-eq / ton	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	Treatment ("breaking") of construction and demolition waste + transport
Landfill	2.241	kg CO2-eq / kg	Directly linked to source	Idemat2024	Global	Landfill organic wate without CH4 emission prevention
Incineration (no energy recovery)	525.663	kg CO2-eq / ton	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	No positive impact quantified of electricity/heat production (consistent with recycled streams)
Incineration (with energy recovery)	525.663	kg CO2-eq / ton	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	No positive impact quantified of electricity/heat production (consistent with recycled streams)

In the following sections, all tabs mentioned above (as well as the tabs of the technical back-end part of the tool) are discussed in further detail.

2.1 Title Page Tab



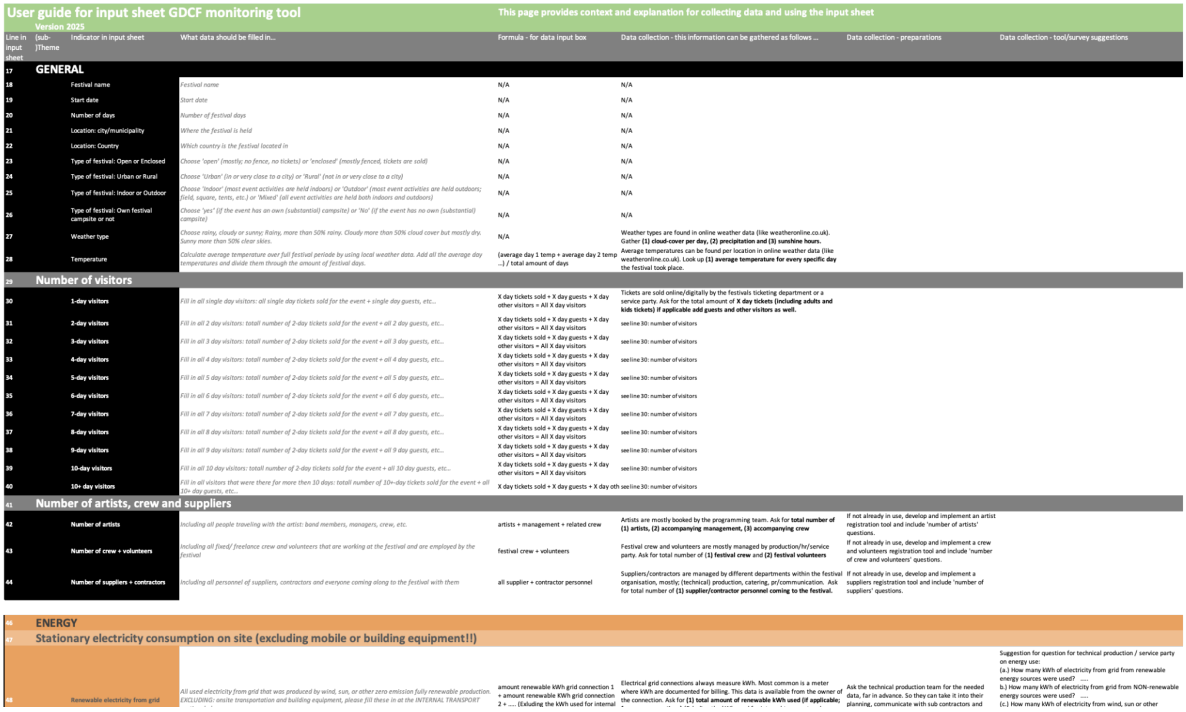
Purpose: This is the landing page and introduction to the tool.

Key Information & Actions:

- Version: Displays the current version (e.g., version 0.2 Beta). Always check that you are using the latest version.
- Navigation Guide: This tab provides an overview and direct map to the other sheets in the workbook. Use the buttons on this page to navigate through the tool.

What to do here: Read the introduction, then use the navigation guide to proceed to the “Input sheet” tab.

2.2 User Guide Tab



User guide for input sheet GDCF monitoring tool Version 2025			This page provides context and explanation for collecting data and using the input sheet			
Line in input sheet	(sub-)Theme	Indicator in input sheet	What data should be filled in...	Formula - for data input box	Data collection - this information can be gathered as follows ...	Data collection - preparations	Data collection - tool/survey suggestions
17	**GENERAL**						
18		Festival name	*Festival name*	N/A	N/A		
19		Start date	*Start date*	N/A	N/A		
20		Number of days	*Number of festival days*	N/A	N/A		
21		Location: city/municipality	*Where the festival is held*	N/A	N/A		
22		Location: Country	*Which country is the festival located in*	N/A	N/A		
23		Type of festival: Open or Enclosed	*Choose 'open' (mostly, no fence, no tickets) or 'enclosed' (mostly fenced, tickets are sold)*	N/A	N/A		
24		Type of festival: Urban or Rural	*Choose 'Urban' (in or very close to a city) or 'Rural' (not in or very close to a city)*	N/A	N/A		
25		Type of festival: Indoor or Outdoor	*Choose 'Indoor' (most event activities are held indoors) or 'Outdoor' (most event activities are held outdoors; field, square, tents, etc.) or 'Mixed' (all event activities are held both indoors and outdoors)*	N/A	N/A		
26		Type of festival: Own festival campsite or not	*Choose 'yes' (if the event has an own (substantial) campsite) or 'No' (if the event has no own (substantial) campsite)*	N/A	N/A		
27		Weather type	*Choose rainy, cloudy or sunny: Rainy, more than 50% rainy. Cloudy more than 50% cloud cover but mostly dry. Sunny more than 50% clear skies.*	N/A	Weather types are found in online weather data (like weatheronline.co.uk). Gather **(1) cloud-cover per day, (2) precipitation and (3) sunshine hours.**		
28		Temperature	*Calculate average temperature over full festival periode by using local weather data. Add all the average day temperatures and divide them through the amount of festival days.*	(average day 1 temp + average day 2 temp ...) / total amount of days	Average temperatures can be found per location in online weather data (like weatheronline.co.uk). Look up **(1) average temperature for every specific day** the festival took place.		
29	**Number of visitors**						
30		**1-day visitors**	*Fill in all single day visitors: all single day tickets sold for the event + single day guests, etc...*	X day tickets sold + X day guests + X day other visitors = All X day visitors	Tickets are sold online/digitally by the festivals ticketing department or a service party. Ask for the total amount of **X day tickets (including adults and kids tickets) if applicable add guests and other visitors as well.**		
31		**2-day visitors**	*Fill in all 2 day visitors: totall number of 2-day tickets sold for the event + all 2 day guests, etc...*	X day tickets sold + X day guests + X day other visitors = All X day visitors	see line 30: number of visitors		
32		**3-day visitors**	*Fill in all 3 day visitors: totall number of 2-day tickets sold for the event + all 3 day guests, etc...*	X day tickets sold + X day guests + X day other visitors = All X day visitors	see line 30: number of visitors		
33		**4-day visitors**	*Fill in all 4 day visitors: totall number of 2-day tickets sold for the event + all 4 day guests, etc...*	X day tickets sold + X day guests + X day other visitors = All X day visitors	see line 30: number of visitors		
34		**5-day visitors**	*Fill in all 5 day visitors: totall number of 2-day tickets sold for the event + all 5 day guests, etc...*	X day tickets sold + X day guests + X day other visitors = All X day visitors	see line 30: number of visitors		
35		**6-day visitors**	*Fill in all 6 day visitors: totall number of 2-day tickets sold for the event + all 6 day guests, etc...*	X day tickets sold + X day guests + X day other visitors = All X day visitors	see line 30: number of visitors		
36		**7-day visitors**	*Fill in all 7 day visitors: totall number of 2-day tickets sold for the event + all 7 day guests, etc...*	X day tickets sold + X day guests + X day other visitors = All X day visitors	see line 30: number of visitors		
37		**8-day visitors**	*Fill in all 8 day visitors: totall number of 2-day tickets sold for the event + all 8 day guests, etc...*	X day tickets sold + X day guests + X day other visitors = All X day visitors	see line 30: number of visitors		
38		**9-day visitors**	*Fill in all 9 day visitors: totall number of 2-day tickets sold for the event + all 9 day guests, etc...*	X day tickets sold + X day guests + X day other visitors = All X day visitors	see line 30: number of visitors		
39		**10-day visitors**	*Fill in all 10 day visitors: totall number of 2-day tickets sold for the event + all 10 day guests, etc...*	X day tickets sold + X day guests + X day other visitors = All X day visitors	see line 30: number of visitors		
40		**10+ day visitors**	*Fill in all visitors that were there for more then 10 days: totall number of 10+day tickets sold for the event + all 10+ day guests, etc...*	X day tickets sold + X day guests + X day oth	see line 30: number of visitors		
41	**Number of artists, crew and suppliers**						
42		**Number of artists**	*Including all people traveling with the artist: band members, managers, crew, etc.*	artists + management + related crew	Artists are mostly booked by the programming team. Ask for **total number of (1) artists, (2) accompanying management, (3) accompanying crew**	If not already in use, develop and implement an artist registration tool and include 'number of artists' questions.	
43		**Number of crew + volunteers**	*Including all fixed/ freelance crew and volunteers that are working at the festival and are employed by the festival*	festival crew + volunteers	Festival crew and volunteers are mostly managed by production/hr/service party. Ask for total number of **(1) festival crew** and **(2) festival volunteers**	If not already in use, develop and implement a crew and volunteers registration tool and include 'number of crew and volunteers' questions.	
44		**Number of suppliers + contractors**	*Including all personnel of suppliers, contractors and everyone coming along to the festival with them*	all supplier + contractor personnel	Suppliers/contractors are managed by different departments within the festival organisation, mostly; (technical) production, catering, pr/communication. Ask for total number of **(1) supplier/contractor personnel coming to the festival.**	If not already in use, develop and implement a suppliers registration tool and include 'number of suppliers' questions.	
46	**ENERGY**						
47	**Stationary electricity consumption on site (excluding mobile or building equipment!!)**						
48		**Renewable electricity from grid**	*All used electricity from grid that was produced by wind, sun, or other zero emission fully renewable production. EXCLUDING: onsite transportation and building equipment, please fill these in at the INTERNAL TRANSPORT*	amount renewable kWh grid connection 1 + amount renewable kWh grid connection 2 + ... (Exluding the kWh used for internal	Electrical grid connections always measure kWh. Most common is a meter where kWh are documented for billing. This data is available from the owner of the connection. Ask for **(1) total amount of renewable kWh used (if applicable;**	Ask the technical production team for the needed data, far in advance. So they can take it into their planning, communicate with sub contractors and	Suggestion for question for technical production / service party on energy use: (a.) How many kWh of electricity from grid from renewable energy sources were used? ..... b.) How many kWh of electricity from grid from NON-renewable energy sources were used? ..... (c.) How many kWh of electricity from wind, sun or other

