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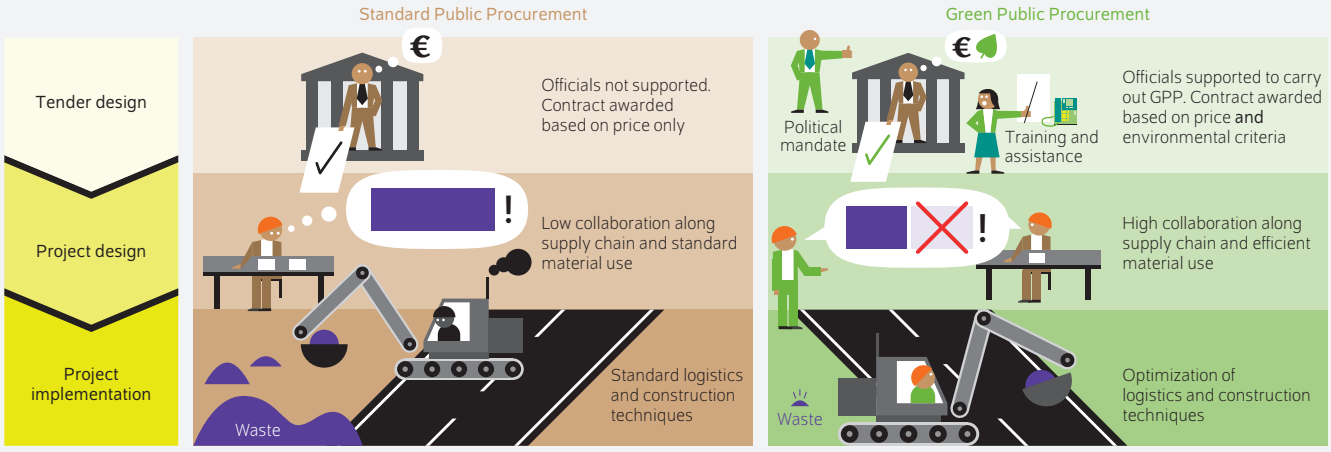
AT A GLANCE

Green Public Procurement: climate provisions in public tenders can help reduce German carbon emissions

By Olga Chiappinelli, Friedemann Gruner, and Gustav Weber

- Government consumption and investment account for at least 12 percent of German greenhouse gas emissions
- Green Public Procurement practices that take into account the emissions embedded in products, services, and construction can reduce greenhouse gas emissions
- Construction, and especially infrastructure, can be a main area for climate change mitigation through Green Public Procurement
- A new survey shows that primarily capacity constraints and limited expertise, especially at the local level, hold back this potential
- Policy measures should aim at increasing local commitment to Green Public Procurement, building up capacities, and assisting procurement officials in implementation

Green Public Procurement can reduce emissions embodied in materials and processes in public purchases
Example of an infrastructure project



Source: Authors' own depiction.

FROM THE AUTHORS

"Given its large CO_2 footprint, public procurement should be aligned with climate objectives to reduce greenhouse gas emissions."

— Olga Chiappinelli —

Green Public Procurement: climate provisions in public tenders can help reduce German carbon emissions

By Olga Chiappinelli, Friedemann Gruner, and Gustav Weber

ABSTRACT

This report estimates that government consumption and investment are responsible for at least 12 percent of German greenhouse gas emissions, mostly arising from the provision of public services and construction. Climate-friendly Green Public Procurement (GPP), which takes into account the carbon footprint of products and services in public tenders, can help reduce these emissions. Construction, and especially infrastructure, can be a main area for climate change mitigation through GPP. Yet the implementation of GPP practices in Germany is still limited and not focused on emission reduction. Based on a survey among procurement officials, this report shows that the main perceived barrier is the technical complexity of GPP combined with a low administrative capacity. Priority policy measures to overcome these barriers include triggering political commitment to GPP at the local level, enhancing specialized procurement capacities, and strengthening the provision of assistance to procurement authorities, for instance through competence centers on sustainable procurement.

The European Green Deal proposed by the new president of the European Commission, Ursula von der Leyen, created political momentum in Europe for a climate-neutral economy by 2050. Therefore, it is a good time to assess the potential of public procurement to help achieve Germany's long-term decarbonization objectives and to provide clarity on policy measures that should be prioritized to align public procurement processes with climate commitments.

Public procurement describes purchasing activities of the government and other public entities that follow the same procurement regulations.[1] In Germany, public procurement accounts for a considerable share of GDP. According to the OECD, government procurement alone accounted for around 15 percent in 2015.[2] Given this considerable impact, governments and other public authorities can exploit their purchasing decisions to pursue strategic policy and welfare objectives, among which climate change mitigation is a priority one.

