



Nordic Council  
of Ministers

# Zero emission delivery of goods

Collaboration and joint procurement between  
the Nordic countries – experience from the project  
Nordic market dialogue on zero emission  
delivery of goods

Feel inspired to collaborate with Nordic neighbours  
to achieve sustainable public procurement?

Please contact us

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**Innovative  
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Nasjonalt program for  
leverandørutvikling



Miljø- og Fødevareministeriet  
Miljøstyrelsen



## About the project

**Joint statement:**  
**“We can boost green solutions and trigger developments of green jobs in the nordic countries. Together we can accelerate the transition towards zero emission logistics”**

In 2018, the Nordic Council of Ministers published a report urging more Nordic co-operation on the environment and climate<sup>1</sup>. The report proposes 12 recommendations for Nordic cooperation, one of which recommends more active sharing of knowledge and experience with green public procurement.

In 2019, the Nordic Council of Ministers awarded the Norwegian Agency for Public and Financial Management (DFØ) and the National Programme for Supplier Development (LUP) a project with the aim of developing cooperation between large Nordic cities in the form of a public buyers' network. The network was to conduct market dialogues on a selected area and promote environmental solutions. The market has more incentive to develop completely new solutions when there is more than one client who is the current buyer. Gathering public contracting authorities with the same need and then challenge the market together is an effective way of creating a larger market for newly developed solutions.

We invited the Danish Environmental Protection Agency (EPA), the National Agency for Public Procurement (Sweden) and Motiva (Finland) to help with the mobilization of cities in their countries. By the end of 2019, 11 cities and the Norwegian central purchasing body had joined the project. SKI, the Danish central purchasing body joined in 2020.

From 2019 until the autumn of 2021, various initiatives were launched which you can read about in this report. You can also visit the project's website and find more information<sup>2</sup>.

<sup>1</sup>[The Nordic countries in the green transition – more than just neighbours | Nordic Co-operation \(norden.org\)](#)

<sup>2</sup>[Zero emission delivery of goods – Innovative anskaffelser](#)

A statement from one of the participants in the Nordic market dialogue in April 2021 illustrates the mindset of both the suppliers and the municipalities that participated in the programme.

Our goal is to work towards zero emission delivery of goods, to develop Nordic companies, achieve greener and more innovative solutions, and to make sure that the public sector cooperates more.

# Timeline

- **May 2019:**  
Project initiative
- **June 2019:**  
Communication and webpage for the project
- **October 2019:**  
Cities join the process
- **December 2019:**  
Mapping the needs
- **April 2020:**  
Digital information meeting for the market
- **May 2020:**  
Request for information (RFI)
- **November 2020:**  
Joint statement
- **December 2020:**  
Aligning criterias in procurements based on experience
- **April 2021:**  
Nordic market dialogue
- **September 2021:**  
Sharing knowledge from the project and inspire other public procurers to join forces in upcoming procurements

# FAQ about Nordic market dialogue

**What is Nordic market dialogue?** The Nordic Region constitutes the 11th largest economy in the world with considerable purchasing power. Nordic market dialogue activities include: public buyers join forces and map needs in upcoming procurement, engage the market and innovative companies to come up with better solutions for public buyers in the Nordic countries.

**What can suppliers achieve?** Suppliers taking part in the dialogue can influence the solutions that will be chosen, and by that acquire knowledge about needs and demands in upcoming procurement, positioning in upcoming procurements and overall reduced risks.

**What is required of those who want to engage in a Nordic market dialogue?** There must be a certain willingness to allocate enough resources and commitment from the management, both from the public buyers and the suppliers. The outcome of the project is often proportional to the effort each participant puts into it, and most of the participants in this project had a positive outcome.

## Clarity, volume and predictability reduce risks associated with green initiatives

The Nordic market engagement will bring clarity about contracting authorities' needs and ambitions, as well as the market's ability to deliver on those needs.



By gathering public contracting authorities with the same needs, we create a larger market and higher volume for new and innovative solutions.



Getting together and discussing potential solutions and alliances increase predictability for all parties, which might spark initiative and add speed.



Combined, this helps reduce risk related to innovation and enables the parties to take lead in the green transition

# **Part 1: Methods for innovative procurement**

# The innovative procurement process

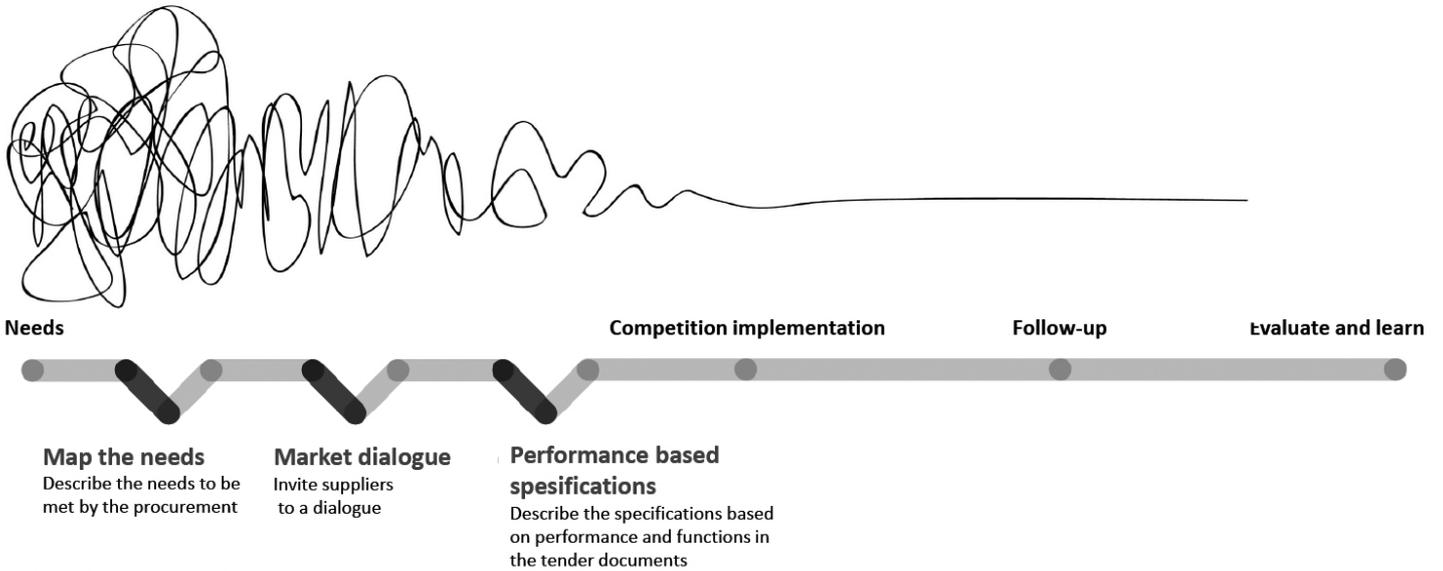


Figure 1 – The innovative procurement process

## // THOROUGH NEEDS ASSESSMENT AND ACTIVE INVOLVEMENT OF USERS ARE KEY ACTIVITIES TO ACHIEVE NEW THINKING AND INNOVATION

### Methods for innovative procurement

Innovative procurement is a method where procurements requesting pre-defined solutions from the market are discouraged. Instead, needs and functions are communicated to the market, which in turn responds on how to best solve this.