Purpose: This is the essential instruction manual for collecting data and filling out the Input sheet. It provides detailed, line-by-line explanations for every data field, it gives tips and example questions, to copy-paste into your questionnaires and ask to your suppliers.

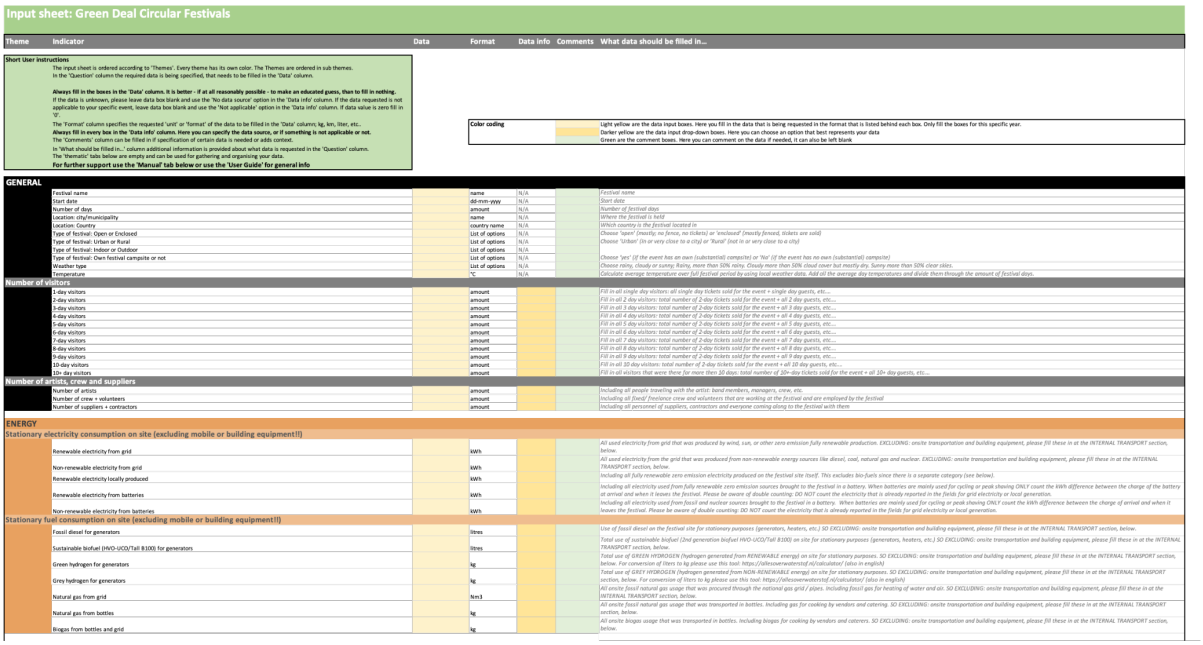
Key Information & Actions:
The User Guide is structured in a table with the following columns:

- **Line in input sheet**: The corresponding row number in the "Input sheet" tab.
- **(sub-)Theme / Indicator**: The category and specific data point being requested (e.g., "Number of visitors," "Renewable electricity from grid").
- **What data should be filled in...**: A clear description of the required data, this is the same information as in column H of the Input sheet.
- **Formula - for data input box**: Instructions on how to calculate or sum the data if it comes from multiple sources.
- **Data collection - this information can be gathered as follows...**: Practical advice on which departments or suppliers to ask for the data.
- **Data collection - preparations**: Recommendations for setting up systems (e.g., registration tools, surveys, meter installations) to capture data more effectively in the future. These actions should be included in your data collection plan and part of the preparations (ideally) BEFORE the start of your event.
- **Data collection - tool/survey suggestions**: Provides ready-to-use questions for surveys or registration forms for artists, crew, suppliers, and visitors.

How to Use This Tab Effectively:

1. **Before Data Collection**: Read this guide thoroughly to understand the scope of data needed. Use the "preparations" and "survey suggestions" to set up your data collection plan - for more info on making a data collection plan, refer to the dedicated chapter in this document - in advance.
2. **While Filling the Input Sheet**: Keep this tab open. For every line in the Input Sheet that is unclear, refer to the corresponding line in the User Guide for a precise definition, formula, and data collection tip.