Green Public Procurement (GPP) describes procurement practices that take into account the environmental quality of offers when awarding public contracts. By using climate-friendly GPP, public purchasers can switch to goods and services with lower life-cycle greenhouse gas emissions than conventional options.[3] On the one hand, this can reduce the carbon footprint of the public sector.[4] On the other hand, GPP can leverage public purchasing power to create demand and lead markets for climate-friendly options, which current

1 These entities comprise public institutions and public utilities, such as publicly financed firms that operate in the energy, water, transport, and post sectors (e.g., Deutsche Bahn). According to EU procurement regulation (set by Directives 2014/23/EU, 2014/24/EU, and 2014/25/EU), other entities that operate in one of these sectors on the basis of special or exclusive rights granted by a competent authority or a Member State, are obliged to follow public procurement regulations as well.

2 Organization for Economic Cooperation and Development, "Public Procurement in Germany. Strategic dimensions for well-being and growth," *Report*, OECD, Paris (August 2019) (available online, accessed on November 24, 2019; this applies to all other online sources in this report unless stated otherwise).

3 Life-cycle emissions of a product account for the overall greenhouse gas emissions from all life stages of the product. These are composed of, first, embodied emissions, that is, emissions associated with materials and processes (e.g., material extraction and manufacturing, manufacturing of product, maintenance, repair, disposal, and transportation in between the stages) and, second, operational emissions, that is, emissions associated with energy used during operation.

4 Carbon footprint is often defined as the total amount of greenhouse gas emissions caused by an individual, event, organization or product, expressed as carbon dioxide equivalents (CO_2e).

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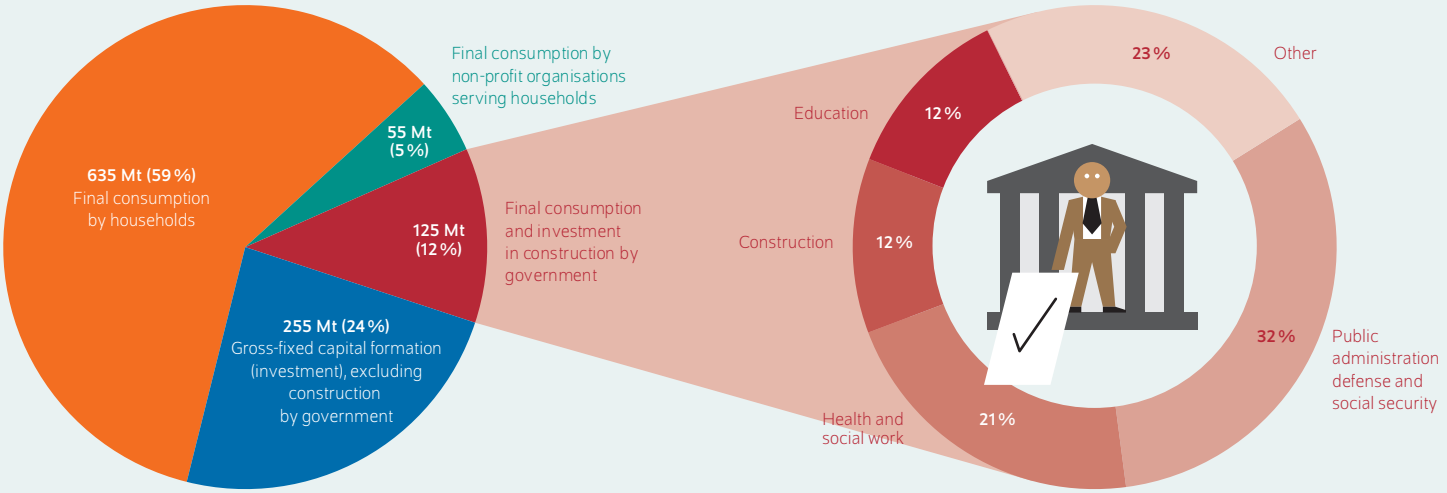
Figure 1

Greenhouse gas footprint of Germany by aggregates of final demand in 2011 and main sources of government emissions
Consumption-based greenhouse gas emissions in megatons CO_2 equivalents (Mt CO_2e)



Note: Emissions from construction calculated using emissions of steel and cement inputs as a proxy.

Sources: Authors' calculations based on EXIOBASE 3.4 and further sources described in Box 1.

