Athens

Nikos Chrysogelos

Deputy Mayor of Athens for Climate Governance and Social Economy

EU MISSION LABEL

CLIMATE-NEUTRAL & SMART CITIES

ΑΘΗΝΑ

The national legal frame for GPP:

- Is there a national law, is it binding for all public procurements or is it voluntary? When was it transposed, in force? Is there a big dispute among public and business stakeholders?
- What can a municipality in Greece now do for its implementation? Can they set own goals? Do they follow strictly only national guidance or do “more individual approach” like Nordic countries”
- What is the mission of Athens regarding GPP? Does it have a local regulation, local guidelines? What is in there? Any black-listed goods or thresholds?
- Is there a monitoring system for GPP in place? What exactly is monitored?
- How is the institutional set-up, how are the responsibilities defined inside the Athens public administration? Who has the “leading hat on?”
- Do you have a training programme for the procurement officers, the recipient beneficiaries in the public institutions? How is the acceptance on GPP inside your public administration?
- Do you practice a dialogue with business actors? How do you get them aware and cooperating?

What is included in the Operational Program regarding:

- a) Legislation & Institutional Framework
- Dir 24/2014, Dir 25/2015
- Law 14900/4-2-2021 FEK 466/B/8-2/2021 NATIONAL ACTION PLAN for GPP
- LIFE IPP and LIFE-IP-CEI-GR and Guidelines for Green Public Procurements - Circular Public Procurement - Circular Economy Practices (Green Fund)
- Obligations of the Municipality and practices the MoA follow

- Law 3463/2006 (Municipalities and Communities Code)
- Law 3855/2010 for ministerial committee for the creation of an ACtion PLan for GPP
- Law 4412/2016 for Public Procurement
- Law 3852/2010 & Law 4555/2018 (Kallikratis – Kleisthenes)
- Law 4674/2020 & Law 5056/2023 (administration/financial operation of local authorities)
- Ministerial Decision 41179/2014 on the content of Operational Programs

  It is noted that in the context of climate neutrality, sustainable mobility, energy efficiency of buildings, circular economy and green transition, the Municipality must harmonize its policies with the European acquis and the directives related to the award of green public contracts for products and services.

  For example, the recently completed Phase I of the Business Plan documents the Municipality's obligations in areas such as:

- Building Energy Performance Plan (BEPP)
- Municipal Buildings Emissions Reduction Plan (DίSME)
- Climate Pact - Climate Neutrality Plan 2030
- Local Waste Management Plan (LWMP)
- Sustainable Urban Mobility (SUM)
- Smart Cities
- Circular Economy & Cleanliness

  All of the above constitute legal and strategic frameworks that impose the adoption of environmental criteria in the procurement of electrical equipment for lighting, vehicle fleets, cleaning equipment, energy efficiency projects, etc.

Obligations of the Municipality for green - environmental procurement

From the analysis of the axes of the Operational Program, clear obligations of the Municipality regarding procurement emerge:

- Obligation to align with Athens' commitments as an EU "Mission City" for Climate Neutrality 2030
  (Chapter 2.12 & 9.6.3.1–9.6.3.5)
  – This involves environmentally friendly procurement, emission reduction and adoption of green technologies.
- Obligation to implement the Circular Economy and Waste Reduction
  (Axis 1 – Cleanliness, Waste, Recycling)
  – It concerns the procurement of materials with recycling, durability and reuse standards.
- Obligation to improve energy efficiency of infrastructure & municipal buildings
  – It involves procurement of energy-efficient equipment, LED lighting systems, “smart” devices, etc.
- Obligation to adopt sustainable mobility practices
  – Procurement of electric or low-emission vehicles.
- Obligation to integrate digital and “smart” solutions
  (Chapter 5.16 – Digital Transition)
  – Procurement with environmental and technical standards that ensure low energy consumption.

Practices already implemented by the Municipality as documented in the Operational Program

The Operational Program shows that the Municipality is already implementing some green procurement practices in the context of the following:

- Extensive application of LED lighting and upgrading of electrical lighting with environmental criteria (Chapter 2.2.2).
- Supply and operation of electric and hybrid cleaning and municipal service vehicles.
- Development of an electric vehicle charging network (Chapter 2.2.7).
- Upgrades and energy interventions in municipal buildings through SEAK.
- Climate Neutrality Projects, which provide for green procurement of materials, equipment and technologies.
- Supply of pollution reduction systems and digital energy consumption monitoring.
- Equipment that supports the circular economy and waste reduction through the Local Waste Management Plan.
- Digital platforms (Novoville, SafeAthens, AthensTrees) that reduce printed material, travel and resource consumption.

The above practices confirm that the Municipality is on track to implement green procurement, in accordance with its obligations, but much more is required.

The Municipality has an obligation to incorporate green criteria in every tender for products and services and this must be included in the Operational Plan currently being prepared. The integration of green criteria is an obligation, not an option, within the framework of climate policy and commitments to climate neutrality.

- However:
  ➞ The Operational Program is currently in Phase A (Strategic Plan).
  The integration of specific actions for green and sustainable procurement is not planned to appear in Phase A, but:
  ➞ It will be incorporated normally into Phase II (Business Plan - detailed actions).
- In Phase II:
  the measures are specified,
  specific actions are defined,
  practices and procedures are described,
  expenses and financing are foreseen,
  analytical indicators are defined.

Phase II will incorporate the required provisions for:
a single green procurement policy,
mandatory environmental criteria in all notices,
compliance with European GPP guidelines,
specific categories of products & services,
monitoring indicators.

The Operational Program (Phase A) already includes the strategic framework for green procurement, through the sections for:

- Climate Neutrality
- Energy Efficiency
- Circular Economy
- Smart Cities
- Environment and Cleanliness
- Digital Transition

In Phase II, as institutionally provided, specific actions, practices and obligations will be incorporated for the Municipality's full alignment with Green Public Procurement.

The greatest difficulties in implementing Green sustainable procurement (contracts) are due to the difficulty of:

- conversion of the corresponding obligations - options into practices that are implemented by the various services of the Municipality that prepare the contracts and then the procurement department proceeds with the call for proposals

- the limited flexibility that exists at all levels of administration for procurement, which often insist, despite the existence of legislation and an opinion from the Court of Justice of the EU, on requesting the lowest economically viable offers and not the most efficient and based on environmental and social criteria, and actually based on these, the most advantageous ones

- the difficulties of suppliers in preparing product or service offers that meet green specifications

- the limited interest of the central administration in supporting green sustainable procurement and, on the contrary, in choosing to reduce the cost of contracts as the exclusive criterion, with the result that even the employees who prepare the contracts are afraid to set green criteria

- despite seminars and occasional training, the relevant employees dealing with contracts do not have appropriate training to prepare contracts with green criteria

- the market has not been opened enough for products and services based on green criteria

Lithuania
Co-create

Ministry of Environment Republic of Lithuania

GPP in Lithuania: between *before* and *after*

Rūta Kukulskytė – Sustainable Developement and Green Transformation Division, Chief specialist

2025-11-26

A. Aleksandravičius; source www.lithuania.lt

Before: The European Green Deal

- „Green products should become the norm among citizens, but we have to start from ourselves, the public authorities. Green public procurement requirements will be essential to boost demand for more sustainable products and services.“

- Public authorities are major consumers in Europe: **they spend approximately 1.8 trillion euro annually, representing around 14 % of the EU's gross domestic product.**

National GPP policy

Vision

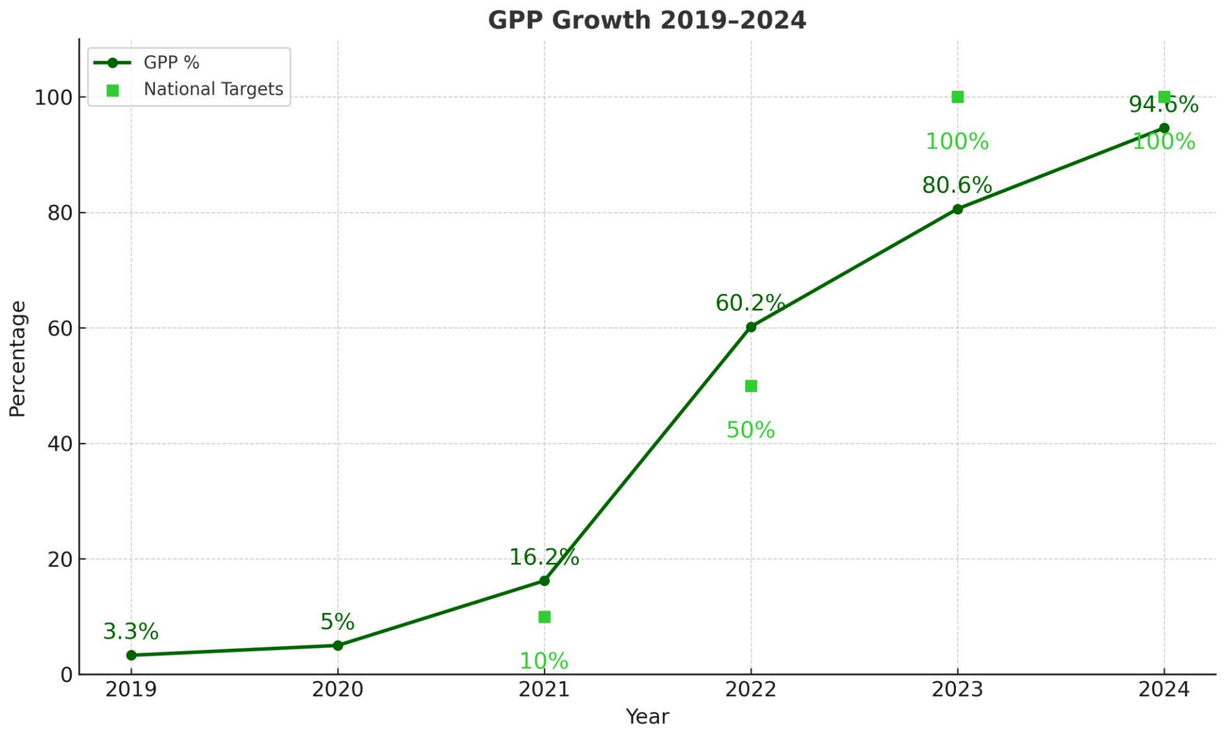
- The XVIII Programme of the Government of the Republic of Lithuania, approved by Government Resolution on the 11th of December 2020, has set the vision for GPP as one of the key instruments in greening the public sector and shifting the market towards a green economy.

National Targets

- Government Resolution No. 478 On Green Public Procurement Goals and Implementation was signed on 21st June 2021, which established national targets for GPP % of all public procurement value.

Action Plan

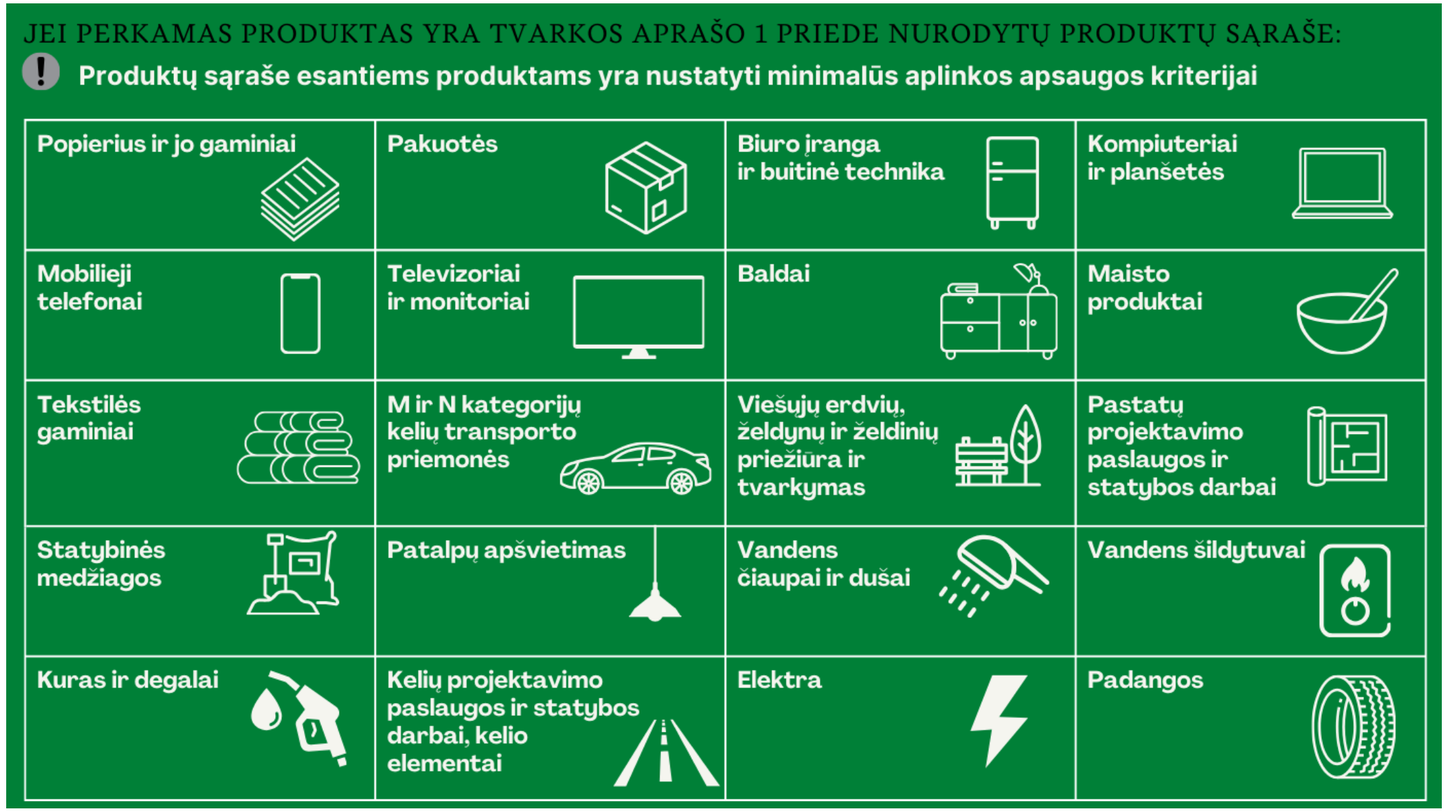
- The Minister of Environment in July 30th, 2021 signed order Nr. D1-448 for Green Public Procurement 2021-2025 Strategy and Implementation Plan.



This Is Engineering; source Unsplash.com

Between: The Environment Minister Order No. D1-508

Minimum environmental criteria for **20 product groups** as well as **horizontal** environmental criteria



Minimum criteria - examples

Road design and work:

- at least half of the construction products - EPDs; OR
- at least 1 recycled or reused material in the pavement construction layer; OR
- at least 20 % of warm mix asphalt (i.e. reduced temperature hot mix asphalt with a production temperature at least 20 °C lower than hot mix asphalt).

Furniture/ wood - at least 80 % FSC or PEFC, or equivalent certification;

Paper: 100 recycled OR 30 % from FSC or PEFC certified wood;

Food and catering:

- at least 30 % organic OR
- national quality certification OR
- following EU regulation on geographical indications;

Horizontal criteria - examples

- I type Ecolables, such as *EU EcolabNordic Swan, Blue Angel* and etc.
- The environmental management systems that are ISO 14001 certified or EMAS are applicable
- Independant environmental criteria based on the 5 environmental principles:

Circularity – use of second-hand and recycled material

Energy efficiency – low energy consumption or renewable energy use

Toxic substances – reduced toxic substances in products

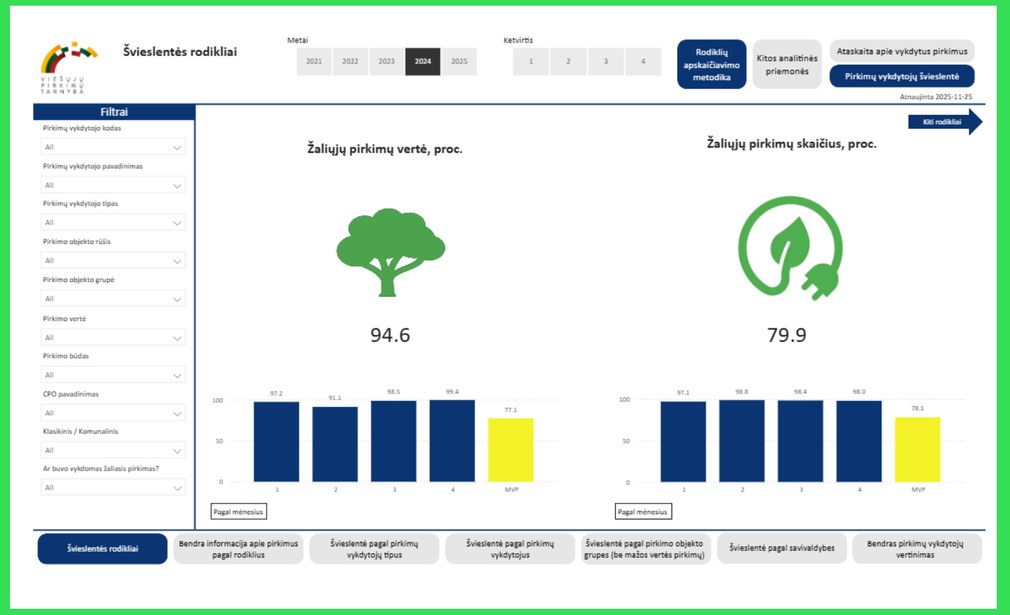
Durability – the product is durable, functional and easily fixed or reused

Reuse – the product can be recycled or easily reused

This Is Engineering; source Unsplash.com

Building capacities for GPP uptake

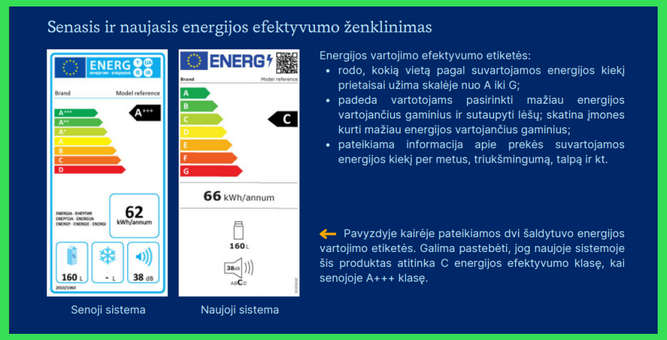
Consulting and information	Interactive tools
Sustainable Public Procurement Center of Excellence	Dashboard
Information Tree (FAQ)	Tool for practical GPP examples



Building capacities for GPP uptake

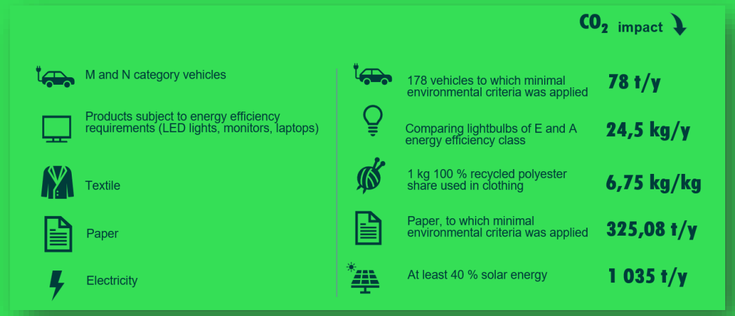
The awards of GPP leaders

Recommendations



Newsletter

Analysis of the environmental impact of green public procurement (2024)