2.3 Input Sheet Tab



Input sheet: Green Deal Circular Festivals

Theme	Indicator	Data	Format	Data info	Comments	What data should be filled in...
Short User instructions	The input sheet is ordered according to 'Themes'. Every theme has its own color. The Themes are ordered in sub themes. In the 'Question' column the required data is being specified, that needs to be filled in the 'Data' column. **Always fill in the boxes in the 'Data' column. It is better - if at all reasonably possible - to make an educated guess, than to fill in nothing.** If the data is unknown, please leave data box blank and use the 'No data source' option in the 'Data info' column. If the data requested is not applicable to your specific event, leave data box blank and use the 'Not applicable' option in the 'Data info' column. If data value is zero fill in '0'. The 'Format' column specifies the requested 'unit' or 'format' of the data to be filled in the 'Data' column; kg, km, liter, etc. **Always fill in every box in the 'Data info' column. Here you can specify the data source, or if something is not applicable or not.** The 'Comments' column can be filled in if specification of certain data is needed or adds context. In 'What should be filled in...' column additional information is provided about what data is requested in the 'Question' column. The 'thematic' tabs below are empty and can be used for gathering and organising your data. **For further support use the 'Manual' tab below or use the 'User Guide' for general info**					
Color coding						Light yellow are the data input boxes. Here you fill in the data that is being requested in the format that is listed behind each box. Only fill the boxes for this specific year. Darker yellow are the data input drop-down boxes. Here you can choose an option that best represents your data Green are the comment boxes. Here you can comment on the data if needed, it can also be left blank
GENERAL						
	Festival name		name	N/A		*Festival name*
	Start date		dd-mm-yyyy	N/A		*Start date*
	Number of days		amount	N/A		*Number of festival days*
	Location: city/municipality		name	N/A		*Where the festival is held*
	Location: Country		country name	N/A		*Which country is the festival located in*
	Type of festival: Open or Enclosed		List of options	N/A		*Choose 'open' (mostly; no fence, no tickets) or 'enclosed' (mostly fenced, tickets are sold)*
	Type of festival: Urban or Rural		List of options	N/A		*Choose 'Urban' (in or very close to a city) or 'Rural' (not in or very close to a city)*
	Type of festival: Indoor or Outdoor		List of options	N/A		
	Type of festival: Own festival campsite or not		List of options	N/A		*Choose 'yes' (if the event has an own (substantial) campsite) or 'No' (if the event has no own (substantial) campsite)*
	Weather type		List of options	N/A		*Choose rainy, cloudy or sunny; Rainy, more than 50% rainy. Cloudy more than 50% cloud cover but mostly dry. Sunny more than 50% clear skies.*
	Temperature		°C	N/A		*Calculate average temperature over full festival period by using local weather data. Add all the average day temperatures and divide them through the amount of festival days.*
Number of visitors						
	1-day visitors		amount			*Fill in all single day-visitors: all single day tickets sold for the event + single day guests, etc....*
	2-day visitors		amount			*Fill in all 2 day visitors: total number of 2-day tickets sold for the event + all 2 day guests, etc....*
	3-day visitors		amount			*Fill in all 3 day visitors: total number of 2-day tickets sold for the event + all 3 day guests, etc....*
	4-day visitors		amount			*Fill in all 4 day visitors: total number of 2-day tickets sold for the event + all 4 day guests, etc....*
	5-day visitors		amount			*Fill in all 5 day visitors: total number of 2-day tickets sold for the event + all 5 day guests, etc....*
	6-day visitors		amount			*Fill in all 6 day visitors: total number of 2-day tickets sold for the event + all 6 day guests, etc....*
	7-day visitors		amount			*Fill in all 7 day visitors: total number of 2-day tickets sold for the event + all 7 day guests, etc....*
	8-day visitors		amount			*Fill in all 8 day visitors: total number of 2-day tickets sold for the event + all 8 day guests, etc....*
	9-day visitors		amount			*Fill in all 9 day visitors: total number of 2-day tickets sold for the event + all 9 day guests, etc....*
	10-day visitors		amount			*Fill in all 10 day visitors: total number of 2-day tickets sold for the event + all 10 day guests, etc....*
	10+ day visitors		amount			*Fill in all visitors that were there for more then 10 days: total number of 10+-day tickets sold for the event + all 10+ day guests, etc....*
Number of artists, crew and suppliers						
	Number of artists		amount			*Including all people traveling with the artist: band members, managers, crew, etc.*
	Number of crew + volunteers		amount			*Including all (hired/ freelance crew and volunteers that are working at the festival and are employed by the festival*
	Number of suppliers + contractors		amount			*Including all personnel of suppliers, contractors and everyone coming along to the festival with them*
ENERGY						
Stationary electricity consumption on site (excluding mobile or building equipment!!)						
	Renewable electricity from grid		kWh			*All used electricity from grid that was produced by wind, sun, or other zero-emission fully renewable production. EXCLUDING: onsite transportation and building equipment, please fill these in at the INTERNAL TRANSPORT section, below.*
	Non-renewable electricity from grid		kWh			*All used electricity from the grid that was produced from non-renewable energy sources like diesel, coal, natural gas and nuclear. EXCLUDING: onsite transportation and building equipment, please fill these in at the INTERNAL TRANSPORT section, below.*
	Renewable electricity locally produced		kWh			*Including all fully renewable zero emission electricity produced on the festival site itself. This excludes bio-fuels since there is a separate category (see below).*
	Renewable electricity from batteries		kWh			*Including all electricity used from fully renewable zero emission sources brought to the festival in a battery. When batteries are mainly used for cycling or peak shaving ONLY count the kWh difference between the charge of the battery at arrival and when it leaves the festival. Please be aware of double counting: DO NOT count the electricity that is already reported in the fields for grid electricity or local generation.*
	Non-renewable electricity from batteries		kWh			*Including all electricity used from fossil and nuclear sources brought to the festival in a battery. When batteries are mainly used for cycling or peak shaving ONLY count the kWh difference between the charge of arrival and when it leaves the festival. Please be aware of double counting: DO NOT count the electricity that is already reported in the fields for grid electricity or local generation.*
Stationary fuel consumption on site (excluding mobile or building equipment!!)						
	Fossil diesel for generators		litres			*Use of fossil diesel on the festival site for stationary purposes (generators, heaters, etc.) SO EXCLUDING: onsite transportation and building equipment, please fill these in at the INTERNAL TRANSPORT section, below.*
	Sustainable biofuel (HVO-UCO/Tall B100) for generators		litres			*Total use of sustainable biofuel (2nd generation biofuel HVO-UCO/Tall B100) on site for stationary purposes (generators, heaters, etc.) SO EXCLUDING: onsite transportation and building equipment, please fill these in at the INTERNAL TRANSPORT section, below.*
	Green hydrogen for generators		kg			*Total use of GREEN HYDROGEN (hydrogen generated from RENEWABLE energy) on site for stationary purposes. SO EXCLUDING: onsite transportation and building equipment, please fill these in at the INTERNAL TRANSPORT section, below. For conversion of liters to kg please use this tool: https://allesoverwaterstof.nl/calculator/ (also in english)*
	Grey hydrogen for generators		kg			*Total use of GREY HYDROGEN (hydrogen generated from NON-RENEWABLE energy) on site for stationary purposes. SO EXCLUDING: onsite transportation and building equipment, please fill these in at the INTERNAL TRANSPORT section, below. For conversion of liters to kg please use this tool: https://allesoverwaterstof.nl/calculator/ (also in english)*
	Natural gas from grid		Nm3			*All onsite fossil natural gas usage that was procured through the national gas grid / pipes. Including fossil gas for heating of water and oil. SO EXCLUDING: onsite transportation and building equipment, please fill these in at the INTERNAL TRANSPORT section, below.*
	Natural gas from bottles		kg			*All onsite fossil natural gas usage that was transported in bottles. Including gas for cooking by vendors and catering. SO EXCLUDING: onsite transportation and building equipment, please fill these in at the INTERNAL TRANSPORT section, below.*
	Biogas from bottles and grid		kg			*All onsite biogas usage that was transported in bottles. Including biogas for cooking by vendors and caterers. SO EXCLUDING: onsite transportation and building equipment, please fill these in at the INTERNAL TRANSPORT section, below.*

Purpose: This is the core data entry point for your festival. All your measurements will be input here to generate the results.

Key Information & Actions:
The Input Sheet is organized into logical themes that correspond with the festival and event operations:

1. General

This section collects the basic profile and attendance data for your festival.

- **Festival Profile:** Name, start date, number of days, location (city and country), and festival type (e.g., open/enclosed, urban/rural, indoor/outdoor, campsite availability).

- **Weather:** Predominant weather type (sunny/cloudy/rainy) and the average temperature during the event.
- **Attendance (visitors):** The number of 1-day, 2-day, 3-day… up to 10+ day visitors and guests.
- **Artists, crew, suppliers:** The total number of artists (including their crew and management), festival crew & volunteers, and supplier personnel on site.

---

2. Energy

This section measures the consumption of electricity and fuels for stationary purposes on site (excluding transport and building equipment).

- **Stationary Electricity:** Consumption in kWh, split into renewable and non-renewable sources from the grid, local production, and batteries.
- **Stationary Fuels:** Consumption of fossil diesel, sustainable biofuel (HVO), green/grey hydrogen, natural gas, and biogas for generators, cooking, heating, and cooling.

---

3. Materials

This theme is divided into procurement and end-of-life materials.

- **Procured Materials:** The weight (in kg) of newly purchased materials (e.g., aluminum, steel, wood, plastics, textiles), categorized as virgin (non-circular) or recycled/second-hand/bio-based (circular).
- **End-of-Life Materials:**
    - **Reusable Items:** Number of reusable cups, tableware, and cutlery used, and the percentage lost or damaged.
    - **Single-Use Items:** Number of single-use items and their successful recycling/composting rate.
    - **Waste Streams:** Weight (kg) or volume (liters) of materials accepted for recycling/composting (e.g., paper, glass, plastic, organic waste, cooking oil).
    - **Residual Waste:** Weight (kg) of waste sent for incineration (with/without post-separation and/or energy recovery) or to landfill.

---

4. Travel & Transport

This section covers all mobility related to the event.

- **Visitor, Artist & Crew Travel:** The main means of travel (modal split in %) and average one-way distance (in km) for each group and modality.
- **Other Transport:** Distances traveled by shuttle or ferry as secondary transport (only when used besides a main means of transport).
- **Internal Transport & Building Equipment:** Energy and fuel consumption (in kWh, liters, kg) for vehicles and equipment used on site.
- **Supplier Transport:** Fuel and energy used by suppliers to transport goods to and from the site.
- **Fuel Replacement:** in/off setted CO_2e emissions (in tonnes) from purchased sustainable aviation, -marine, or -road fuels.

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5. Water

This section tracks the festival's water footprint.

- **Water in:** Liters of potable (drinking) and non-potable water used.
- **Waste water out:** Liters of water reused on-site, treated and released to the environment, and removed from the site as wastewater.

---

6. Food & Drinks

This theme measures the impact of catering.