Final consumption and gross fixed capital formation (investment) in construction by the government accounted for 12 percent of greenhouse gas emissions in 2011.

climate policies may struggle to create in the short term. In addition, GPP can increase the visibility of low-carbon options, which could trigger a behavioral change effect in the economy.

While the potential of GPP as a strategic decarbonization policy has been acknowledged by key international institutions (EU[5], UN[6], OECD[7]) and in policy proposals for both Germany[8] and Europe,[9] there is no clear understanding how large this potential is. Therefore, the first goal of this report is to progress in this direction and to exploit emission accounting data to estimate the emissions associated with government procurement as a proxy for the overall mitigation potential of GPP.

The implementation of GPP has been limited in Germany and Europe so far. Two main barriers to a broader uptake are commonly reported: the perception that GPP increases the purchasing cost as well as the technical complexity of the procurement process. However, there is little evidence on the relative importance of these barriers. In addition, an assessment of to which extent current GPP practices take emissions reduction into account is missing. Therefore, for the second part of this report we conducted a survey on GPP adoption among purchasing authorities in Germany. Its results provide descriptive evidence on both the status of the implementation of climate-friendly GPP and the main barriers to broader uptake.

Government consumption and investment account for significant greenhouse gas emissions

To assess the emissions that could potentially be reduced by GPP in Germany, we estimate the amount of greenhouse gas emissions that are related to purchasing decisions made by the government. Specifically, the analysis adopts a consumption-based emissions accounting approach. It takes into account all emissions occurring along the supply chain of a good or service, including emissions embodied in trade, and assigns them to final demand. This approach allows us to estimate the emissions embodied in the final consumption of goods and services as well as capital investment in construction by the German government, which represents the largest share of government investment (see Box 1).[10]

5 European Commission, "Buying Green! A Handbook on Green Public Procurement," *Report*, Publications Office of the European Union, Luxembourg (2016), 80 (available online).

6 United Nations Environment Programme, "Global Review of Sustainable Procurement," *Report*, Nairobi (2017), 123 (available online). A target on GPP is included in the United Nations' 2030 Sustainable Development Goals (SDG 12, target 12.7).

7 Organization for Economic Cooperation and Development, "Going Green: Best Practices for Sustainable Procurement," *Report*, Paris (2015), 75 (available online).

8 See Olga Chiappinelli and Vera Zipperer, "Using Public Procurement as a decarbonization policy: a look at Germany," *DIW Economic Bulletin*, no. 49 (2017): 523–532 (available online).

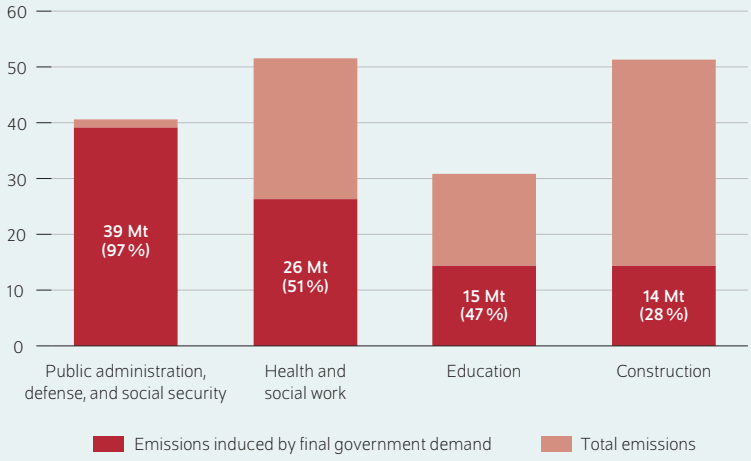
9 See Karsten Neuhoff et al., "Building Blocks for a Climate-Neutral European Industrial Sector," *Policy Brief*, Climate Strategies, London (October 2019), 38 (available online); Tomas Wyns et al., "Industrial Transformation 2050—Towards an Industrial Strategy for a Climate Neutral Europe," *Policy Brief*, Institute for European Studies, Brussels (May 2019), 83 (available online).

10 According to the national accounts, construction represented 56 percent of government gross fixed capital formation in 2011 and 53 percent in 2018. Information based on Statistisches Bundesamt, "Inlandsproduktberechnung – Detaillierte Jahresergebnisse (endgültige Ergebnisse) – Fachserie 18 Reihe 1.4 – 2018, (Table 2.3.12)," destatis, Wiesbaden (2019) (in German, available online).

Figure 2

Total greenhouse gas emissions and emissions induced by final demand of the government for the four most relevant product groups

In megatons CO_2 equivalents. Percentage values in parentheses indicate the share of emissions induced by the government.



