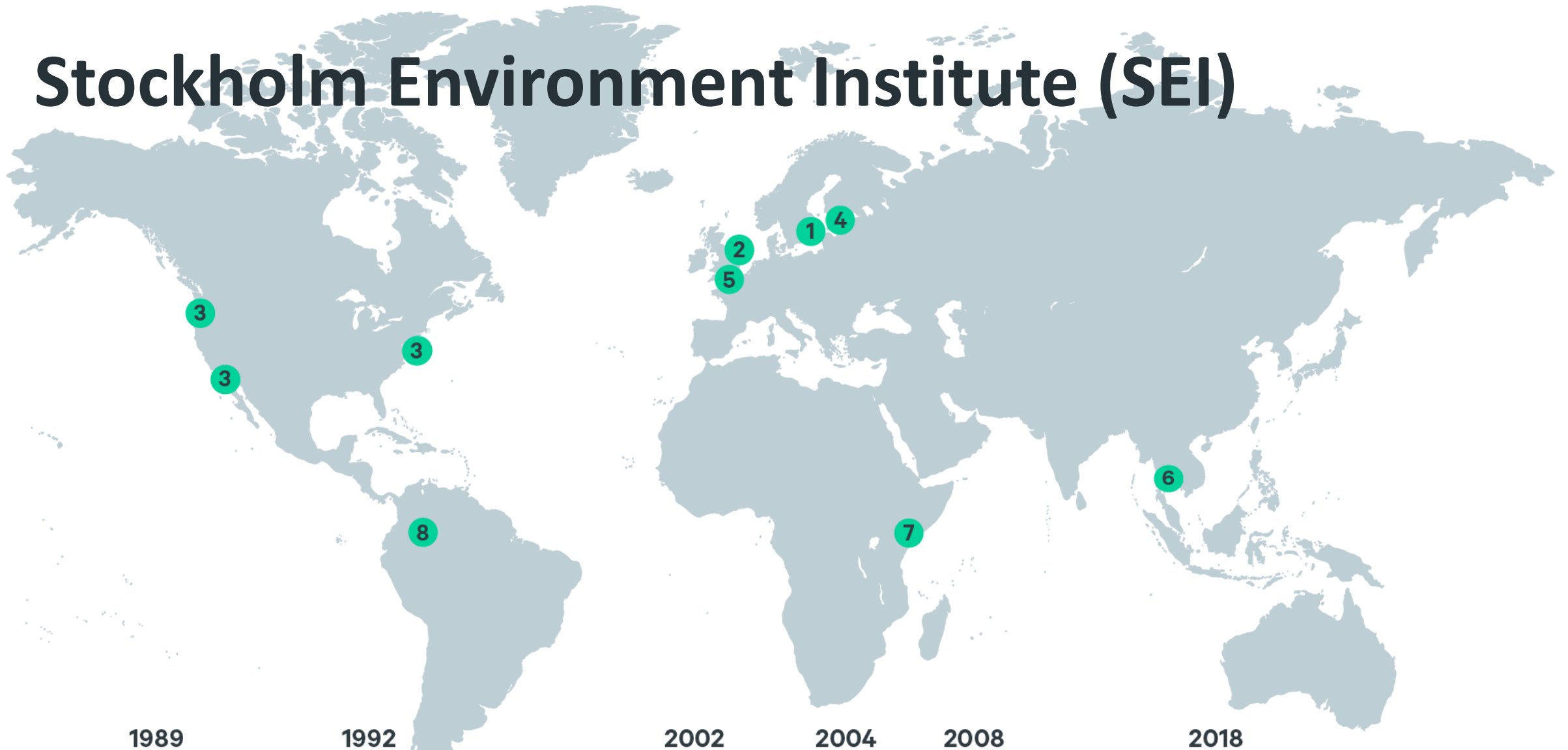


Green Public Procurement: a key to decarbonizing construction and road transport in the EU

March 15th, 2023

Stockholm Environment Institute (SEI)



1989

1992

2002

2004

2008

2018

1 SEI Headquarters

4 SEI Tallinn

5 SEI Oxford

6 SEI Asia

7 SEI Africa

8 SEI Latin America

2 SEI York

3 SEI US

Content

- GPP potential
- Construction and road transport (EU Regulations and findings)
- Accelerating the EU's uptake of Green Public Procurement. Project overview.
- Recommendations
- Conclusions

What is GPP?