- **Food Source:** Percentage of total food that is organic, regenerative, or locally sourced (within 200 km).
- **Food Impact:** There are two options of entering the data about food consumption at your event. **Choose one** - the one which best suits your data *(or use both if different suppliers provide data in different formats - but be aware of double counting!)*.
    - **Option 1 (Ingredients):** Total weight (in kg) of ingredients used, categorized (e.g., vegetables, grains, red meat, dairy).
    - **Option 2 (Meals):** Total number of meals (calculates with average 200gr per meal) served, categorized by their climate impact (in 5 categories from Super High to Ultra Low).
- **Drinks Source:** Percentage of total drinks that are organic, regenerative, or locally produced.
- **Drinks Impact:** Liters of each drink type (e.g., beer, coffee, wine, spirits) consumed, categorized as regular, low, or climate neutral impact.

---

7. Overnight Stay

This section accounts for emissions from accommodation.

- **Own Festival Campsite:** Total number of overnight stays.
- **External Accommodation:** Number of overnight stays at external campsites, hotels, or apartments, categorized as regular, low-emission, or climate-neutral.

---

8. Digital Footprint *(beta theme)*

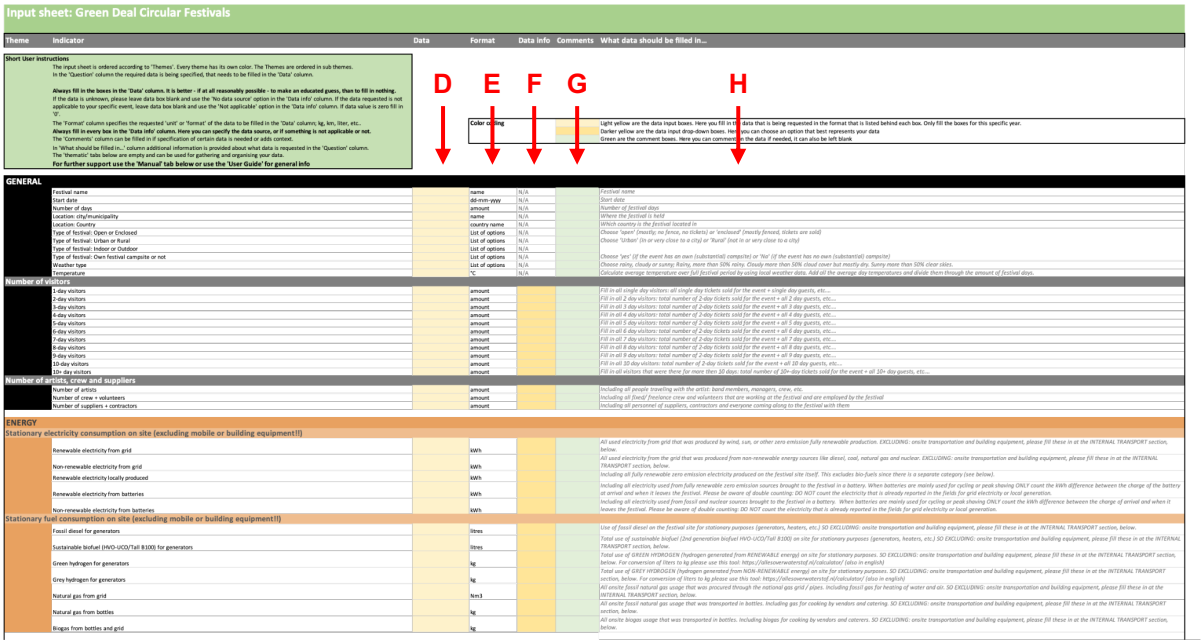
This section estimates the CO_2 emissions from (energy consumption resulting from) digital activities related to the festival.

Note: This section was the most recent addition to the GDCF Monitor and requires some caution. Although state-of-the-art scientific sources were used for the emission factors and assumptions within this category, there is considerable variation in the scientific literature regarding these figures. CO_2-results for this category should be considered indicative with a large margin of error.

- **Website & App:** Total views and sessions of the website and festival app.
- **Communications:** Total number of outgoing (marketing) e-mails and social media views.
- **Cloud Storage:** Total amount of data stored on online cloud services.

How to Use This Tab Effectively:

To start filling in the input sheet, you can enter your own data for each row in **column D, labeled "Data"** (see screenshot below). The required unit of measurement for each row is shown in **column E ("Format")**. If you're wondering what data should be filled in for each row, please refer to **column H ("What data should be filled in…")**, for a short explanation. In case you need more guidance than this, check out the tab ***User manual***.



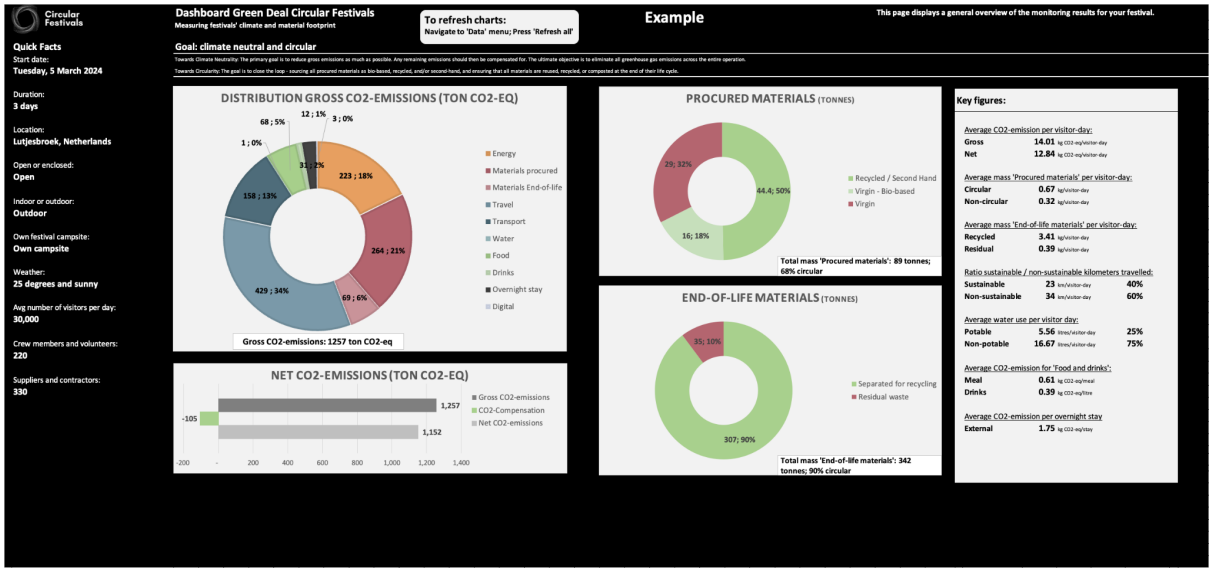
The column called **"Data info" (Column F)**, is meant to indicate for each data point what the source and/or quality of the filled in data is. You can indicate whether the data comes from your own accounting or measurement, from stakeholders or a survey. You can also indicate here that the data is based on assumption or estimation, that no data was available or that the data point is not relevant for your festival or event at all.

Finally, in **column G ("Comments")**, you can write down any additional comments for the data point. This can be more details on the source of the data, any uncertainties or things that still need to be checked, notes on data quality, etc. This information can be helpful for others you might be collaborating with or to yourself if you're looking back at the data at another moment (e.g. next year, when you're calculating the next edition's footprint).

Important notes:

1. **Systematic Entry**: Go through the sheet section by section. Do not skip lines.
2. **Use the User Guide**: Cross-reference with the User Guide tab for more clarity when needed.
3. **Units are Critical**: Ensure all data is entered in the correct units (kg, kWh, liters, km, %, etc.) as specified.

