

# City of Copenhagen

## ZERO EMISSION TRANSPORTATION FOR CRAFT AND FACILITY MANAGEMENT SERVICES

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## Introduction – Craft and facility management services

Copenhagen wants to become the first carbon neutral capital in the world by 2025, with goals regarding clean air, minimising emissions of harmful substances, green mobility solutions and congestion issues.

Copenhagen spends around 1.5bn EUR on procurement of goods and services. Procurement is partly decentralised. Each of the city's seven administrations has a procurement unit, which is in charge of decentralised procurement agreements. A centralised procurement unit is placed in the Finance Administration and is in charge of centralised procurement agreements and framework agreements.

Mapping<sup>1</sup> has shown that procurement of craft (e.g. building, construction and maintenance) and facility management (e.g. cleaning, window cleaning, graffiti cleaning) services is responsible for around half of the transportation CO<sub>2</sub>-emissions in the service category in category 3<sup>2</sup>. Since the nature of transportation in these categories is similar (typically using vans carrying some equipment), we assume it will be possible to address the issues regarding CO<sub>2</sub>-emissions related to the embedded transport in the same way for several of the sub-categories under craft and facility management services.

A report has been prepared for the City of Copenhagen by an external consultant which illustrates the different possibilities for setting criteria in relation to the vehicles used in different procurement areas<sup>3</sup>. Although the starting point for this work was craft and facility management contracts, in fact the procurement approach developed is suitable for use in service contracts in general, not just limited to these categories.

The implementation of the recommendations is pending a final political decision. If the politicians decide to follow the recommendations, it is expected that the criteria will start to be implemented from the beginning of August 2019 in tenders where possible.

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<sup>1</sup>[www.buyzet.eu/wp-content/uploads/2017/11/Copenhagen-BuyZET-Transportation-Mapping-Report.pdf](http://www.buyzet.eu/wp-content/uploads/2017/11/Copenhagen-BuyZET-Transportation-Mapping-Report.pdf)

<sup>2</sup> Category 3 refers to the delivery of goods and services to the City of Copenhagen, as opposed to city-owned vehicles (category 1), or transportation services (category 2). See the mapping report mentioned above for more information on this categorisation.

<sup>3</sup> See COWIs reports here (only in danish): <https://www.kk.dk/indhold/okonomiudvalgets-modemateriale/19032019/edoc-agenda/097e4f1d-c286-46ec-a29d-231c62fb5196/d100dd7a-143c-4c70-aed1-204e154e476e>

## Procurement approach

A generic model or process for implementing criteria for the use of emission free or low emission vehicles in the city's contracts has been developed.<sup>4</sup>

One of the cornerstones in the generic model is that the suppliers start to use low emission or emission-free vehicles when technological and market developments make it possible. Another cornerstone in the model suggested, is that Copenhagen is in line with technological development but not ahead, as this would make procurement more expensive or no one would bid for the tenders that the city publishes.

The analysis has shown that in a Danish context it is still only passenger cars and small vans where it is possible to use green vehicles. But this will change in the coming years (from 2019-2022) where it is expected that technological development will accelerate<sup>5</sup>.

The criteria for the suppliers' vehicles are based on the following assumptions

- The criteria must be aligned with the market development, but still taking the suppliers reality into account. The suppliers must use the newest technology available on the market whenever the market conditions allow this.
- The criteria set must reflect that we are in a transition phase where the technology is still limited, but the development is dynamic
- The criteria must be simple to implement and manage for both the City of Copenhagen and the suppliers

It is important that the criteria follow the market development and are proportional with the subject matter of the contract.

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<sup>4</sup> Zero or low emission vehicles are defined as EV's, biogas, hydrogen or plug-in hybrid

<sup>5</sup> COWI report (only in Danish) see Tabel 2 page 12

[www.kk.dk/sites/default/files/edoc/Attachments/22644820-31332921-1.pdf](http://www.kk.dk/sites/default/files/edoc/Attachments/22644820-31332921-1.pdf)

## Procurement model

The principles that are set up to decide/evaluate the level for green transportation on each contract are:

- Type of vehicles used in relation to the contract
- Contract size/spend
- Duration/start date of contract

The bigger the contract the higher the criteria.