Through innovative procurements, mapping and defining needs are emphasized. The market is then invited to engage in dialogue and challenged to come up with smart solutions.

The picture shows how the process of mapping needs and conducting market dialogues can be complex and take many unexpected turns.

### Mapping and identifying common needs

Thorough needs assessment and active involvement of users are key activities to achieve new thinking and innovation. When public buyers want to cooperate, it is important to spend time and map the possibilities, challenges, and common procurement needs. In the project we involved a service designer to help us with this process.

Before entering into a dialogue with the suppliers, you should make a needs description or a dialogue note. This makes it easier to communicate with the suppliers and easier for the suppliers to provide their input.



Photo by Luke White on Unsplash

## Market dialogue

Dialogue with the market suppliers is encouraged to:

- Get an overview and information about solutions from the suppliers
- Create a common understanding of what your needs are
- Get more attention, more providers, and more competition
- Get input from suppliers, experts, and research environments on a topic, such as how to achieve zero emission delivery of goods

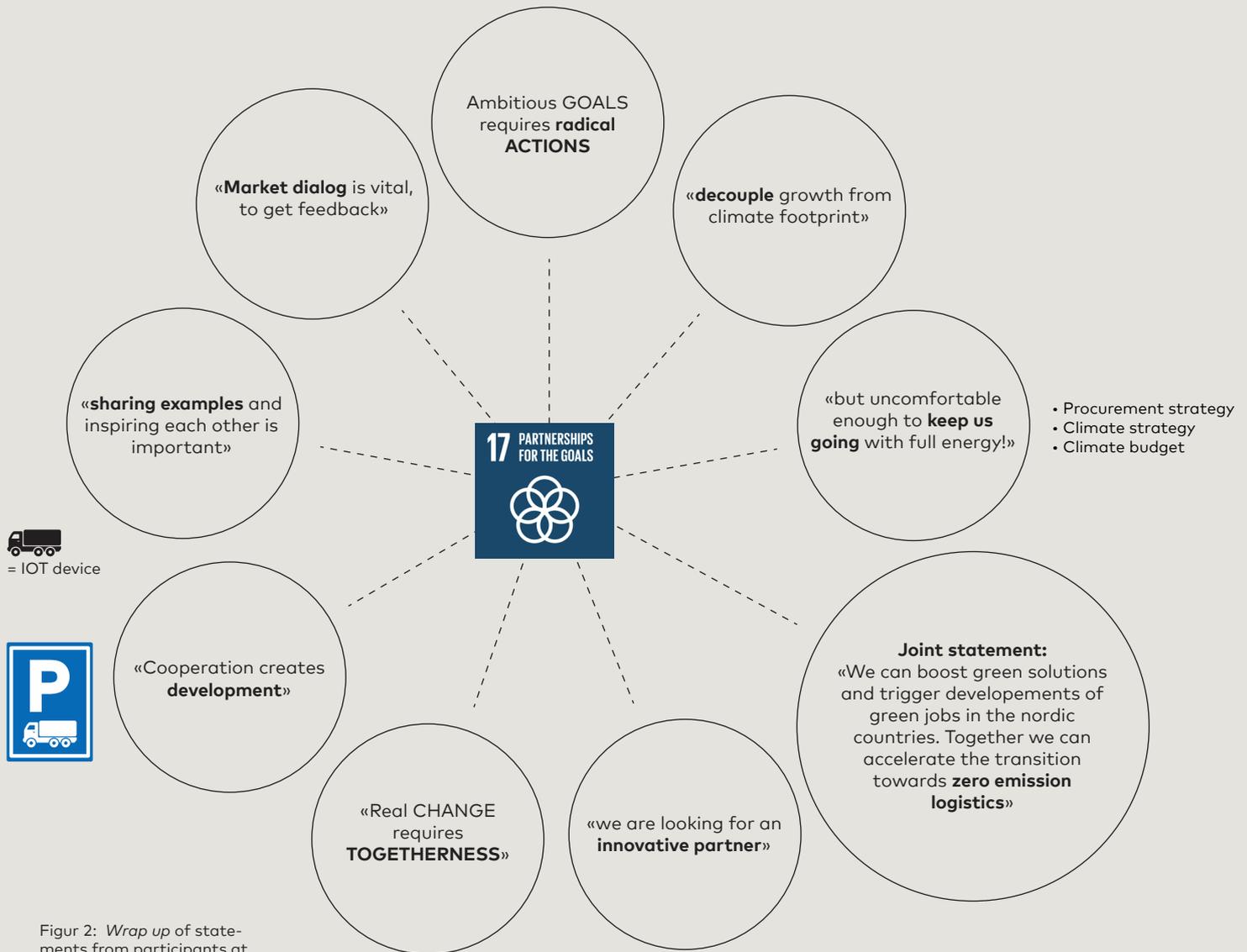
It is important that invitations to join the market dialogue are distributed widely so that you have broad representation from the supplier side. Use your own network, websites, industry, and social media. There is also an announcement form in the tender database that can be used<sup>3</sup>. Get in direct contact with the people or suppliers you want to participate.

Stream, film or write minutes from the dialogue meetings. Include the presentations from the meeting and post them on the company's website and/or upload them on the tender database. This is how you ensure that the same information is available to those who could not participate. The minutes should also be attached in a later invitation to tender<sup>4</sup>.

Further, we will share our experience in a dialogue conference, 1:1 meetings and request for information (RFI).

<sup>3</sup> Doffin is the Norwegian tender database and [Tender Electronic Daily \(TED\)](#) is the European tender database.

<sup>4</sup> Read more about the "what, who and when" in [LUPs handbook for conducting a market dialogue](#)



Figur 2: Wrap up of statements from participants at market dialogue. April 2021

## Dialogue conference

A dialogue conference gives suppliers the opportunity to present their solutions and discuss them with public buyers. It can take many forms, but it often starts with an introduction from the public buyers, followed by suppliers presenting their solutions and ending with 1:1 meetings.