Public Procurement
Best value for money



environment and society



The potential of GPP

Public purchases in the EU amounts to about 15% of its GDP and is globally responsible for 15% of GHG emissions

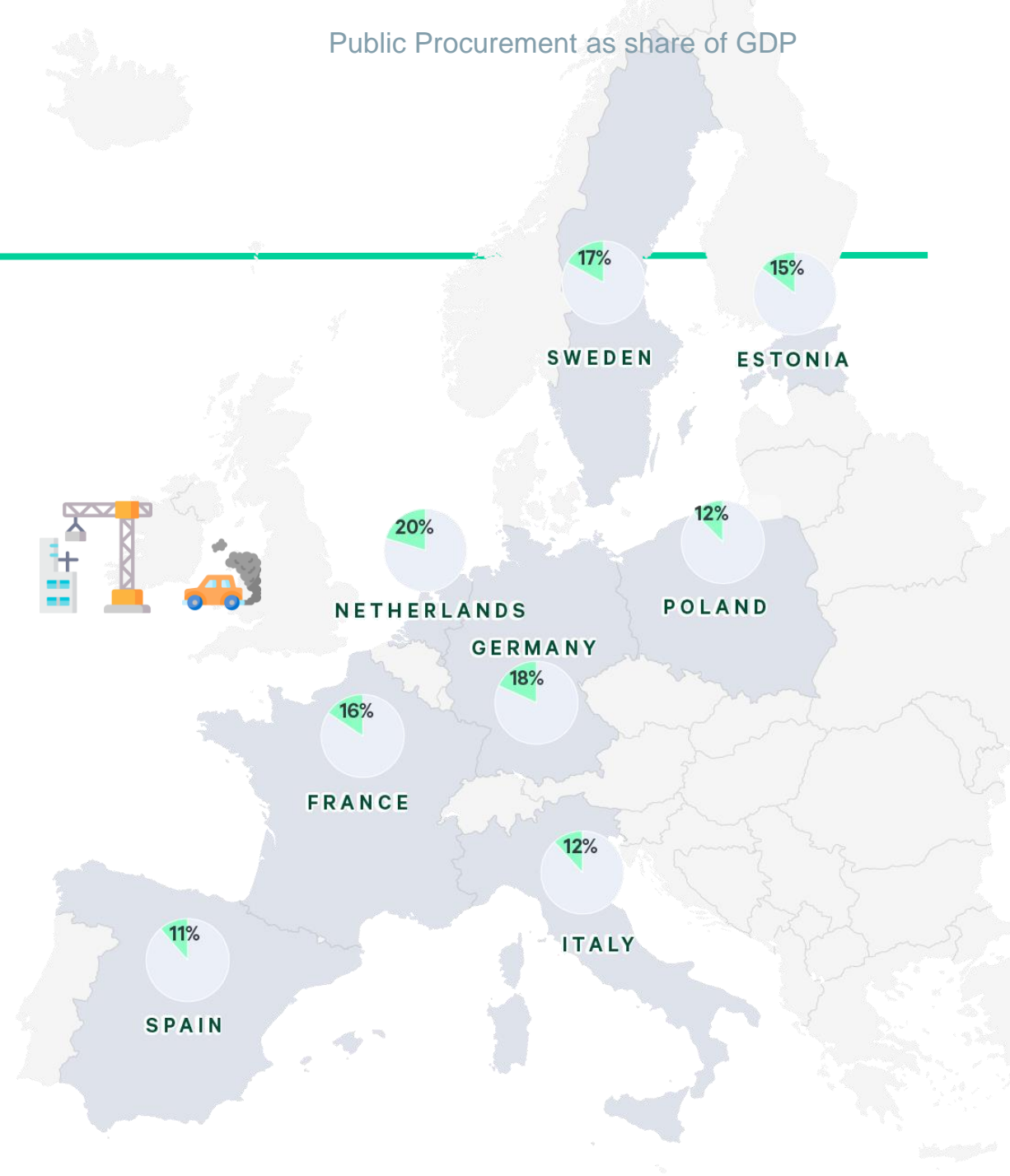
The construction and road transport sectors account for:

