Inštitut
za zdravje
in okolje

Turning the Page to a Sustainable Future

Reducing Carbon Footprints, Amplifying Handprints: How Libraries Can Contribute to Climate Action

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What's one word that comes to mind when you think of libraries and sustainability?

Scan the QR code to answer.

Libraries & Sustainability – Why It Matters

- Libraries contribute to multiple SDGs
- Sustainability aligns with core library values → promoting access to knowledge, community, and equity
- Libraries = public infrastructure = climate actors
- Opportunity to play a key role locally and nationally

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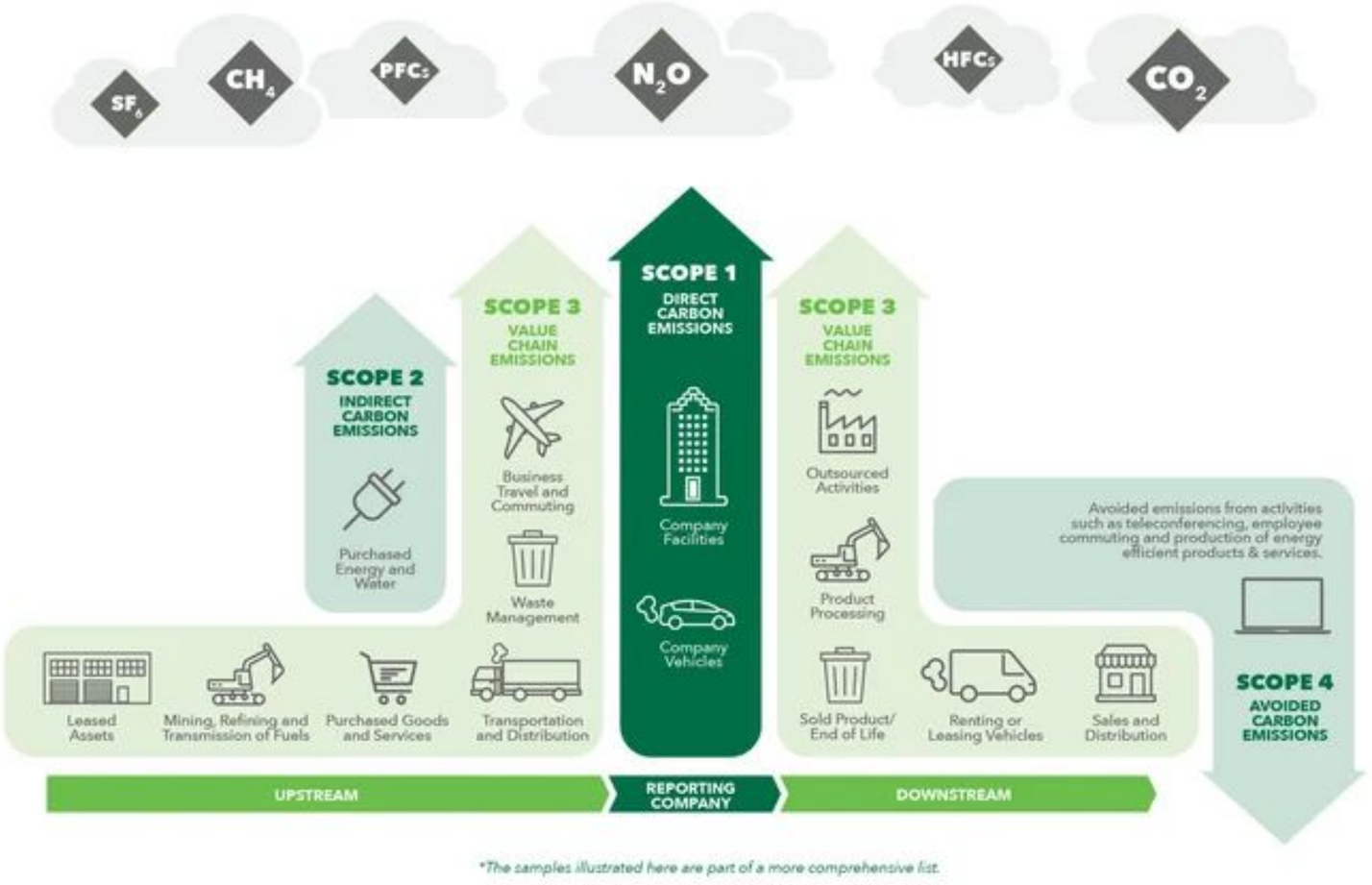
What is a Carbon Footprint?