In the dialogue conference held in relation to this project, 68 people representing companies (supply side), and 23 people from the public sector participated<sup>5</sup>. Nineteen suppliers presented their solutions and it resulted in almost 100 unique 1:1 meetings.

## 1:1 Meetings

1:1 meetings are suitable for obtaining in-depth information from suppliers and experts. Suppliers are often more open to present their solutions and share knowledge when competitors are not present. Public buyers have to either give every supplier the opportunity to book a meeting or be open about criteria for getting one. A meeting time should be booked for each supplier and an equal time frame is recommended for all meetings. Try to get all the one-to-one meetings in 1-3 days so that they do not extend over a longer period (equal treatment). This is also more systematic and efficient. It is also important to make plans for a systematic review of the information you have received from the meetings.

<sup>5</sup> <https://zero.no/arrangement/nordic-market-dialogue-on-zero-emission-delivery-of-goods/>



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**In november 2020 11 Nordic cities and 2 central government procurement bodies have published A joint statement that calls for zero emission delivery of goods**

**ÖREBRO**

**Upphandlingsdokument**  
2020-03-16

**Upphandlande organisation**  
Örebro kommun  
Helena Sköld Lövgren

**Upphandling**  
RFI, Nordisk Marknadsdialog för utsläppsfria leveranser av varor och tjänster 20/44  
Sista anbudsdag: 2020-06-04 23:59

**Symbolförklaring**

- Texten ingår i annonsen
- Texten kommer att ingå i avtalet
- Textenfrågan innehåller krav som måste uppfyllas
- Frågan är värdad och ingår i utvärderingen
- Frågan besvaras av upphandlaren
- Texten ingår i kvalificeringen
- Texten kommer att publiceras i avtalskatalogen
- ESPD: Textenfrågan innehåller ESPD-krav
- Frågan ställs endast upplysningsvis
- Frågan är markerad för särskild uppföljning

**1. RFI Nordisk Marknadsdialog**

**1.1 Inbjudan RFI för Nordisk Marknadsdialog**

Örebro kommun deltar i projektet Nordisk beställardialog för utsläppsfria leveranser av varor och tjänster. Syftet med projektet är att ta fram gemensamma kravställningar för att driva branscher och snabba på tempot med att förbättra klimatpåverkan.

Med denna RFI vill vi gärna höra marknadens insikter.

Vi önskar att ställa frågorna väldigt öppna samt att leverantörer som svarar på RFI:n tänker utanför boxen och inte föreslår lösningar som redan finns på marknaden, alternativt lösningar som är under utveckling eller väldigt nya på marknaden.

**1.2 Ansvarig myndighet**

Ansvarig myndighet för denna RFI är Örebro kommun, organisationsnummer 212000-1967.

**1.3 Inledning**

För att skapa förutsättningar för en så lyckad framtida upphandling som möjligt, samt för att säkerställa en fortsatt hög digitaliseringsakt, vill Örebro kommun bilda sig en uppfattning om marknaden och dess leverantörer med syfte att tillvarata branschens erfarenheter och kunskaper. Vi genomför därför en RFI, där leverantör ges möjlighet att i ett tidigt skede lämna information, synpunkter och svar på frågeställningar på ett mer informellt sätt.

Vi önskar även möjlighet att genomföra fördjupad dialog i ett nästa skede om så behövs. Hösten 2020 kommer projektet bjuda in till Nordisk marknadsdialog för att offentligta myndigheter samt leverantörer

Figure 3 – Request for information (RFI) published by Örebro

**Oslo** **TRONDHEIM KOMMUNE** **Aalborg Kommune** **Stockholms stad**

**Kristiansand kommune** **BERGEN KOMMUNE** **ÖREBRO** **Göteborgs Stad**

**Ministeriet for forvaltning og økonomistyring / Norges Handelsvesen** **SKI** **TURKU ABO** **Kaarina**

**Joint statement - call for zero emission delivery of goods**

**Background:**  
Emissions from goods delivered to the public sector represent almost 5% of the total emissions in the Nordics. Public sector purchases an enormous range of physical goods. The delivery of these goods creates a considerable amount of freight traffic in urban areas. Copenhagen estimates that product deliveries lead to nearly 4.5 million vehicle kilometers travelled within the city limits per year. Public sector goods ordering, and delivery patterns vary considerably by different municipal departments or units/locations, with contracted suppliers delivering directly to the site!

**Commitment:**  
We, the undersigned contracting authorities are committed to reducing emissions from the freight sector through our contractual demands and our actual procurements of goods.  
By stimulating the accelerated production and use of zero emission freight vehicles and other innovative and environmental friendly solutions such as: collecting terminals, city hubs, electric bicycles, drones, ordering procedures, we can boost green solutions and trigger the development of green jobs in the Nordic countries. Together we can accelerate the transition towards zero emission logistics.

**Measures:**

- Joint statement as a signal to the market on our ambitions and demands through procurement.
- Map joint needs and challenges.
- Involve the market through dialogue to discuss viable solutions and challenges.
- Testing and procuring practical and innovative solutions that contributes to zero emission delivery of goods.

Webpage: [www.innovativeanskaffelser.no/zeroemissiondelivery/](http://www.innovativeanskaffelser.no/zeroemissiondelivery/)

**Supporters and partners:**

**Ministeriet for forvaltning og økonomistyring** **Nordic Council of Ministers** **Upphandlingsmyndigheten** **Innovative anskaffelser**  
Nasjonal program for leverandørutvikling

**Miljø- og Fødevareministeriet Miljøprosser** **NHO** **dfo**

Figure 4 – Joint Statement

## Request for information (RFI)

Before the tender is issued you can request information from suppliers. This is usually done by handing out questions to the supplier market and giving them the chance to respond in writing. This is to:

- Obtain information from suppliers that is not publicly available.
- Utilize the expertise in the supplier market.

In this project, we invited suppliers to an information meeting straight after we issued the RFI. The purpose was to provide more information about the project. It was also an opportunity for the suppliers to ask questions. The response to this RFI was a total of 15 answers from all the Nordic countries. The RFI was published on all the national tender databases and TED.

## Joint statement – call for zero emission delivery of goods

A joint statement is a written agreement that shows consensus and commitment to a common goal from a group of public buyers. A joint statement sends an important signal to the market on the demands and ambitions in the upcoming procurements. This gives suppliers the opportunity to adjust their inventory and business model. It can also give the suppliers the security they need to invest in new technology.

In November 2020, the project participants issued a joint statement that calls for zero emission delivery of goods.