- a large share of national GHG emissions
- 24% to 30% of GHG emissions that arise from government spending

Green public procurement can:

- Reduce the environmental footprint of the public sector

- Support faster decarbonization of key industries



Construction

The public sector accounts for 20 to 30% of the construction industry's revenues

Cement and steel account for 7% and 8% of global CO2 emissions

Low-carbon construction procurement is complex, due to:

- High level of embodied carbon in the construction materials

- The operational emissions

- Differences between new constructions vs retrofitting

- Complex value chains involving a lot of actors



Construction

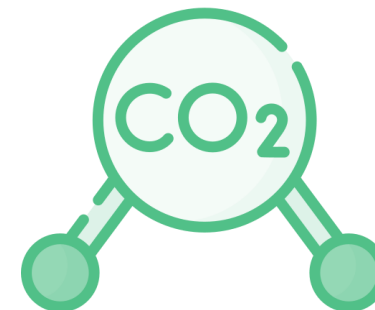
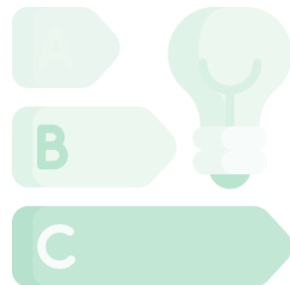
Current EU Directives targeting construction:

Energy Performance of Buildings Directive (EPBD)

The Energy Efficiency Directive

The Construction Product Regulation

- Current focus is on **energy efficiency** during the use phase
- Policies on **whole-life carbon** are missing



Applicable voluntary standards

Construction, repair and construction works	Quality management systems, environmental aspects, occupational health and safety management (ISO 9001, ISO 14001, ONSAS 18001).
Building materials	Quality management systems, environmental aspects, occupational health and safety management, energy management (ISO 9001, ISO 14001, ONSAS 18001, ISO 50001).
Chemical products	Quality management systems, environmental aspects, occupational health and safety management (ISO 9001, ISO 14001, ONSAS 18001).
Slag materials (metallurgical slags and fly ash)	Quality management systems, environmental aspects, occupational health and safety management (ISO 9001, ISO 14001, ONSAS 18001).
Road lighting equipment	Quality management systems, environmental aspects, occupational health and safety management (ISO 9001, ISO

Man-made waste as a resource

Areas:

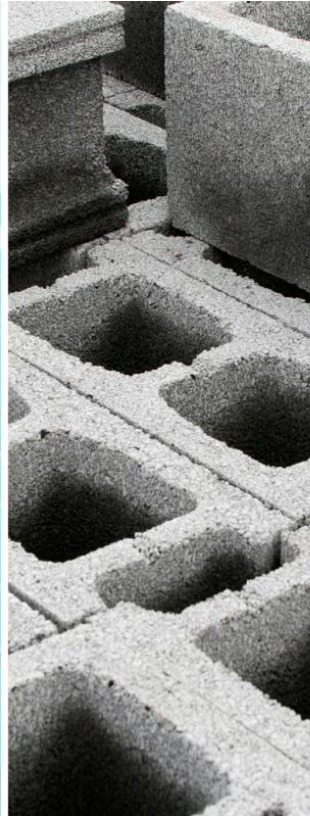
- Additive to concrete
- Mineral wool
- Road construction works
- Filler when building dams
- Drainage
- Shot for blasting