- Total amount of all GHG emissions caused by an organization's activities → expressed in CO_2 equivalents (CO_2e) for standardization

- Scopes:

  1. **DIRECT EMISSIONS** from activities that the organization controls
  2. **INDIRECT EMISSIONS** from purchased electricity and energy use
  3. **OTHER** indirect emissions from products and services

- Foundation for identifying reduction opportunities and supporting advocacy



Key Benefits of Measuring Carbon Footprint in Libraries

- **Foundation for action:**
  You can’t manage what you don’t measure!
- **Supports decision-making:**
  Guides resource use and infrastructure upgrades
- **Enables goal setting:**
  Provides baseline for climate targets and reductions
- **Strengthens funding and policy arguments:**
  Concrete data to influence stakeholders
- **Increases transparency and credibility**
- **Identifies key emission sources and savings potential**

The Carbon Footprint Calculation Process

Step 1

Define methodology

Step 2

Set boundaries and scope

Step 3

Collect data on emissions

Step 4

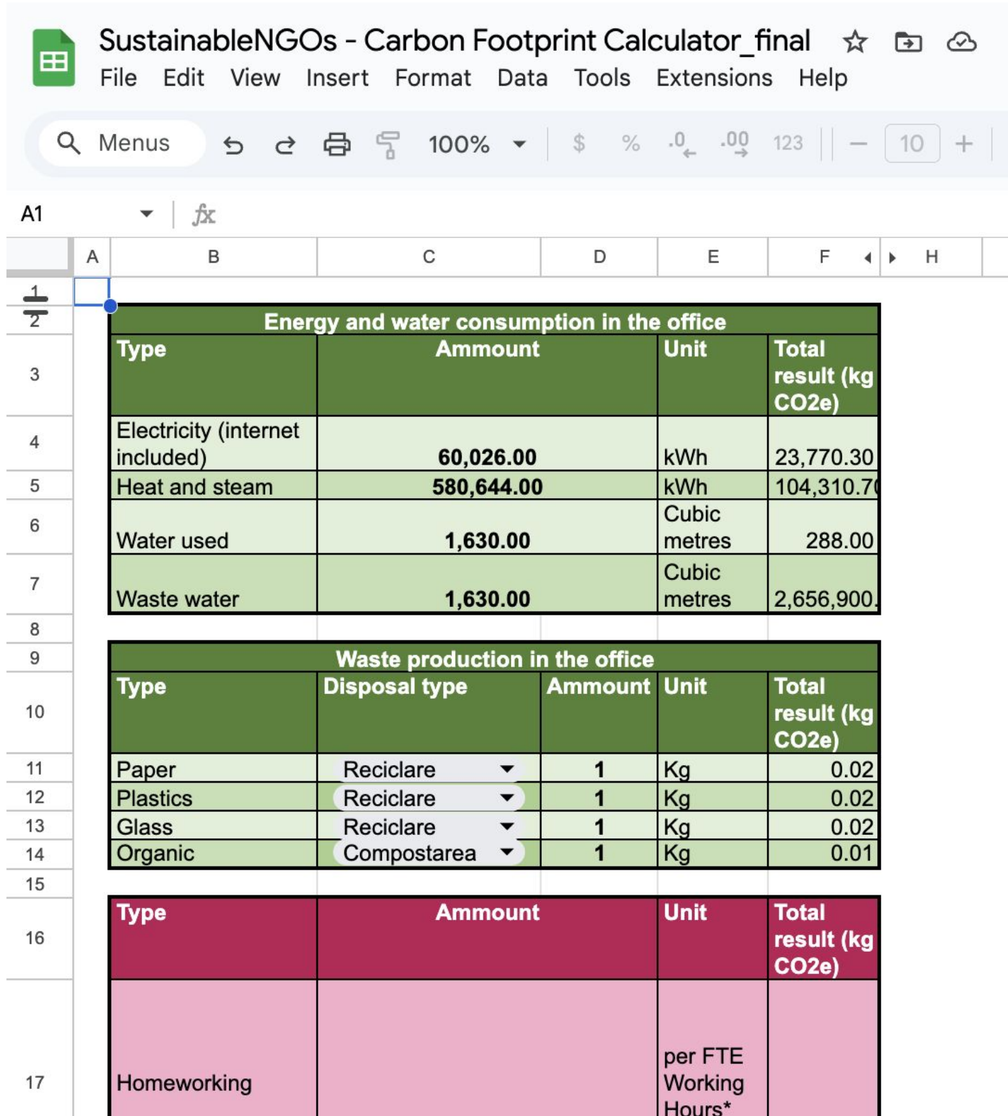
Verify results (optional)