2.4 Results Tab



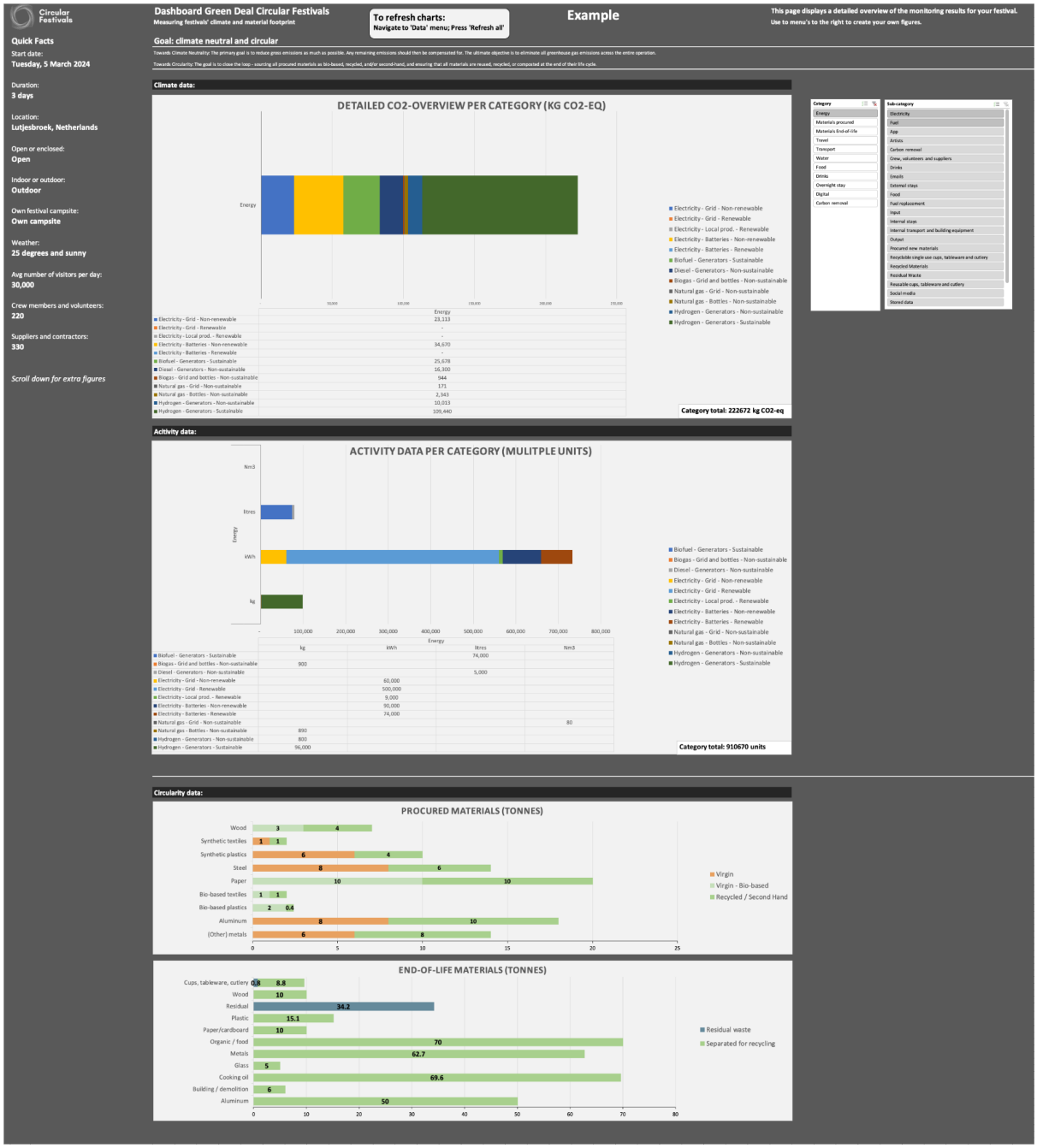
Purpose: To present a high-level, visual overview of your festival's climate impact and circularity performance.

Key Information & Actions:

- This tab is automatically populated based on the data entered in the Input Sheet.
- Expect to see key summary figures and metrics, such as:
    - Total CO_2 Footprint: The overall carbon emissions of your festival.
    - Breakdown by Theme: A chart showing the contribution of the different categories (e.g. Energy, Travel, Materials, Food, etc.) to the total carbon footprint.
    - Circularity Performance: Metrics on the percentage of circular procurement and the recycling rate of end-of-life materials.
    - Footprints per Visitor: Key metrics for benchmarking and year-on-year comparison.

What to do here: After entering all data, don't forget to navigate to 'Data' menu; Press 'Refresh all', to see the latest updated version of your festival's environmental impact.

2.5 Results - Deep Dive Tab



Purpose: To provide a flexible space for conducting a more detailed analysis of your results.

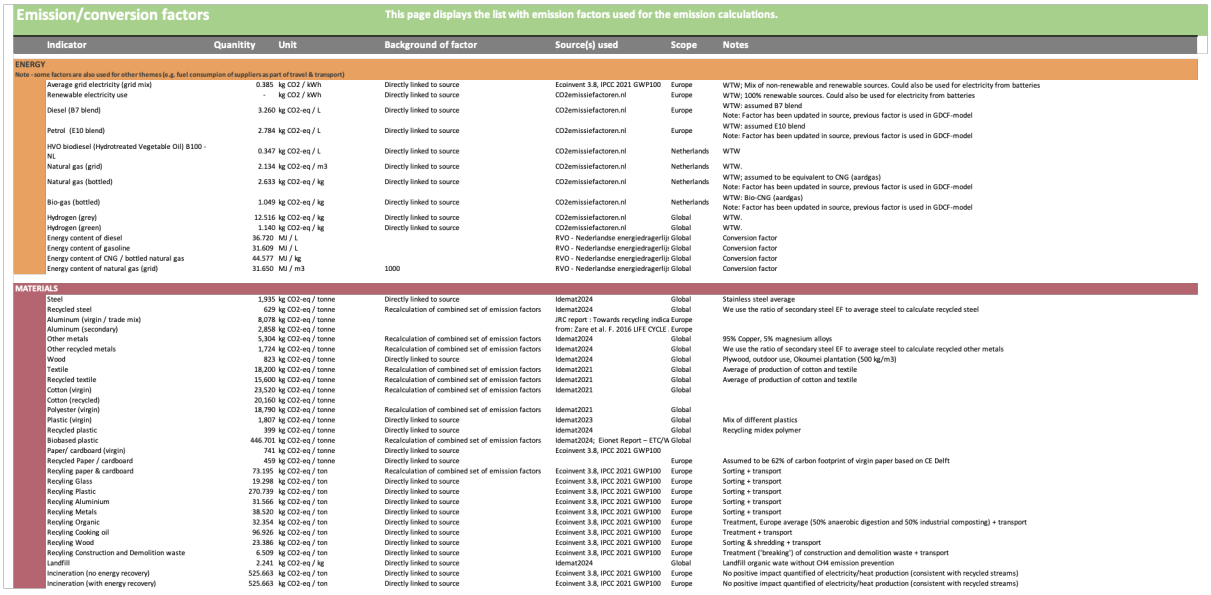
Key Information & Actions:

- This tab contains more detailed results charts where you can dive deeper into the results per category.

- In these figures, the results are broken down to the level of individual indicators, allowing for detailed analysis of results.
- It offers pivot tables or charts that can be filtered and manipulated.
- It allows you to "construct your own detailed figures," meaning you can explore specific questions, such as:
    - "What are the emissions from visitor travel by car versus airplane?"
    - "How does the impact of our food choices compare to our energy use?"
    - "What is the detailed waste composition and treatment?"

What to do here: Use this tab for advanced analysis when you need to look beyond the summary dashboard to find activity data and specific insights and opportunities for targeted interventions. Note: Don't forget to navigate to 'Data' menu first; Press 'Refresh all', to see the latest updated version of your festival's environmental and activity data.

2.6 Emission Factors - List Tab



Emission/conversion factors — This page displays the list with emission factors used for the emission calculations.