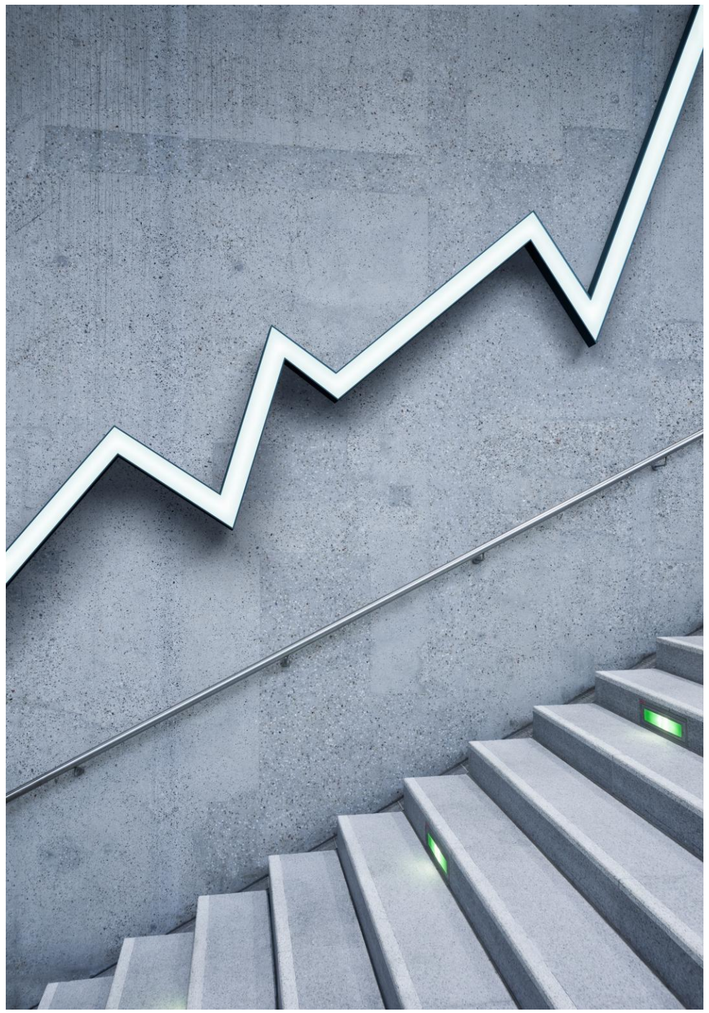


After: lessons learnt

- **Regulation** - proportionate, reasonable and ensuring competition
- **Communication** with the market participants (shareholders, associations) - since we set out the mandatory and not voluntary criteria
- **Collaboration and leadership** of other institutions (PPO has expanded their functions to be able to consult, Central Procuring Organizations have greened their catalogue)
- **Having a plan** – we had GPP goals before as well, but only the implementation plan got us this far
- **LIFE programe** – additional financing and human resources

After: added value

- **For the first time**, we exceeded the clean transport purchase target set out in the Alternative Fuels Act.
- **CO2 saved** - 602 t CO2 a year from green paper procurement;
- **Increase of sustainable products in the market** – x 2,5 more type I ecolabels and x2 more environmental systems. 60 % suppliers acknowledge a tendency of sustainable products increase
- **Increase of energy efficient product procurement**
- **EU law** obliges countries to apply GPP criteria to different product groups. The frameworks are ready.
- **Meeting national strategic objectives**: reducing polluting transport fleet, developing renewable energy, waste reduction and circularity



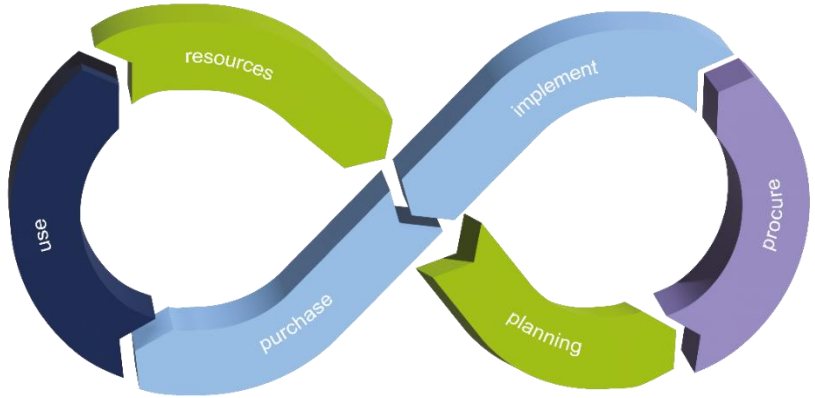
Ministry of Environment Republic of Lithuania

THANK YOU!

Rūta Kukulskytė - ruta.kukulskyte@am.lt
Sustainable Developement and Green Transformation Division,
GPP Team

A. Aleksandravičius; source www.lithuania.lt

CHEMCLIMCIRCLE-2



Green Public Procurement 2025 in Europe: State of the Play

Green Public Procurement (GPP) what and why?

- Public procurement **≈ 14% of EU GDP** (€2 trillion annually)
- Major lever for reducing environmental impact
- Can shift entire markets towards sustainability
- Supports EU Green Deal objectives

Green Public Procurement (GPP) - public procurement that reduces environmental impacts by applying environmental criteria to goods, services, and works

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Historical development of GPP in Europe

1990s

First pilots with green criteria, ecolabel use

2001

GPP in Sustainable Development Strategy

2008

First EU-wide GPP criteria published and EU wide goal set

2014

EU Procurement Directives: strategic procurement recognized

2020s

GPP embedded in EU Green Deal & Circular Economy Action Plan

1990s and early 2000s

Voluntary environmental integration

Late 2000s to early 2010s

Efficiency and market transformation

Mid-2010s to 2020

Strategic and Policy integration

2020s

From voluntary to mandatory; from “green” to “sustainable”

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GPP uptake in Europe

- Over 90% of Member States have national GPP policies
- GPP uptake varies from 70% in Lithuania to less than 5% in Poland (2023)
- Increasing uptake at regional & city levels
- Growing application in mobility, ICT, mobility, cleaning, office paper, textiles, and furniture
- However, systematic, comparable monitoring is lacking and the actual impact is not known

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Dual role of Green Public Procurement

Regulatory baseline

- Sets minimum environmental standards
- Aligns public procurement with EU policy
- Eliminates worst-performing products
- Creates predictable market conditions and certainty for suppliers

Market innovation driver

Creates demand for greener alternatives and better environmental performance

Supports early-stage markets for clean technologies (e.g., EVs, LED lighting)

Encourages lifecycle thinking and system innovation

Promotes competition based on sustainability

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From GPP to Strategic, Green & Innovation Procurement

- GPP is now part of strategic procurement
- Links to innovation procurement (e.g. Pre-Commercial Procurement and Public Procurement of Innovative Solutions)
- Supports policy goals: circularity, climate neutrality
- Moves beyond compliance toward market transformation

New approach in GPP – mandatory criteria

The risks of mandatory criteria

- Stifle innovation if too prescriptive or outdated
- Lock the market into current technologies
- Limit flexibility for alternative solutions
- Create barriers for SMEs

Mandatory criteria can enable innovation

Focus on performance rather than technical solutions

Set ambitious but achievable targets

Are updated regularly

Allow alternative solutions that meet or exceed requirements

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Levels of innovation of GPP

Product level

Green or circular products already on the market

Supplier Level

New or innovative products, materials, or technologies

System Level

Solutions combining products + services + systems

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The future of GPP in Europe

- Mandatory GPP expanding under the Green Deal
- Growing importance of circularity but go beyond integration with climate mitigation and circular economy strategies
- Growing use of innovation procurement to support achieving policy goals
- Digital tools for market dialogue & monitoring
- More focus on actual impacts of procurement, especially whole-life cost and lifecycle impacts

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Conclusions

- GPP has evolved from voluntary practice → strategic policy tool
- Plays a dual role: baseline + innovation driver
- Mandatory criteria can support or limit innovation
- Three levels of GPP create different impacts
- Essential for meeting EU environmental policy goals and targets

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THANK YOU FOR THE ATTENTION

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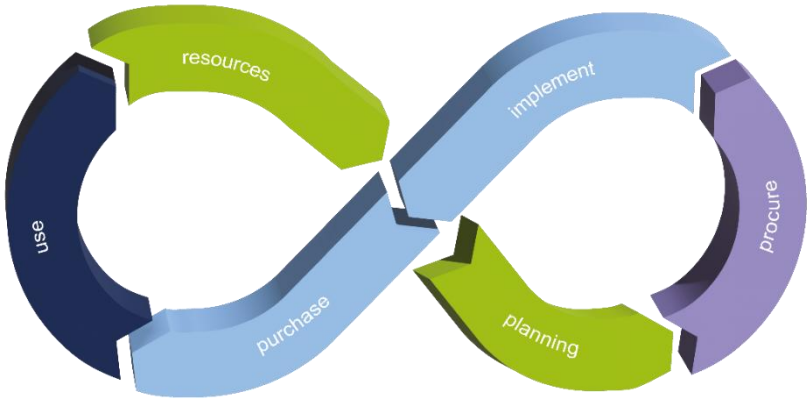

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Integrating Hazardous Chemical Management Goals into Green Public Procurement – A Practical Approach from NonHazCity-3 for Sustainable Construction

Interreg Baltic Sea Region

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SUSTAINABLE WATERS
NonHazCity 3

NonHazCity


Why is procurement relevant when we talk about reducing emissions and hazardous substance exposure??

NonHazCity

Everyday Chemical Exposure

- In our everyday lives**, we are constantly exposed to a wide variety of chemicals**.
- Many chemicals are harmless and serve important functional purposes.
- However, **research shows that some chemicals used in everyday products can pose risks to human health and the environment**.
- These substances are present in the **surfaces we touch** and the **objects we use**.

Construction Materials Contain Hazardous Chemicals

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What Did We Discover in NonHazCity-3?

For example:

Indoor dust analyses revealed a complex mix of contaminants, reflecting the materials present inside buildings.

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“The **construction industry** is one of the largest consumers of energy and raw materials globally. Within the EU, it **contributes to nearly 40% of emissions and accounts for almost a third of all waste generated**. Only around 40% of construction waste undergoes recycling or reuse during building demolition. Typically, recycled construction materials find application in secondary construction rather than in new building projects.”

The EU commission

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Products Commonly Procured by Public Entities with Chemical Risk Potential

Category	Examples of Products	Typical Hazardous Substances / Risks
Construction & Building Materials	Paints, coatings, sealants, adhesives, flooring (PVC, vinyl, laminate), insulation, treated wood	VOCs, formaldehyde, phthalates, flame retardants, heavy metals
Furniture & Interior Equipment	Office desks, chairs, storage units, upholstery textiles, mattresses, cushions	Formaldehyde, PFAS, dyes, biocides, plasticizers
Cleaning & Maintenance Products	Detergents, disinfectants, air fresheners, floor coatings, pest control agents	Biocides, fragrances, solvents, VOCs
Electrical & Electronic Equipment (EEE)	Computers, printers, lighting, cables, wiring, batteries	Lead, cadmium, brominated flame retardants, plasticizers
Transport & Outdoor Equipment	Vehicles, paints, lubricants, playground and sports surfaces, outdoor furniture	PAHs, heavy metals, rubber granules, solvents

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Procurement is THE solution

The Power of Procurement

- Public procurement can **influence the chemical content** of products and materials (consumer goods, construction materials) as well as services.
- Procurement is the **effective tool** to **reduce risks from hazardous chemicals** in practice.

Setting Higher Standards

- Chemical smart procurement **demand chemical safety** and go **beyond national and the EU minimum standards and take care of special groups like children**.

Chemical smart public procurement can steer the market toward safer, non-toxic solutions.

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Reducing Chemical Risks Through Chemical Smart Procurement

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Chemical Procurement Criteria

- There are a lot of ready-made chemical criteria that can be used e.g. EU GPP criteria, Swedish National Procurement Authority's criteria (in eng)
- Ban the use of Substances of Very High Concern (SVHC)

Connect with an expert!

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Green Building Certificates

- **Green certificates help ensure higher chemical safety in construction projects.**
- They provide a structured, verifiable approach to sustainability and material health.

Benefits of certification include:

- Clear, measurable, pre-made criteria for hazardous chemical reduction and sustainability
- Improved verification, traceability, and documentation of materials
- Enhanced communication and alignment with suppliers and stakeholders
- Increased trust and transparency for residents and decision-makers

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Eco-labels

- Many products that have a Type I eco-label, such as the Nordic Swan, EU Flower, and Blue Angel, contain fewer hazardous substances.
- **Utilising eco-labelled products for large surfaces and materials that have the greatest impact on exposure and indoor air** (such as wall paints and flooring) helps to keep costs moderate.

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Nordic Swan Kindergarten in Helsinki © Elisa Keto

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NORDIC SWAN ECOLABEL

What is the first step?

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NonHazCity

Material links

- Building material catalogue for tox-free construction https://interreg-baltic.eu/project/nonhazcity-3/#output-1
- The Byggvarubedömningen® database - a tool for sustainable construction https://interreg-baltic.eu/project/nonhazcity-3/#output-4
- Tox-free building blueprint - chemical criteria for building certification and procurement https://interreg-baltic.eu/wp-content/uploads/2025/06/tox-free-building-blueprint.pdf
- Strategic solution for managing hazardous substances in buildings and construction materials: procurement, building certificates and restrictions Best practice cases and learnings https://interreg-baltic.eu/wp-content/uploads/2025/07/O2.2_NonHazCiy-3-strategic-solutions-final.pdf

Large-scale events free from single-use tableware

Interreg
Baltic Sea Region

Co-funded by
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Tallinn

CIRCULAR ECONOMY
Change(K)now!

Liina Kanarbik
Circular economy lead specialist
Tallinn Strategic Management Office

Vilnius, Green Governance Conference
26.11.2025

Background

- The EU produces around 55 million tonnes of plastic annually, **with packaging accounting around 40% of total plastic demand** *(Plastics Europe, 2023)*
- Despite increasing collection rates, **only about 40% of plastic packaging waste** in the EU is actually **recycled** *(Eurostat, 2024)*
- Reuse systems for packaging and tableware remain marginal, typically covering **less than 2% of the market**, indicating a substantial gap between policy ambition and practical implementation *(The European Reuse Barometer, 2025)*
- Although the EU has introduced various regulatory measures aimed at the prevention and reduction of single-use plastics, **the widespread implementation of ambitious reuse policies remains limited** *(European Environment Agency, 2020)*

Photo by Bernard Bodo / iStock / Getty Images Plus

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Moving from single use to reuse at public events – the case of Tallinn City

Is it possible to serve food and drinks from reusable tableware in an event where there are …

- 10 participants?
- 1000 participants?
- 100 000 participants?

Phase 1/5: Early measures – laying the foundation (2019)

- Initiative by forward thinking politicians
- **Ban on single-use plastic** tableware at public events (regulation, not procurement conditions)
- **Only compostable** tableware (EN 13432) were allowed

Replacing the material of a disposable product does not solve the waste problem!

➢ Groundwork for broader reforms **towards reuse systems**

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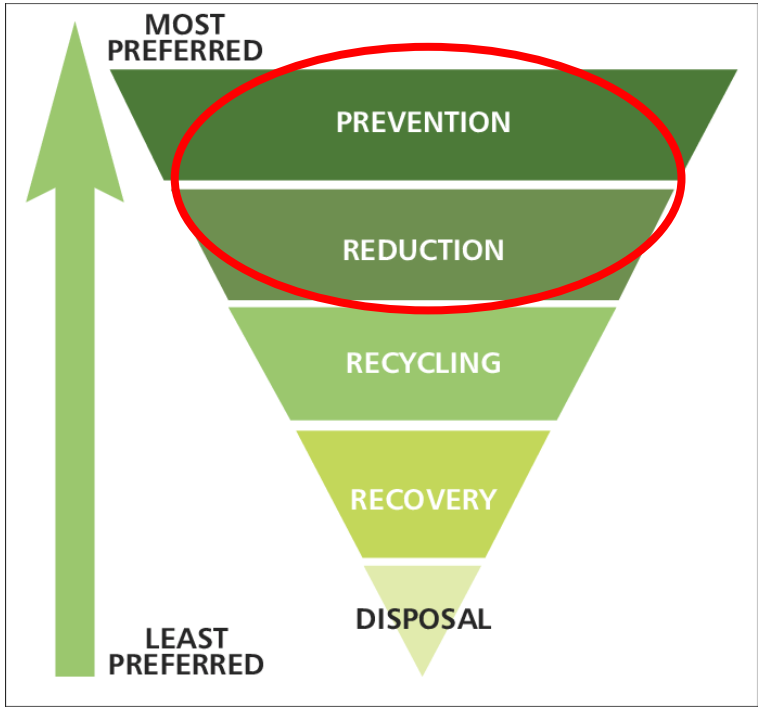
Phase 2/5: Strategic framework and policy integration (2021-2022)

- Recognising the limitations of first measures, the strategic framework was developed **to support the reuse initiatives** (City Waste Plan 2022-2026)
- Not **WHY? ...** but **HOW**?
  - Procurement conditions?
  - New regulation?
  - Guidelines?
  - …



Phase 3/5: Pilot implementation (spring/summer 2022)

- Testing guidelines at **different public events**
- Piloting **various reusable tableware systems** (service providers, logistics, with/without deposit)
- **Engaging stakeholders!!!** (service providers, event organizers, public)
- **Monitoring** (user behavior/return rates; staff involvement/operational ease; cost; infrastructure requirements)

➢ Piloting demonstrated that reuse systems were well-received by event organizers, attendees, and vendors!

