

# Carbon footprint calculators - practical examples

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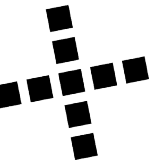
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**Positive  
Impact**

# Content

- Introduction
- Calculator types
- Case studies
- Result interpretation
- About data quality
- Discussion and questions



# About the presenter

## **Education:**

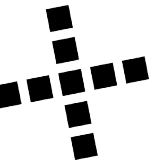
- MSc, Aalto University
  - Environmental and Water Engineering

## **Work experience:**

2014-2018 The Natural Step Nordic Oy  
Carbon footprinting, LCA

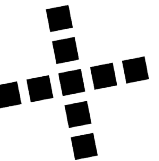
2019 SustainOnline Oy  
Reporting tool development

2020-present Positive Impact Finland Oy  
Sustainability advisor & software developer



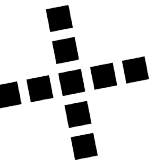
# Carbon calculators - why?

- + Concrete way to measure progress
- + More legislative pressure
- + Customer wants
- + Marketing and sales



# Carbon calculators - how?

- + Existing online tools
  - + Custom tools
- + Mobile applications
- + Microsoft Excel
- + Google Sheets



# Different calculator types

Global / national level tools

Industry specific

Regional / city

**Company**

**Product / service**

**CO<sub>2</sub> calculators for personal use**

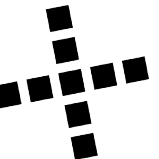
Periodic - one time

Annual

Monthly

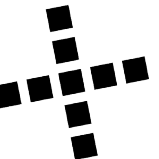
Quarterly

Real time?



# User needs: what are the calculators used for?

- + Koskisen group: Corp footprint and product footprint calculator
- + Finlayson: company and select products
- + Finanssiälä ry and partners: digitization of physical documents
- + Miils: carbon footprint of meals ([demo](#))
- + Kotihiili: pilot for household CO<sub>2</sub>
- + Hiilipörssi: to calculate carbon impact of peatland restoration
- + CO<sub>2</sub>roadmap.com: to create fact based carbon neutrality roadmap and footprint calculations



# CO2roadmap.com: calculations, goal setting and action planning in one place



## Overall goal and detailed targets

Define the **overall goal** for the whole organization and give **detailed targets** for each emission component.

2



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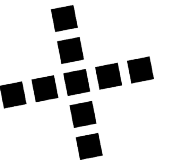
## CO2 data management and carbon footprints

Cloud based service to **store** and **manage** all your CO2 data and calculate **footprints**. Compatible with **GHG protocol** and **ISO standards**. Easy **exports** of both consumption data and footprints.

## Concrete actions!

3

**Brainstorm** ideas, **quantify** them to real actions and put them in the **timeline**. **Track** progress towards the targets and overall goal.





# CO2 Roadmap™ - How it works?



## 1. Set up the boundary and data sources

- Kickoff workshop to define the boundary
- Set up the system:
  - Categories and components
  - Sites and units
  - Emission factors
- Identify data sources and engage people to the project

## 2. Collect data and create footprints

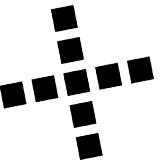
- Collect the data from various sources
- Add it in the app
- Create footprints and other reports
- Export data and tables for further use (desktop graphics, CSR reports etc.)
- Set up the update and maintenance routines

## 3. Set overall goal and targets

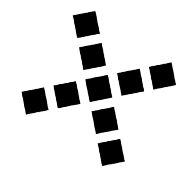
- Set company level goal: target year and emission reduction percentage
- Define target year and reduction percentage for each component
- Evaluate and adjust overall goal vs. targets

## 4. Create the roadmap

- Brainstorm actions
- Assign them to components
- Quantify actions with reduction percentages and emission factor changes
- Assign time frame
- Follow up and track the progress.

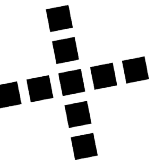


# Quick demo



# Understanding CO<sub>2</sub> calculations

- + Comparability
- + Repeatability
- + Transparency
- + Methodology

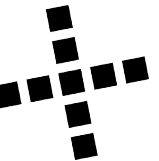


# Data quality

**GIGO: garbage in, garbage out**

Company data

Emission factors -> open database?



**Thank you!**