Note: Emissions from construction calculated using emissions steel and cement inputs as a proxy.

Sources: Authors' calculations based on EXIOBASE 3.4 and further sources described in Box 1.

The government is responsible for 28 percent (14 megatons) of all construction sector emissions.

For 2011, total emissions induced by final consumption and gross fixed capital formation (investment) in construction of the German government are estimated to amount to around 125 megatons CO_2 equivalents (Mt CO_2e).[11] This is equivalent to about 12 percent of the total greenhouse gas footprint of Germany (1070 Mt CO_2e) (see Figure 1). This estimate constitutes a lower bound of total emissions induced by public procurement. Due to data limitations, the calculation does not take into account emissions related to capital investment in categories other than construction (i.e., machinery) as well as emissions related to consumption and investment by entities outside the government sector that must follow public procurement regulations, e.g., (local) public transport companies and other public utilities.

Our results also indicate the product groups responsible for the largest shares of the government's greenhouse gas emissions (see Figure 1).[12] The four top emission sources are related to the provision of public services—i.e., public administration, defense and social security, health, and education services—as well as to construction. For each of these sectors, Figure 2 indicates the total emissions and the share induced by the government.

The greenhouse gas emissions induced by public services account for direct emissions from fuel consumption on site and for all supply-chain emissions of all intermediate inputs procured to run these activities. For example, in the case of education, these include emissions embodied in a variety of products, like school furniture, stationery, and heating fuel, as well as services, such as cleaning and canteen services, but exclude emissions from investments, for instance the construction of the school building. The latter are already included in the emissions from government construction investments.

Construction emissions account for emissions embodied in materials used in buildings (residential and non-residential) and infrastructure (civil engineering). It is estimated that government construction is responsible for 28 percent of the total emissions embodied in the construction sector and for 12 percent of government emissions. Government investment in infrastructure alone, such as in roads and bridges, is responsible for 62 percent of emissions from government construction and 17 percent of emissions from all construction.

Climate-friendly Green Public Procurement can help reduce the government's carbon footprint

GPP practices that take into account the emissions embedded in products, services, and construction can help reduce the government's carbon footprint. While activities like public administration, health, and education are responsible for important shares of government emissions, these arise from a multitude of intermediate products and services. Therefore, the mitigation potential of GPP in these categories is diffused and might be particularly challenging to realize.

Yet the construction sector could be a "hot spot" for GPP. According to our estimates, a large share of emissions are concentrated in construction, which also accounts for a large share of public spending. Therefore, GPP of government construction has an important potential to reduce both emissions in the construction sector and total government-induced emissions. More than half of this potential is related to investment in infrastructure, which also represent the largest share of government construction.[13]

International experiences teach how to realize the mitigation potential of GPP of infrastructure

International best practices of GPP of infrastructure provide different examples of how to effectively take into account emission reductions when awarding public contracts.[14]

11 The most recent year available in the emissions accounting data we use is 2011 (see Box 1). The reason is that data are based on Multi Regional Input Output (MRIO) tables that take a long time to be compiled. One megaton amounts to one million tons.

12 We identify the product groups according to the Statistical Classification of Products by Activity (CPA) at the second level of aggregation. See Eurostat, "CPA: Statistical Classification of Products by Activity in the European Community," European Union, Luxemburg (2008) (available online).

13 According to national accounts, investment in public infrastructure (civil engineering) accounted for 59 percent of government construction in 2011 and 77 percent in 2018. Information available in Statistisches Bundesamt, "Inlandsproduktberechnung – Detaillierte Jahresergebnisse (endgültige Ergebnisse) – Fachserie 18 Reihe 1.4 – 2018, (Table 2.3.14)," destatis, Wiesbaden (2019) (in German, available online).

14 See, for instance, Anna Kadefors et al., "Procurement requirements for carbon reduction in infrastructure construction projects—an international case study," *Project Report*, KTH Royal Institute of Technology, Stockholm (June 2019), 130 (available online).

Box 1

Assessment of decarbonization potential of Green Public Procurement through consumption-based emissions accounting

The analysis of the greenhouse gas emissions embodied in the purchases of the German government adopts a consumption-based emissions accounting methodology. It is based on a global, environmentally extended, multi-regional input-output model (EE-MRIO), EXIOBASE version 3.4.[1] The latest version refers to the year 2011. Consumption-based accounting takes into account all emissions occurring along the supply chain of a product or service and assigns them to different aggregates of final domestic demand. This comprises consumption from private households, non-profit organizations, and the government—as well as investment (gross fixed capital formation). The assignment of emissions of a given product or service to final demand categories is implemented according to their final expenditure on that product or service. In contrast to production-based emission inventories, consumption-based accounting also takes into account emissions embodied in trade.