Indicator	Quanitity	Unit	Background of factor	Source(s) used	Scope	Notes
ENERGY						
Note - some factors are also used for other themes (e.g. fuel consumption of suppliers as part of travel & transport)						
Average grid electricity (grid mix)	0.385	kg CO2 / kWh	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	WTW; Mix of non-renewable and renewable sources. Could also be used for electricity from batteries
Renewable electricity use	-	kg CO2 / kWh	Directly linked to source	CO2emissiefactoren.nl	Europe	WTW; 100% renewable sources. Could also be used for electricity from batteries
Diesel (B7 blend)	3.260	kg CO2-eq / L	Directly linked to source	CO2emissiefactoren.nl	Europe	WTW: assumed B7 blend Note: Factor has been updated in source, previous factor is used in GDCF-model
Petrol (E10 blend)	2.784	kg CO2-eq / L	Directly linked to source	CO2emissiefactoren.nl	Europe	WTW: assumed E10 blend Note: Factor has been updated in source, previous factor is used in GDCF-model
HVO biodiesel (Hydrotreated Vegetable Oil) B100 - NL	0.347	kg CO2-eq / L	Directly linked to source	CO2emissiefactoren.nl	Netherlands	WTW
Natural gas (grid)	2.134	kg CO2-eq / m3	Directly linked to source	CO2emissiefactoren.nl	Netherlands	WTW.
Natural gas (bottled)	2.633	kg CO2-eq / kg	Directly linked to source	CO2emissiefactoren.nl	Netherlands	WTW; assumed to be equivalent to CNG (aardgas) Note: Factor has been updated in source, previous factor is used in GDCF-model
Bio-gas (bottled)	1.049	kg CO2-eq / kg	Directly linked to source	CO2emissiefactoren.nl	Netherlands	WTW: Bio-CNG (aardgas) Note: Factor has been updated in source, previous factor is used in GDCF-model
Hydrogen (grey)	12.516	kg CO2-eq / kg	Directly linked to source	CO2emissiefactoren.nl	Global	WTW.
Hydrogen (green)	1.140	kg CO2-eq / kg	Directly linked to source	CO2emissiefactoren.nl	Global	WTW.
Energy content of diesel	36.720	MJ / L		RVO - Nederlandse energiedragerlijs	Global	Conversion factor
Energy content of gasoline	31.609	MJ / L		RVO - Nederlandse energiedragerlijs	Global	Conversion factor
Energy content of CNG / bottled natural gas	44.577	MJ / kg		RVO - Nederlandse energiedragerlijs	Global	Conversion factor
Energy content of natural gas (grid)	31.650	MJ / m3	1000	RVO - Nederlandse energiedragerlijs	Global	Conversion factor
MATERIALS						
Steel	1,935	kg CO2-eq / tonne	Directly linked to source	Idemat2024	Global	Stainless steel average
Recycled steel	629	kg CO2-eq / tonne	Recalculation of combined set of emission factors	Idemat2024	Global	We use the ratio of secondary steel EF to average steel to calculate recycled steel
Aluminum (virgin / trade mix)	8,078	kg CO2-eq / tonne		JRC report : Towards recycling indica	Europe	
Aluminum (secondary)	2,858	kg CO2-eq / tonne		from: Zare et al. F. 2016 LIFE CYCLE	Europe	
Other metals	5,304	kg CO2-eq / tonne	Recalculation of combined set of emission factors	Idemat2024	Global	95% Copper, 5% magnesium alloys
Other recycled metals	1,724	kg CO2-eq / tonne	Recalculation of combined set of emission factors	Idemat2024	Global	We use the ratio of secondary steel EF to average steel to calculate recycled other metals
Wood	823	kg CO2-eq / tonne	Directly linked to source	Idemat2024	Global	Plywood, outdoor use, Oikoumei plantation (500 kg/m3)
Textile	18,200	kg CO2-eq / tonne	Recalculation of combined set of emission factors	Idemat2021	Global	Average of production of cotton and textile
Recycled textile	15,600	kg CO2-eq / tonne	Recalculation of combined set of emission factors	Idemat2021	Global	Average of production of cotton and textile
Cotton (virgin)	23,520	kg CO2-eq / tonne	Recalculation of combined set of emission factors	Idemat2021	Global	
Cotton (recycled)	20,160	kg CO2-eq / tonne				
Polyester (virgin)	18,790	kg CO2-eq / tonne	Recalculation of combined set of emission factors	Idemat2021	Global	
Plastic (virgin)	1,807	kg CO2-eq / tonne	Directly linked to source	Idemat2023	Global	Mix of different plastics
Recycled plastic	399	kg CO2-eq / tonne	Directly linked to source	Idemat2024	Global	Recycling midex polymer
Biobased plastic	446.701	kg CO2-eq / tonne	Recalculation of combined set of emission factors	Idemat2024; Eionet Report – ETC/W	Global	
Paper/ cardboard (virgin)	741	kg CO2-eq / tonne	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100		
Recycled Paper / cardboard	459	kg CO2-eq / tonne	Directly linked to source		Europe	Assumed to be 62% of carbon footprint of virgin paper based on CE Delft
Recyling paper & cardboard	73.195	kg CO2-eq / ton	Recalculation of combined set of emission factors	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	Sorting + transport
Recyling Glass	19.298	kg CO2-eq / ton	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	Sorting + transport
Recyling Plastic	270.739	kg CO2-eq / ton	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	Sorting + transport
Recyling Aluminium	31.566	kg CO2-eq / ton	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	Sorting + transport
Recyling Metals	38.520	kg CO2-eq / ton	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	Sorting + transport
Recyling Organic	32.354	kg CO2-eq / ton	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	Treatment, Europe average (50% anaerobic digestion and 50% industrial composting) + transport
Recyling Cooking oil	96.926	kg CO2-eq / ton	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	Treatment + transport
Recyling Wood	23.386	kg CO2-eq / ton	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	Sorting & shredding + transport
Recyling Construction and Demolition waste	6.509	kg CO2-eq / ton	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	Treatment ("breaking") of construction and demolition waste + transport
Landfill	2.241	kg CO2-eq / kg	Directly linked to source	Idemat2024	Global	Landfill organic wate without CH4 emission prevention
Incineration (no energy recovery)	525.663	kg CO2-eq / ton	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	No positive impact quantified of electricity/heat production (consistent with recycled streams)
Incineration (with energy recovery)	525.663	kg CO2-eq / ton	Directly linked to source	Ecoinvent 3.8, IPCC 2021 GWP100	Europe	No positive impact quantified of electricity/heat production (consistent with recycled streams)

Purpose: To provide transparency by listing all the conversion factors used to translate activity data (e.g., kWh, liters, kg) into carbon dioxide equivalents (CO_2e).

Key Information & Actions:

- An Emission Factor (EF) is a coefficient that quantifies the CO_2e emissions per unit of activity. For example: kg CO_2e per kWh of grid electricity or kg CO_2e per liter of diesel.

- This sheet is a reference library. For most users it is recommended not to make any changes in this tab.
    - *Note: You can however change the values here if you have more accurate EFs for your specific situation. It is recommended to use the default EFs since they are thoroughly researched, but otherwise make sure to only use alternatives from trustworthy EF databases or scientific literature/ LCAs.*
- It allows you to verify the assumptions behind the tool's calculations.
- Factors are categorized by type (Energy, Materials, Travel & Transport, etc.).

What to do here: Consult this tab if you want to understand the used emission factors with which the calculations are made, or if you need to compare the tool's factors with other tools, EF databases or standards.

2.7 Back-end Calculation Tabs - For Advanced Use

Purpose: These tabs are the 'engine room' of the tool, where all the complex calculations happen. For the typical user, it is not necessary to consult these tabs. These tabs are separated from the main part of the tool to avoid accidental changes but are accessible for transparency, knowledge sharing and advanced troubleshooting.

Key Information & Actions:

- CO_2-Calculation: This sheet performs the core calculations, taking the data from the "Input sheet" tab and multiplying it by the corresponding Emission Factors from the "Emission factors - list" tab to generate the results.
- Facilitary data: This tab displays the intermediate and background calculations/conversions for establishing the CO2-footprint (e.g., passenger-to-vehicle conversion, waste-post-separation conversion, etc.).
- EF-background info: This tab provides the sources, references, and methodological notes for the emission factors used, lending credibility and traceability to the results.

What to do here:

- For most users: It is recommended not to modify these sheets. Any changes can corrupt the tool's logic and produce incorrect results.
- For advanced users: You can inspect these sheets to understand the calculation flow, verify formulas and assumptions, or check the background of specific data points. If you need to update an emission factor based on a country-specific, verified source, this can be done in "Emission factors - list" tab.
- ***Disclaimer:*** When changing content in the Back-end Calculation Tabs proceed with extreme caution! Changes here can corrupt the tool and negatively influence the reliability of the

outcomes, or, even worse, corrupt the entire operation of the tool causing it to stop working all together. Therefore, **it is strongly recommended to always save a backup version of the tool before you alter anything in these parts of the tool.**

Part 3 | Data Collection

This section provides a practical, step-by-step approach to gathering your festival's data in order to then fill the input sheet of the GDCF Monitoring Tool. The data gathering process is of the utmost importance; what counts for all data tools also counts for this tool: ***garbage in, garbage out***. Meaning, data quality is the determining factor for the quality of the outcomes.

For **more detailed specifications** of how to go about gathering and filling in individual data points, please refer to the "**User Guide**" **tab in the Monitoring tool** itself. This guide contains comprehensive line-by-line definitions, instructions, and example questions for all of the rows in the Input sheet.

3.1 Overview of the Data Collection Process

The data collection process is structured around **four key phases**, designed to guide you from preparation through to final submission:

1. **Preparation** (Before the Festival): Laying the groundwork for efficient data gathering.
2. **Collection** (During/After the Festival): Actively gathering data from all relevant sources.
3. **Entry** (After the Festival): Preparing the data and inputting your collected data into the monitoring tool.
4. **Review** (After Entry): Ensuring data quality and completeness before analysing and sharing your results.

3.2 Phase 1: Preparation (Before the Festival)

Objective: To identify data requirements and establish clear communication channels with data providers and bring it all together in a data collection plan.

- **Data Collection Plan:** Create a data collection plan in which you address all of the data which you will need to collect for your calculations, the sources from where you will have to retrieve this data, and connect these actions to a time planning. A template for such a data collection can be found in the Appendix of this User Guide. During the preparation of your data collection plan, make sure to walk through the following steps:
    - **Familiarization:** Review the "Input sheet" tab to understand the full scope of data requested across all activity categories (Energy, Materials, Travel & Transport, etc.).
    - **Stakeholder Identification:** Identify all internal departments (e.g., production, catering, sustainability, marketing) and external suppliers (e.g., waste management, energy provider, food vendors) who are required to start monitoring (some of) their activities and will have to report on those.