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*Definition: **Green vehicles** are defined as cars that can run on electricity, biogas or hydrogen. Plug-in hybrid cars are also covered by the definition, whereas hybrid cars are considered to be energy efficient gasoline or diesel cars*

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Instead of looking at numbers of green vehicles in the suppliers' fleet, it has been suggested to relate the criteria to the number of deliveries. For example, 20% of all deliveries or all transportation in relation to the contract matter must be with green vehicles.

The figure on the next page indicates how strict the criteria is recommended to be, taking into account the type of vehicles used on the contract, contract size and year for awarding the contract. The default approach is to establish these criteria as minimum requirements in the specifications. However, the ⓘ mark indicates the possibility to instead use transportation criteria as an award criterion. This could for example mean giving points to the suppliers depending on how much of the transportation related to the contract matter that will be with green vehicles. The scheme is dynamic and should be updated annually or whenever the technology develops.

Type of Vehicle	Spend	2019	2020	2021	2022-2025
Passenger cars and small vans	<2 million DKK <sup>6</sup>	Minimum energy efficiency class A	1 green vehicle	1 green vehicle	1 green vehicle
	2-5 million DKK	1-2 green vehicles	2 green vehicles	2-3 green vehicles	3 green vehicles
	>5 million DKK	2 green vehicles	2-3 green vehicles	3-4 green vehicles	5 green vehicles
Large vans	<2 million DKK	Minimum energy efficiency class A	Minimum energy efficiency class A	Minimum energy efficiency class A	1 green vehicle
	2-5 million DKK	Minimum energy efficiency class A	Minimum energy efficiency class A	1 green vehicle	1-2 green vehicles
	>5 million DKK	Minimum energy efficiency class A	Minimum energy efficiency class A	1-2 green vehicles	2-3 green vehicles
Small busses	<2 million DKK	Minimum energy efficiency class A	Minimum energy efficiency class A	Minimum energy efficiency class A 	1 green vehicle
	2-5 million DKK	Minimum energy efficiency class A	Minimum energy efficiency class A 	1 green vehicle	1-2 green vehicles
	>5 million DKK	Minimum energy efficiency class A	Minimum energy efficiency class A 	1-2 green vehicles	2-3 green vehicles
Tourist busses	<2 million DKK	Min. Euronorm 6	Min. Euronorm 6	Min. Euronorm 6	Min. Euronorm 6 
	2-5 million DKK	Min. Euronorm 6	Min. Euronorm 6 	Min. Euronorm 6 	1 green vehicle
	>5 million DKK	Min. Euronorm 6	Min. Euronorm 6 	Min. Euronorm 6 	1 green vehicle
Trucks	<2 million DKK	Min. Euronorm 6	Min. Euronorm 6	Min. Euronorm 6 	1 green vehicle
	2-5 million DKK	Min. Euronorm 6	Min. Euronorm 6 	Min. Euronorm 6 	1-2 green vehicles
	>5 million DKK	Min. Euronorm 6	1 green vehicle	1 green vehicles	2 green vehicles

Figure 1 Suggestions for low emission criteria for the suppliers' deliveries depending on type of vehicles used on the contracts, spend and year. The darker the colour the higher the percentage of the deliveries must be with green vehicles.

<sup>6</sup> 1 million DKK = approx. 133,000 EUR

## Market dialogue

It is recommended that a market dialogue process is undertaken by the procurement officer prior to each tender. Based on this the officer should that decide the precise level of criteria to set for deliveries. The market dialogue process should aim to reveal what kind of vehicles are typically used and how much the suppliers are expected to drive in relation to the contract.

## Tender documentation

If the politicians decide to follow the recommendations the principles mentioned above will form the foundation for criteria set in the upcoming tenders from August 2019 where the goods or services already are delivered in passenger cars or small vans. This includes the following tenders:

1. Window cleaning
2. Locksmith services
3. Craftsmen services – electricians

The percentage of the deliveries that are to be delivered with zero/low emission vehicles will be decided based on the feedback from the market dialogue.