Phase 4/5: Political momentum and regulation (2023)

- Tallinn - **European Green Capital 2023**, amplified political will and public visibility
- In April 2023, the Mayor's decree mandating the use of the **sustainable event guidelines**—including reusable tableware—for all city-organized events
- This was soon reinforced by **two formal city-wide regulations**:
  - Tallinn Waste Management Regulations (June 2023)
  - Rules for Organizing and Holding Public Events (June 2023)

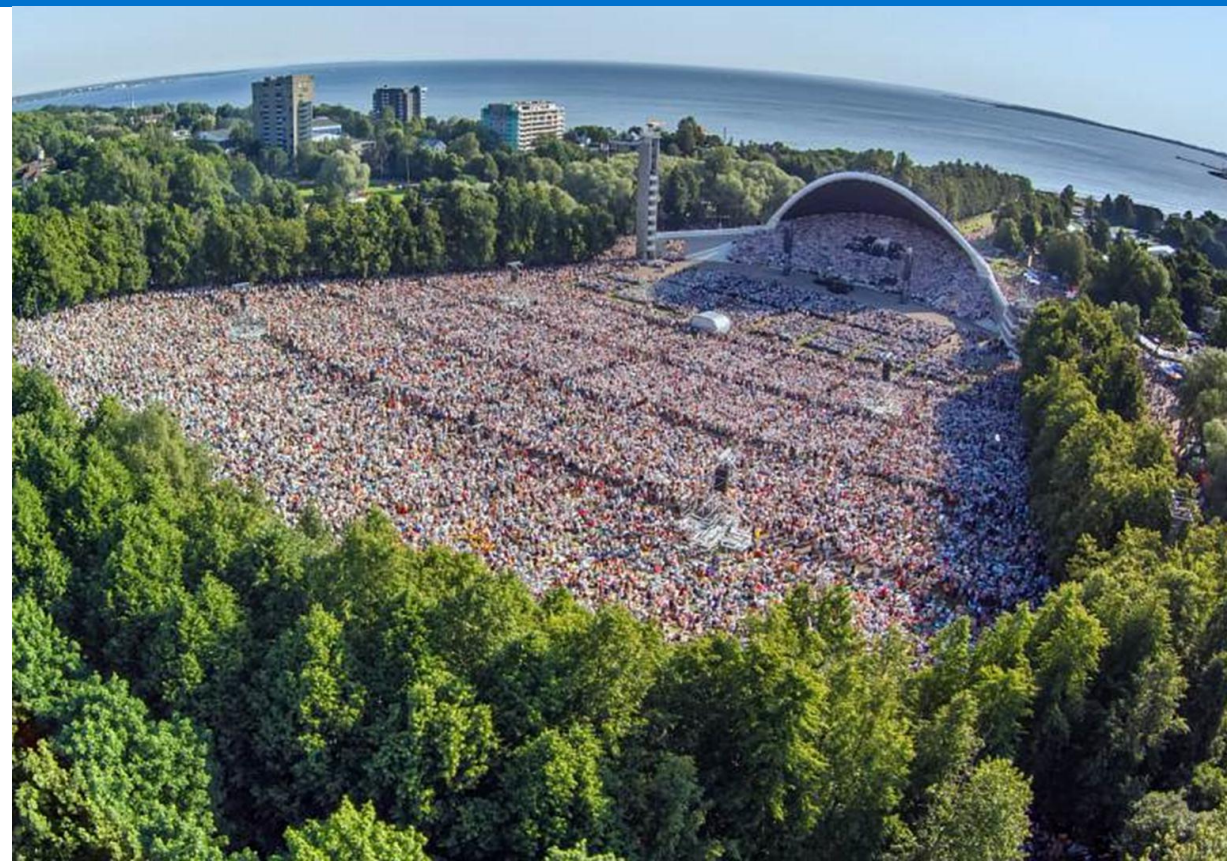
Phase 4/5: Political momentum and regulation (2023)

- **June 2023** – food and drinks may only be served in reusable containers and use only reusable cutlery at public events with **up to 30 000 visitors/day in Tallinn**.

- **Public event** = concerts, festivals, competitions, performances, trade fairs, etc
  - open to the public with or without a ticket

Flagship example: Youth Song and Dance Festival (2023)

~100 000 participants and spectators



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Flagship example: Youth Song and Dance Festival (2023)

- **Strong will** to organize this festival as sustainable as possible
- Testing the guidelines and **reviewing existing reuse systems confirmed** that reusable tableware can also be successfully used at large-scale events
- How to ensure that caterers use reusable solutions?
  - Through **mandatory procurement requirements**!
- **Catering procurements—both for participants and visitors**—were issued with strict requirements for reusable tableware and reuse systems

➢ Youth Song and Dance Festival became a landmark case for large-scale reuse implementation in the whole world!

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Deposit system

- 11 deposit-return points
- 85 000 reusable cups
- 155 000 reusable bowls/plates
- 161,500 reusable utensils
- 92% overall return rate

➢ The event avoided 400 000 single-use items

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Green ambassadors

- Around 100 „green ambassadors“
- 70 waste collection points

Tallinn

Phase 5: National policy uptake and systemic impact (2024)

- Following Tallinn's success, Estonia adopted **national legislation**, effective **1 January 2024**, requiring reusable tableware at all public events in Estonia

➢ Tallinn's experience demonstrates that **cities are key drivers of circular innovation,** capable of testing, adapting, and expanding solutions more quickly than national-level policy often allows.

Conclusions

- Policy integration
- Political leadership & timing
- Phased implementation
- Stakeholder engagement
- Flagship events
- Regulation supporting the market

➢ Procurement criteria, regulations, guidelines — you can choose the tools that fit your city. Use it to make a change — and move towards a more circular economy.

Thank you!

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Tallinn

CIRCULAR ECONOMY
Change(K)now!

Liina Kanarbik
Circular economy lead specialist
Tallinn Strategic Management Office

new loop

Procurement of a return infrastructure for reusables - in the perspective of a service provider

INTRODUCTION AND BACKGROUND

- Danes use over **300 million single-use cups** each year in public spaces. These cups are among the top ten plastic items found in nature and surrounding seas in Denmark.
- This represents a major waste of resources and conflicts with Denmark's goal of a **climate-neutral waste sector by 2030**, as well as key targets in the Plastic Action Plan.
- Political focus has been secured on the need to explore reuse systems, including for takeaway packaging. Incentive models like fees or surcharges on single-use items — as seen previously with plastic bags — are also being considered to drive behavior change.

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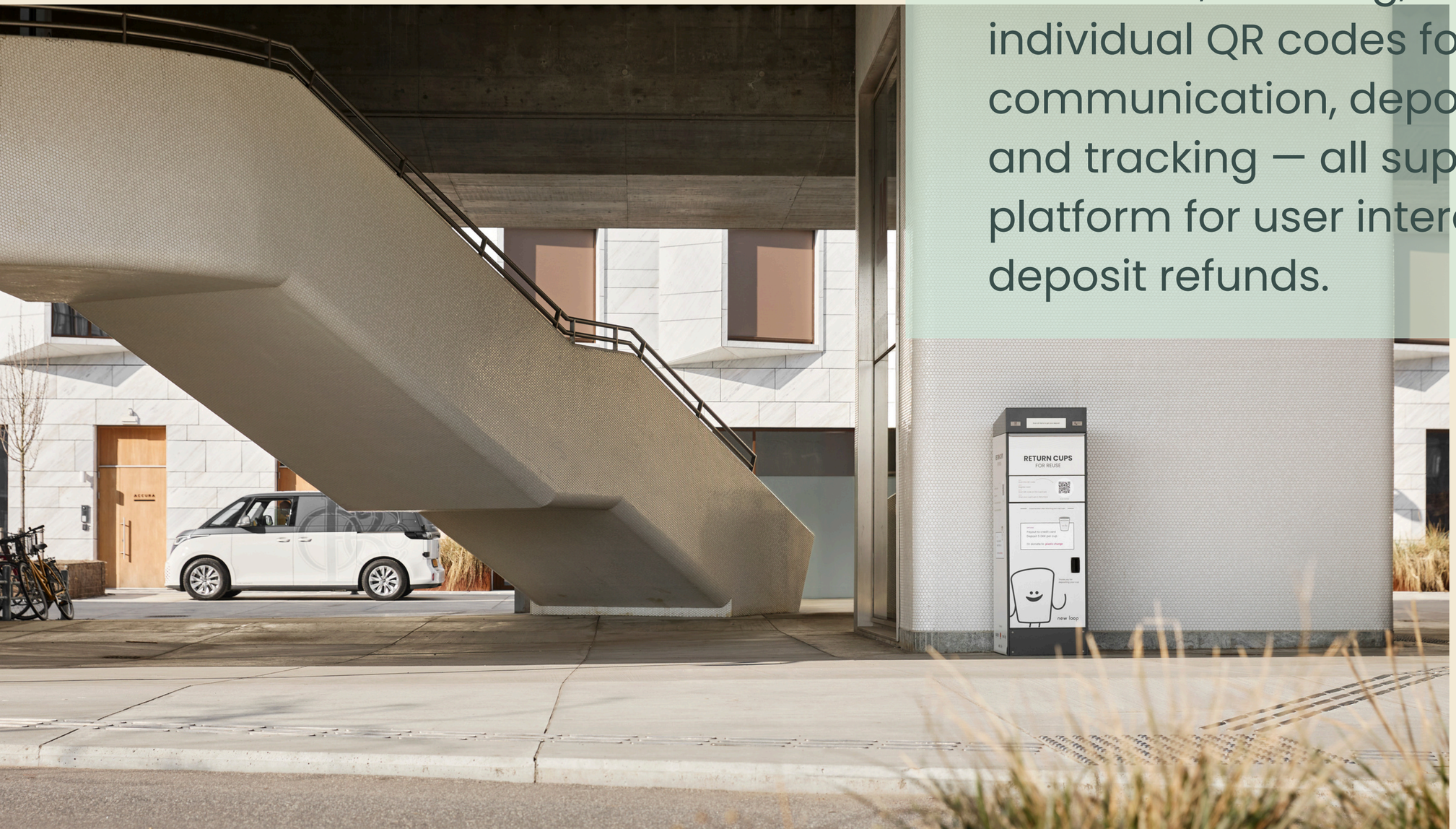
THE COPENHAGEN CITY PROJECT

The municipality of Copenhagen tendered the operation of up to 38 returnpoints for reusable takaway packaging and documenting data based on LCA and CO2 reduction for the initiative. The main requirements were;

- **Open deposit system** – allows anyone to return a left-behind item and redeem the deposit.
- **Agnostic platform** – open to multiple partners introducing their own packaging and maintaining individual visual identities for brands.
- **Flexible deposit stations** – enabling easy and agile adjustments across the network.
- **Access to support funding** – available for businesses committing to a full transition to reusable packaging.
- **Comprehensive reporting and traceability** – covering return and discard rates, as well as LCA, CO_2, and resource reduction metrics.

SOLUTION

New Loop – a circular system for reusable packaging featuring return machines, washing, logistics, and individual QR codes for communication, deposit registration, and tracking — all supported by a web platform for user interaction and deposit refunds.



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PACKAGING

New Loop provides a diverse range of cups, glasses, bowls, and trays, all crafted from **ISCC Plus-certified material** derived from 73% used vegetable oil - making them superior in terms of both CO_2 footprint and resource efficiency.

All packaging features unique QR codes for deposit handling, allowing tracking and for the deposit value to be activated or deactivated individually

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RETURNBOX

Our return boxes offer an automated and user-friendly solution, while also creating a digital link between our clients and end users. **Based on parcel locker technology**, the boxes are cost-effective compared to competitors.

The outdoor model is powered by solar cells and batteries, making it highly flexible and eliminating the need for a power connection. The containers notify staff automatically when they need to be emptied.

WEB-APP, VERSIONING AND COMMERCIAL ELEMENTS

Our web app for deposit refunds is activated by scanning the QR code on the packaging or return box. It helps users locate return options and receive their deposit back. Scan the QR code here to try it yourself...

Example of versioning of a web-app and encouragement to download app for a client

DEPOSIT MODEL

New Loop operates with the classic deposit model, which is already well established in users’ minds thanks to years of experience from Dansk Retursystem.

RETURNBOX FLOW

Video

STEP 1

The customer scans the QR code on the packaging and the web app opens. The customer is asked to register their credit card via Apple Pay, Google Pay or manually (first time using the system).

STEP 2

The customer can see all returned products and find their way to the selected return location via the map function.

STEP 3

At the return point, the costumer scans the QR code on the Return Box. The web app opens and the costumer is asked to scan the used packaging in the opening.

STEP 4

The scanned packages are delivered to the hatch. The costumer closes the hatch to complete the transaction.

STEP 5

When the Return Box is closed, press exit in the web app, which turns off the deposit value on the returned packaging, and the deposit is paid to the costumer's chosen credit card.

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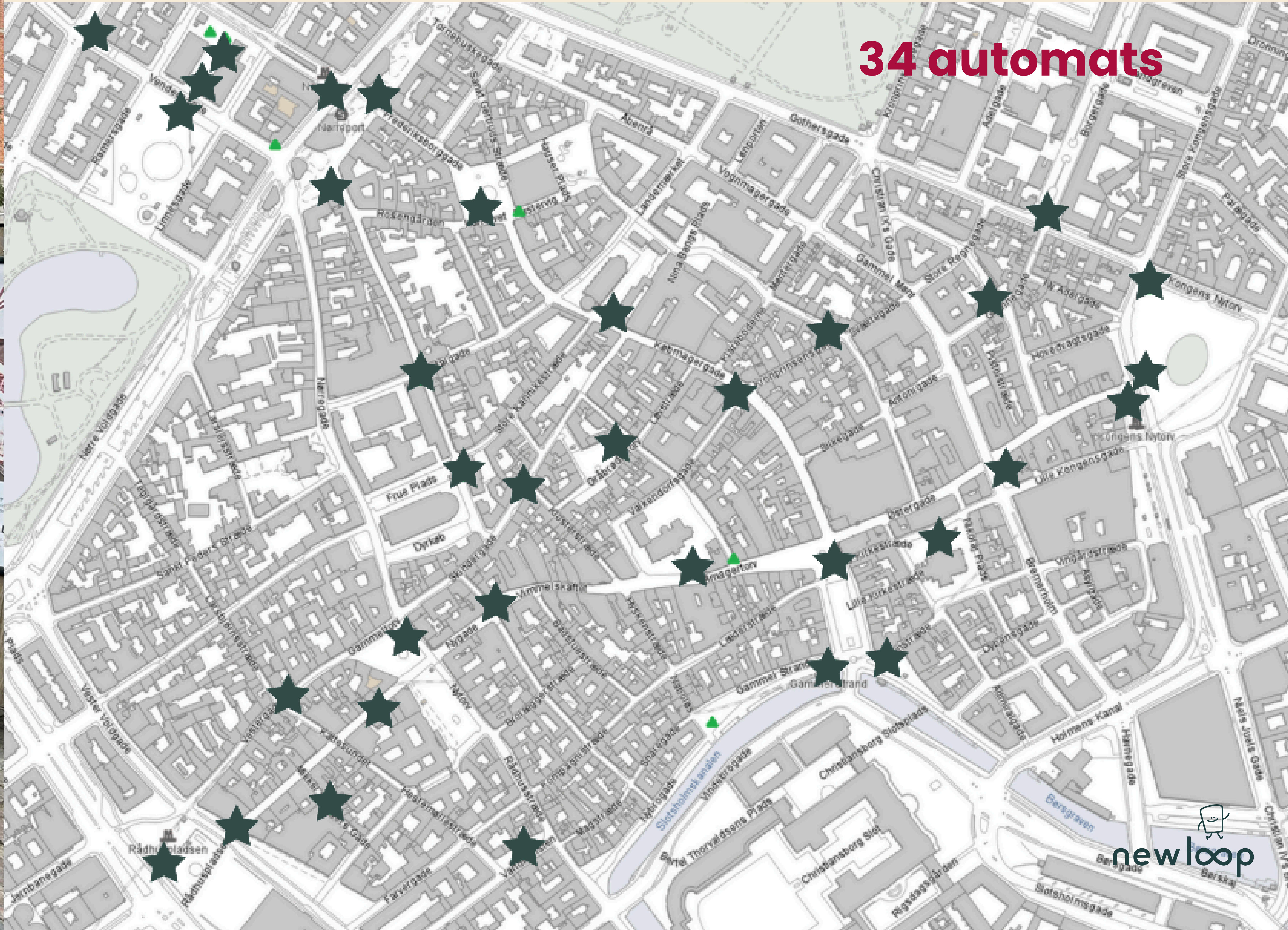
RETURN NETWORK CPH

34 automats



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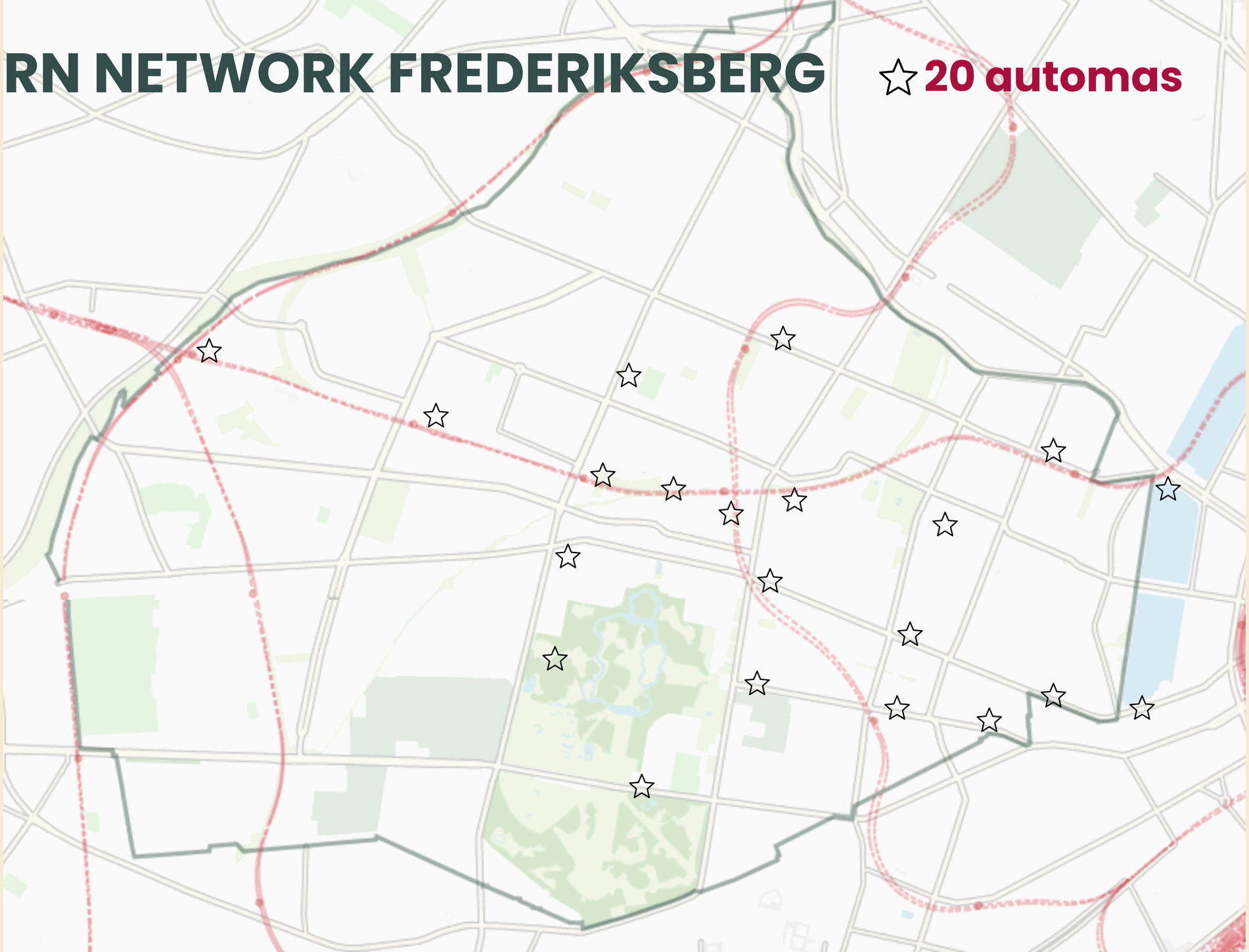
RETURN NETWORK FREDERIKSBERG

☆ 20 automas



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NEW LOOP'S DELIVERABLES FOR THE ADDITIONAL FUNDING

- **Dedicated Return Boxes for in-door** → Enables return and deposit refund without disruption.
- **Logistics Setup** → Agreements for packaging delivery and pickup through existing supplier.
- **Onboarding** → All staff are trained in using the system.
- **System Integration** → New Loop adapts the solution to fit existing systems and workflows.
- **Information Materials** → "How-to" guides and visual instructions for guests.
- **Social Media Assets** → Materials for activation on your own platforms.
- **Awareness Campaign** → You will be featured in ongoing communications tied to the initiative.

REDUCING CO_2 AND RESOURCE USE

Hypothetical example:
A company using 300,000 cups/month over the course of a year, compared to an average single-use cup.