As there is no information on the government share in gross fixed capital formation in EXIOBASE, it is not possible to directly assign emissions related to investments to the government. To account for investment-related emissions induced by the government at least partially, we adopt our own approach. In particular, we derive the emissions from construction in 2011 and estimate the share of the government. To calculate emissions from construction, we combine estimates of the emission intensities of the two main inputs to construction, steel and cement, and the demand for these inputs by the construction sector.[2] Second, to assign construction emissions to different types of construction, we use data on shares of steel and cement used in construction of infrastructure (i.e., civil engineering) compared to (residential and non-residential) buildings.

Last, to obtain an estimate of the government's emissions arising from construction, we multiply the estimated emissions in infrastructure and non-residential buildings with the respective share of government demand in these construction categories. Importantly, we use the "demand split" for the industry of main construction works, which includes works for infrastructure and the erection of buildings and excludes interior works. The calculation is, therefore, based on the part of the construction sector whose overall emissions can be best approximated by looking only at emissions from steel and cement inputs.[3]

To estimate the greenhouse gas footprint of government purchasing decisions, government's emissions embodied in construction are added to the emissions embodied in final consumption. It is important to notice that due to data limitations our analysis does not take into account emissions related to government capital investment in machinery and non-tangible assets. In addition, it excludes emissions related to consumption and investment by entities outside the government sector that must follow public procurement regulations such as (local) public transport companies and other public utilities. Therefore our estimate represents a lower bound of total emissions induced by public procurement.

1 Konstantin Stadler et al., "EXIOBASE 3: Developing a time series of detailed environmentally extended multi-regional input-output tables," *Journal of Industrial Ecology* 22 (2018): 502–515 (data are available online). Stefan Pauliuk kindly provided the data and helpful information on the methodology.

2 Data on carbon intensity and demand for cement are from Verein Deutscher Zementwerke e.V., "Environmental Data of the German Cement Industry," VDZ Umweltdaten, Düsseldorf (2012) (in German, available online). Data on carbon intensity from steel are from Ali Hasanbeigi et al., "Comparison of carbon dioxide emissions intensity of steel production in China, Germany, Mexico, and the United States," *Resources, Conservation and Recycling* 113 (2016): 127–139. Data on final demand for steel are from International Trade Administration, "Global Steel Trade Monitor. Steel Imports Report: Germany," ITA, Washington D.C. (2017) (available online). Data on sector split for cement are from Xhi Cao et al., "Elaborating the History of Our Cementing Societies: An in-Use Stock Perspective," Environmental Science and Technology 51 (2017): 11,468–11,475. Data on sector split for steel are from Stefan Pauliuk, Tao Wang, and Daniel B. Müller, "Steel all over the world: Estimating in-use stocks of iron for 200 countries," Resources, Conservation and Recycling 71 (2013): 22–30; and Muiris C. Moynihan and Julian M. Allwood. "The flow of steel into the construction sector," Resources, Conservation and Recycling 68 (2012): 88–95.

3 Calculations are based on Hauptverband der Deutschen Bauindustrie, "Struktur des baugewerblichen Umsatzes im deutschen Bauhauptgewerbe 2018," HDB, Berlin (2019) (in German, available online). There is no further information on government investment in residential buildings. However, the share of the government in residential construction investment is almost negligible. According to the national accounts, the share of residential buildings in total government construction was two percent in 2011 and three percent in 2018. Information available in Statistisches Bundesamt, "Inlandsproduktberechnung – Detaillierte Jahresergebnisse (endgültige Ergebnisse) – Fachserie 18 Reihe 1.4 – 2018, (Table 2.3.12)," destatis, Wiesbaden (2019) (in German, available online).

First, the level of emissions can be included in the award criteria to determine the Most Economic Advantageous Tender (MEAT)—i.e., the best offer based on the price as well as other criteria such as environmental performance. This can improve the economic viability of infrastructure design offers with lower carbon content that possibly come at a higher price. For example, the Dutch Infrastructure Authority, Rijkswaterstaat (RWS), adopts a shadow carbon price to monetize the life-cycle emissions of design offers and provides bid discounts proportional to the reduction of emissions compared to a business-as-usual design. The RWS approach was able to achieve a reduction of up to 50 percent in estimated life-cycle emissions compared to the business-as-usual baseline. These mainly arose from more efficient material use, higher use of recycled materials, and optimization in construction techniques and logistics.[15]

Second, carbon performance can be specified as a functional requirement. This means that all design offers must deliver a given percentage of emission reduction relative to a conventional baseline while being flexible in how it is achieved. For example, the Swedish Transport Administration adopts a GPP approach based on functional carbon requirements that are raised over time to reflect increasing emission reduction

15 For additional details see Chiappinelli and Zipperer, "Using public procurement."

Figure 3

Use of Green Public Procurement practices in 2017 through 2019

Proportion of responding procurement officials that used climate-friendly GPP or some other element of GPP, in percent

Source: Authors' own calculations based on authors' own survey.