The figure below shows examples on how the criteria for the upcoming tenders could look like.

Procurement area	Contract start	Spend annually (million DKK)	Minimum criteria
Window cleaning	2019	6	2 green vehicles
Lock service	2020	Not known	Depending on size of contract either 1, 2 or 2-3 green vehicles.
Electricians	2020	116	2-3 green vehicles

*Example of criteria that might be used depending on contract size, vehicles used and year of tender*

## Contract management

Contract management is essential when working with these kinds of flexible criteria. It is suggested that the suppliers frequently report and document how they comply with the criteria set in the contract. The follow up will therefore be an integrated part of the regular contract management.

It is important with qualified staff to facilitate the market dialogue with the suppliers and to set the level for green deliveries as well as the following up.

## Complementary measures

The City of Copenhagen are working on several other measures in relation to improving CO<sub>2</sub> emissions, air quality, congestion, traffic safety etc. Some of these measures might have a positive influence on the implementation of zero or low emission deliveries. The relevant areas are described in the following.

### **Advantages for parking**

In the government's new strategy "Together for a greener future" they allow the possibility for cities to give advances/a discount on parking to low emissions vehicles. The City of Copenhagen is looking into the possibility of using this instrument and giving a discount to zero or low emission vehicles. This could be a forceful incentive for the city's suppliers to invest in zero emission vehicles, because they can save the parking expenses as well as time to drive around and look for a free parking spot.

### **Closing of the old city**

For a long time there has been a political wish to close the inner city for cars/vehicles or minimize/reduce the accessibility for vehicles partly due to terror safety but also to limit congestion and reduce noise and air pollution. This is still up for discussion. The city council is expected to reach a decision based on a public hearing at the end of 2019.

If the city decides to close the inner city for vehicles there is still a need for deliveries of goods and services for the institutions and businesses placed in the inner city and it would therefore make sense to make strict criteria for the vehicles that can enter the zone.

### **Environmental zone**

In the new strategy "Together for a greener future" The Danish government opens up the possibility of strengthening the environmental zone (at present, vehicles above 3.500 kg must comply with at least Euronorm 4), but for now they are only talking about a minimum Euronorm 6 for trucks and busses in 2022 and Euronorm 6 for vans in 2025. There are no limits for passenger cars and no focus on emission-free and low emissions vehicles.

However, a strict environmental zone would be the most effective and easiest instrument to accelerate the implementation of sustainable mobility solutions.

## Next steps & internal promotion

As mentioned, the generic model or process for implementing green vehicles is now up for political decision. If the politicians decide to follow the recommendations, then the green vehicle criteria will be implemented based on the model presented in this document.

The generic model will (if agreed), will be enforced through the centralised procurement office in the Economics Administration, which has the responsibility for tendering all main contract. The city's CSR department (also located in the Economics Administration and working in close cooperation with the central procurement office), that are responsible for city's green public procurement, could assist as well the central procurement office as well as decentralised procurement offices in other administrations, in using the generic model.

A part of the decision will also be, that the Economics Committee will be annually presented with an overview of the procurement areas that are up for tendering and where green vehicle criteria are to be implemented as well as an updated overview of the technological possibilities within the different vehicles types.

## Replicability

It will be easy for other Danish public institutions to replicate the model and set the same criteria for their suppliers. However the infrastructure and technological accessibility vary in the different countries so it might will be difficult to set the same criteria but the model or process for implementing criteria for the use of emission free or low emission vehicles in the city's contracts can be used by public institutions outside Denmark as well. A key part of the recommended process is to carry out a market dialogue process prior to tendering, to ensure that the level of the criteria established is appropriate to the contract, including whether these are set as minimum requirements or technical specifications.

## About BuyZET

BuyZET stands for BuyZET ‘Procurement of innovative solutions for zero emission urban delivery of goods and services’.

The BuyZET project will develop innovative procurement plans to help the participating cities achieve their goals of zero emission urban delivery of goods and services.

## Partners Logos



## Contact details

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