### Set equal or similar requirements and criteria

In the project, we sought to find common requirements and criteria. We found this somewhat challenging, as conditions are different in the Nordic countries in terms of legislation, policies, definitions of terms like zero emission and framework conditions such as infra-structure for charging. It was more beneficial to agree on a joint statement and adjust the requirements and criteria to what gave the best results in the various procurements. The project participants meet several times and exchange experience. Over time, this is likely to lead to requirements and criteria approaching each other in form and expression. We are already seeing examples of this and believe that this will be the most appropriate approach. It is not always "one size fits all!"

### Other methods for innovative procurement

There are several other methods and procedures that can be used to achieve innovation in public procurements that we did not use for this project. The National Programme for Supplier Development (LUP) has experience from planning and design competition, innovation partnership, pre-commercial procurement, and competitive dialogue in other Norwegian innovative procurement projects.

### Planning and design competition

Planning and design competitions are used in situations where you need to develop a plan, concept, or design. In a planning and design competition, one or more winners can be chosen. If the budget allows it, it is often an advantage to nominate more winners. It gives you the opportunity to develop various alternative solution proposals and compare them against each other. The illustration shows the process of a planning and design competition.

In 2020, LUP together with DFØ initiated five planning and design competitions in a programme called "fast track for circularity". Five different public buyers participated, and over a period of five to six months, they managed to describe a need, publish the competitions, and qualify five different suppliers, who submitted concepts for a solution. These concepts were then evaluated by a professional jury, which announced a winner that was given the opportunity to develop their concept further. Status pr. autumn 2021 is that all five public buyers continue to work with the solution concepts and the results are looking promising.<sup>6</sup>

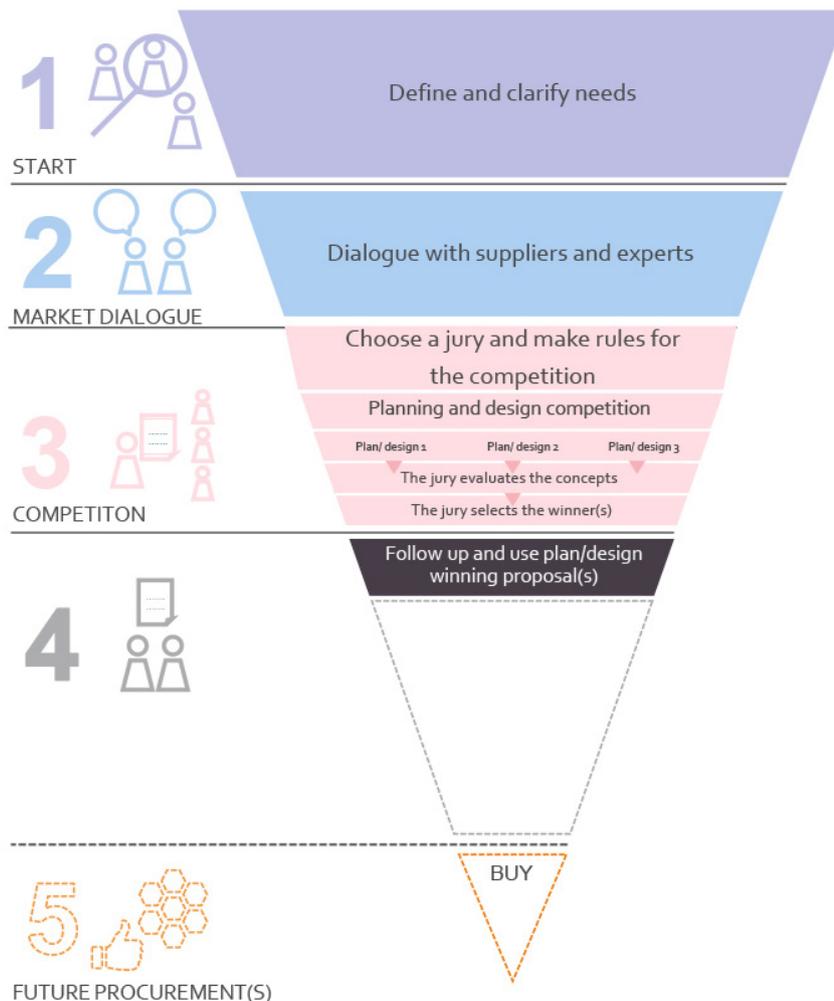


Figure 5 – Illustration of a planning and design competition process

<sup>6</sup> <https://innovativeanskaffelser.no/blogg/fast-track-for-sirkulaerokonomi-ruller-videre/>