- **Supplier Engagement:** Inform all relevant parties (internal AND external) about the specific data points you will need from them post-event. This ensures they actually monitor their activities and are prepared to provide necessary documentation like weighbridge tickets, fuel invoices, and consumption reports.
- **Data Structuring:** Create a working document with tabs corresponding to the themes used in the “Input sheet” tab of the monitoring tool (e.g., “General”, “Energy”, “Material” etc.) as preparatory worksheets to structure and consolidate raw data before formal entry into the "Input sheet" tab.

3.3 Phase 2: Data Collection (During and Immediately After the Festival)

Objective: To systematically gather all required information from designated sources during and immediately after the festival, ensuring comprehensive data capture.

The list below sums up the required data points per category for a complete analysis of your festival:

- **General**:
  - Collect general information on weather, location, name, date, festival type, duration.
  - Gather ticketing numbers (make sure you split out single-day and all the different kinds of multi-day tickets) and guest lists/accreditation.
  - Record the number of artists, crew/volunteers, and suppliers/ contractors.

- **Energy**:
  - Collect final meter readings from grid connection points (renewable and non-renewable power).
  - Request data on the electricity brought to the site in batteries and any renewable produced on-site.
  - Obtain fuel consumption reports for fuels used in power generators (diesel, HVO, biofuels, green/grey hydrogen).
  - Document energy consumption related to any cooling and heating systems and used for cooking.

- **Materials**:
  - Collect the invoices and compile the amounts of all directly purchased (NOT rented or borrowed) materials and products. See the list in the Input sheet for all relevant materials. Make sure to distinguish between circular (second hand, biobased, recycled) and non-circular (virgin) materials.
  - Collect the amounts of tableware and cups used including their respective recycle or return rates. Distinguish between reusable, recyclable/compostable, and single use tableware and cups.

    - Obtain weighbridge tickets or invoices for all resource streams that are accepted as fully recyclable/compostable (mixed plastic, glass, organic, etc.).
    - Obtain weighbridge tickets or invoices for all residual waste streams (incineration; with or without energy recovery, post separation, landfill).

- **Travel & Transport**:
    - Collect visitor travel data, including information about travel mode, distance travelled, car occupancy, and, optionally, any other last-mile modes of travel.
        - This information can best be gathered by implementing these questions in the visitor survey or somewhere in the ticketing/accreditation process (for examples; see the “Manual” tab in the Monitoring tool itself).
    - Collect artist travel information, including transport modes, distances travelled, car occupancy, and, optionally, any other last-mile modes of travel.
        - This information can best be gathered by implementing these questions in the standard communication with the artists or accreditation process.
    - Collect crew, volunteer and suppliers travel information, including transport modes, distances travelled, car occupancy, and, optionally, any other last-mile modes of travel.
        - This information can best be gathered by implementing these questions in any surveys that might be sent out to these groups or in the accreditation process.
    - Register all fuel and electricity consumption related to internal transport and (building) equipment movements on site.
    - Gather data on the transport of goods from suppliers.
        - Ideally, this data is reported directly in terms of fuel and electricity consumption. Otherwise, these figures can be calculated from a combination of distance travelled, vehicle type (and corresponding fuel efficiency), and the weight of goods transported.
    - Collect invoices of fuel replacement (in-/offsetted amounts of fuel) and report in terms of avoided CO_2e emissions - in tonnes.

- **Water**:
    - Document the total volumes of water used (in liters) by collecting utility statements and meter readings (distinguish between drinking and non-drinking water).
    - Gather information about the amount of water which is reused on-site (in liters).
    - Record data for any on-site water treatment systems (total amount of liters water treated).
    - Gather data about the amount of waste water released to the off-site treatment facilities AND/OR the environment (in liters).
        - *Note: If this data is not available, the tool will estimate an amount based on the total input of water into the festival.*

- **Food & Drinks**:

    - Gather data on the food consumption from audience-, crew- and artist-catering.
        - You can base these figures on the total amount of food purchased or on the amount of food sold/given out by food suppliers.
        - The tool provides two options for filling in this data: 1) total weights of different categories of ingredients; or 2) number of meals consumed, divided into five impact categories (ranking from Ultra low to Super high).
    - Document the source/types of food and drinks. Report the shares of the total food that was sourced organically, locally, and/or through regenerative agricultural practices.
    - Collect information about beverage consumption. Report for the different beverage types (Beer, soda, wine, coffee, etc.) the total consumption in liters and the impact category for each beverage (regular, low, or climate neutral).
        - *Note: If the impact category is unknown, always use regular.*

- **Overnight Stays**:
    - Record the number of all overnight stays - including visitors, guests, artists, crew, volunteers, and suppliers - at your own official festival campsite.
    - Record the number of overnight stays - including visitors, guests, artists, crew, volunteers, and suppliers - at external accommodations. Distinguish between 1) external campsites, and 2) hotels, holiday houses or apartments. Also report the emission intensity for each accommodation (regular, low, or climate neutral).
        - *Note: If the impact category is unknown, always use regular.*

- **Digital Footprint**:
    - Determine the emission intensity of your main festival website. Use: https://www.websitecarbon.com/
    - Collect data on the total number of views for your main festival website.
    - Record the number of emails sent on behalf of the festival.
    - Gather data on the amount of sessions on the festival app and total amount of social media views.
    - Document the total amount of data stored in cloud services (in GB) related to the event.

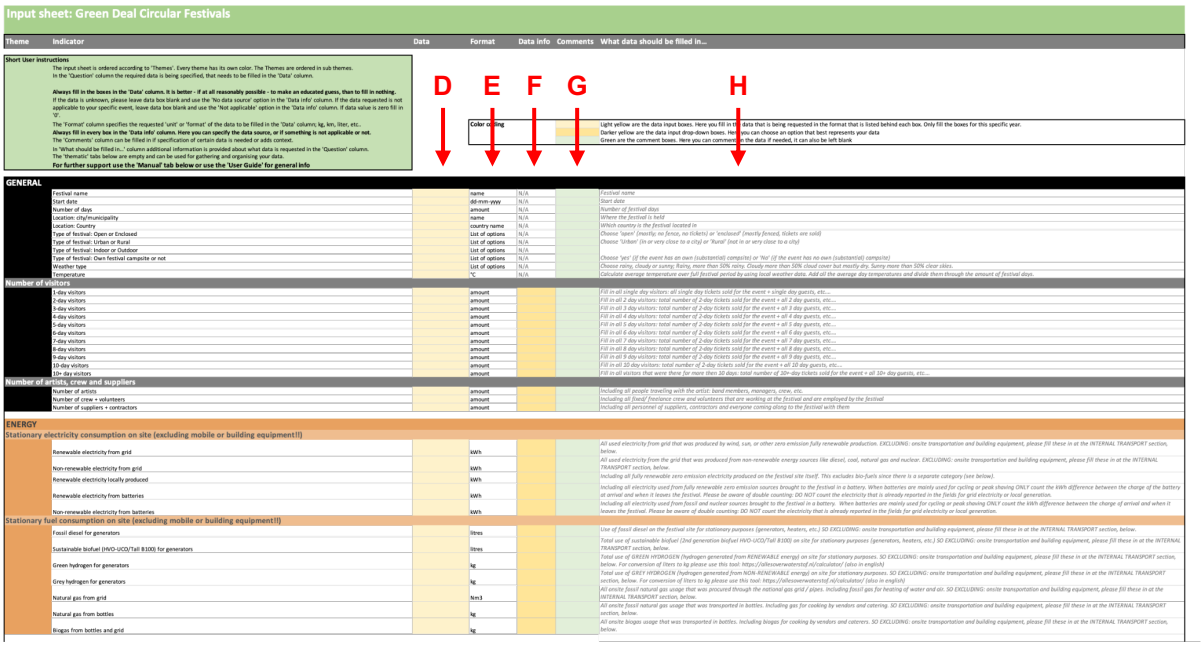
- **Carbon Removal**:
    - Record the amount of tonnes of CO_2e removed via certified carbon removal projects for this edition of the festival.

3.4 Phase 3: Data Entry (After the Festival)

Objective: To accurately transfer collected data into the monitoring tool.

When transferring your data into the Input sheet, please pay attention to the following:

- **Systematic Input**: Work through the Input sheet methodically from top to bottom, focusing on one theme at a time.
- **Mandatory Fields**: Enter your data only in the yellow cells in Column D ("Data").
- **Source Documentation**: For every entered data point, select the appropriate data source from the drop-down menu in Column F ("Data info") and add any additional relevant context in Column G ("Comments"). This is a very useful step for data validation and assessing data quality later on.
- **Data Precision**:
    - If you entered data in a row, Column F (“Data info”) should always indicate a data source.
    - If there is NO data in a row because this is information is unknown OR this row is not applicable to your festival, always indicate which of the two is the case by using the drop down menu in Column F, “Data info” (respectively, “No data source - left blank” or “Not applicable - left blank”).
- **Guidance**: Consult Column H ("What should be filled in...") for quick definitions. Use the “Manual” tab for more elaborate guidance per data point.