The calculation incl. production, washing, and transport.
It also assumes a 90% return rate and a 3% discard rate after washing.

Reduction:
308 tons CO_2 eq
16.5 tons of waste

		Data	Enhed
Antal kopper (Total)		3.600.000	stk
Periode		12	måned
Antal leveringer i perioden		56	
Returprocent (Kunden) pr loop		90,0%	%
Frasorteringsprocent (New Loop og DMO)		3,0%	%
Genbrugspotentiale		7,9	gange
Antal kopper per levering		64.286	stk
Antal kopper til vask per returnering		56.121	stk

Mængde ZWC kopper anvendt		513.321	stk
Kopper tabt grundet manglende returnering		360.000	stk
Kopper tabt grundet frasortering		97.200	stk

CO2 Udledninger		**ZWC-kop**	**Engangskop**	**Besparelse**	**Enhed**
Produktion og distribution		11.800	341.040	329.240	kg CO2 eq
Forbrænding af kopper		1.144	3.293	2.149	kg CO2 eq
Tilbagetagning og vask		22.644	0	-22.644	kg CO2 eq
CO2-udledning i alt		**35.588**	**344.333**	**308.745**	**kg CO2 eq**

Affaldsbesparelse		8.801	25.332	**16.531**	**kg**

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ESG-TARGETS

Environmental

- Multiple reuse cycles followed by controlled recycling
- Utilization of unused capacity in existing freight routes ("return full")
- Reduction of water and energy consumption in the washing process
- Use of renewable energy sources
- Significantly reduced CO_2 footprint and resource consumption
- Full transparency and calculation of climate impact and reductions

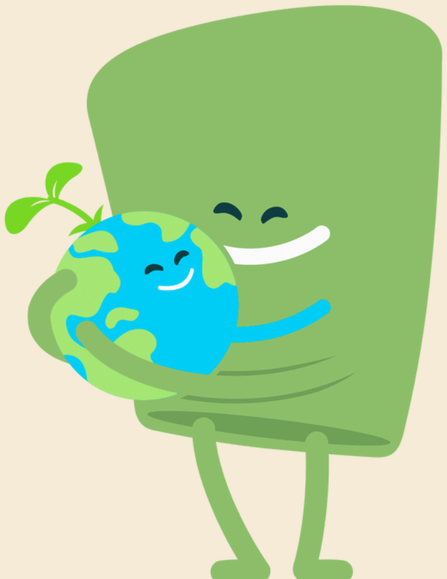
Social

- Ethical sourcing throughout the supply chain
- New Loop as a platform for creating jobs for unemployed minorities
- Commitment to diversity and inclusion across all activities
- Female co-founder

Governance

- Impact-driven business model
- Measurable outcomes that support long-term business value
- Goal of increasing diversity in board and leadership
- Transparent communication at all levels

We hope you'll join us in driving a scalable solution combining reduced resource consumption with lasting local impact — while also supporting your sustainability goals and financial responsibility.



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Practical learnings from Holbæk Municipality (Denmark) on Green Construction Procurement

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Greetings from Major of Holbæk Municipality,
Christina Krzyrosiak Hansen

Pernille Moesgaard
Sustainability Coordinator,
Holbæk Municipality

Practical Learnings on accessing chemical criteria in Construction materials

- Where: Holbæk, Denmark
- What: Kindergarten construction project
- Aim: Assess whether Building standards met low-chemical Requirements expected from Sustainability certifications
- Certification System: DGNB Gold
- Method: Assessment of building materials in Byggvarubedömningen (BVB)

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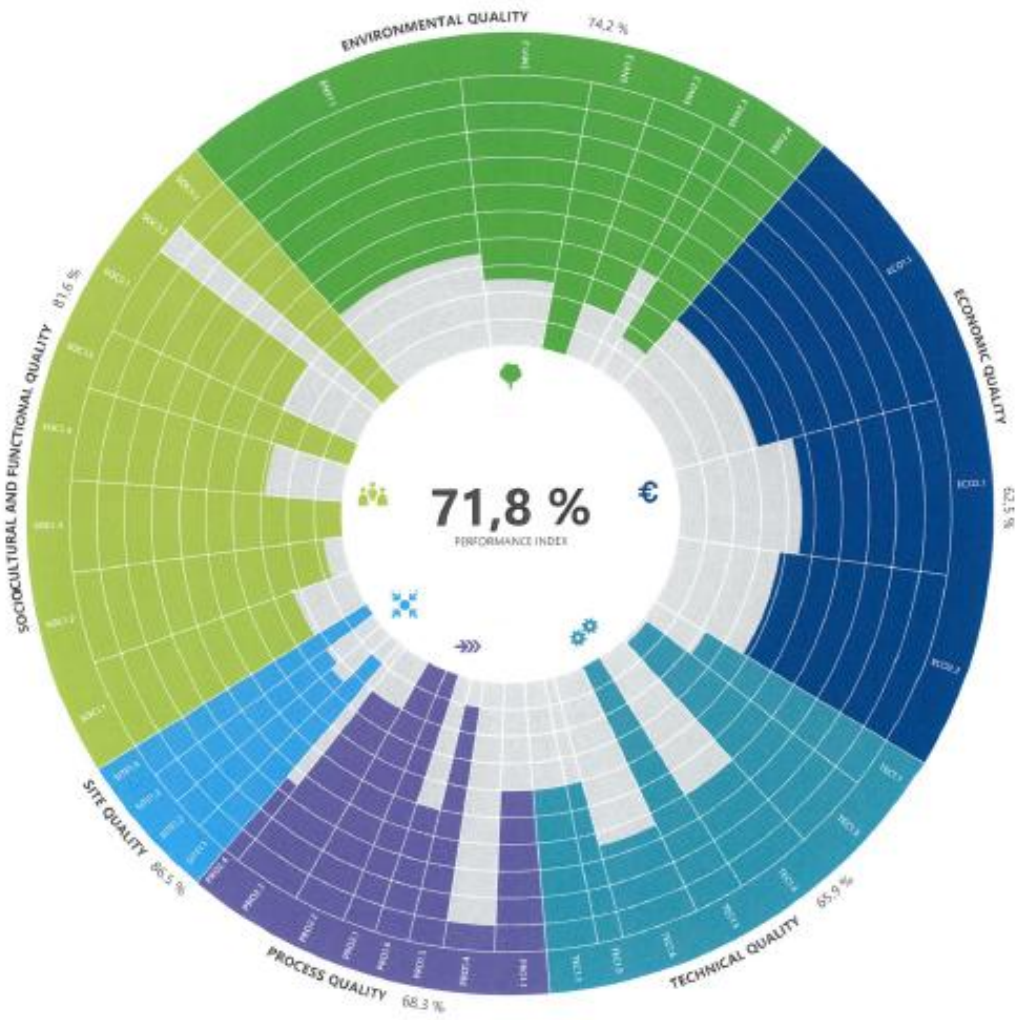
Certification Schemes as a Tool

DGNB



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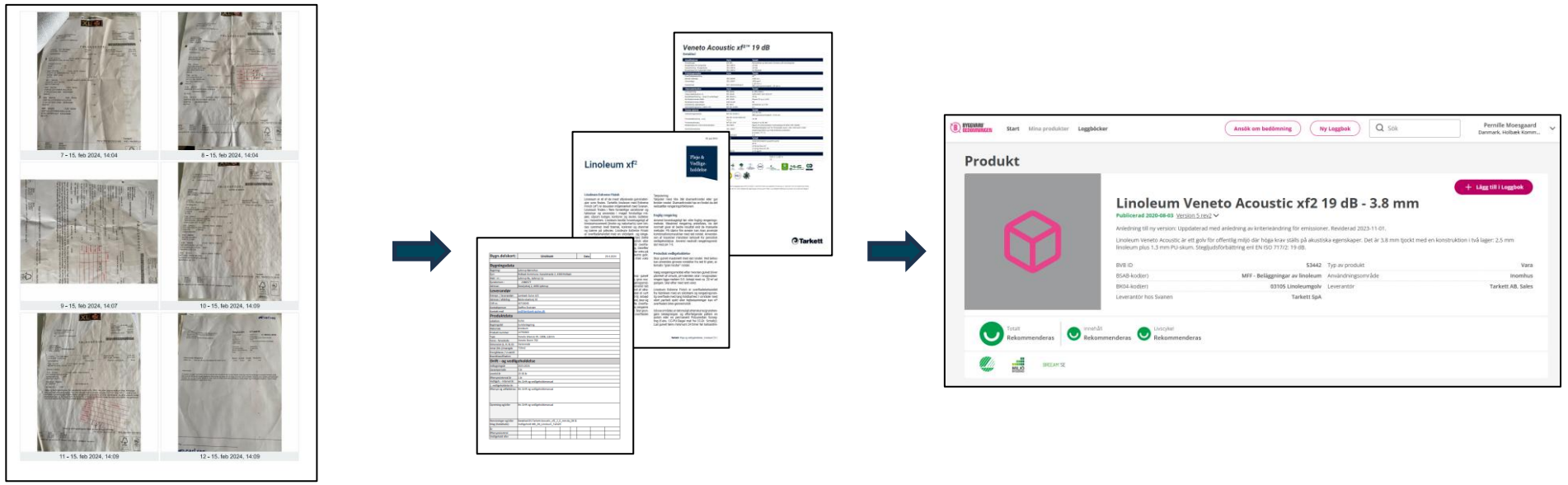
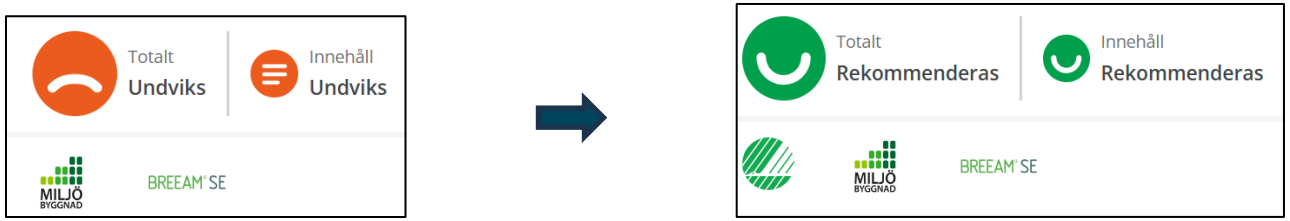
From Paper Chaos to Digital Clarity





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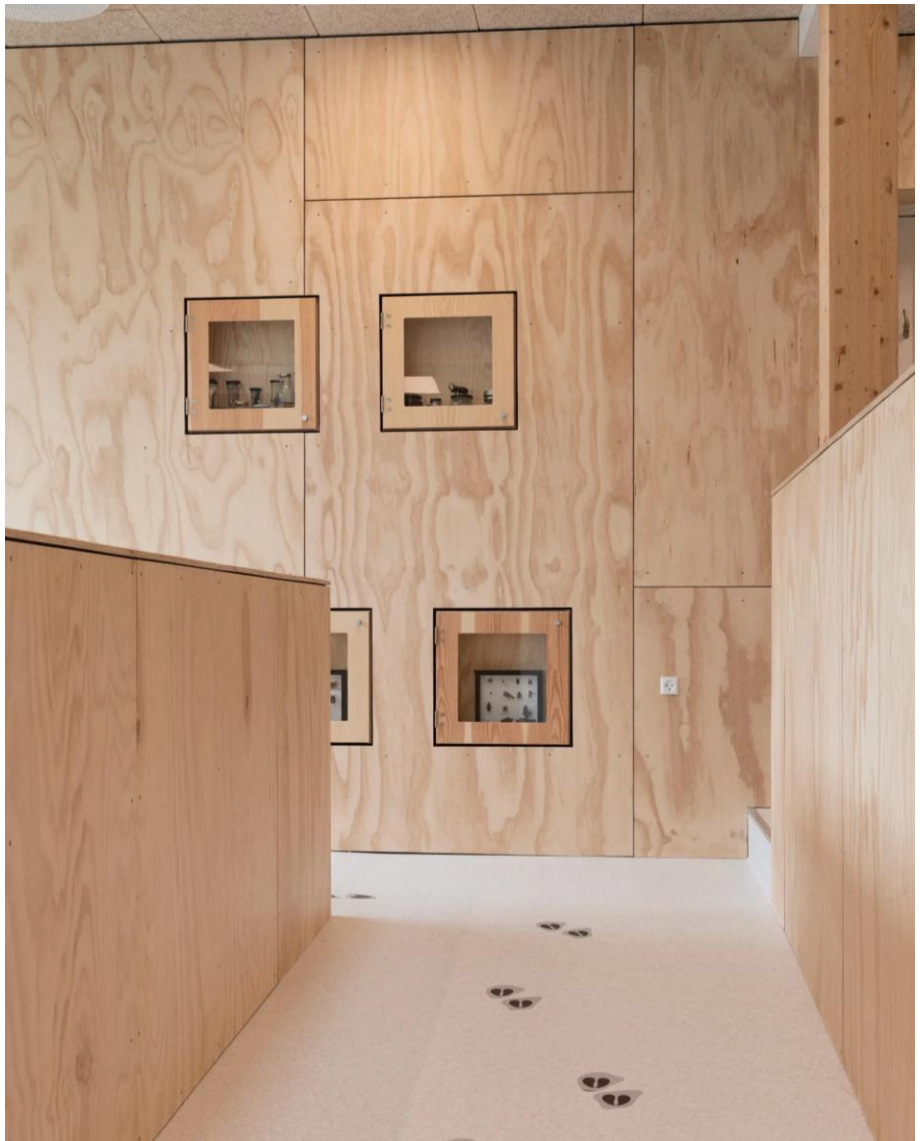
Regulatory Barriers

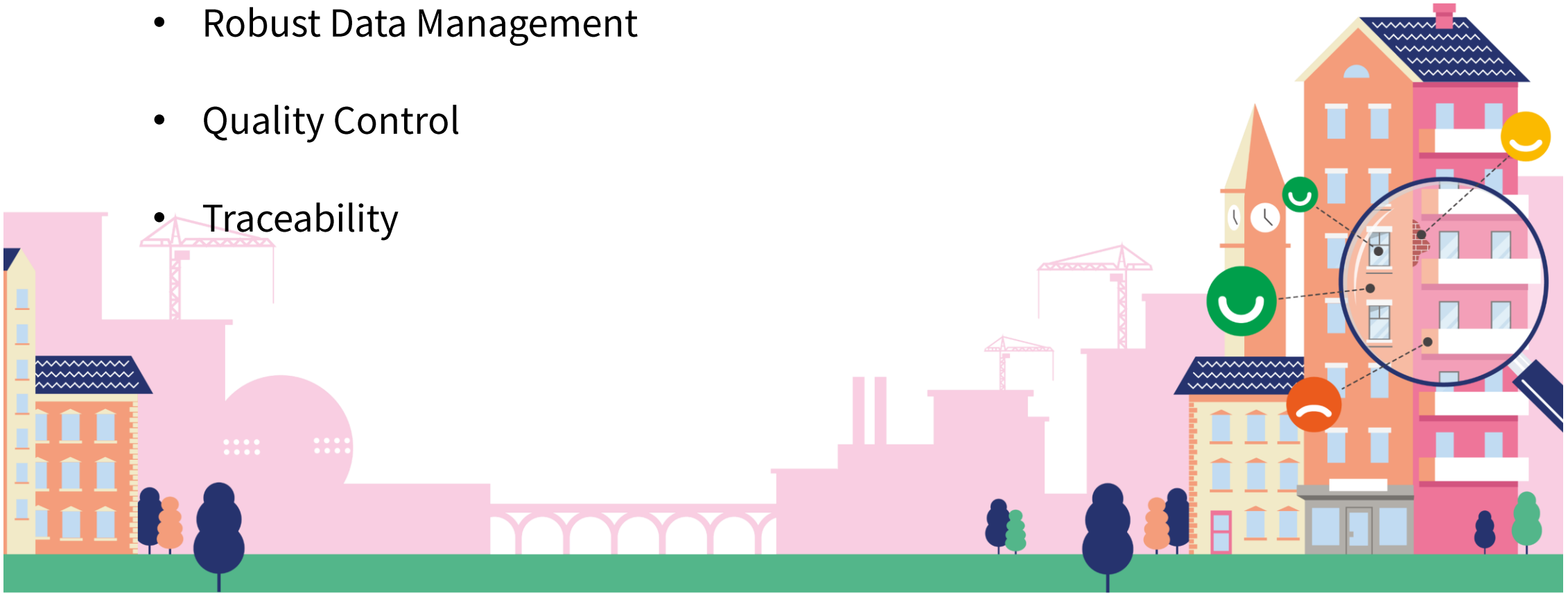
- Building Standards as hindrance for green alternatives

- Signal demand for greener solutions to suppliers, through certification, databases and logbooks



Lessons learned

- Robust Data Management
- Quality Control
- Traceability



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BYGGVARU BEDÖMNINGEN

Key Outcomes

- No severe deviant building materials after BVB assessment

- The Municipality will continue DGNB Gold certification on all new buildings over 1000m2

- Lack of quality control of data

- The Municipality is now in the process of implementing new guidelines for data management in construction projects, following the results from the NHC project

- Improving the log-book for our buildings

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Thank you

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GREEN GOVERNANCE DAY

Lighthouse 4

Including criteria on harmful chemicals, circularity and climate aspects into procurement of buildings and construction works in the Swedish municipality of Västerås.
Best practice experience from the NonHazCity3 project.

Political governance towards sustainability

- prioritization, budgeting and follow-up

12 political goals are set for 2024-2027

4 of them directly approach climate smart and ecological sustainable municipality

En klimatsmart och ekologiskt hållbar kommun

Under perioden 2024-2027:

E **ökar** framkomligheten och tillgängligheten i gång- cykel- och kollektivtrafiken i hela kommunen.

F **främjas** stadsgrönska och andra ekosystemtjänster samtidigt som den biologiska mångfalden ökar.

G **skapas** mer jämlika förutsättningar för att leva hållbart.

H **minskar** Västerås stads fossilberoende för att bli en fossilfri kommunal organisation år 2030.

E – increase the accessibility and availability for walking, cycling and public transport in the entire municipality.

F – promote urban greenery and other ecosystem services and increase biological diversity.

G – create equal opportunities to live sustainably

H – reduce the fossil dependency in the municipality of Västerås to reach a fossil free organization by 2030.

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Västerås Climate Cooperation

An agreement with the local business community

Västerås City Council has set a climate goal to achieve **net zero greenhouse gas emissions in the geographical area by 2040,** with an annual reduction of at least 10 % per year.

In order to succeed, cooperation with the local businesses is prerequisite!