## PHASES IN THE STARTOFF-PROCESS

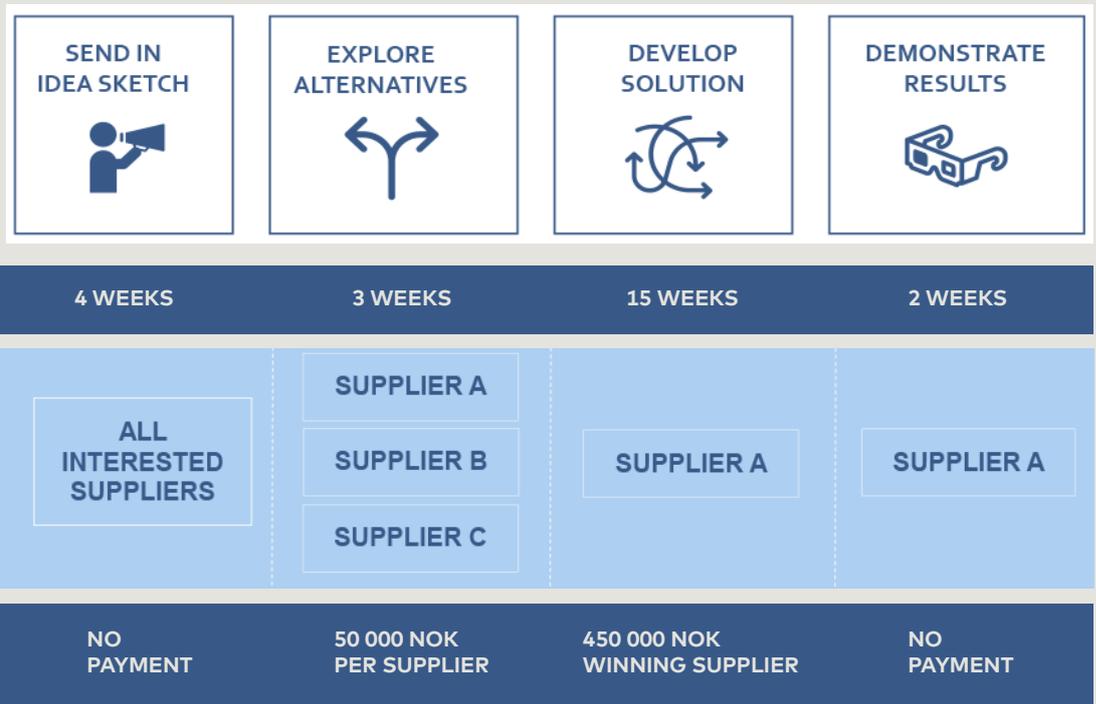


Figure 6 – Illustration of the StartOff process

### Startoff

StartOff is a Norwegian framework for conducting startup-friendly procurements. Compared with other schemes, such as innovation contracts, innovative procurement and innovation partnerships, StartOff is faster, it is predictable and it has payment mechanisms included in the process which is important to reach start-ups. A StartOff project is focused on the development of a solution in collaboration between the public buyer and the supplier. The main goal is a final procurement, or it can result in a further acquisition. The StartOff project itself is limited to 18 weeks of developing a minimum viable product (MVP). StartOff offers guidance and project support to the client and supplier in a facilitated process, as illustrated in the figure above. You can read more about the process on the StartOff website.<sup>7</sup>

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**STARTOFF IS A  
NORWEGIAN FRAMEWORK  
FOR CONDUCTING STARTUP  
FRIENDLY PROCUREMENTS**

<sup>7</sup> <https://startoff.anskaffelser.no/>

# **Part 2: Experiences with zero emission delivery of goods**



Emissions from goods delivered to the public sector represent almost 5 percent of total emissions in the Nordic countries. Public sector entities purchase an enormous range of physical goods. The delivery of these goods creates a considerable amount of freight traffic in urban areas. Copenhagen estimates that product deliveries lead to nearly 4.5 million vehicle kilometres travelled within the city limits per year. The public sector's ordering of goods, and delivery patterns vary considerably from city to city, but generally this is a relatively uncoordinated process. Goods are ordered individually by different municipal departments or units/locations, with contracted suppliers delivering directly to the site.<sup>8</sup>

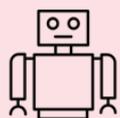
## Why we have chosen to focus on delivery of goods



Delivery of goods continues to grow in the cities. This is to some extent driven by e-commerce and because urbanization causes cities to grow – and thus, the volume of goods increases. A major challenge is to limit the effect of the increase on the urban traffic system.



Public sector goods are typically ordered individually by different municipal departments or units/locations, with contracted suppliers delivering directly to the site. Improvement of procurement and delivery patterns can help reduce emissions from delivery of goods.



The availability of technology not only for zero emission vehicles, but also for crowd sourcing, data sharing, machine learning, and AI, suggest this is an area ripe for new and more innovative solutions.



Cities in the Nordic countries share the same challenges and have similar ambitions, and in many cases also use the same suppliers and distributors; making this an area where Nordic collaboration can prove beneficial to all parties.

<sup>8</sup> 5 percent is a general estimate on emissions from last mile transport in the Nordic countries. It is mainly based on the calculations from the City of Oslo and City of Copenhagen presented in the [BuyZET handbook](#).

Goods are typically delivered by many suppliers to many locations many times a day – putting pressure on urban areas

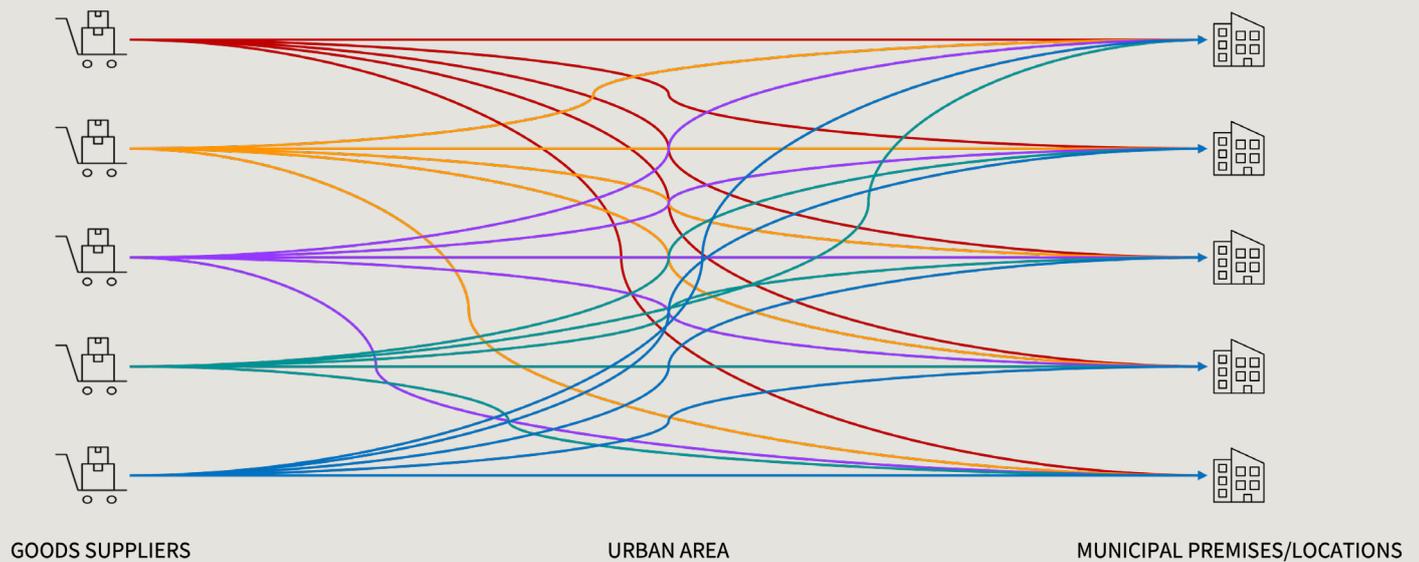


Figure 7 – Illustration of the complexity of goods deliveries

## Four key measures to limit emissions from delivery of goods



Reduce the number of motorised vehicle trips in the urban area, e.g. by establishing collecting terminals, sharing vehicles and rides, and by consolidating orders and deliveries.



Foster the use of zero emission vehicles, such as electric or hydrogen vehicles, electric bicycles, and drones.



Encourage a modal shift towards cleaner forms of transportation, such as walking, cycling, and public transportation.



Reduce waste and the number of new purchases by choosing products that last and facilitating for circular models.