Most respondents used GPP practices – and in particular those with a focus on emission reduction – in only a minority of tenders.

targets. The approach triggered emission reductions up to 50 percent, also mostly related to optimization in material use, construction, and logistics, without increasing the purchasing cost.[16]

The emissions reduction potential lies at different stages of the construction supply chain and with different actors. Yet project time constraints often limit flexibility and innovation in design as well as the opportunity for coordination across the supply chain. To overcome this problem, Anglian Water, the largest water and wastewater company in the UK, has established an alliance with key suppliers in the supply chain. It specifies that partners are only remunerated if both the cost and emission reduction targets are achieved. This integrated view on the supply chain allowed detecting and realizing measures with larger mitigation potential, which delivered 50 percent emission reduction with no increased cost.[17]

Learning from such international best practices can help to reduce Germany's emissions from infrastructure investments. Yet while GPP can trigger emission mitigation through more efficient material use and logistics, it will likely need to be complemented by production-based policy instruments to eliminate the emissions related to materials production. For example, as demand from GPP is likely short-term and fragmented across sub-national governments, it may not induce sufficient scale and sufficiently strong business cases for investing in low-carbon production processes in a specific location.[18]

The use of Green Public Procurement is increasing moderately in Germany, but not yet focused on reducing emissions

We conducted a survey among German procurement offices on GPP implementation in the years 2017 through 2019 (see Box 2). The data show that among all tenders awarded, 24 percent contained some elements of GPP. This figure is substantially higher than in a previous analysis that found a share of less than three percent for the period 2009 through 2015,[19] indicating a further diffusion of GPP in Germany. This is likely due to Germany's 2016 procurement reform that, following a new EU regulation, streamlined the consideration of quality dimensions alongside the price—including environmental quality.[20]

However, the number indicates that the uptake is still only moderate. While 80 percent of respondents reported to have used GPP at least once in the reference period, a much smaller share used GPP to a substantial extent. Thirty-five percent of respondents adopted GPP in only one to ten percent of all tenders awarded, 19 percent of respondents adopted GPP in 11 to 30 percent of tenders, 11 percent of respondents used GPP in 30 to 50 percent, and around 15 percent of respondents used GPP in more than half of all tenders (see Figure 3).

In addition, among those respondents who used GPP, less than half (45 percent) included a provision explicitly aimed at reducing embodied emissions in their procurement

16 Anna Kadefors et al., "Procurement requirements."

17 Anna Kadefors et al., "Procurement requirements."

18 Karsten Neuhoff et al., "Building blocks."

19 See Chiappinelli and Zipperer, "Using Public Procurement." However, this estimate likely represented a lower bound, while the one in the present analysis an upper bound (see Box 2). Thus, the increase in the share should be interpreted in conservative terms.

20 OECD, "Public Procurement in Germany."

decisions. The environmental dimension that was most often taken into account in GPP tenders was energy efficiency,[21] while other dimensions—like recycling, waste reduction, and renewable energy use– were considered to a lesser extent. Life cycle costing and analysis (LCC/LCA)—a method that allows the purchasing authority to take into account the full climate impact of an item as measured by emissions over its entire lifetime—was used in less than 30 percent of the cases that included GPP provisions. Therefore, despite an increasing trend in the use of GPP, its decarbonization potential could be exploited to a higher extent.

Main barriers to implementation are technical complexity and a lack of specialized expertise