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The importance of tools for sustainable construction

The Byggvarubedömningen® database

A tool for sustainable construction
December 2023

BYGGVARU BEDÖMNINGEN

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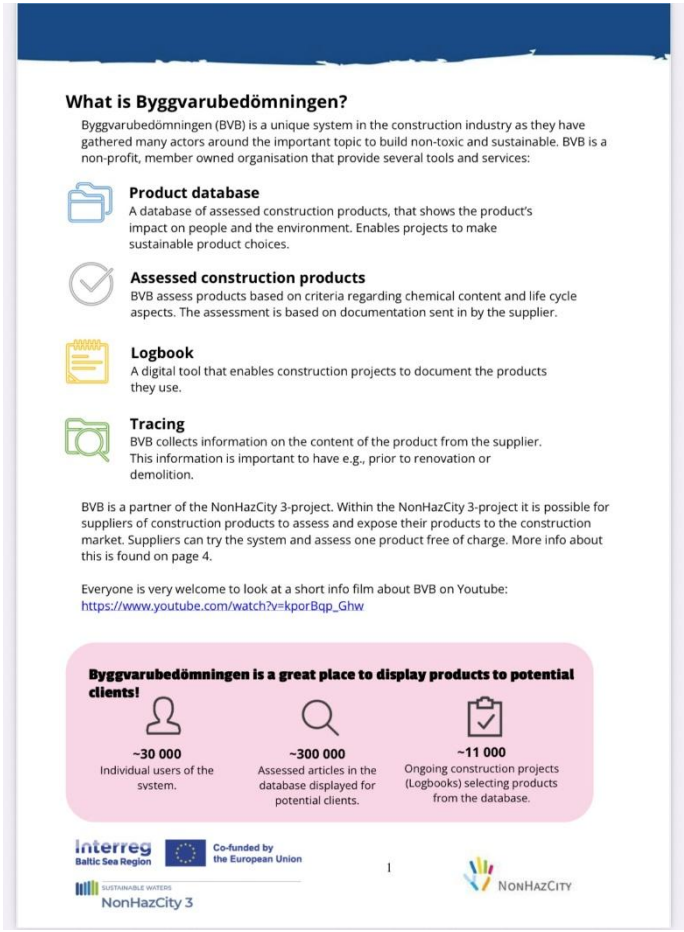

What is Byggvarubedömningen?

Byggvarubedömningen (BVB) is a unique system in the construction industry as they have gathered many actors around the important topic to build non-toxic and sustainable. BVB is a non-profit, member owned organisation that provide several tools and services:

Product database
A database of assessed construction products, that shows the product's impact on people and the environment. Enables projects to make sustainable product choices.

Assessed construction products
BVB assess products based on criteria regarding chemical content and life cycle aspects. The assessment is based on documentation sent in by the supplier.

Logbook
A digital tool that enables construction projects to document the products they use.

Tracing
BVB collects information on the content of the product from the supplier. This information is important to have e.g., prior to renovation or demolition.

BVB is a partner of the NonHazCity 3-project. Within the NonHazCity 3-project it is possible for suppliers of construction products to assess and expose their products to the construction market. Suppliers can try the system and assess one product free of charge. More info about this is found on page 4.

Everyone is very welcome to look at a short info film about BVB on Youtube:
https://www.youtube.com/watch?v=kporBqp_Ghw

Byggvarubedömningen is a great place to display products to potential clients!

~30 000
Individual users of the system.

~300 000
Assessed articles in the database displayed for potential clients.

~11 000
Ongoing construction projects (Logbooks) selecting products from the database.

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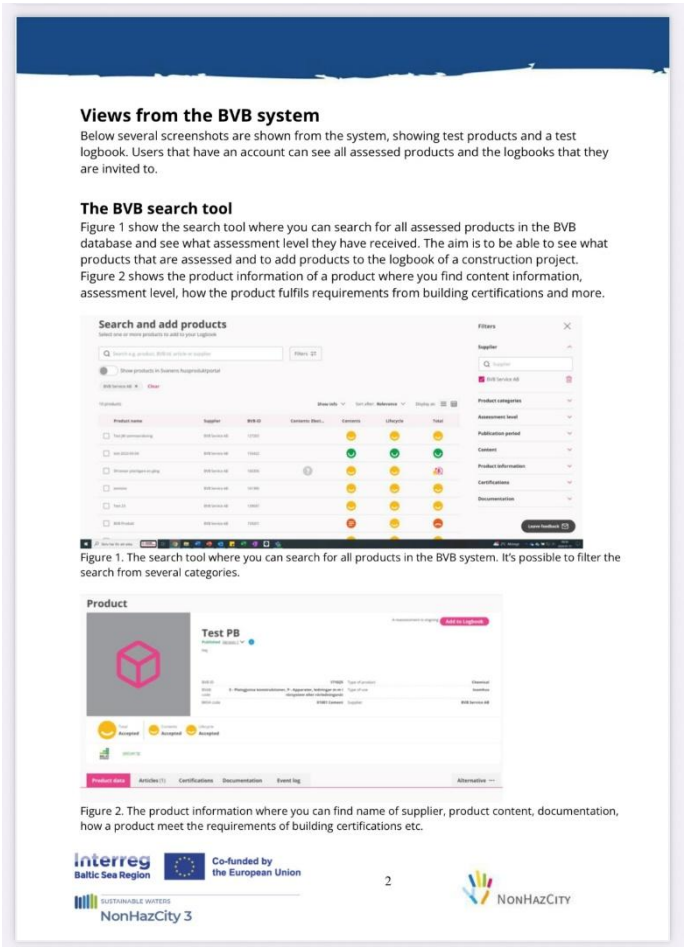

Views from the BVB system

Below several screenshots are shown from the system, showing test products and a test logbook. Users that have an account can see all assessed products and the logbooks that they are invited to.

The BVB search tool

Figure 1 show the search tool where you can search for all assessed products in the BVB database and see what assessment level they have received. The aim is to be able to see what products that are assessed and to add products to the logbook of a construction project. Figure 2 shows the product information of a product where you find content information, assessment level, how the product fulfils requirements from building certifications and more.

Figure 1. The search tool where you can search for all products in the BVB system. It's possible to filter the search from several categories.

Figure 2. The product information where you can find name of supplier, product content, documentation, how a product meet the requirements of building certifications etc.

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NONHAZCITY

https://interreg-baltic.eu/wp-content/uploads/2024/01/BVB-text-NonHaz.pdf

REBUILDING AND EXTENDING EMAUS ELEMENTARY AND MIDDLE SCHOOL INCLUDING A NEW INDOOR SPORTING ARENA

Buildning period September 2022 – August 2025

from 350 to 750 students

FOCUS on **reused** products:

- Floor mat
- Acoustic tiles
- Toilets and washbasins
- Student lockers
- Heat treated wood to avoid pesticides in paint
- Reused bricks

Light design for nocturnal wildlife

Vedbobacken winter and summer resort in Västerås

Västerås ski resort at **Vedbobacken** is build on what once was an old waste dump.

Now , a very popular nature and recreational area during both summer and winter.

Artificial snow is necessary for the winter activities, cross country and downhill skiing, but…

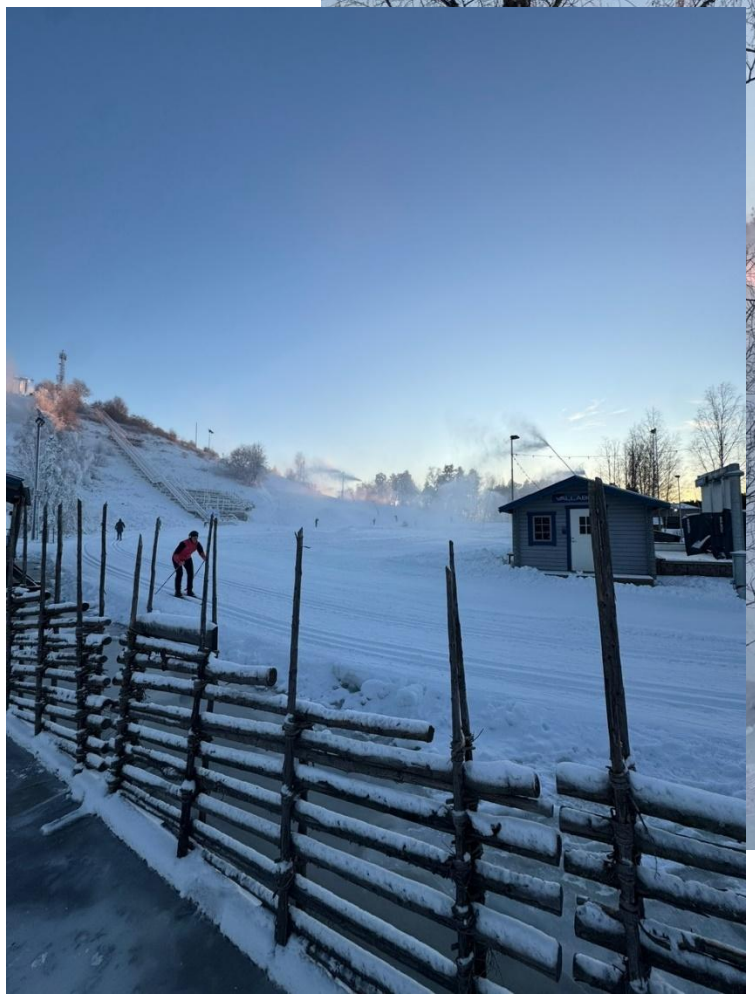
the **artificial snow was made from drinking water**, using **2% the total amount of drinking water produced for Västerås**, and often problems with a **high amount of unclean storm water** during heavy rain…

The building of a storm water pond for sustainable artificial snow production for sporting and recreation activities

Plus an upgraded summer and winter outdoor recreation area for all ages – win-win-win!

Climate and environmental benefits:

- The storm water goes into the dam, through 2 sand filters and 2 more filters that stops particles and micro plastics and becomes snow.
- The water in the dam is 5 degrees colder than drinking water – less energy and faster snow making.
- No marshland during heavy rain.
- No unclean storm water reaches our freshwater lake Mälaren.
- A positive impact on the wildlife off winter season.



Photos from last week!

Thank you for your attention!

Vicki Skure-Eriksson (C)
Deputy Mayor
The eity of Västerås, Sweden
viktoria.skure.eriksson@vasteras.se

“Thanks to our strong partnerships ChemClimCircle-2 and NonHazCity-3 we are able to develop and share best practice for a sustainable and safer future for the children in the Baltic region.”

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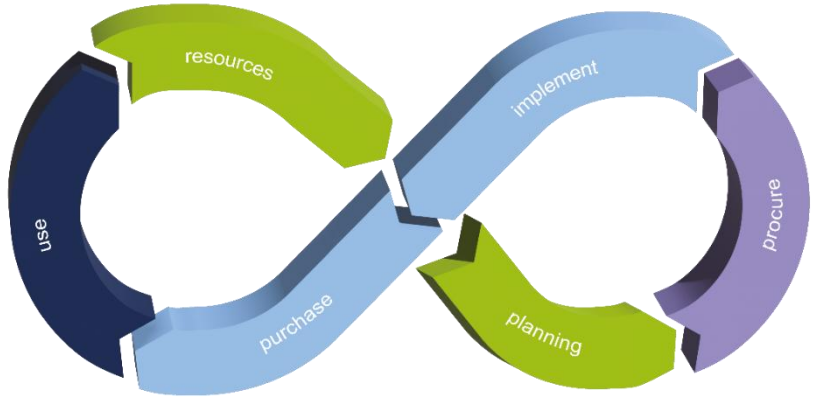
ChemClimCircle-2

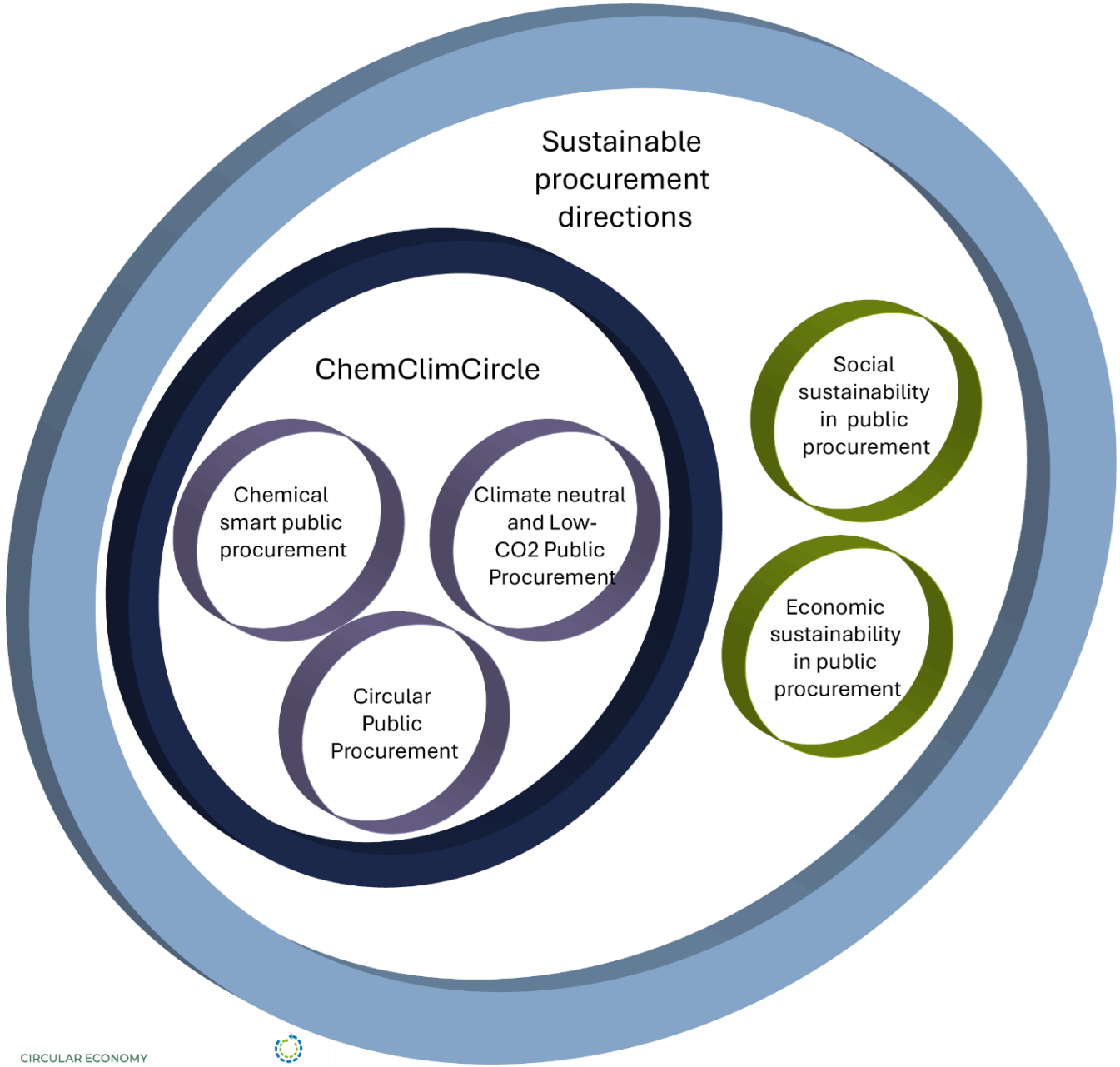
The ChemClimCircle concept for advancing Green Public procurement.



Anne Lagerqvist, City of Stockholm, Chemicals centre

Sweden

25/11/26 Vilnius



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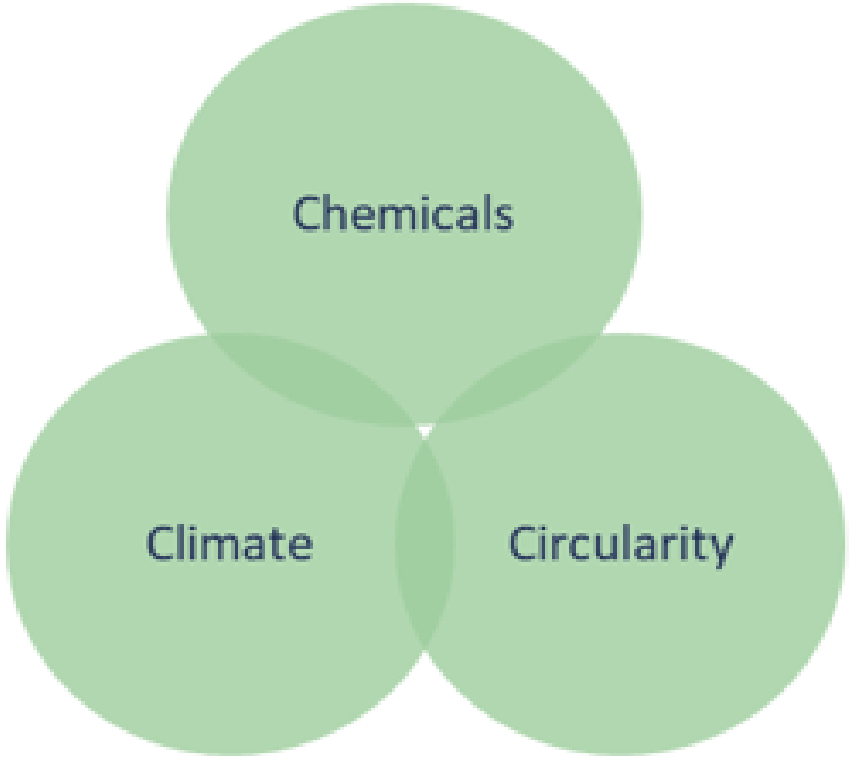
Integrating criteria on Chemicals, Climate and Circularity

Avoid work in separate silos – utilizing synergies and avoiding conflicts between the three C's



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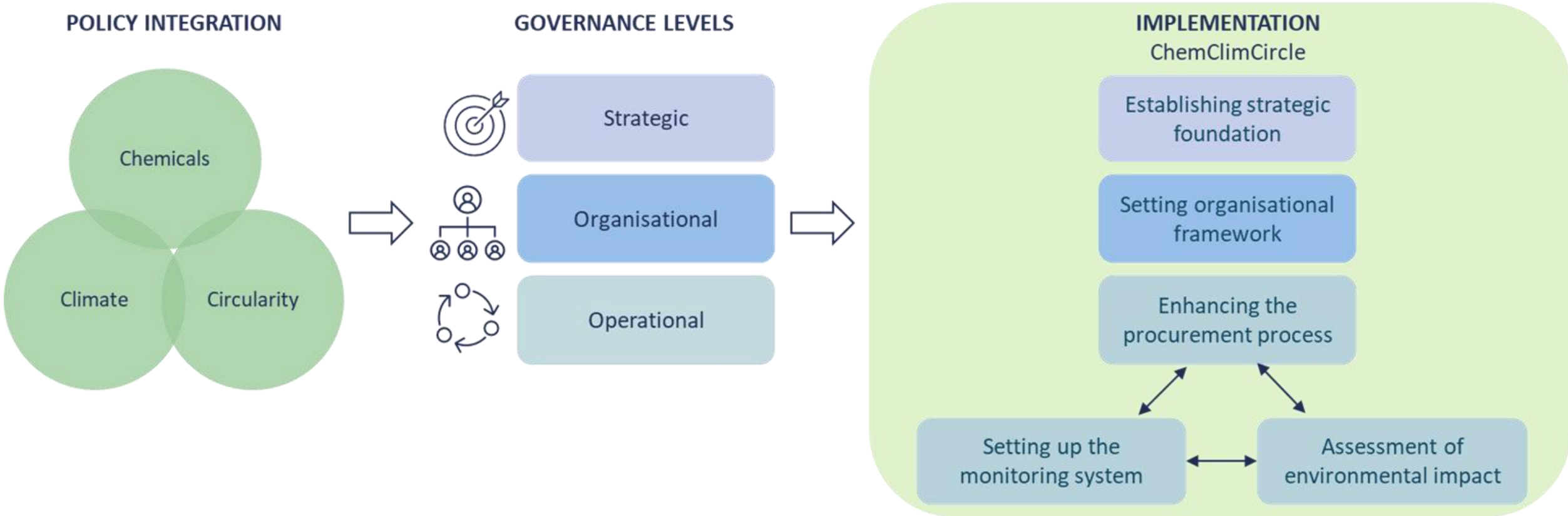
ChemClimCircle conceptual framework