3.5 Phase 4: Review

Objective: To ensure data completeness and quality before finalizing the process.

- **Completeness Check**: Verify that all yellow cells in Column D (“Data”) actually contain data, or that “No data source” or "Not applicable" has been selected in Column F (“Data info”) where appropriate.

- **Sanity Check**: To improve data quality even further, it's good to check for order-of-magnitude errors, digit group errors, or unit conversion errors. The question to ask yourself is: Do the results make sense based on your event?
- **Final Verification**: Conduct a final review to ensure all thematic sections are complete and that data sources are fully documented and saved in an orderly manner.

Key Success Factor: Early engagement with your team and suppliers is crucial for a smooth and efficient data collection process. Allocate sufficient time for the data entry and review phases to ensure the highest quality of your final submission.

Appendix
Template: Data Collection Plan - GDCF Monitoring Tool

This **data collection plan** template helps you track **what data** to collect, **who is responsible**, **how to get** it and what the **current status** is. This document is meant as a support document for the data collection process and works best in combination with the **'User Guide' Tab** in the monitoring tool - specific information and tips per data line - and with the **'User Guide' Document** - user manual and process guide.

Festival: _____
Edition/Year: _____
Data Coordinator: _____

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1. General & Attendance

What to Collect	Who is Responsible?	How to Collect?	Status	Notes
Festival name, location, dates, type (Open/Enclosed, Urban/Rural, etc.)	Event Manager	Event plan & site details	- - - - -	- - - - -

Weather type (Sunny/Cloudy/Rainy) & average temperature	Sustainability / Event Manager	Online weather service (e.g., weatheronline.co.uk)	- - - - -	- - - - -
Number of visitors (split by 1-day, 2-day, etc.)	Box Office / Ticketing Manager	Ticketing system report	- - - - -	- - - - -
Number of artists (incl. management & crew)	Artist Liaison / Programming	Artist registration lists	- - - - -	- - - - -
Number of crew & volunteers	Production / HR Manager	Internal schedules & HR lists	- - - - -	- - - - -
Number of supplier personnel on site	Production Manager	Supplier registration lists	- - - - -	- - - - -

2. Energy (Stationary)

What to Collect	Who is Responsible?	How to Collect?	Status	Notes
Electricity from grid (kWh) - renewable & non-renewable	Technical Producer	Meter readings, utility invoices	- - - - -	- - - - -
Electricity produced on-site from renewables (kWh)	Technical Producer	Meter readings from solar/wind systems	- - - - -	- - - - -
Electricity from batteries (kWh) - renewable & non-renewable	Technical Producer	Battery system logs, supplier reports	- - - - -	- - - - -
Fuel for generators/heaters (liters) - Fossil Diesel & HVO	Technical Producer	Fuel delivery invoices, on-site tank logs	- - - - -	- - - - -
Hydrogen for generators (kg) - Green & Grey	Technical Producer	Supplier delivery notes, consumption logs	- - - - -	- - - - -

Natural Gas (Nm³ from grid, kg from bottles)	Technical Producer	Utility invoices, supplier delivery notes	- - - - -	- - - - -
Biogas (kg from bottles/grid)	Technical Producer	Supplier delivery notes, invoices	- - - - -	- - - - -

3. Materials & Waste

What to Collect	**Who is Responsible?**	**How to Collect?**	**Status**	**Notes**
Weight of purchased materials (kg) - for all categories split: **virgin** and **recycled/ second-hand/biobased**	Procurement / Department Heads	Purchase invoices, supplier data sheets	- - - - -	- - - - -
Number of reusable cups, tableware, cutlery used & % lost/damaged	F&B / Bar Manager	Stock counts, rental service reports	- - - - -	- - - - -

Number of single-use items used (cups, tableware, cutlery) & their recycling/composting rate	F&B / Bar Manager	Purchase lists, waste contractor reports	- - - - -	- - - - -
Weight of waste for recycling/composting (kg) - per material stream (paper, glass, PMD, etc.)	Waste Manager	Weighbridge tickets from waste company	- - - - -	- - - - -
Weight of residual waste for incineration/landfill (kg)	Waste Manager	Weighbridge tickets from waste company	- - - - -	- - - - -
Used Cooking Oil for refining (liters)	Waste Manager	Collector invoice / report	- - - - -	- - - - -

4. Travel & Transport

What to Collect	Who is Responsible?	How to Collect?	Status	Notes
Visitor travel (main mode of transport & average one-way distance)	Sustainability / Marketing Manager	Audience travel survey, ticketing geo-data	- - - - -	- - - - -
Artist travel (main mode of transport & average one-way distance)	Artist Liaison	Travel itineraries, accreditation survey	- - - - -	- - - - -
Crew & Volunteer travel (main mode of transport & average one-way distance)	HR / Production Manager	Accreditation survey, travel bookings	- - - - -	- - - - -
First/Last mile transport (Shuttle, Ship/Ferry) - number of people, distance, % sustainable fuel	Transport / Production Manager	Transport provider reports, operator data	- - - - -	- - - - -

Fuel/electricity for **on-site** transport & building equipment	Production Manager	Fuel invoices, equipment logs, battery reports	- - - - -	- - - - -
Fuel/electricity for **supplier** transport to/from site	Production / Sustainability Manager	Supplier registration survey, delivery notes	- - - - -	- - - - -
Fuel replacement / Sustainable Fuels (tonnes CO_2e avoided)	Sustainability Manager	Certificates from providers (e.g., Goodshipping)	- - - - -	- - - - -

5. Water & Sanitation

What to Collect	**Who is Responsible?**	**How to Collect?**	**Status**	**Notes**
Total water consumption (liters) - drinking & non-drinking	Site / Technical Manager	Water meter readings, utility & water truck invoices	- - - - -	- - - - -
Water reused on-site (liters)	Site / Technical Manager	Treatment system logs, meter readings	- - - - -	- - - - -

Wastewater treated on-site & released (liters)	Site / Technical Manager	Treatment system logs	- - - - -	- - - - -
Wastewater removed from site (liters)	Site / Technical Manager	Haulage invoices, sewerage utility invoice	- - - - -	- - - - -

6. Food & Drinks

What to Collect	**Who is Responsible?**	**How to Collect?**	**Status**	**Notes**
Option 1: Total weight of ingredients used (kg) - by category (veg, meat, dairy, etc.)	F&B Manager / Caterers	Aggregate purchase lists from all caterers	- - - - -	- - - - -
Option 2: Number of meals served, by impact category (Super High to Ultra Low)	F&B Manager / Caterers	Sales data from caterers, menu analysis	- - - - -	- - - - -
% of total food that is organic, regenerative, and local	F&B Manager / Caterers	Supplier declarations, purchase lists	- - - - -	- - - - -

Liters of drinks sold/consumed, by type (beer, wine, coffee, etc.) and impact (Regular, Low, Zero)	F&B Manager / Bar Manager	Purchase invoices, sales data from POS	- - - - -	- - - - -
% of total drinks that are organic, regenerative, and local	F&B Manager / Bar Manager	Supplier declarations, purchase lists	- - - - -	- - - - -

7. Overnight Stays

What to Collect	**Who is Responsible?**	**How to Collect?**	**Status**	**Notes**
Number of stay-nights at **festival** campsite	Camping Manager	Campsite registration & ticketing data	- - - - -	- - - - -
Number of stay-nights at **external accommodations** (campsites, hotels, etc.) - split by Regular, Low, and Zero emission	Travel Coordinator / Estimations	Booking data, partner reports, audience survey	- - - - -	- - - - -

8. Digital Footprint

What to Collect	Who is Responsible?	How to Collect?	Status	Notes
Festival website traffic data (sessions, page views, data transfer)	Digital / Marketing Manager	Google Analytics / website analytics report	- - - - -	- - - - -
Festival app usage data (sessions, page views, data transfer)	Digital / Marketing Manager	App analytics platform report	- - - - -	- - - - -
Number of emails sent	Digital / Marketing Manager	Email platform report (e.g., Mailchimp)	- - - - -	- - - - -
Social media impressions/views for festival-related post	Digital / Marketing Manager	Social media platform insights	- - - - -	- - - - -

Cloud & data storage used for festival operations (GB)	Digital / IT Manager	Cloud service provider report (AWS, Google Cloud, etc.)	- - - - -	- - - - -

9. Carbon Removal

What to Collect	Who is Responsible?	How to Collect?	Status	Notes
Tonnes of CO_2e removed via certified carbon removal projects	Sustainability Manager	Certificate from carbon removal provider	- - - - -	- - - - -

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Title:	**User Guide Monitor Green Deal Circular Festivals**
Version:	0.1
Date:	21 November 2025
Commissioned by:	Ministry of Infrastructure and Water Management of The Netherlands
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Circular Festivals