

Digital Impacts Schema & Taxonomy (DIST)



Oliver Cronk, Founder, Cronk Advisory

Hannah Smith, Director of Operations, Green Web Foundation

Who's presenting today?



GREEN WEB
FOUNDATION

Hannah Smith

Director of Operations

Green Web Foundation - a non-profit organisation working towards a fossil-free internet.



Oliver Cronk

*Founder of Cronk Advisory and
Architect Tomorrow*



Cronk Advisory: helps organisations get their arms around the impacts of their technology estates

**Sustainability reporting is hard &
digital technologies are complex.**

Putting the two together = 🤖



DIGITAL IMPACT SCHEME & THE ECONOMY 2021



often ignored because **the**

Sustainability reporting is hard & digital technologies are complex.

Putting the two together = 🤯



Plenty of intent but lots of problems

1. Most of your tech belongs to someone else
2. Usage is not where impact starts and ends
3. No shared structure
4. Data that sits on a shelf
5. Moving beyond carbon

We're building DIST to help



DIST = Digital Impacts Schema & Taxonomy

✓ Open guidance

✓ Aligned to
existing standards

✓ Holistic and
beyond carbon

POLL

Poll / Question to the room:

Does your org produce any internal or external-facing reporting on your digital emissions at the moment?



How can you use and contribute to DIST?



The DIST three-part tool suite

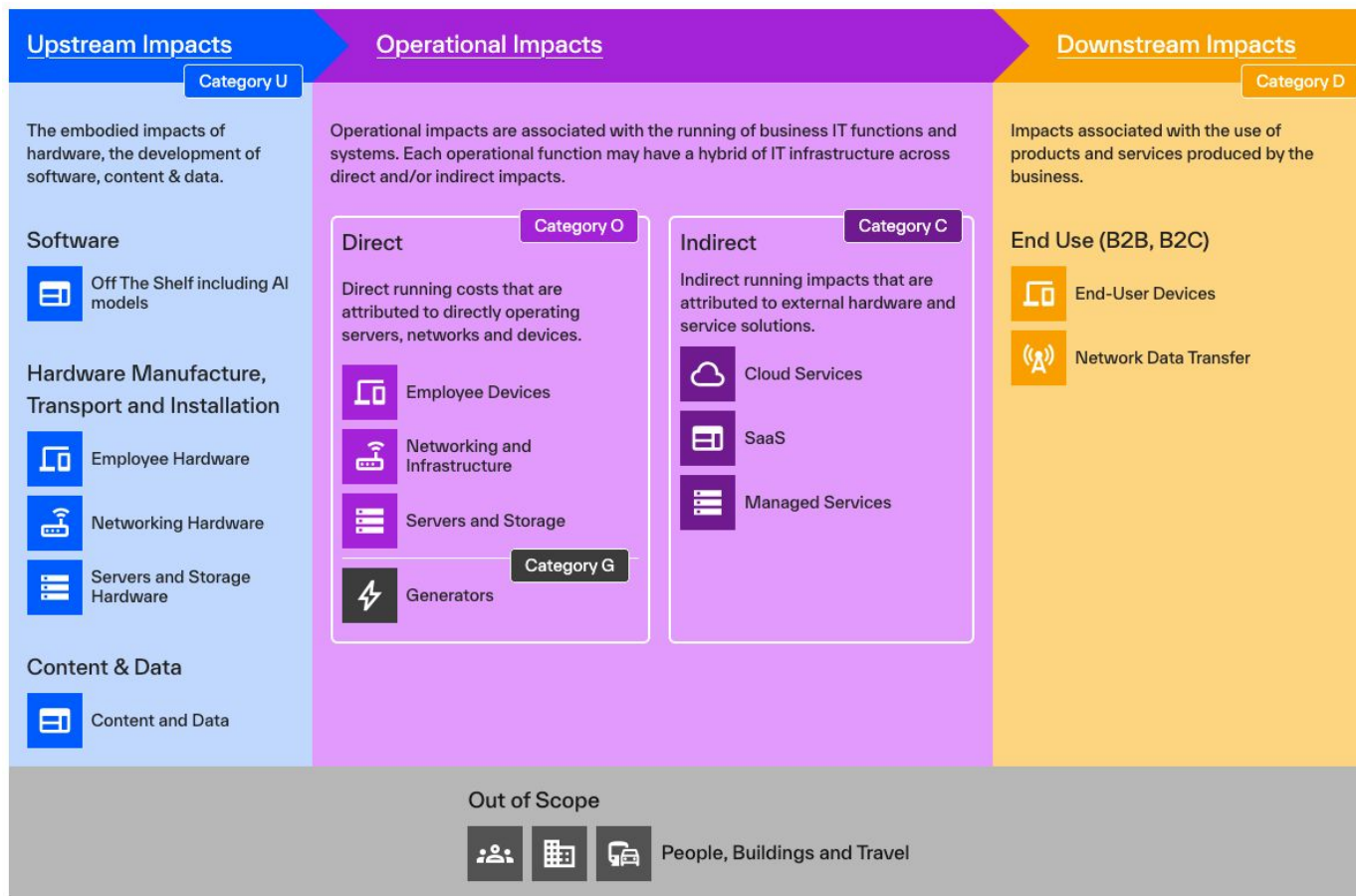
Designed to meet you where you are.