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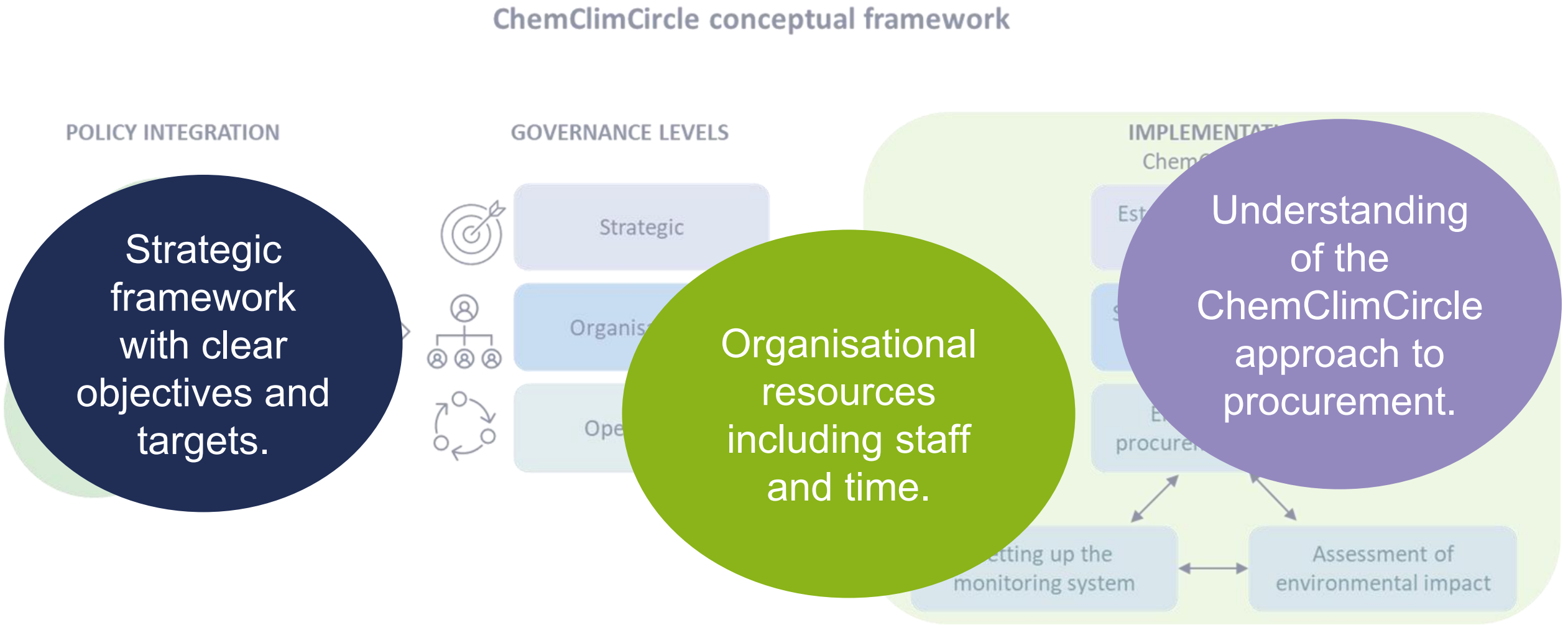
Requirements for use of purchasing as a lever for change and sustainability goal fulfilment:



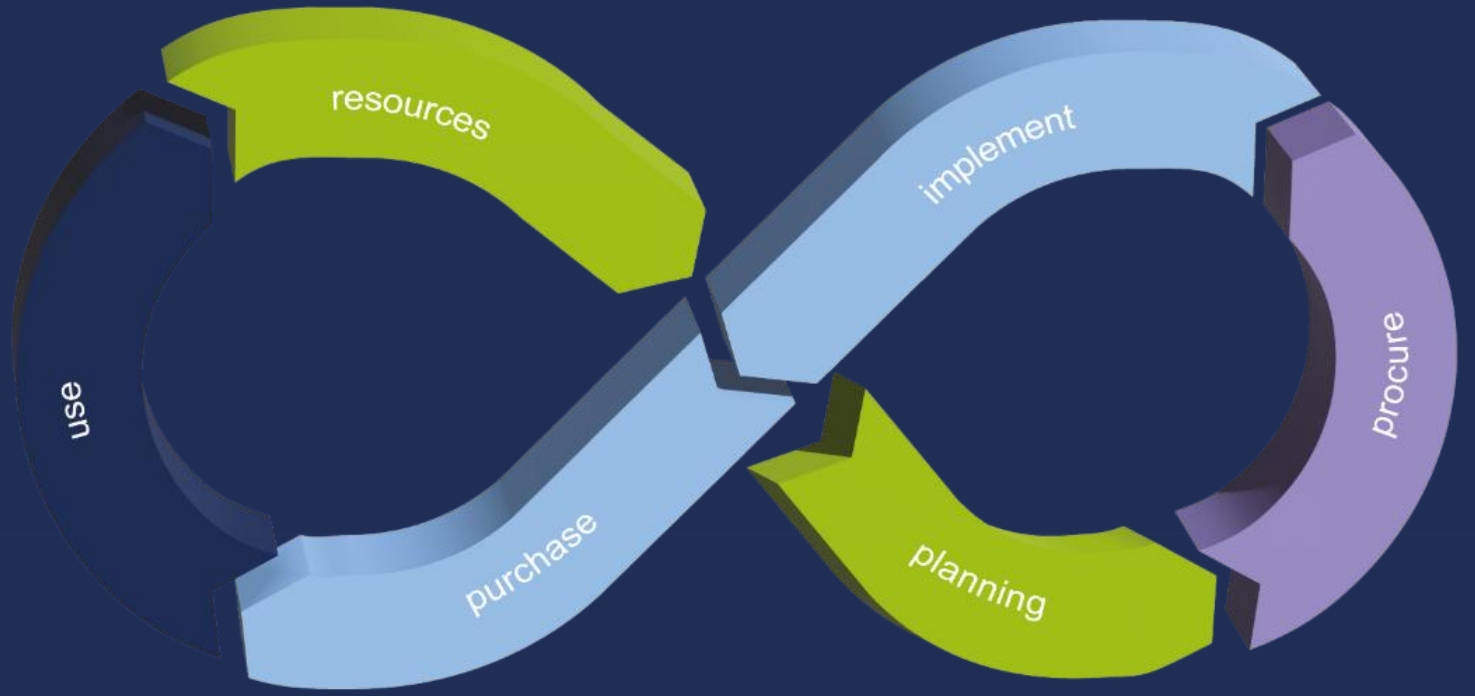
THE CHEMCLIMCIRCLE APPROACH TO PROCUREMENT

- The approach encompasses everything from needs- and market analysis through setting of criteria to follow-up during the contract period, evaluation and transfer of experience into the next procurement period.
- The logic of the three C’s need to follow through the whole process.

Process structure and sustainability coordination

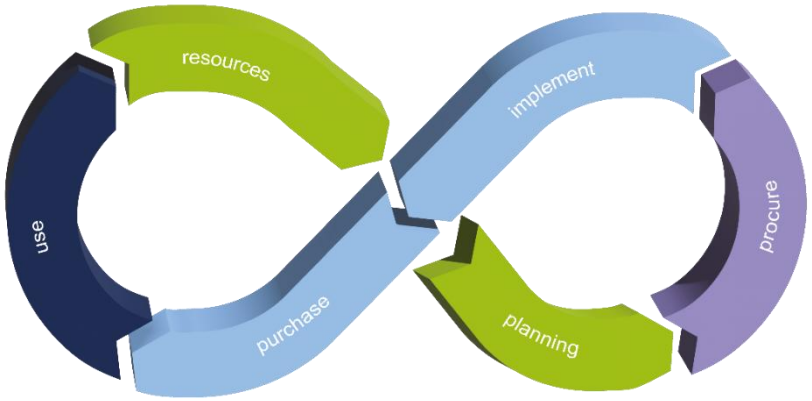
To efficiently implement the CCC aspects into the whole purchasing process, thought is needed in all parts - also the use phase.

Coordination of the work by a function in the organization gives clarity for everyone involved.



THANK YOU FOR THE ATTENTION

CHEMCLIMCIRCLE-2



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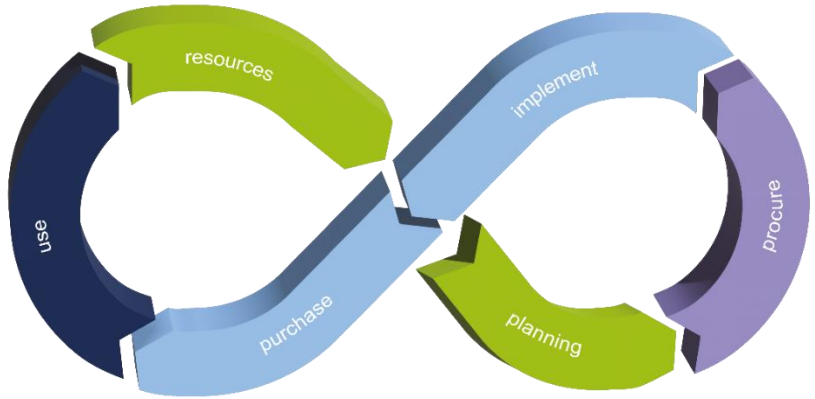
CHEMCLIMCIRCLE-2



Advancing Green Public Procurement for Future

25/112005
Vilnius

Perspective for future holistic environmental assessments

Dennis Lisbjerg
dlis@gentofte.dk
26/11/2025

Expect to get more data available – we need to prepare to act on them

Ecodesign for Sustainable Products Regulation (ESPR)

Environmental Product Declaration (EPD)

EU Digital Product Passport

Corporate Sustainability Reporting Directive (CSRD)

Clean energy

Zero pollution

Preserve and restore ecosystems and biodiversity

Healthy and environmental friendly food system

Green is not only Climate and ”CO_2- equivalent”

- Green ≠ climate and CO_2

- Green = climate
  + environment (emissions (water, air), pollution, ..)
  + nature (biodiversity, habitats, living resources ..)
  + ecosystem services (provisioning, regulating, cultural)

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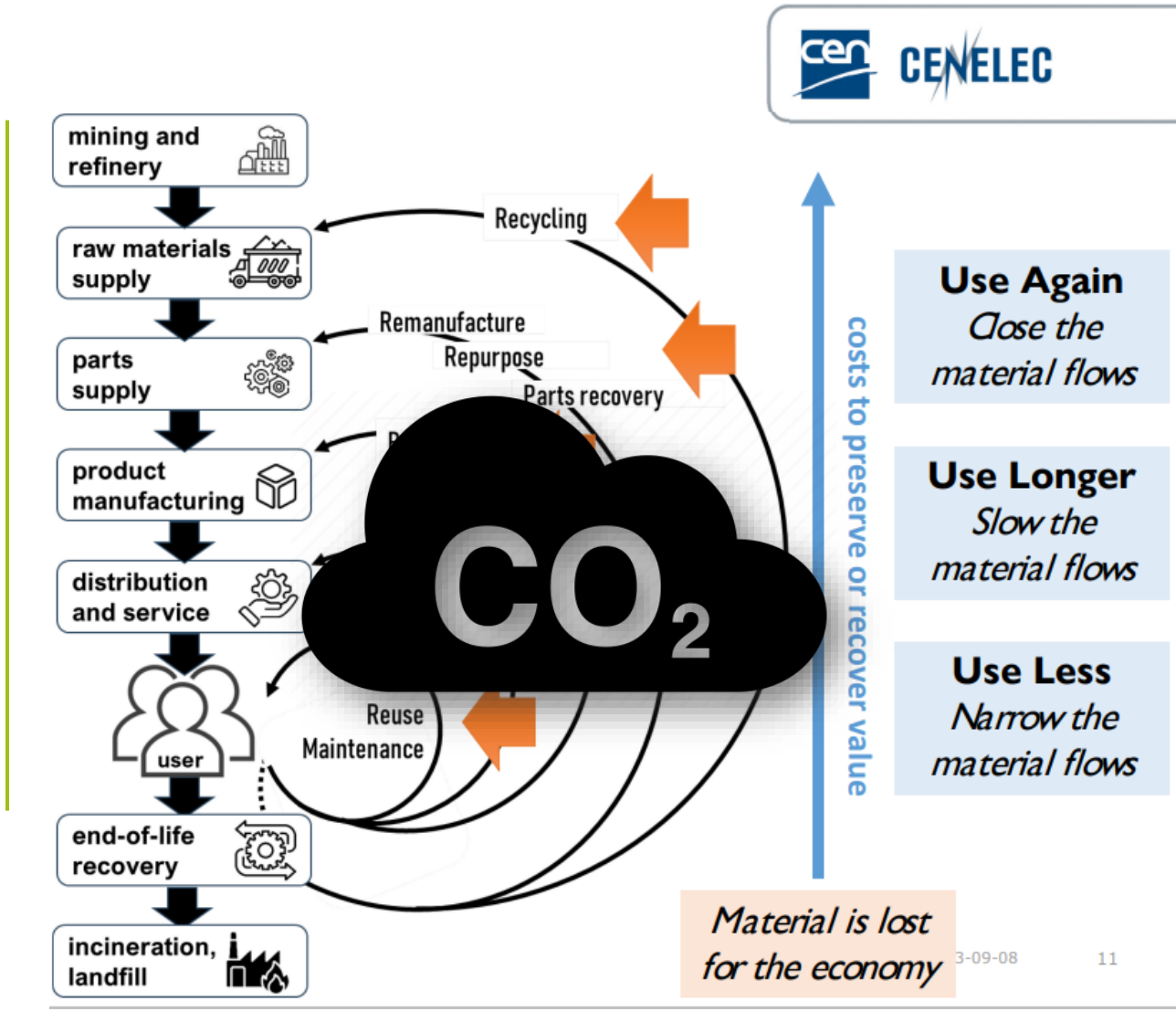
Circular ambitions

use resources again and-again

=

less pressure on nature



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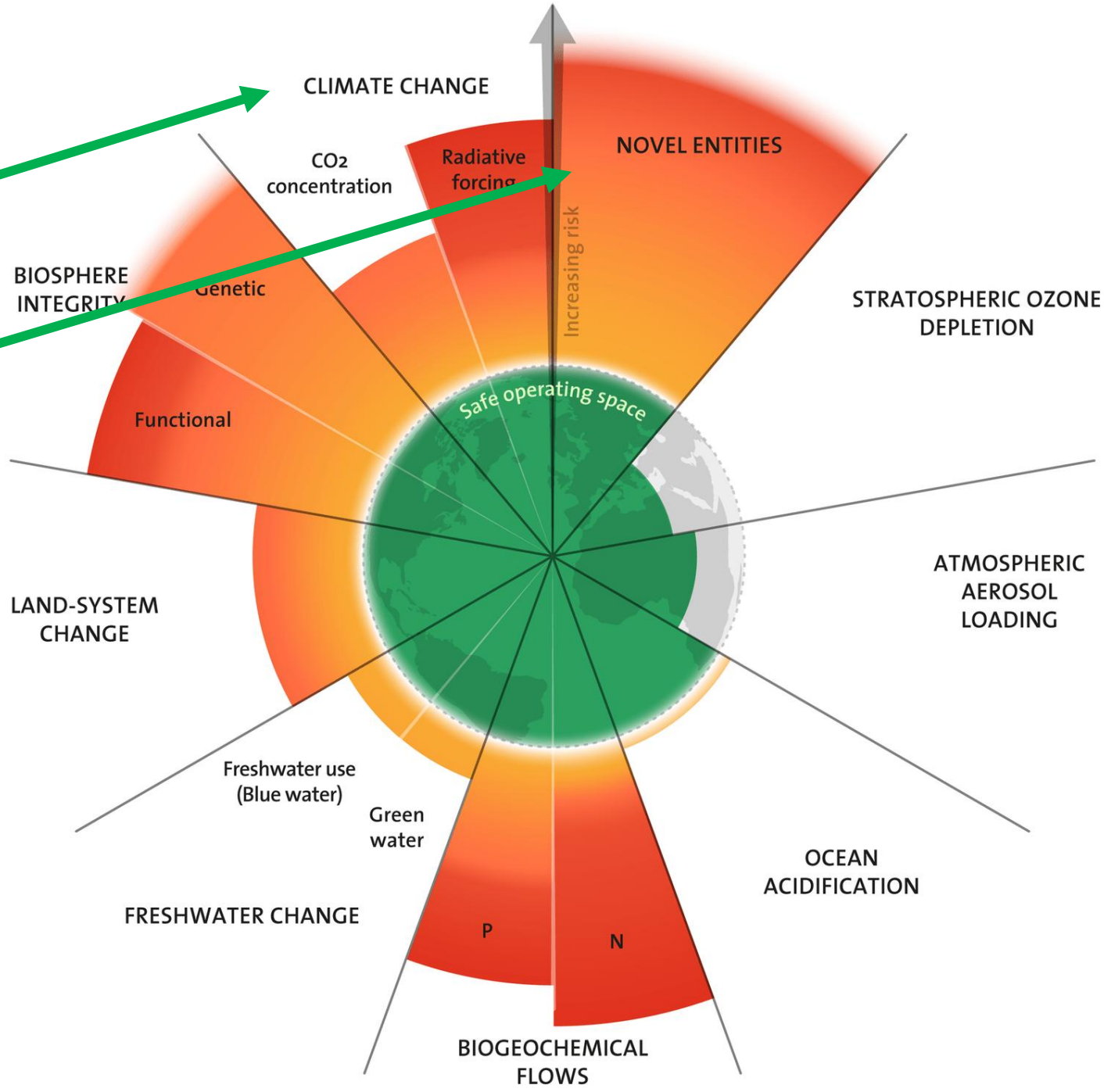
Planetary Boundaries

Clim

Chem

Circle



Sakschewski and Caesar et al. 2025
https://www.stockholmresilience.org/research/planetary-boundaries.html