Source: [BuyZET-Handbook](#)



Photo: Unsplash

### Focus on contract clauses in Sweden

In Sweden several public buyers have chosen to use contract clauses to obtain either fossil fuel free or zero emission vehicles and construction machinery. This is achieved through a "phase-in-model" in which requirements regarding lowering emissions are gradually tightened throughout the contract period. Helsingborg was among the first cities to introduce this kind of model, and several cities in the Nordic market dialogue have followed suit.<sup>9</sup>

#### Example: "Phase-in- model" in the procurement of laundry services in Stockholm

The City of Stockholm has introduced a policy for all deliveries in the city's contracts to be fossil free within 18 months from contract start. Moreover, the city has ambitions to increase the proportion of zero emission deliveries in their contracts. The requirements also cover subcontractors of transport services.

The city's objective to reduce CO<sub>2</sub> emissions from transport is illustrated in their recent procurement of door mats and laundry services. Prior to deciding on the contract clauses, the city had a market dialogue, which gave valuable insight into what the suppliers could deliver.

Finally, the following terms were chosen:

- From the start of the contract, at least 50 percent of the kilometres spent on the contract must be operated with renewable fuel, with a requirement that 100 percent renewable fuel use must be achieved no later than 18 months after the start of the contract.
- From the start of the contract, the supplier of the part of the contract that covers laundry services must have an electrically powered light or heavy truck (not an electric hybrid).
- From the start of the contract, the supplier of the part of the contract that covers door mats must have an electrically powered light or heavy truck (not electric hybrid), and then two more electrically powered light or heavy trucks (not electric hybrid) no later than 18 months after the start of the contract.

In an environmental audit, the supplier must prove that the requirements for the proportion of renewable fuel and zero emission vehicles are met. The percentage level for renewable fuel consists of an average for the time period (calendar year). The calculations of the percentage level must be made per vehicle, based on its refuelling, and the number of kilometres driven within the framework of the assignment, which is then summed up for all vehicles.

<sup>9</sup> For more information in Swedish about the "phase-in-model", see [Helsingborgs stad använder en trappstegsmodell vid krav på fossilbränslefritt - Sveriges miljömål \(sverigesmiljomal.se\)](#)



Photo by Andreas M on Unsplash

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### THE CITY MAY ALSO CARRY OUT RANDOM CHECKS TO VERIFY THAT THE REQUIREMENTS FOR RENEWABLE FUELS ARE MET

To prove that the requirements for vehicles, fuel and safety are met, the supplier must fill in an environmental report before the start of the contract. When changing vehicles used in connection with the contract, an updated vehicle and environmental report must be sent to the city's contract manager.

In connection with annual follow-up, or at the request of the city, the supplier must provide the following:

- an updated vehicle and environmental report
- documentation proving that the fuels stated in the vehicle and environmental report correspond to those purchased and refuelled in current vehicles

The city may also carry out random checks to verify that the requirements for renewable fuels are met. During random checks, the supplier must either submit a special report for the previous year or alternatively submit verification in the form of invoices for the fuel bought for each vehicle, in which the registration number of each vehicle must be stated. Together the city and the supplier decide on the most appropriate alternatives.

According to the party for the contract on laundry services and door mats, stricter environmental requirements do not seem to have resulted in any major cost increases. Nor has the number of tenders been affected to any particular extent. This serves to underline that the suppliers seem ready to deliver on stricter terms regarding CO2 emissions from transport, and that public procurement can play an important role in pushing for greener transport.

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Stockholm, + 46 76 12 28 819 /  
[per.erik.osterlund@stockholm.se](mailto:per.erik.osterlund@stockholm.se)

### Use of minimum requirements and award criteria in Norway

In Norway, several large public buyers have chosen to use either minimum requirements or award criteria, or a combination of the two, to obtain either fossil fuel free or zero emission vehicles and construction machinery, based on the response obtained in their market dialogue. The City of Oslo was among the first to design a concrete procedure for choosing between minimum requirement and award criteria, and to implement a procedure for verification and follow-up of transport contracts. Oslo's procedure has been adjusted and adopted by several other cities, such as Bergen, Trondheim, and Stavanger.

#### Example: standardized method for emission free goods and service delivery in Oslo

In 2019, Oslo City Council decided that as of 2025, mandatory requirements for zero emissions and biogas will be set for all procurements with a value above NOK 500,000, where transport is part of the delivery.

Before 2025, a minimum requirement or an award criteria will be used, depending on the number of suppliers that can meet the requirement. The City Council's decision states the following: "For procurements where it is assumed that a sufficient number of suppliers can deliver with zero emission or biogas vehicles, the minimum requirement (technical specification) must be that these technologies are used. Such a minimum requirement will be mandatory for the municipality's procurements from 2025"<sup>10</sup>.

Until 2025, the general rule is that if three or more of the relevant suppliers can carry out the contract using zero emission vehicles or biogas gas vehicles, the requirement should be formulated as a minimum requirement. If fewer than three suppliers can carry out the contract using zero emission vehicles or biogas, the requirement should be formulated as an award criteria.

Market research or market dialogue prior to the announcement determines whether requirements for transport are to be formulated as a minimum requirement or as an award criteria. All agencies within the municipality of Oslo are obliged to complete market research before each procurement.

<sup>10</sup> [https://www.anskaffelser.no/sites/default/files/byradssak\\_standard\\_klima-\\_og\\_miljokrav\\_til\\_transport\\_for\\_oslo\\_kommunes\\_vare-og\\_tjenesteanskaffelser.pdf](https://www.anskaffelser.no/sites/default/files/byradssak_standard_klima-_og_miljokrav_til_transport_for_oslo_kommunes_vare-og_tjenesteanskaffelser.pdf)

## The market dialogue determines which requirements are to be set

### Method:

If three or more suppliers can supply zero emissions or biogas from the start of the contract

