

Decarbonizing the EU's road and construction sectors through green public procurement

The case of Sweden and the Netherlands



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Key insights

- Green public procurement (GPP) is regularly practiced in Sweden and the Netherlands, despite the voluntary nature of GPP policies. In the Netherlands, procurers use nationally developed criteria and tools, while those in Sweden use a wider, decentralized variety of criteria.
- Success factors include the development of tools to support GPP efforts, developing purchase centers and buyers' clubs, and dedicated agencies to support and monitor progress.
- Remaining barriers to greater GPP uptake include the need for increased resources, more systematic follow-up on awarded tenders to ensure they follow standards, and increased collaboration among public procurers, as well as suppliers and private procurers.
- Despite increased adoption of GPP in Sweden and the Netherlands, good practices still need great development if they are to help achieve national and EU climate objectives.

Government spending on public works, goods and services in the European Union (EU) accounts for about 14% of the EU's GDP. Consequently, the EU and its Member States can make a great impact in accelerating the development and uptake of low-carbon technologies through green public procurement (GPP).

This brief is part of a wider project financed by Breakthrough Energy, aiming to understand the divergences in GPP uptake in different EU Member States and to identify key barriers to greater adoption and opportunities ahead. Ultimately, the project's goal is to contribute to greater policy coherence among member states to reduce greenhouse gas (GHG) emissions, as well as to increase policy support for the design of GPP implementation frameworks and for harmonized GPP target-setting.

We focus on the construction and road transport sectors because of their high share of GHG emissions. In 2020, the road transport sector accounted for 37% and 17% of Sweden and the Netherlands' total GHG emissions, respectively, while the construction sector represented about 17% and 19% of Sweden and the Netherlands' total GHG emissions, respectively. Furthermore, these sectors represent large shares of public procurement budgets. About 48% of procurements in Sweden are construction-related and 6% transport-related. This highlights the large mitigation potential that procuring authorities can support by including environmental criteria in procurements.

IMAGE (ABOVE): © MASKOT / GETTY

In this brief, we share results from our research and stakeholder interviews for Sweden and the Netherlands. Results from all cases and additional research will be published in a report later in 2022.

The Swedish green public procurement landscape

In Sweden, the government sets its own procurement policy, and in 2017 published a National Public Procurement Strategy with seven goals. Two of the goals (public procurement that drives innovation and promotes alternative solutions, and environmentally responsible public procurement) can directly contribute to an environmental transition, especially in the road and construction sector. The Swedish Procurement Agency (SPA), created in 2015, is tasked with supporting the implementation and follow-up of the strategy.

The [Swedish Public Procurement Act \(2016\)](#) encourages environmental considerations in public procurements, but it is not mandatory. Procuring entities enjoy great latitude in how they formulate their calls to tender, which can include environmental criteria. However, since 1 January 2022, a new law requires builders of all new buildings state their climate impact to a public committee through a [climate declaration](#).

Currently, the only policies that require environmental criteria in procurements follow EU directives,¹ which impose a minimum proportion of environmentally friendly vehicles in public fleets and require procurers to source the best available energy efficiency for products, services or buildings. But publicly procured building materials themselves are not currently addressed. Furthermore, in October 2021, the Swedish government [proposed a law requiring local authorities to consider climate, environmental, human health, animal rights, and social and labor laws in public procurement](#). The law, now under review, is proposed to take effect on 1 July 2023.

To support the procurement strategy's implementation, the SPA has developed several tools. These include: 1) a [criteria service](#), which features a database of criteria for different product categories, and with three ambition levels; 2) a [risk analysis service](#), detailing where in the supply chain different products pose higher social and environmental risks; and 3) a [Life Cycle Costing \(LCC\) tool](#), allowing users to calculate the cost of the product or service over its whole life cycle. This does not directly include environmental considerations, but allows users to grasp the cost of, say, energy use over a product's entire life cycle.

National law mandates that four-year framework agreements – a means of group purchasing among multiple entities – must be established for goods and services that government agencies procure frequently, on a large scale or that are of high value, in order to reduce costs. The pre-study phase of the framework agreement [requires state authorities](#) to investigate the environmental requirements of a purchase. For municipalities and regional authorities, which account for most public purchasing in Sweden, there is a dedicated purchasing center known as Adda, which is responsible for commissioning the four-year framework agreements for local authorities. Municipalities and regions, which issue respectively 68% and 11% of procurements, enjoy fewer environmental restrictions to procurement than the national government, and can choose whether to adopt these framework agreements. Interviews with Adda showed high commitment and expertise in implementing GPP principles. Hence, Swedish procurers from local authorities can choose to develop their own criteria, opt into framework agreements procured by Adda, or use criteria developed by the SPA or the EU Commission.

¹ The EU Directive 2009/33/EC on environmentally friendly road transport and 2012/27/EU, the Energy Efficiency Directive

The SPA follows up on the implementation of the National Public Procurement Strategy, issuing a bi-annual survey to all procuring agencies (government agencies, municipalities, regional authorities and state-owned companies) to measure participation and understand current practices and challenges. The assessment found that in 2020, current procurement practices contributed by a level of 38% to meeting the national environmental goals. This shows there is much more to be done to develop more impactful GPP practices.