1. **Taxonomy** ➡ Catch the important things
2. **Methodologies** ➡ Measure with confidence
3. **Schema** ➡ Share transparently

1. Taxonomy

Impact dimension: **Default**

Category DIST Category





If you're new to digital sustainability and don't know where to start.

Start with the taxonomy categories.

- Work out what categories are significant for your context.
 - Skip the parts that you're not ready for, you don't have to:
 - Start with your whole organisation's digital estate - just an application, product or service level works.
 - Attempt to get numbers for every single category – skip parts that are too hard to start with.
-

2. Methodology map

Use the filter icon  on the right to sort and filter what you see.



Name	Impact Dimension	DIST Categories
SPRUCE	 Carbon  Water	 CatCCloud: Cloud Services
webNRG ⚡ - Website Carbon Emissions	 Carbon	 CatDEndUserDevices: End-User Devices CatDNetworkDataTransfer: Network Data Transfer
Cloud Energy - Server Energy Estimation	 Carbon	 CatOServers: Servers and Storage CatCCloud: Cloud Services
Sustainable Web Design Model v4	 Carbon	 CatUNetworkHardware: Networking Hardware CatUServerHardware: Servers and Storage Hardware CatOServers: Servers and Storage CatONetworkDevices: Networking and Infrastructure CatDEndUserDevices: End-User Devices CatDNetworkDataTransfer: Network Data Transfer
Eco CI - Energy Estimation	 Carbon	 CatUServerHardware: Servers and Storage Hardware CatOServers: Servers and Storage CatCCloud: Cloud Services CatCSaaS: SaaS
One-Token Model	 Carbon	 CatUSoftware: Off The Shelf including AI models
Resilio Database	 Carbon  Water	 CatUSoftware: Off The Shelf including AI models CatUEmployeeHardware: Employee Hardware CatUNetworkHardware: Networking Hardware

2. Methodologies – starting with carbon

Find methods* to fill your measurement gaps.

- A curated list of measurement and estimation methods, mapped across every category of the taxonomy.
- Differentiate between open methods and commercial ones.

** Think of methods as a broad term covering a range of approaches such as calculation procedures, formulas, datasets, estimation tools and resources - anything that helps you produce numbers for a taxonomy category.*



You know the categories, but aren't sure how to work out the numbers.

The methodology map will be your starting point.

- Soon you'll be able to filter methods by category and other criteria.

We're working on the carbon list, and are looking for help.

3. Schema overview

```
{
  "$schema": "https://dist.greenweb.org/schemas/dist/v0.0.1.json",
  "organization": {
    "name": "Green Web Foundation",
  },
  "report": {
    "reporting_period": {
      "from": "2023-01-01",
      "to": "2023-12-31"
    },
    "verification": "self_reported",
    "impacts": {
      "carbon": [
        {
          "categories": ["upstream:employee_hardware"],
          "value": 186,
          "unit": "kgCO2e"
        }
      ]
    }
  }
}
```

3. Schema – DIST.json files

Create transparency about your impacts, scope and measurement approaches.

- An open-source JSON schema (data structure) for reporting digital/technology impacts.
- Aligned with the taxonomy categories eg upstream, operational and downstream.
- Designed to be discoverable via [carbon.txt](#) and machine-readable from day one.
- A foundation that other frameworks, tools, calculators and methodologies can plug into.



You already do reporting, but want to help people find it and make use of it.

Start with the schema.

- Make a DIST.json file and put it on your website
 - eg `yoursite.com/.well-known/DIST.json`
- Make your DIST.json file, and any other sustainability reporting you have, findable using the carbon.txt convention.

How you can contribute to DIST! 🙏

1. **Try out the taxonomy:** try mapping something real into the categories, then tell us what broke. Constructive questions are worth more to us than praise.
2. **Publish impact data:** if you have data already, especially officially reported on what you build or operate, try putting it into the schema and tell us where it didn't work.
3. **Submit methods:** let us know about any methods you own or work on a method* on that should feature in the methodology map.

For feedback raise an issue at
github.com/thegreenwebfoundation/DIST

For anything else
www.thegreenwebfoundation.org/support-form/

POLL

POLL: What problems do you think this could solve in your supply chain?



Thank you

Questions and feedback welcomed