Man-made waste as a resource

Construction materials:

- Cement
- Concrete
- Dry construction mixes
- Gas and foam blocks
- Cinder blocks
- Brick and pavement tile
- Abrasives



Man-made waste as a resource

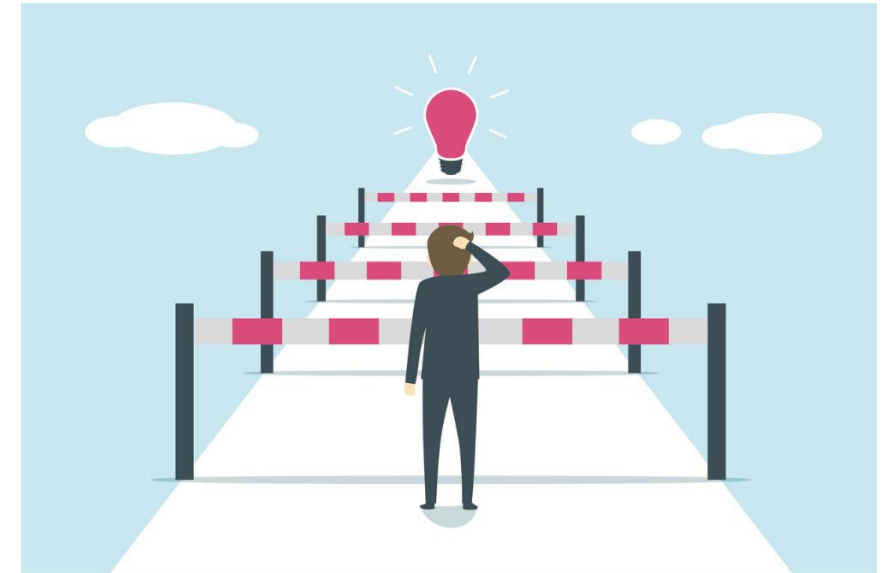
Road construction:

- Covering, base, sides, etc.
- Suitable for the construction of asphalt concrete and cement concrete roads
- Belong to the 1st class of radiation safety
- Meet state standards



Barriers

- Underestimation;
- No effective ecological and economic tools;
- No inter-sectoral interaction in matters of waste disposal;
- Low rate of development of construction;
- Problems with logistics and transportation costs;
- Outdated regulatory and research framework;
- Lack of a state order for objects using slag materials;
- Lack of implemented instruments of state aid.



EU approach

<https://publications.jrc.ec.europa.eu/repository/handle/JRC102168>

Revision of Green Public Procurement Criteria for Road Design, Construction and Maintenance