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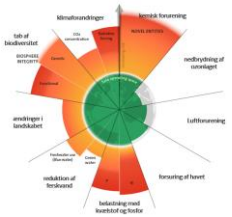
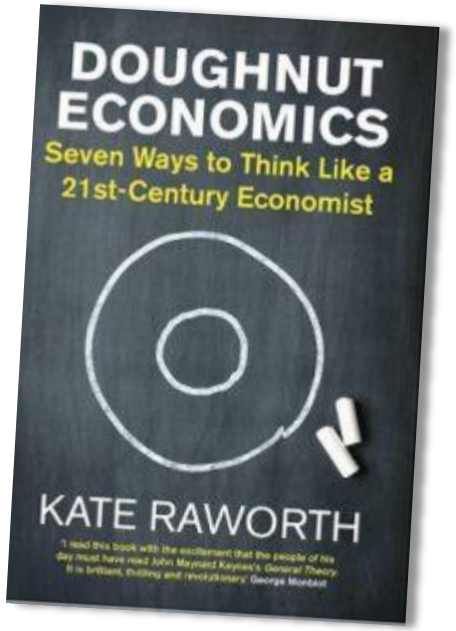
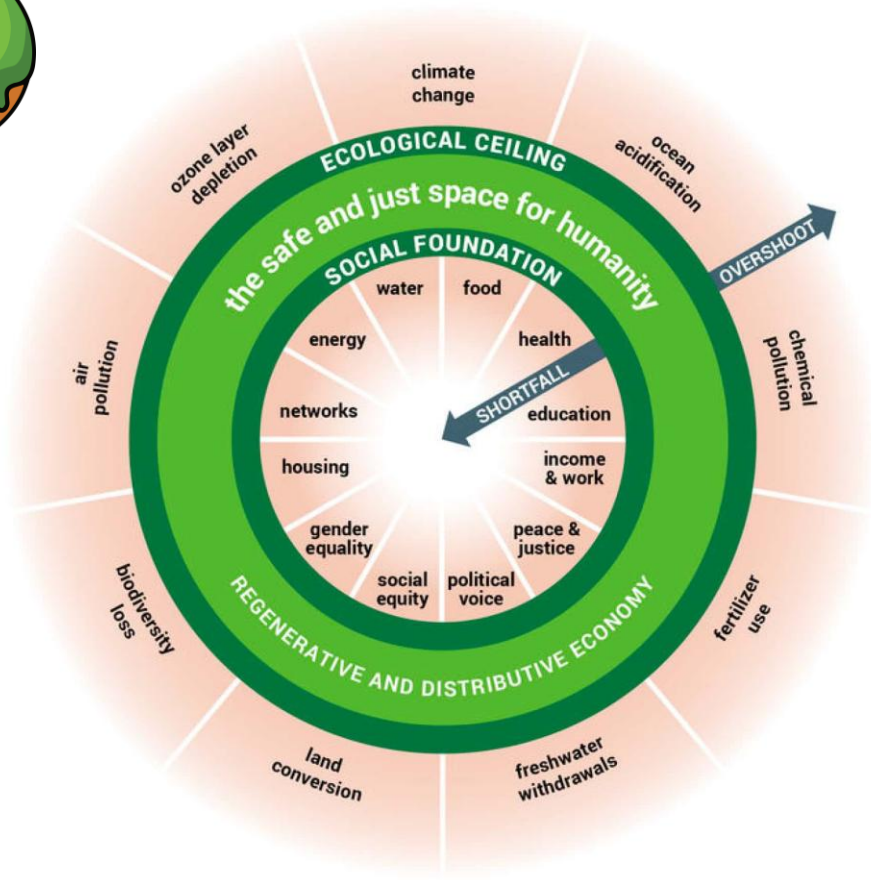
Doughnut economics







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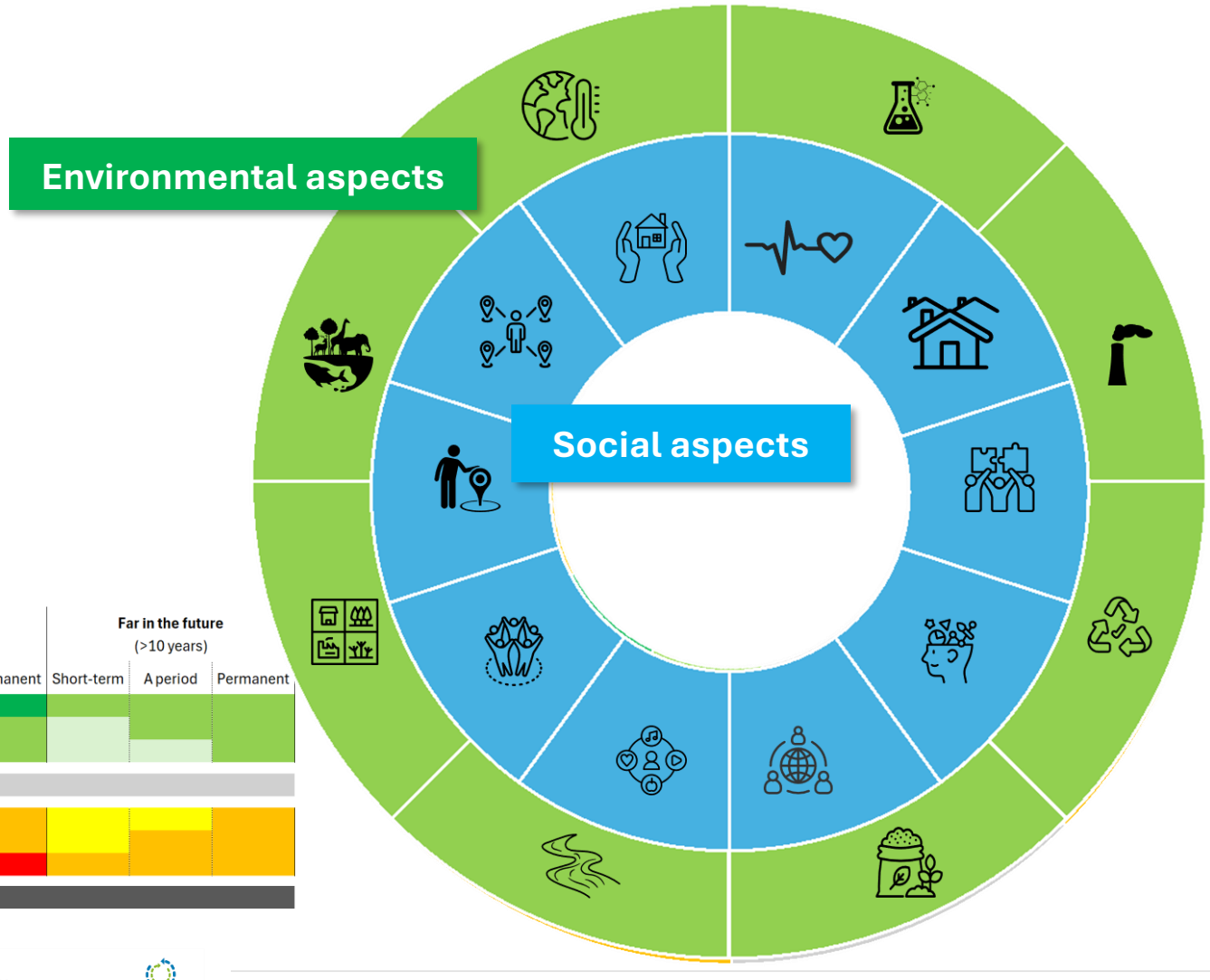
Impact overview

Future holistic assessment



ENVIRONMENTAL ASPECTS

When?	Now (within 2-4 years)			In a while (within 5-10 years)			Far in the future (>10 years)		
How long?	Short-term	A period	Permanent	Short-term	A period	Permanent	Short-term	A period	Permanent
Positive Impact Extensive									
Positive Impact Some									
Positive Impact Limited									
Compared to now (Business As Usual) No/Neutral									
Negative Impact Limited									
Negative Impact Some									
Negative Impact Extensive									
Difficult to assess									

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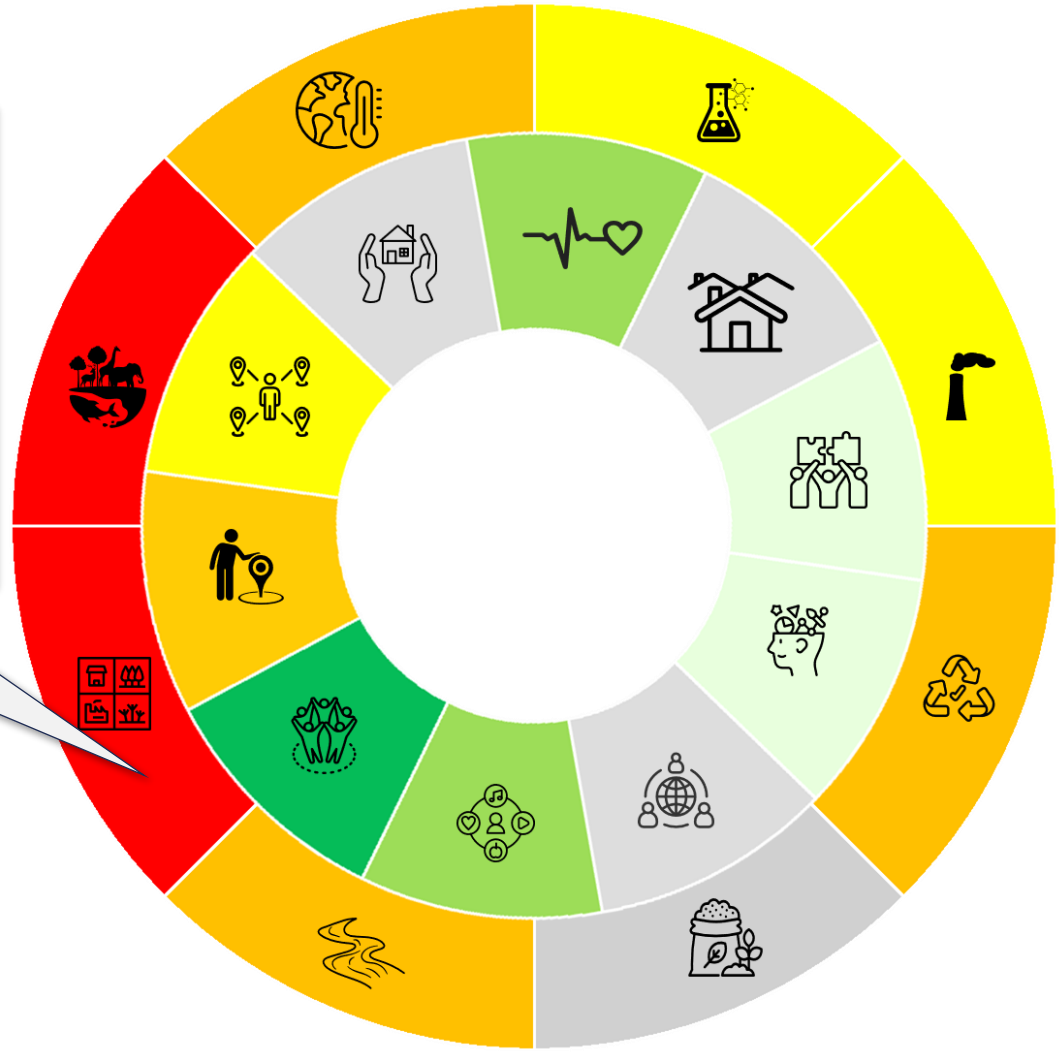
Impact overview

Future hollistic assessment

Need to further develop assessment.

Assessments can be based on:

- Qualitative judgements,
- Give a direction (less/less – metrics x%, amounts, use of certifications, lifespan in years)
- quantitative (CO_2 kg, water m^3, materials kg) resources …



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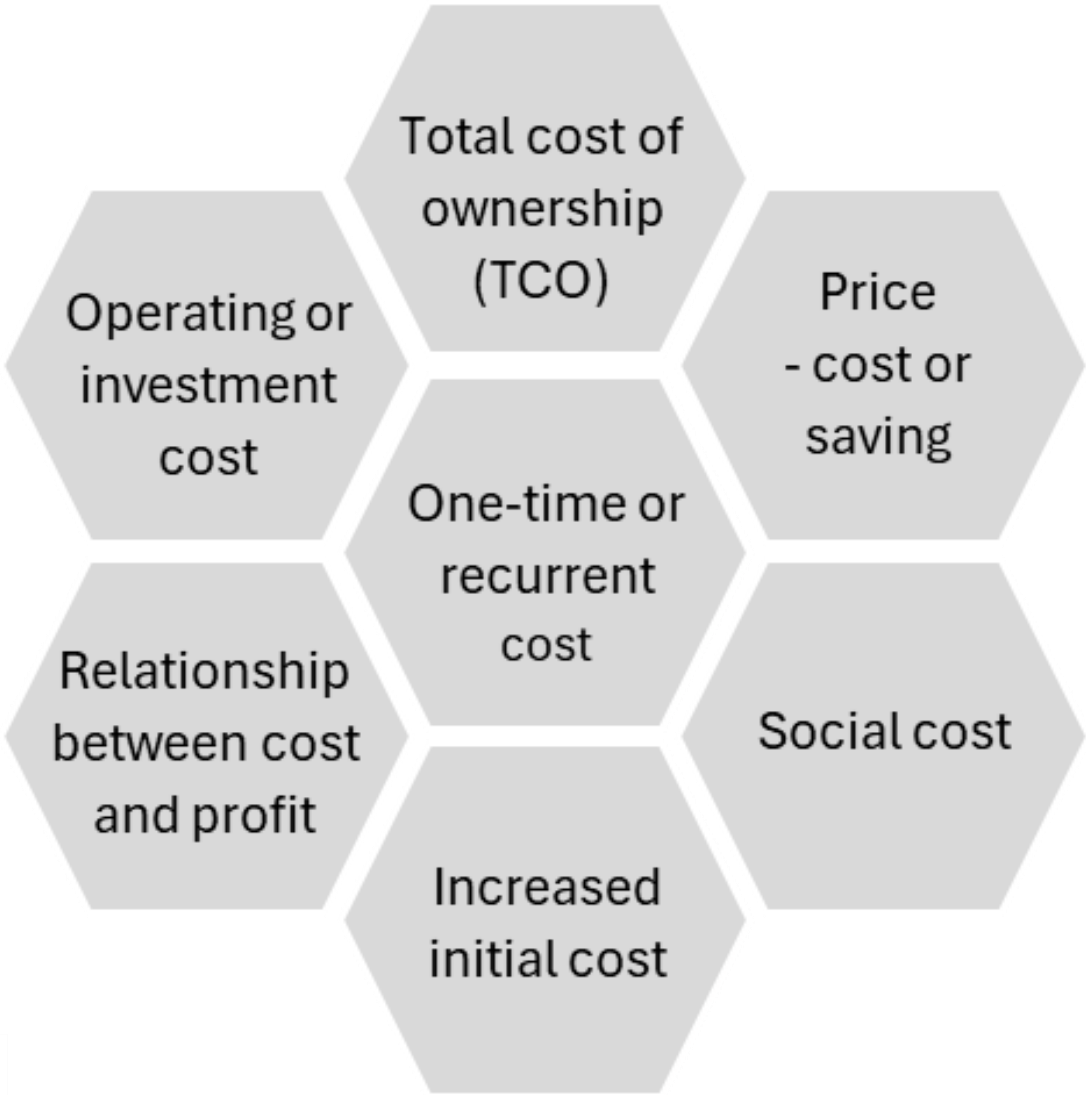
Economic dilemmas



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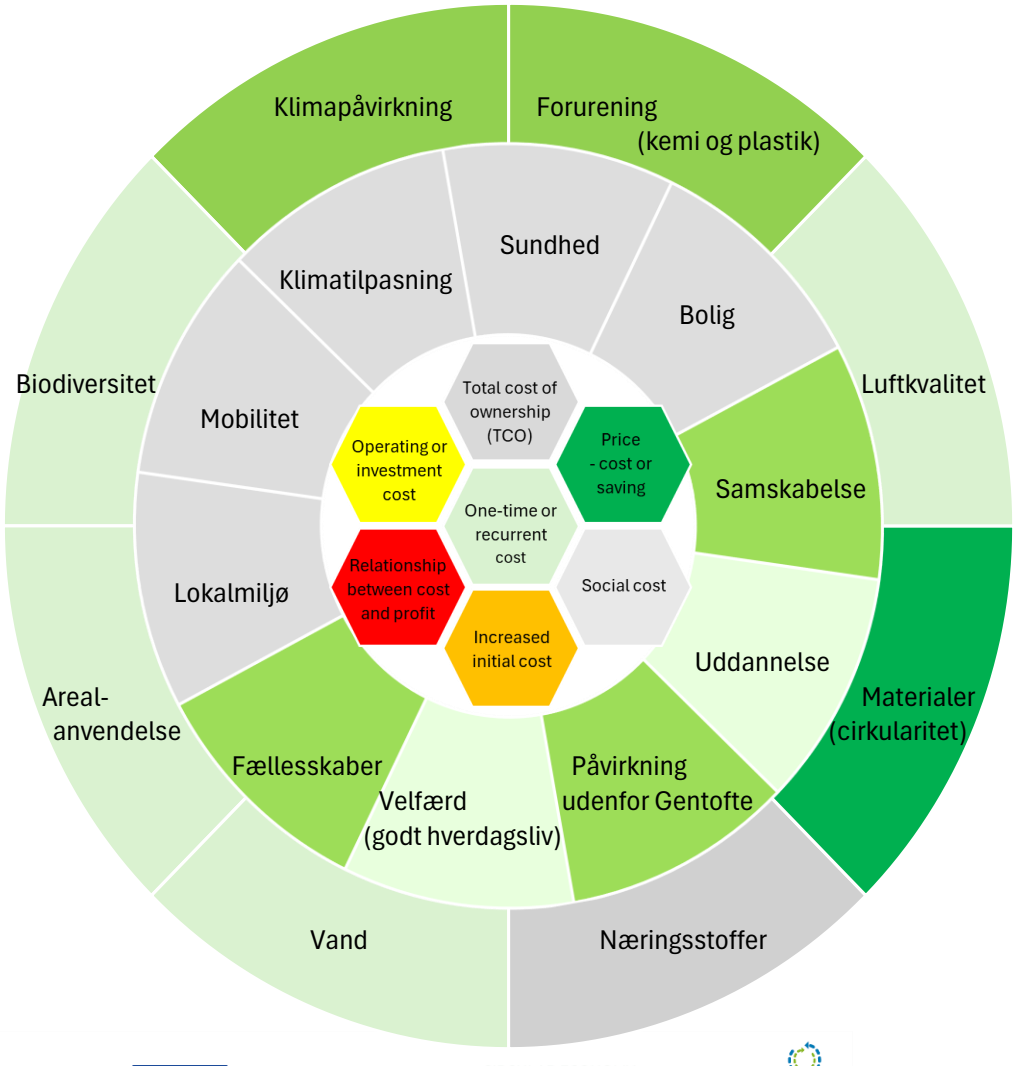
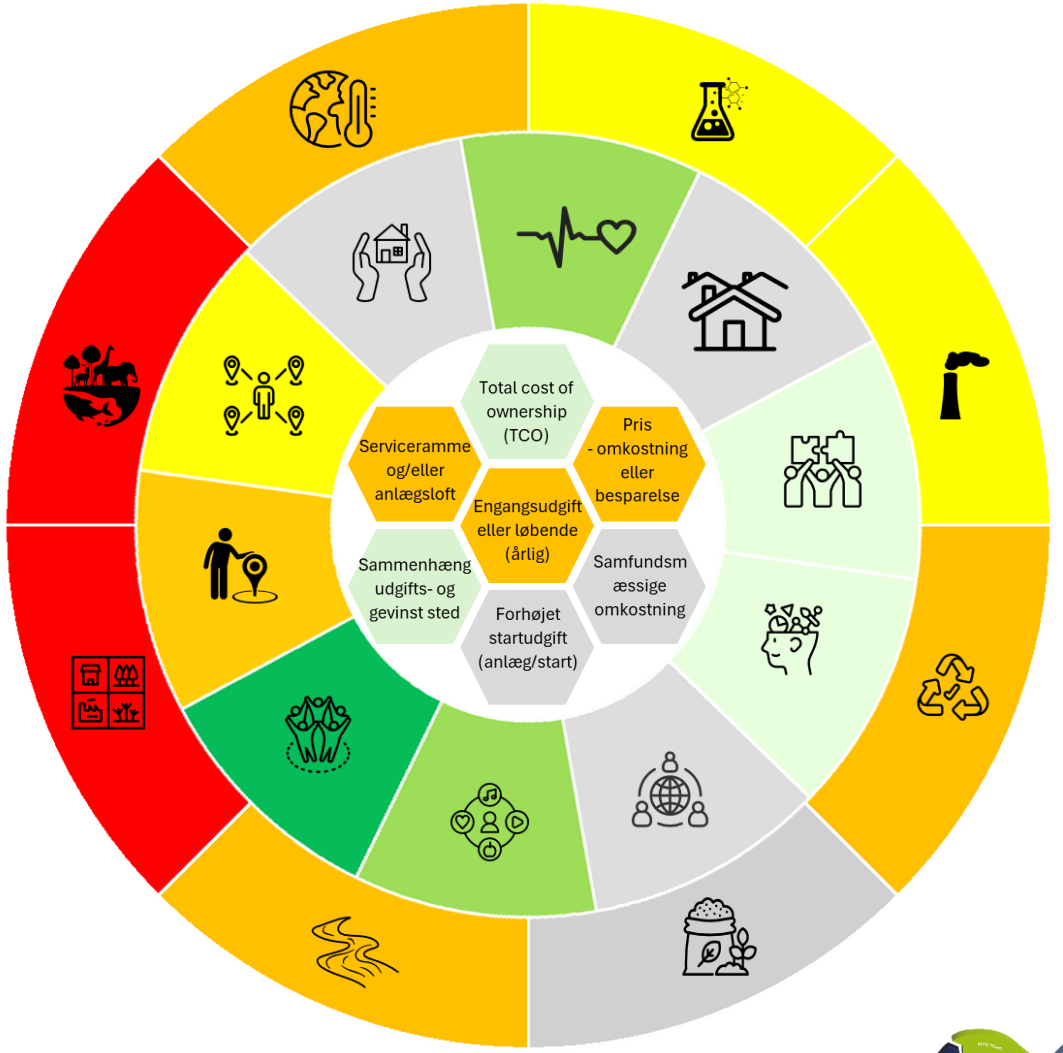
Hollistic Impact Overview