The Dutch green public procurement landscape

The Netherlands uses the term Sustainable Public Procurement (SPP), and its landscape is determined by several governmental departments, each taking a different focus, including circular economy, climate and sustainability (Ministry of Infrastructure and Water Management), social return and central government procurement (Ministry of the Interior and Kingdom Relations) and green transitions and social enterprises (Ministry of Economic Affairs and Climate Policy).

The Ministry of Infrastructure and Water Management (known as Rijkswaterstaat) commissions construction projects, as it is responsible for the design, construction and management of national infrastructure in the Netherlands. The Ministry of Economic Affairs and Climate Policy (known as MiEACP) is responsible for policy development, with a focus on opportunities that sustainable procurement creates for innovation and enterprise.

PIANOO, which exists under the MiEACP umbrella, is the Dutch public procurement expertise center, supporting agencies with legal information and training. PIANOO plays the role of the help desk for public authorities. Environmental targets outlined by EU Directives serve as mandatory minimum requirements and are adapted to the national policy landscape.

The amended Dutch Public Procurement Act, enacted in 2016, allows procurements to include environmental and social criteria. The recent amendment to Dutch National Plan on Sustainable Public Procurement, which spans 2021 to 2025, highlights the positive trends that have occurred since 2015, with 67% of public purchases including environmental criteria. Over 170 signatories have endorsed a manifesto to boost the uptake of SPP by requiring sustainability criteria in procurement contracts. At the same time, the assessment of the 2015–2020 plan found cost most often still beats sustainability as the main driver for procurement decisions, and that SPP must be further developed to realize significant GHG emissions savings. Therefore, the 2021–2025 plan aims to build on positive achievements to create more systematic SPP processes, through, for example, sectoral buyers' groups. Additionally, the Netherlands government has adopted a Procurement with Impact strategy (2020) to increase the central government's ambitions to use procurement to achieve significant environmental and social benefits.

The Dutch government also offers resources and tools to help buyers measure their environmental impact. An SPP criteria database allows procurers to quickly collect relevant GPP criteria for products. The Netherlands has developed a tool called the CO₂ Performance Ladder that allows agencies to certify tenders based on their carbon dioxide (CO₂) emissions performance. The Netherlands is currently working on an updated CO₂ Performance Ladder, striving to exceed Paris Agreement ambitions. The software DuboCalc, developed by the Rijkswaterstaat, makes rapid calculations of sustainability and environmental design variants of ground, road and water construction through a life-cycle assessment of energy use and materials. Both the CO₂ Performance Ladder and DuboCalc convert assessment results into price deductions from the initial bid, making more environmentally ambitious projects more cost-effective for the buyer.

In terms of follow-up processes, the supplier must report its compliance with the tender's environmental requirements. In a scenario where the quality does not comply with assumptions, the government imposes financial sanctions on the supplier.

Similarities and differences between the Swedish and Dutch cases

National plans and targets

The Netherlands and Sweden have national plans outlining their procurement strategy. In both cases, these plans detail strategies and ambitions for public procurement, but do not include specific targets. For example, The Dutch National Action Plan 2021–2025 lists actions to boost SPP uptake such as increased funding, coordination of international efforts and better support systems for procurers.

Governance

In both the Netherlands and Sweden, governments are responsible for setting the overall procurement strategy, with several ministries involved. Then, national expertise centers (PIANOo and SPA, respectively) support the implementation and evaluation of the procurement strategies. In both countries, government agencies, local authorities and businesses have the freedom to set their own procurement processes.

Monitoring and follow-up of GPP uptake

In Sweden, the SPA follows up on its national procurement plan through a survey sent out to procuring entities. However, no single platform allows the government to monitor the use of any type of green procurement criteria. In the Netherlands, all procurement documents are collected on one website, [TenderNed](#). The webpage records the use of procurement criteria from the database, allowing agencies to monitor the number of tenders with SPP considerations. The 2021–2025 Dutch National Action Plan also includes an evaluation of the 2015–2020 plan's outcomes.

Mandatory vs. voluntary GPP policies

GPP is fully voluntary in both countries except for mandatory rules following EU Directives. However, in both countries, the national governments set higher criteria for their own procurement than other public buyers, in an effort to lead by example. In interviews, the Swedish stakeholders said they would welcome more national mandatory rules on GPP, which would ensure commitments to GPP despite potential higher costs or changes in political priorities, and would ideally promote greater harmony among the criteria in use. This contrasts with the Netherlands, where despite it being voluntary, the CO₂ Performance Ladder and the SPP criteria database allow most procurers to follow similar criteria.

Use of GPP in practice

Despite the lack of mandatory use, GPP rules are extensively used in the Netherlands, with 67% of public procurements having included at least one environmental criterion, according to the assessment of the 2015–2020 Dutch National Action Plan. However, the same assessment highlights that there are still a lot of missed opportunities to reduce GHG emissions through better GPP practices and pushes for more systematic and integrated SPP policies in organizations and strategic sectoral commitments.