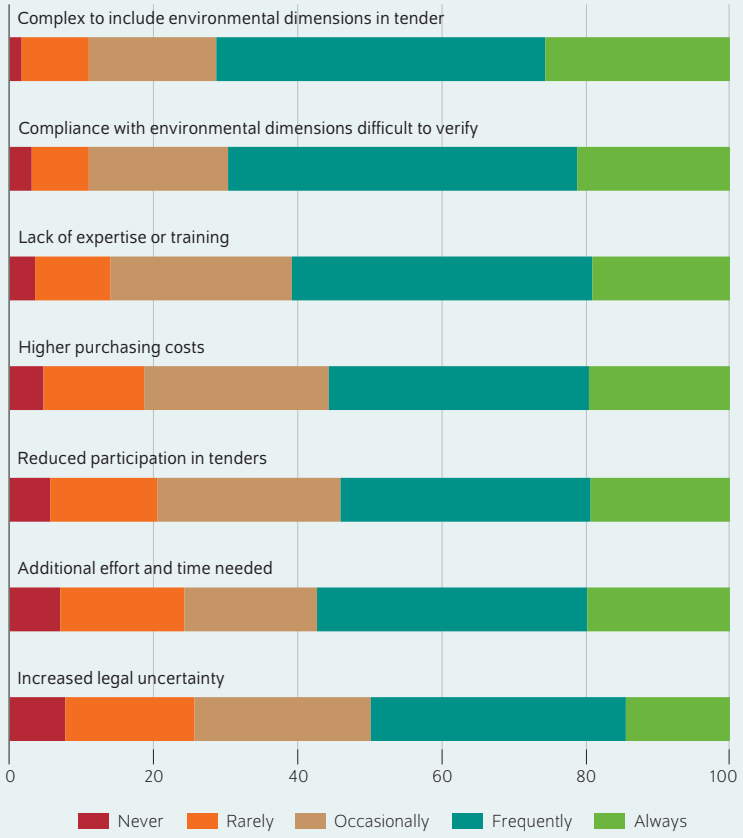
Our survey results provide an indication of the relative importance of the perceived barriers to GPP adoption in Germany (see Figure 4). The most important barrier is associated with the technical complexity of GPP implementation both at the tender stage, when including the environmental requirements or criteria in the tender documents, and after the tender, when assessing the compliance of the winning offer with such requirements. For example, assessing the carbon footprint of different offers requires that carbon footprint software and databases are available as well as specialized expertise on how to use them.

This goes hand in hand with the lack of technical expertise on GPP implementation—most respondents (76 percent) did not receive any GPP training.[22] This is in line with the tradition that procurement officials, as the rest of the country's civil service, receive a generalist training, with no or little specialized training on procurement and in particular on GPP.[23] The lack of specialized training may also explain the generally limited awareness of existing GPP policies and initiatives, although a range of them are currently in place at the sub-national, national, and EU levels. Half of the respondents are also not aware of the existence of GPP guidelines or handbooks.

Particularly at the municipal level, which represents almost 60 percent of governmental purchasing authorities,[24] procurement teams can be very small. More than half of all procurement offices in the sample of respondents have fewer than or exactly three employees. This can translate into tighter time and resource constraints that hinder the acquirement of additional technical expertise or the implementation of more complex procurement procedures.[25]

Figure 4

Main barriers limiting the adoption of Green Public Procurement
In percent



Note: Answers to the question "What do you see as the main reasons why you do not include/include to a larger extent environmental aspects in tenders?"

Source: Authors' own calculations based on authors' own survey.

Main barriers to adopting GPP practices comprise the complexity of including the environmental dimensions in the tender and verifying compliance with them.

21 This can be explained by the presence of an administrative directive of the Federal Ministry for Economics Affairs and Energy, which requires the consideration of highest energy efficiency standards in procurement. See Chiappinelli and Zipperer, "Using Public Procurement."

22 For example, the reason most frequently reported for limited implementation of LCC is the lack of familiarity with the approach.

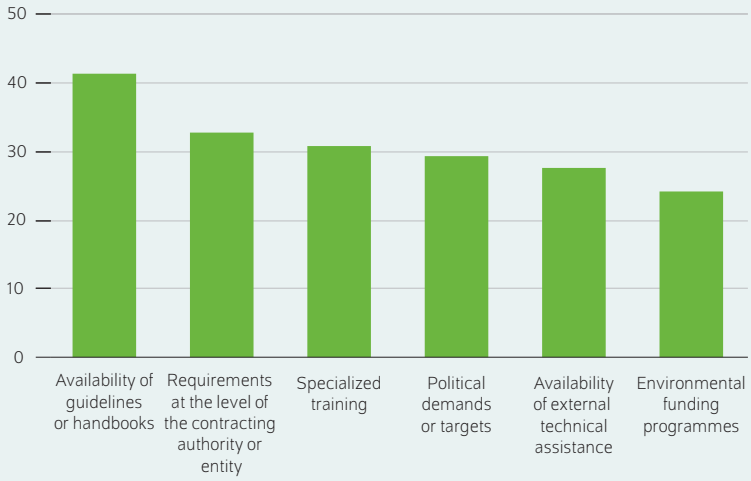
23 See OECD, "Public Procurement in Germany,"

24 Procurement is mostly decentralized in Germany. Thirty-two percent of respondents in our sample work for the municipal government, 16 percent for the state government and six percent for the federal government. The rest of the respondents work for other purchasing entities (e.g., public utilities). These figures are in line with the shares in OECD, "Public Procurement in Germany."