*Procurement practice
guidance document*

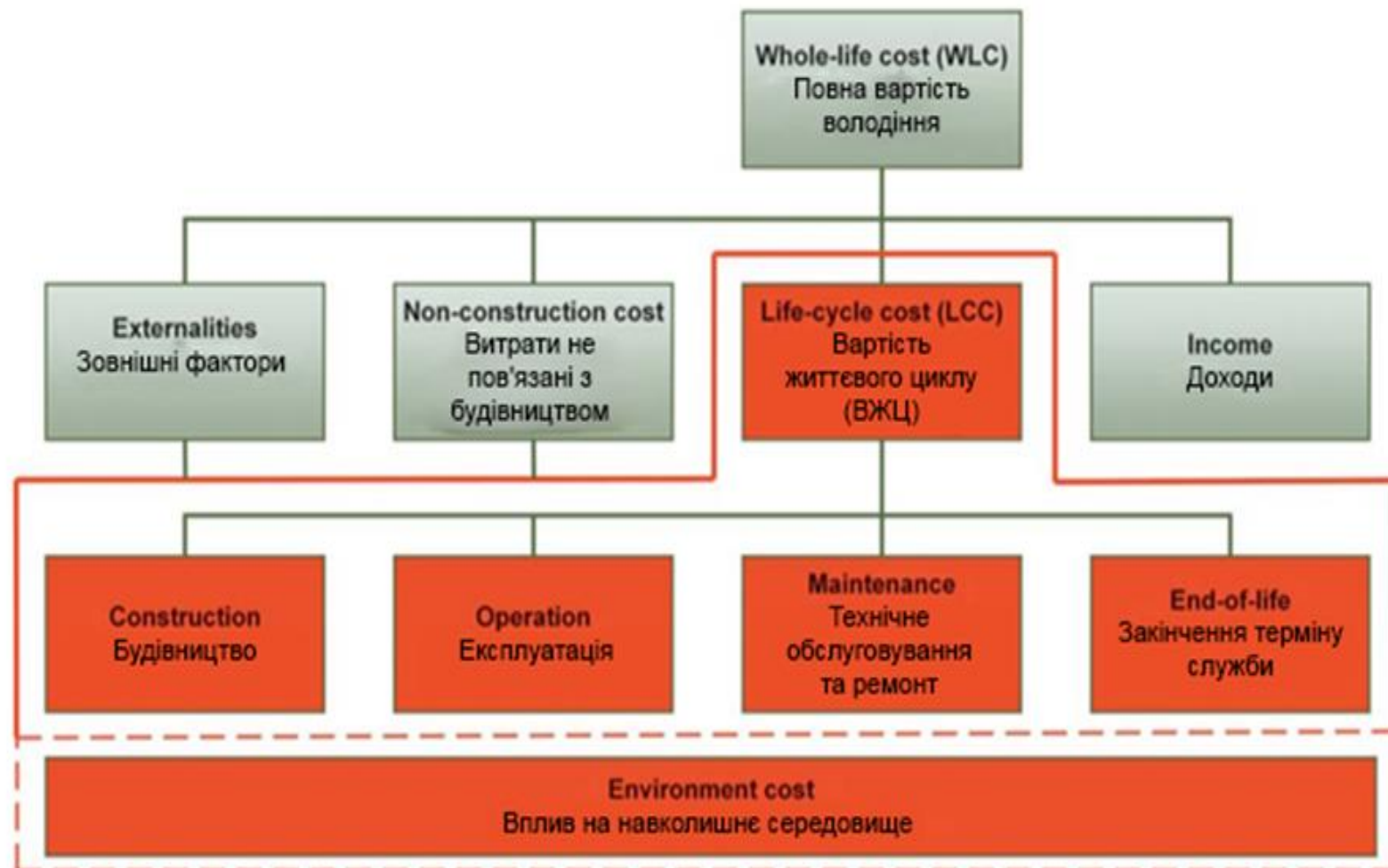
Elena Garbarino, Rocío Rodríguez Quintero,
Shane Donatello, Oliver Wolf (JRC)

June 2016




EU criteria


- Life Cycle Assessment (LCA)
- Carbon footprint (CF)
- Secondary and renewable materials as raw materials
- Reduced emissions from the transport of heavy loads / equipment



Accelerating the EU's uptake of Green Public Procurement. Project overview.

- One year project funded by  Breakthrough Energy
- Our aim was to :
 - Unpack existing *barriers* at Member State level
 - Find opportunities to *increase the implementation* of GPP policies
 - Contribute to achieve greater *coherence* between decarbonization policies and GPP-related policies
- Method: 8 Case studies; **Sweden, the Netherlands, Estonia, Poland, France, Germany, Italy, Spain**

Key Findings

An aerial photograph of a city, likely New York City, showing a dense urban landscape with various buildings, streets, and green spaces. The image is overlaid with a semi-transparent dark blue filter. In the center, the text '| Governance' is displayed in a large, white, sans-serif font. The vertical bar is positioned to the left of the word 'Governance'.