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C40 - Cities Climate Transition Framework (CCTF)

Re-certification of climate plans in Denmark

- Increased focus on
- Co-benefits – added value

Resources by compon

Commitment, governance and mainstreaming	1. Public commitment by t… consistent with the highe… 2. Climate commitments ar… functions, ensuring that …
Inclusive engagement and communication	3. Engagement with divers… action. 4. Collaboration and partnerships are e… across the wider city community.
…idence to inform …s, targets, …egies and …ns	5. Evidence and analysis to sup… city build climate resilienc… 6. Evidence and analysis t… contribute to net zer… 7. Evidence that sect… actions.
… goals and …s, supported by …oral strategies	8. Short, m… and long term city-wide adaptation goals and targets to build resilience and reduce vulnerability, informed by the evide… base and latest climate science. 9. Sho… medium and long term city-wide net zero emission reduction targets, and visions and/or targets for urban consumption to …ntribute to net zero globally, informed by the evidence base and latest climate science. 10. Short, medium and long term goals and targets to ensure that climate action improves social, environmental and economic equity. 11. Sector-specific strategies that together achieve the city-wide adaptation, net zero GHG emissions, urban consumption, and equity goals and targets.
…ence-based …ns and …ementation …ning	12. Adaptation and mitigation actions that are directly linked to the evidence base, goals and targets, and demonstrate use of all possible city powers, partnerships and influence. 13. Actions using all available powers to end the use and support for fossil fuels. 14. Implementation planning for priority short-term actions.
…itoring, …uation reporting and learning	15. A system for monitoring, evaluation, reporting and learning (MERL) which includes a set of indicators to assess progress towards meeting goals, targets and implementation of actions. 16. Regular public communication and reporting of the status of climate action implementation and progress towards the city climate goals and targets based on the MERL system.

10. Short, medium and long term goals and targets to ensure that climate action improves social, ***environmental*** and economic equity.

6. Evidence and analysis to support the identification of mitigation strategies and actions to achieve city-wide net zero and to contribute to net zero ***globally*** by reducing emissions from urban consumption.

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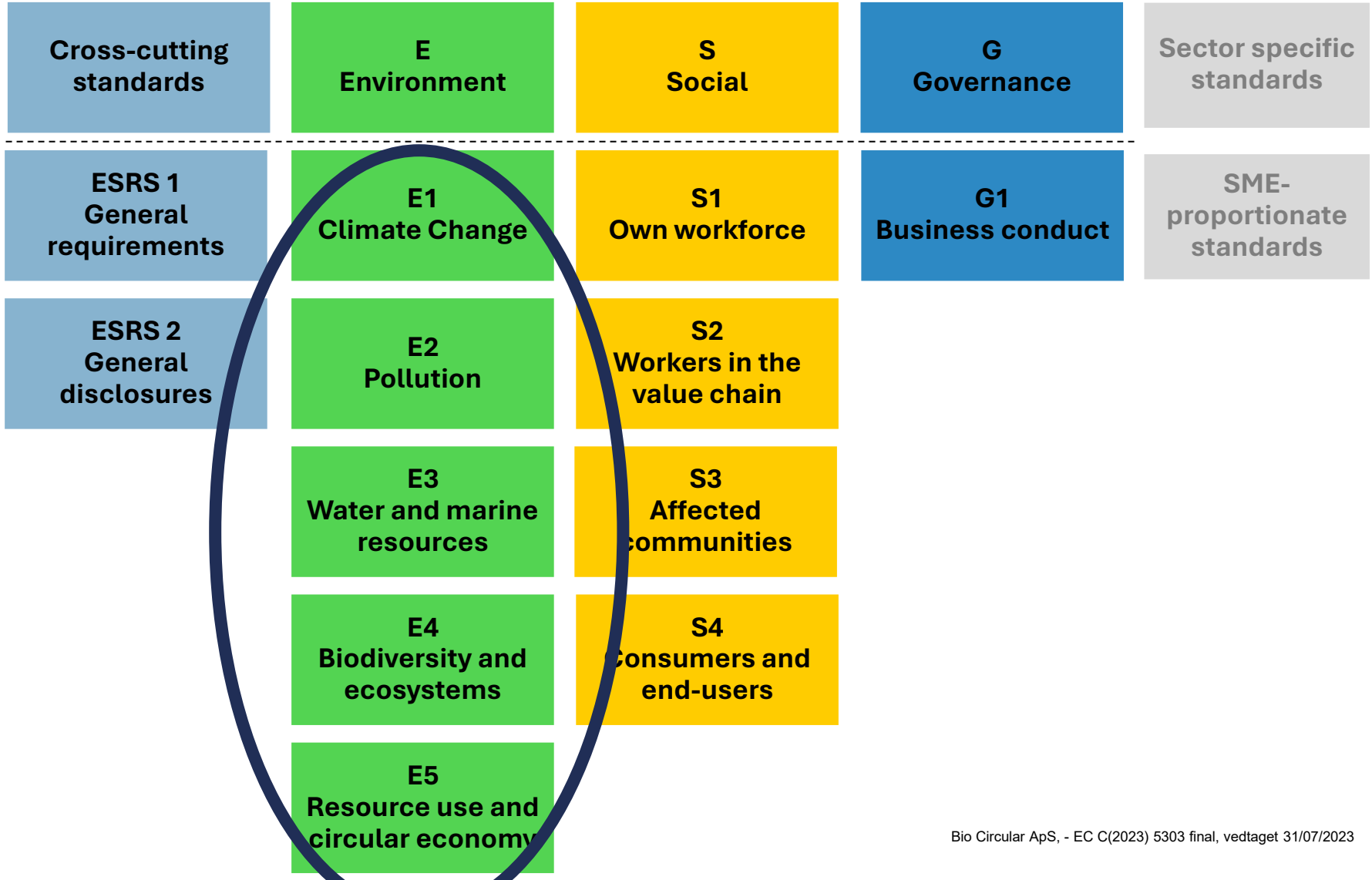
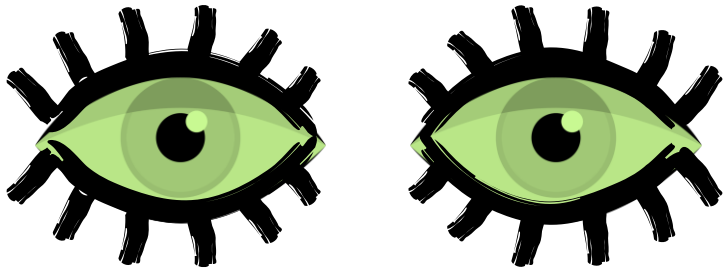
Corporate Sustainability Reporting Directive (CSRD)



Bio Circular ApS, - EC C(2023) 5303 final, vedtaget 31/07/2023

Impact of omnibus?



Shillibeer's omnibus, 1829, model (scale 1:6)
Science Museum Group

https://collection.sciencemuseumgroup.org.uk/objects/co25478/model-of-shillibeers-omnibus-of-1829

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Future perspective – the Global Risks Report 2025

Omnibus impact?

Chemical reductions
Climate impact reductions
Increased Cirularity

Risk categories

- Economic
- Environmental
- Geopolitical
- Societal
- Technological

	2 years	10 years
1st	Misinformation and disinformation	Extreme weather events
2nd	Extreme weather events	Biodiversity loss and ecosystem collapse
3rd	State-based armed conflict	Critical change to Earth systems
4th	Societal polarization	Natural resource shortages
5th	Cyber espionage and warfare	Misinformation and disinformation
6th	Pollution	Adverse outcomes of AI technologies
7th	Inequality	Inequality
8th	Involuntary migration or displacement	Societal polarization
9th	Geoeconomic confrontation	Cyber espionage and warfare
10th	Erosion of human rights and/or civic freedoms	Pollution

THANK YOU FOR THE ATTENTION

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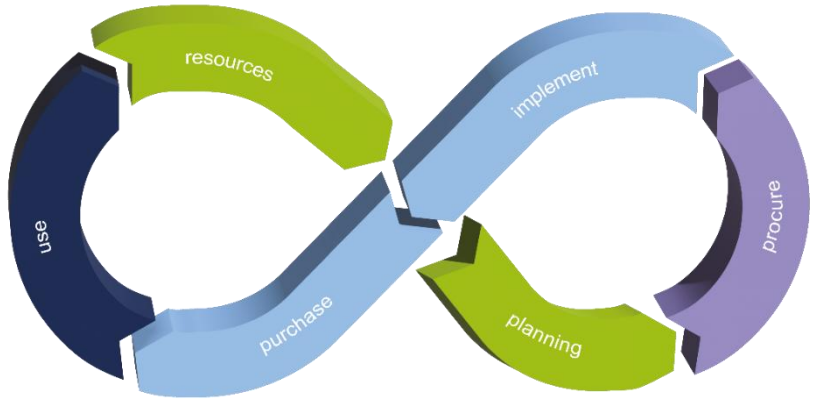

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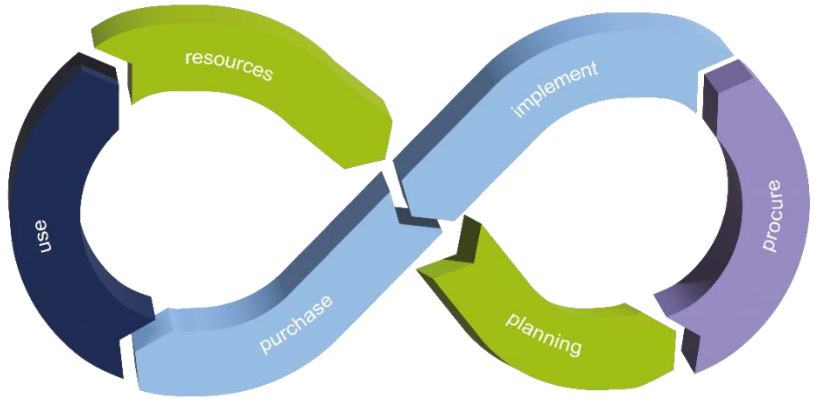

MAKING PROCUREMENT A REAL DRIVER OF CHANGE

25/11/26
Vilnius

MAKING PROCUREMENT A REAL DRIVER OF CHANGE

Ieva Markuceviciute-Vincke

Executive Research Manager at MC Baltics UAB

PhD candidate in Economics at Lithuanian Center for Social Sciences

Green public procurement (GPP) in the EU encourages public authorities to consider the environmental impact of goods, services, and works throughout their life cycle when making purchasing decisions, directly supporting EU sustainability goals

EU climate policy pillars targeted by CCC

CHEMICALS

Elimination of harmful chemicals in supply chains, materials, construction projects

1

CIRCULARITY

Resource efficiency, reuse systems, waste minimization across procurement lifecycles

2

CLIMATE

GHG emissions reduction, carbon accounting, lifecycle climate impact beyond energy

3

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How do we translate multi-pillar environmental priorities into procurement decisions that actually reduce impact?

Impact assessment challenge in GPP

Why is there so little progress to automate impact assessment?

- Fragmented criteria and requirements across jurisdictions – EU is still 27 unique MS
- Data availability gaps in supply chains – such essential data as scope 3 emissions, chemical composition, circularity metrics
- Attribution complexity: which environmental improvements are procurement-driven vs. regulatory-driven?
- Monitoring systems are not scaled: there is lack of systematic impact tracking infrastructure

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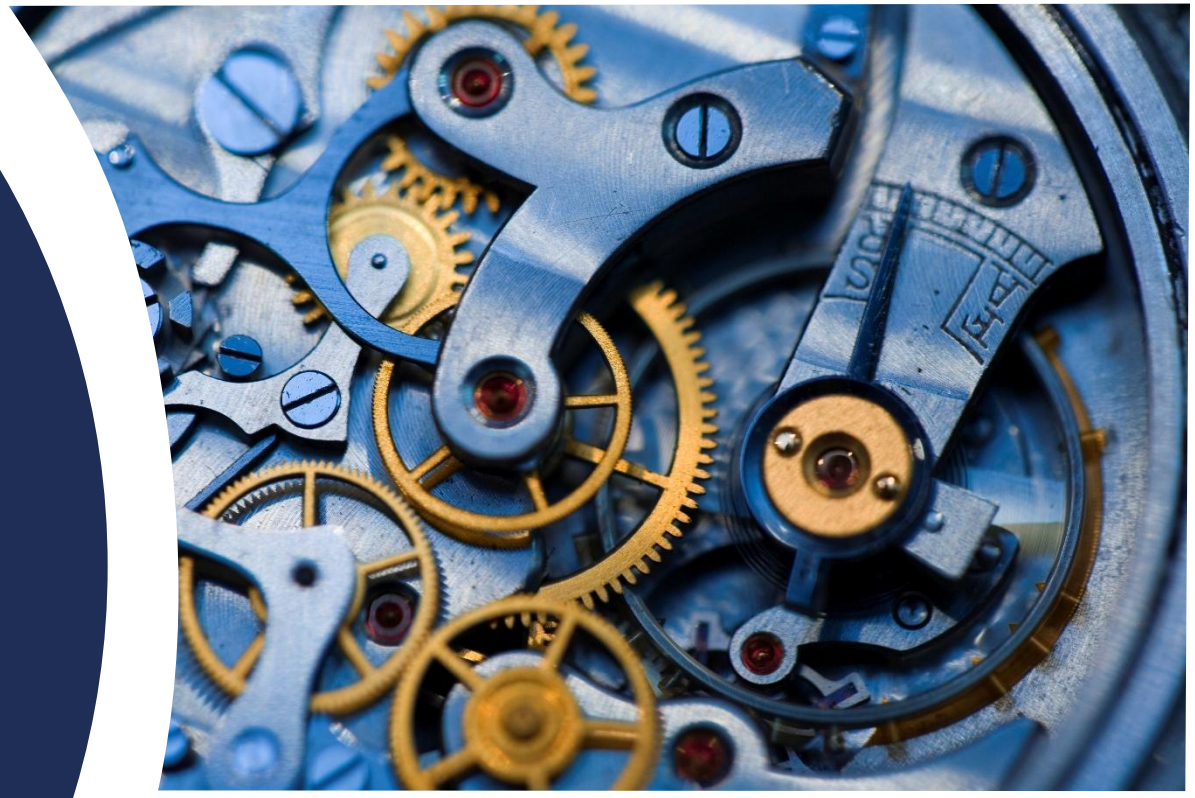
WHY NOW? THE CONVERGENCE MOMENT

Policy is reaching maturity: EU GPP frameworks, circular economy directives, hazardous substance regulations are intentionally aligned

Measurement gap is closing: Individual category tools exist, however harmonized impact assessment frameworks lag behind

Regional momentum: Alignment at a regional level allows to scale proven models



ABC of CCC

What are the most common approaches for measuring environmental impact of Chemicals, Climate and Circularity?

	Key metrics	GPP strategy	Measurable outcomes
Chemicals	Hazard inventory, restricted substances list	Material bans, certification mandates	% reduction in hazardous material procurement
Climate	Lifecycle emissions, scope 3 hotspots, carbon intensity	Emissions criteria, supplier audits, renewable transition	tCO_2e avoided vs. baseline per unit procured
Circularity	Take-back rates, reuse cycles, waste diversion	PPP models, design criteria, recovery targets	Tons of material recovered/reused annually

Layers of “impactful” impact assessment

Layer 1: Baseline Establishment

Layer 2: Criteria Harmonization

Layer 3: Supply Chain Data Capture

Layer 4: Impact Monitoring & Attribution

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Assessment Maturity Model: Where do you stand?

Level 1: Ad-Hoc

Reactive, project-based assessment | Prerequisites: Political trigger, minimal staffing (0.5 FTE) | Quick wins possible

Level 2: Repeatable

Standardized criteria across categories | Prerequisites: Templates, environmental officer role (1–2 FTE), basic tracking

Level 3: Optimized

Multi-pillar integration, supplier data systems | Prerequisites: Data infrastructure (3–5 FTE), supply chain engagement

Level 4: Integrated

Closed-loop monitoring, attribution modelling | Prerequisites: Dedicated budget, data systems, supplier councils (4+ FTE)

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Frequently mentioned barriers

and how to address them

Barrier: Data Gaps

- Use digital product passports & supplier self-declarations as interim; co-develop standards with procurement communities

Barrier: Supplier Costs

- Price sustainability into evaluation; recognize compliance cost recovery; phase requirements by supplier size

Barrier: Measurement Attribution

- Use quasi-experimental designs (control procurement categories); establish counterfactual baseline scenarios

Questions and reflections?

THANK YOU FOR THE ATTENTION

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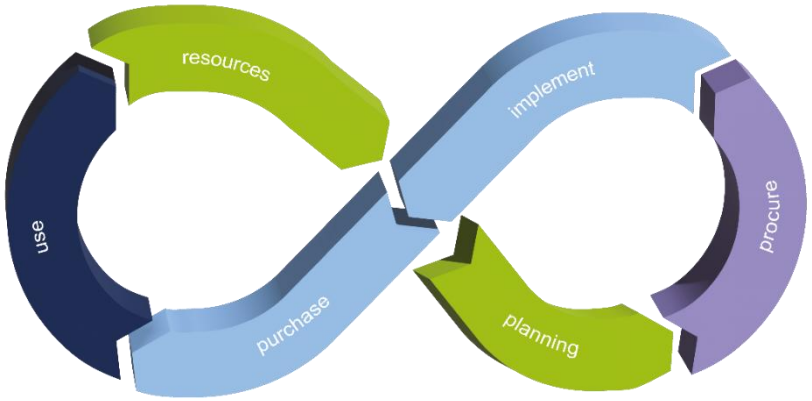

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