25 In fact, respondents working in a municipality mentioned more frequently than the rest of the sample that additional time and effort can be an important barrier to GPP implementation.

Figure 5

Main drivers for adopting Green Public Procurement
In percent



Note: Answers to the question: "What has helped you in the past to integrate environmental aspects into tenders?" (Multiple selections possible).

Source: Authors' own calculations based on authors' own survey.

The availability of guidelines and official requirements at the level of contracting authority or entity were the most important drivers of adopting GPP practices in the past.

Box 2

Survey on Green Public Procurement implementation

We conducted a survey on the adoption of Green Public Procurement among procurement offices in Germany in summer 2019. The survey was sent by email to 12 000 procurement officials that were recorded as tender responsible for a German contracting authority or entity in Tenders Electronic Daily, the procurement dataset of the European Union.[1] The analysis in this report is based on the answers of 717 respondents.

Procurement officials were asked questions on the extent and type of GPP implementation and on perceived barriers to and drivers of adoption. The survey also contained questions on characteristics of the contracting authority or entity (e.g., on institutional category, size of procurement team etc.) and of the procurement officials (e.g., on training on and awareness of GPP).

As the analysis is based on a survey, the following caveat should be taken into account. Authorities or entities that are more willing and capable to implement (climate-friendly) GPP might be overrepresented in the sample. The results should be therefore interpreted as an upper bound of the actual degree of GPP implementation and a lower bound of the actual barriers.

1 For more information on Tenders Electronic Daily, see TED (available online).

The survey also suggests that the risk of higher purchasing cost through GPP, while mentioned among the barriers, is somewhat less important relative to administrative capacity constraints (see Figure 4).[26] The same holds for the perception of reduced competition in the tenders as well as reduced legal certainty of the process (e.g., in terms of risk of infringing procurement and competition law).

The most important driver of adopting GPP practices in the past, other than the availability of handbooks and guidelines and acquiring of specialist training, was the commitment to climate objectives reflected in GPP requirements at the level of the contracting authority or entity (see Figure 5).

Conclusion: local commitment to Green Public Procurement can help Germany achieve climate targets

Given the large impact of their purchases, governments and other public procurers have both the responsibility and the opportunity to reduce emissions in line with 2050 climate targets. However, despite an increasing trend, GPP is still underused in Germany and does not focus on emission reduction. The following recommendations for priority policy measures to support climate-friendly GPP emerge from the analysis.

First, political commitment to GPP should be built, especially at the municipal level where a large share of procurement takes place. Climate-friendly GPP can catalyze climate action by giving authorities a tool to meet climate protection demands. Given the decentralized nature of procurement regulation and implementation in Germany, initiatives should be taken to support coordination between government levels and departments as well as cooperation among contracting authorities.

Second, given that tight capacity constraints exist in procurement offices, officials need to be supported for GPP implementation. This requires that officials receive specialized training on GPP and, more specifically, on practices focused on emissions reduction. As long as this expertise is not sufficiently built up, effective technical assistance service on GPP implementation needs to be provided. A possibility to address both needs is to expand the scope of sustainable procurement competence centers. Currently, only one Competence Centre for Sustainable Procurement (KNB – Kompetenzstelle für nachhaltige Beschaffung beim Beschaffungsamt des Bundesministeriums des Innern) exists on the federal level, operating under major human and financial resource constraints, which impede the ability to effectively meet the high demand of training and assistance.

In addition, the development and standardization of processes for monitoring, ex-post verification, and reporting of environmental performance could facilitate implementing

26 This holds true also in the perception of those respondents that never implemented GPP and for those that implemented GPP with a focus on emission reductions.

effective climate-friendly GPP. As a specific means, a greater role for life-cycle costing can help to reduce greenhouse gas emissions induced by public procurement as well.

Third, dedicated funding might be required to facilitate the diffusion of GPP and catalyze the implementation of effective climate-friendly procurement practices. A possibility to provide resources at the EU level is to extend the Innovation Fund, the new EU funding program for innovative low-carbon technologies, so that cities could compete to obtain a payment per ton of CO_2 saved in Green Public Procurement projects or for capacity building. The development of measures that support cooperation among contracting authorities and platforms to share and promote best practices might also help accelerate the uptake of climate-friendly Green Public Procurement.

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