In Sweden, according to the SPA's latest [follow-up study](#), the percentage of total public procurements adopting environmental requirements shrank from 63% in 2018 to 58% in 2020, with municipalities scoring the lowest on different GPP practices measured in the study. In our interviews, we found that the uptake of GPP criteria developed by the SPA is lower than what the SPA hoped for, and the framework agreements procured by

Table 1. Comparison of GPP landscapes in Sweden and the Netherlands

	Sweden	Netherlands
National plan / goal	National Public Procurement Strategy: Includes goals on public procurement that drives innovation and promotes alternative solutions and public procurement that is environmentally responsible	Dutch National Action Plan for sustainable public procurement: Includes goals on preventing climate change, promoting a circular economy and reducing environmental pollution
Governance	Ministry of Finance, The Swedish Procurement Agency (SPA), National Board of Housing, Building and Planning (Boverket)	Ministry of Infrastructure and Water Management, Ministry of Interior and Kingdom Relations, Ministry of Economic Affairs and Climate Policy
National / regional standards	National strategy, targets for state agencies, high flexibility for regional and municipal authorities to set their own standards	National strategy, targets for state agencies, high flexibility for regional and municipal authorities to set their own standards
Monitoring	The SPA monitors practice of the national strategy; lack of single platform to monitor all public procurements	The effectiveness of the Dutch National Action Plan is evaluated as part of the process to update the plan; this evaluation gives an idea of current GPP use in the Netherlands
Mandatory / voluntary	No mandatory requirements except EU directives	No mandatory requirements except EU directives
Use of GPP in practice	According to the SPA, in 2020, 58% of procurements included environmental requirements	In 2020, 85% of procurements included at least one criterium from the database.
Main implementation barriers	<ul style="list-style-type: none"> Lack of time and human resources Too little follow-up of contracts Lack of special competence Call for data reporting standardization 	<ul style="list-style-type: none"> Call for data reporting standardization Lack of dialogue between private and public entities National shortage of professional buyers
Best practices	<ul style="list-style-type: none"> SPA developed criteria with several ambition levels and supporting procurers Follow-up of the national strategy by the SPA, which includes a survey sent out to the procuring agencies Coordinated purchase centers for the State, as well as municipalities and regions 	<ul style="list-style-type: none"> SPP Manifesto and sectoral buyers' coalitions Nationally developed tools (DuboCalc, CO₂ Performance Ladder, SPP criteria database) act as resources to aid procurers in climate-friendly decision-making

Adda account for a small share of the volume of municipal and regional procurements. Hence, we find that Swedish municipalities often choose to develop their own criteria. Interviewees stressed good political will leading to an eagerness to adopt more green criteria, though this leads to a scattered landscape of green criteria in use and depends on prevailing political priorities.

In Sweden, coordinated procurement through purchase centers has existed for about a century. This allows procurers to share their efforts and resources to perform better, and often leads to more economically advantageous procurements. Adda has developed a tool, Hållbarhetskollen, which is a database evaluating suppliers' environmental



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performance based on procurement follow-ups, allowing procurers to benefit from others' previous experience. In the Netherlands, we found that information-sharing about procurement practices among procurers was missing. However, in 2021 the government launched the [Better Procurement program](#), aimed at improving the purchasing process and encouraging cooperation between governments and entrepreneurs in implementing environmental agendas in tenders.

Main implementation barriers

Interviewees in the Netherlands mentioned wishing for more cooperation between procurers in the form of a national platform with uniform standards where entities can compare building designs, analyse success stories and share good practices. Similarly, in both countries, interviewees believe more dialogue between the private and public sector is crucial to align industrial transition efforts and support GPP practices. Moreover, stakeholders in both countries call for more data reporting standardization that includes criteria for circularity of materials and GHG emissions.

In Sweden, the SPA found that 50% of procurers feel like they lack time and human resources to consider environmental impacts, and 41% say they lack the expertise to do so. Indeed, in an average Swedish municipality, only one procurement officer is responsible for the entire city's procurement of goods and services. Interviewees also highlighted the lack of contract follow-up. Interviews with Swedish stakeholders exposed a gap between the GPP ambition level expressed in national plans and the resources and capacities the government allocates to its implementation. For the Netherlands, the assessment of the 2015–2020 action plan highlights a lack of translation of ambitions to concrete implementation. Furthermore, most current good practices are still dependent on enthusiastic individuals, hence, a more structural anchoring of GPP policies is needed.

All Swedish interviewees in our study cited follow-up on tenders as crucial for good implementation of ambitious GPP, but deficient in practice due to lack of resources. Following up allows procurers to test how green criteria work in reality and gives stronger signals to the market, which is also highlighted as a crucial aspect to develop in the Dutch National Action Plan.

Role of the EU

In terms of how interviewed stakeholders view the potential role of the EU in accelerating GPP uptake, most agreed that increased data and reporting standardization would aid national and local efforts. As to introducing mandatory GPP use at the EU level, we found that some Swedish stakeholders support it, while others thought it could lead to rules that do not match the local context (e.g. electric cars in northern Sweden might not be feasible), or lead to mainstreaming criteria with insufficient ambitions. In the Netherlands, we found that stakeholders want increased training from the EU.