| Governance

Key findings - Governance

- At the **national level**
 - Responsibilities are divided between several ministries
 - In some cases, there is also a dedicated agency
 - In other cases, implementation is tasked to several different authorities
- **Subnational** authorities accounting for over 60% of public spending
 - Regional differences in policies and regulations in decentralized countries result in a fragmented policy landscape in the EU
- At the **EU level**, several DGs and expert groups are working on this topic



An aerial view of a city skyline, likely Stockholm, Sweden. The image shows a dense urban landscape with various buildings, including a prominent church with a tall, dark spire. A bridge spans across a body of water in the foreground. The sky is filled with large, dark, dramatic clouds. The text 'Goals, policies and regulations' is overlaid in white, bold font, with a vertical line to its left.

Goals, policies and regulations

Key findings - Goals, policies and regulations

Plans & targets

- Most Member States have national GPP action plans which include overarching goals
- But, often, previous targets have not been met

Policies & regulations

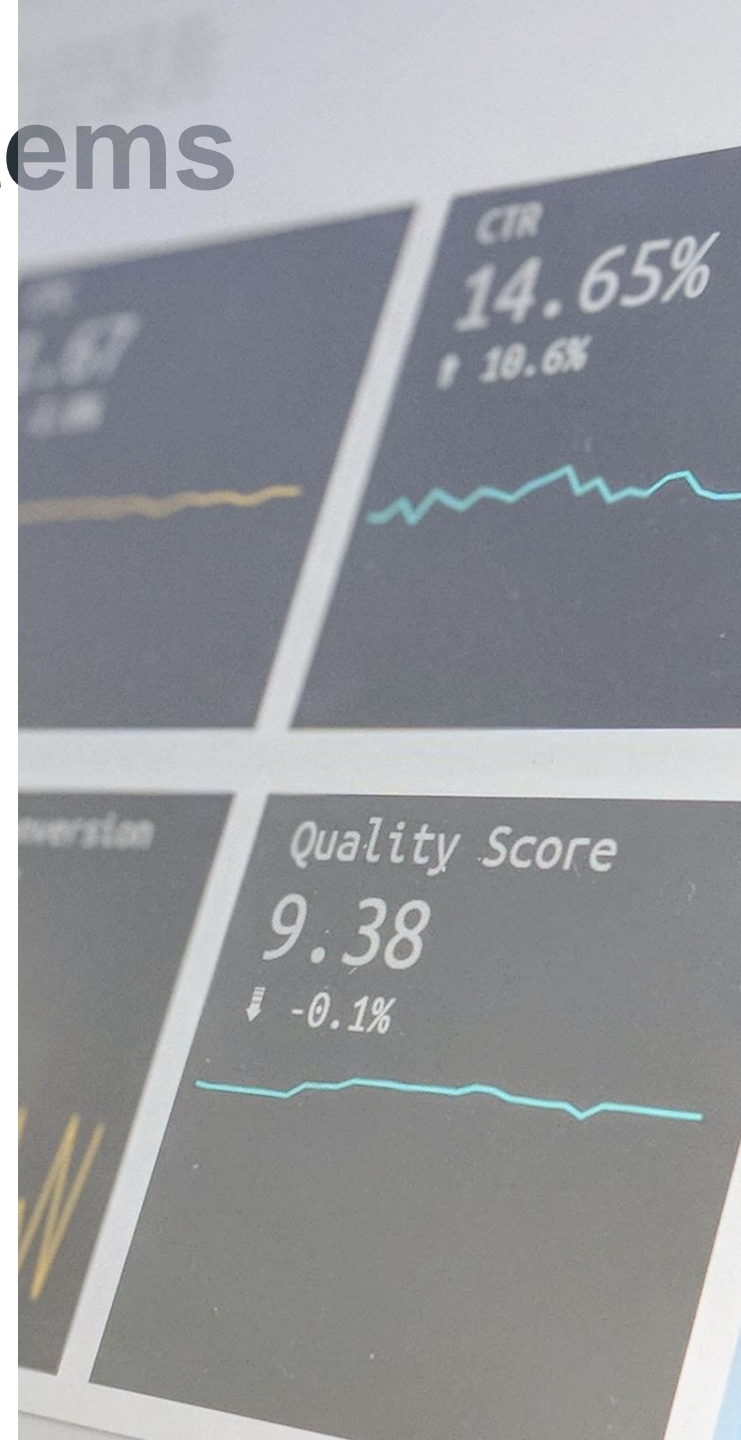
- In most case studies, using GPP is **voluntary** beyond the EU Directives
- For some, GPP is **mandatory** for selected product groups
- Follow-up of whether mandatory rules are applied or whether winning bids follow the set requirements is often missing