- YES → minimum requirements
- NO → award criteria

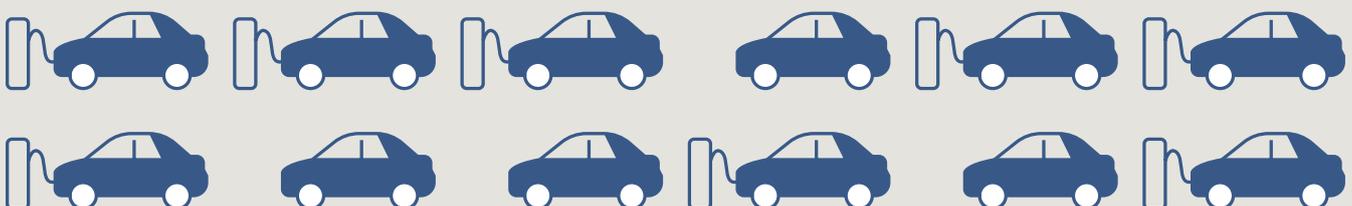


Figure 8 – Oslo city, Method for use of minimum or award criteria



Visa din  
Mat.se-  
app så  
juler vi  
å resan!  
nat.se

CITY  
CROSS

## Shows how sub-criteria in award criterion can be distributed

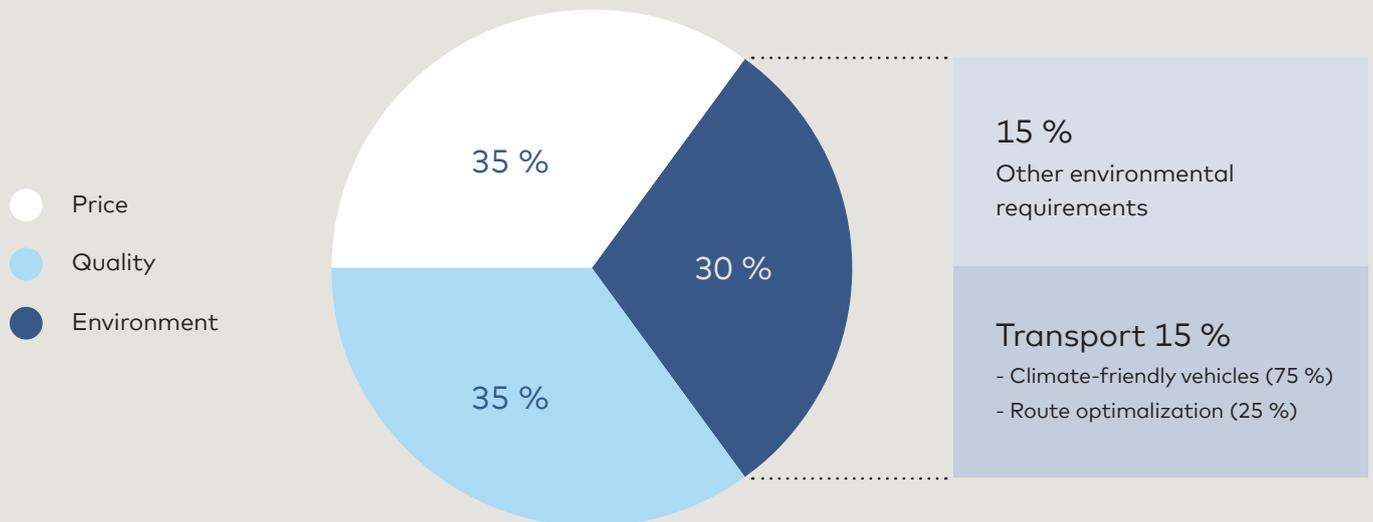


Figure 9 – How sub-criteria in the award criteria environment can be distributed

It is recommended that the award criteria "Environment" be weighted at least 30 percent. When transport is included as part of the award criteria, it must never be weighted lower than 15 percent. When using award criteria for transport, two sub-criteria can be used. These are a) climate-friendly vehicles and b) route optimization where sub-criteria a should always be given the highest weight. If both a and b are used, the City of Oslo recommends the following:

- 75% a) Climate-friendly vehicles
- 25% b) Route optimization

The table below provides an overview of the results that Oslo had obtained by mid-2021 with regard to zero emission delivery in their contracts. Currently, Oslo has 18 ongoing framework agreements in which eight have a 100 percent share of zero emission transport solutions.

## City of Oslo, Framework agreement (Categories) per medio 2021

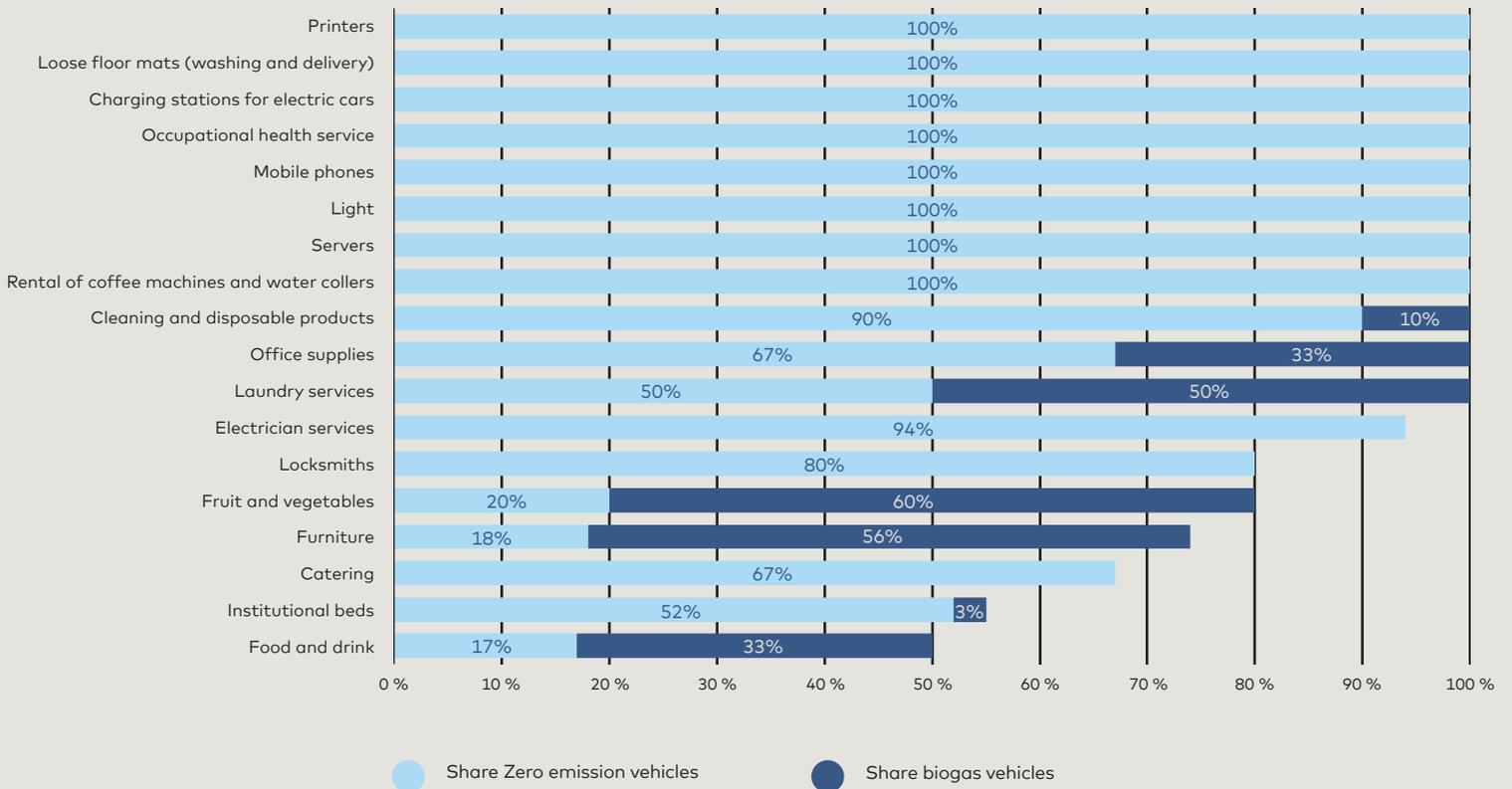


Figure 10 – City of Oslo, percentage of zero emission vehicles in 18 framework agreements per medio 2021.