Step 5

Publish results (optional)

Guidelines & Tools for Measuring Carbon Footprint

- **Use recognized standards:** GHG Protocol, ISO 14064
- **Identify emission sources (Scope 1–3)**
- **Choose the right tools:**
  - Excel-based calculators (e.g. Sustainable NGOs calculator)
  - Online tools (e.g. CoolClimate, Carbon Trust)
- **Use consistent data sets & units**
- **Document assumptions and boundaries clearly**
- **Start simple, expand over time**



SustainableNGOs - Carbon Footprint Calculator_final

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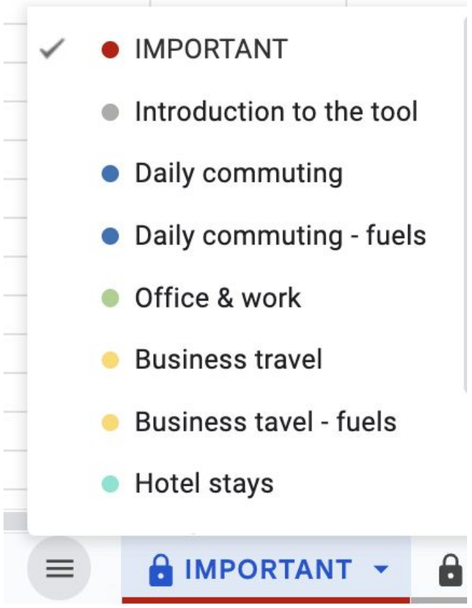
Energy and water consumption in the office			
Type	**Ammount**	**Unit**	**Total result (kg CO2e)**
Electricity (internet included)	**60,026.00**	kWh	23,770.30
Heat and steam	**580,644.00**	kWh	104,310.7
Water used	**1,630.00**	Cubic metres	288.00
Waste water	**1,630.00**	Cubic metres	2,656,900.

Waste production in the office				
Type	**Disposal type**	**Ammount**	**Unit**	**Total result (kg CO2e)**
Paper	Reciclare	**1**	Kg	0.02
Plastics	Reciclare	**1**	Kg	0.02
Glass	Reciclare	**1**	Kg	0.02
Organic	Compostarea	**1**	Kg	0.01

Type	**Ammount**	**Unit**	**Total result (kg CO2e)**
Homeworking		per FTE Working Hours*	