An aerial photograph of a city, likely Copenhagen, featuring a river, a bridge, and a prominent tall tower (the Copenhagen Tower). The sky is a mix of blue and orange, suggesting dawn or dusk. The text 'Monitoring systems' is overlaid in white, with a vertical line to its left.

Monitoring systems

Key findings - Monitoring systems

- **Data is lacking** on the practices, impact and mitigation potential of GPP
- In most countries, progress on national plans are regularly followed-up
- There are large differences across countries in terms of systematic monitoring green criteria use
- **Impact monitoring** is still nascent





Implementation and uptake

CONCERT MUSIC

SWEET CALIFORNIA

BARRA DE JUSTICIA

Heineken
GRAND CAFE

Key findings - Implementation

- MS and the EU provide training, capacity building and a helpdesk. Some countries, and the EU, have developed criteria databases and LCC- or LCA-based tools
- A couple of countries and the EU have developed collaboration platforms for procurers and/or public-private sectoral groups
- The most **common barriers** identified are:
 - Lack of *knowledge*, capacity and peer-to-peer learning at the procurer level
 - Lack of *resources*: time, knowledge and capacity
 - Lack of standardized *data and reporting systems*
 - Lack of public-private *dialogue*
 - Lack of mandate and *fear of litigation/disputes*

Key findings - Uptake

- The inclusion of environmental considerations varies greatly between countries (1% to 67% of procurements, 2020) and within countries
- Overall, there is a gap between ambitious targets and plans and their implementation at different governance levels
- Some countries, regions and municipalities show examples of ambitious and innovative procurement practices

Recommendations

Recommendations (summarized)

- We have developed 17 policy recommendations aiming at increasing the uptake of GPP with the scale and consistency needed to make a powerful decarbonization policy tool.
- In summary, they focus on:
 - The need for better **coordination** within and across countries
 - Introducing clearer **incentives**, binding requirements and enforcement mechanisms, covering operational and embedded emissions
 - Establishing harmonized **definitions and metrics** for reporting, measuring progress, and evaluating tenders
 - Increase the **support to procurement officers** through clearer mandates and resources such as time, funding and support mechanisms
 - Enhance **collaboration and knowledge exchange** among procurers and businesses

Conclusion

- Procurement should be turned into a **strategic policy tool** that can accelerate industry decarbonization and achieve significant GHG emissions.
- Procurers need to be given a clear **mandate and capacity** to play a strategic role in implementing a sustainability vision
- The **EU can play a role** in supporting the implementation of impactful GPP practices through standardized reporting methods, tools and sectoral mandatory requirements
- Many innovative examples are being implemented in countries and regions across the EU and could be scaled up



Closing words

Briefs and reports

- **3 briefs** describing and comparing
 - Sweden & the Netherlands
 - Estonia & Poland
 - Germany & France
- **Project report** covering all 8 case studies and research on EU legislation
- **Policy brief** covering the key insights and recommendations – *coming soon*



Find them on our project webpage :

<https://www.sei.org/projects-and-tools/projects/accelerating-gpp-uptake/#publications>

Thank you!

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