For more information contact;  
 Geir Rossebø, Oslo city, + 47 456 04 927 /  
[geir.rossebø@uke.oslo.kommune.no](mailto:geir.rossebø@uke.oslo.kommune.no)

Photo:Adobestock



Photo by Rolands Varsbergs on Unsplash

## // IN THE PROCUREMENT OF WINDOW CLEANING AND ELECTRICAL SERVICES, COPENHAGEN WANTED TO USE THEIR MARKET POWER TO OBTAIN GREEN TRANSPORT

### Minimum requirements and contract clauses in Denmark

In Denmark, we see examples of minimum requirements and contract clauses being used to phase in requirements for fossil free fuel and zero emission solutions in contracts that cover transport. The City of Copenhagen started phasing in such requirements in their contracts from 2020. The aim, in addition to obtaining reduced air pollution and CO2 emissions, is both to push the suppliers to gain experience from green transport and to create synergies with other customers of the suppliers, that will hopefully see the potential of procurements for obtaining green solutions.

### Example: Window cleaning and electrical services with green transport in Copenhagen

In the procurement of window cleaning and electrical services, Copenhagen wanted to use their market power to obtain green transport. They did so by applying the following contract clauses:

- As part of their contract obligations, contractors have to use green vehicles. "Green vehicles" are broadly defined as cars running on electricity, biogas or hydrogen, or plug-in hybrids. Other non-motorized modes of transport such as bicycles are also considered green vehicles.
- The contracting authority may request documentation proving the composition of the supplier's car fleet.
- The clauses are gradually getting stricter over the contract period to meet the suppliers' need for a conversion period.
- The supplier must state the registration number of the cars that are used in the contract on the invoice.
- If the supplier company does not comply with the obligation to use green vehicles, it will be fined.
- Entry into force on 1 September 2020
- Suppliers must invest in green vehicles if they do not already use them
- Suppliers must phase in the use of green vehicles, so that they attain the following percentage of the

## Progression in use of green vehicles for window cleaning services

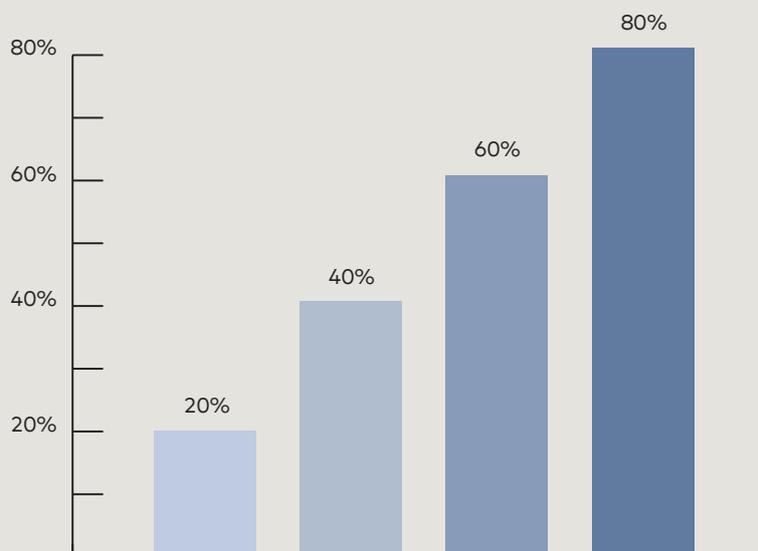


Figure 11 – City of Copenhagen, progression in use of green vehicles for window cleaning services.

For the part of the contract that covers window cleaning, the environmental requirements for supplier vehicles were designed in the following way:

total number of deliveries:

- 2021: min. 20%
- 2022: min. 40%
- 2023: min. 60%
- 2024: min. 80%

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Visit to the City hub consolidation centre in Gothenburg, January 2020.

### Use of city hubs to achieve zero emission delivery of goods

Several initiatives for city hubs have been introduced in all the Nordic countries. At the project meeting in Oslo we looked into a City hub at Filipstad in Oslo. When the project visited Gothenburg in early 2020, we visited a solution in "Norra Stan". In Stockholm and Oslo, Bring and RangSells have joined forces on a scheme called "beloved city", which combines goods delivery with waste collection, so there is a lot going on in the area of city hubs solutions. A hub is a mobile container, or a permanent or temporary address, that acts as a pick-up point for items that are going to be delivered by bicycle. Hubs are primarily located in city centre areas and provided by the suppliers. The hub solution will make it easier to deliver "the last mile" with environmentally friendly solutions such as smaller zero emissions vans, bicycles etc. in city areas.



Visit to the City hub at Filipstad in Oslo, October 2019.



Turku has recently piloted a city hub in the city centre. DHL express was chosen as supplier.

### Example: Piloting of city hub in Finland

Together with the city of Kaarina, Turku has aimed to create sustainable city logistics by combining public deliveries of goods and mail with deliveries of private goods. They have sought to find an innovative supplier that can develop new logistic solutions for deliveries. Another objective has been to improve traffic safety in the city centre.

In 2020 Turku hosted a market dialogue with eight different suppliers and asked:

- What kind of products/solutions do your company offer related to zero emission delivery of goods?
- How can your products/solutions solve the needs and challenges of public/private actors?

Some of the products and solutions that were identified were depot electrification, digital solutions for managing e-fleets for charging infrastructure and city hubs such as in Oslo, where last mile solutions for bicycles are used.

Turku has recently piloted a city hub in the city centre. DHL express was chosen as supplier. They delivered parcels from the city hub using two bicycles and e-lorries in the wintertime. In total, about 500 parcels were delivered each week for both private citizens and companies. One of the interesting findings of the project is that bicycle deliveries were 10 percent more efficient than deliveries by car, since bicycles do not meet the same obstacles to road accessibility and parking as cars do.

The same city hub, which ran on solar energy, has also been used as a pick-up point for grocery shopping that resulted in less traffic and air pollution in the city centre.

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## ZERO EMISSION DELIVERY OF GOODS

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