Example of an Excel-based Calculator

- Sustainable NGOs calculator



Type		Ammount	Unit	Total result (kg CO2e)
Hybrid	Small car		km	0.00
	Medium car		km	0.00
	Large car		km	0.00
Plug-in Hybrid Electric Vehicle	Small car		km	0.00
	Medium car		km	0.00
	Large car		km	0.00
Battery Electric Vehicle	Small car		km	0.00
	Medium car		km	0.00
	Large car		km	0.00
Diesel Fuel Vehicle	Small car		km	0.00
	Medium car		km	0.00
	Large car		km	0.00
Petrol Fuel Vehicle	Small car		km	0.00
	Medium car		km	0.00
	Large car		km	0.00
CNG-fueled vehicles*	Medium car		km	0.00
	Large car		km	0.00
LPG-fueled vehicles*	Medium car		km	0.00
	Large car		km	0.00

Type		Ammount	Unit	Total result (kg CO2e)
Motorbike	Small		km	0.00
	Medium		km	0.00
	Large		km	0.00

Type		Ammount	Unit	Total result (kg CO2e)
Taxi	Battery Electric Vehicle		Passenger km	0.00
	Regular		Passenger km	0.00

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Type	Ammount	Unit	Total result (kg CO2e)
Homeworking		per FTE Working Hours*	0.00

Explanation*
Example: If an employee works at home 2 times a week and you want to calculate the monthly emissions, enter "64" in the "Amount" cell (2 days * 4 weeks * 8 hours).

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	Large car		km	0.00
Plug-in Hybrid Electric Vehicle	Small car		km	0.00
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	Large car		km	0.00
Battery Electric Vehicle	Small car		km	0.00
	Medium car		km	0.00
	Large car		km	0.00
Diesel Fuel Vehicle	Small car		km	0.00
	Medium car		km	0.00
	Large car		km	0.00
Petrol Fuel Vehicle	Small car	**756**	km	106.44
	Medium car		km	0.00
	Large car		km	0.00
CNG-fueled vehicles*	Medium car		km	0.00
	Large car		km	0.00
LPG-fueled vehicles*	Medium car		km	0.00
	Large car		km	0.00

Type		Ammount	Unit	Total result (kg CO2e)
Motorbike	Small		km	0.00
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	Large		km	0.00

Type		Ammount	Unit	Total result (kg CO2e)
Taxi	Battery Electric Vehicle		Passenger km	0.00
	Regular		Passenger km	0.00

How can you reduce your Carbon Footprint?

USE ENERGY WISELY

LED lighting, smart thermostats, natural ventilation

ENCOURAGE SUSTAINABLE HABITS

Promote green travel, host repair/swap events, raise awareness through activities

REDUCE WASTE

Go digital, recycle properly, avoid single-use plastics

LEAD BY EXAMPLE

Choose sustainable suppliers, run eco-themed programs, involve the community

Exploring Your Library's Environmental Impact

Scan the QR code and let’s see where we’re at!

Leveraging Carbon Data for Green Advocacy and Funding

- **Use carbon data** to engage funders and policymakers for green projects.
- **Advocate** for green policies aligned with climate goals.
- **Secure funding** by demonstrating long-term savings and community benefits.
- **Build awareness** by publishing sustainability data and promoting environmental solutions.
- Support green renovations by emphasizing the energy-saving benefits.

On the other side of the carbon footprint: the Handprint

- **CARBON HANDPRINT = POSITIVE CLIMATE IMPACT**

- **Handprint vs. Footprint:**
  → Footprint = environmental harm; Handprint = environmental benefit

- **Libraries create handprints by:**
  → Providing access to shared materials (books, tools, devices)
  → Promoting reuse over consumption
  → Supporting sustainability education and awareness

- **Example:**
  → Borrowing a book instead of buying it saves ~0.7 kg CO_2e per book

- **Community Impact:**
  Libraries educate, influence, and empower communities→ **can enable users to lower their personal carbon footprints**

The Power of Libraries: Environmental Awareness

- Organize climate awareness events
- Start a “green” book club
- Collaborate with local eco-friendly businesses and organizations
- Create green curriculum kits and teaching resources
- Showcase climate-friendly improvements in the library

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