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TRANSPORT & CLIMATE

Global public procurement factsheet



This factsheet provides an overview of the challenges and opportunities facing the transport sector in the context of the global climate emergency. It summarises the innovative actions GLCN cities have taken to address those issues locally through public procurement.

Background

Modern urban activities rely heavily on the transport sector. Everything from access to job and leisure opportunities to the delivery of goods and services is dependent upon well-functioning transportation systems.

Many cities are however facing significant challenges in developing clean, efficient, affordable and safe solutions to support the free movement of people and goods within their boundaries. Notable issues include the following:

★ **Greenhouse Gas Emissions:** The transport sector is responsible for a significant share of global greenhouse gases emissions (ca 20% in 2014 according to the [World Bank](#)). Urban logistics and last-mile deliveries account for a fast-growing share of urban road traffic and emissions. A [2020 report](#) from the World Economic Forum estimates that the number of delivery vehicles in the world's top 100 cities could increase by 36% by 2030. Without intervention, this could lead GHG from urban logistics to rise by over 30%, simultaneously increasing congestion by at least 20%. → [#GHGEmissions](#)

★ **Mobility Access:** inequalities in access to clean, efficient and inclusive mobility solutions keep perpetuating socio-economic inequalities in many cities around the world (OECD/ITF 2017). → [#MobilityForAll](#)

★ **Petroleum-based fuels:** Almost all (95%) of the world's transportation energy comes from petroleum-based fuels, largely gasoline and diesel (IPCC, 2014). This dependency on fossil fuels is a key driver behind the poor environmental performance of the sector. In the EU for example, 22 % of the total greenhouse gas emissions

in 2017 [came from road transport activities](#). A drop of emissions in the sector by at least two thirds from the 1990 levels would be required to meet the EU's climate targets to 2050. Technological developments and the rise of alternative fuels are fortunately providing an opportunity to transform the sector and reduce reliance on fossil fuels. The booming market for electric vehicles, which is growing by about 60% a year and reached 2 million electric cars sold in 2018 ([McKinsey, 2019](#)), illustrates the potential of this transition.

→ [#AlternativeFuels](#)

★ **Shared mobility:** much of the global urban transport infrastructure has been designed with individual car users in mind. As a result, individual car or taxi transportation is the preferred commuting mode for a majority of people in many countries (e.g. [70%](#) in France; [68%](#) in Germany; [76%](#) in the US; [14%](#) in China; [54%](#), including taxi commutes, in South Africa). From GHG emissions to urban air pollution, the climate impacts of private motorised transport are significant, making a strong case to switch to cleaner and shared urban mobility solutions. A [study](#) from the US Center for Climate and Energy Solutions for example found that, for a 20-mile (32km) daily round trip commute, switching from an individual car to public transportation could lower a person's carbon footprint by over 2 tons annually. The transition to more sustainable urban transport modes is however dependent upon the availability of convenient, safe and affordable alternatives. Delivering the right infrastructure and services to support non-car mobility is therefore the key challenge facing cities across the globe.

→ [#SharedMobility](#)

→ [#SustainableInfrastructures](#)

→ [#Pollution](#)

The power of public procurement

Through their role as transport solution and infrastructure providers, city governments have a large role to play in improving the performance of the sector. In 2018, European public authorities spent an average of 2% of their GDP on transport infrastructure and services, through roles which include:

- ✦ Managing a significant fleet of public vehicles;
- ✦ Contracting out transportation services, such as public transport, waste collection, social transportation services and deliveries;
- ✦ Procuring a wide range of products and services which need to be delivered (from the delivery of physical goods to the carrying out of cleaning services, or construction work);
- ✦ Providing transport infrastructure.

By spending this money in a climate-conscious and socially-responsible way, they have a strong potential to drive forward the sustainable transformation of the sector. Members of the Global Lead City Network on Sustainable procurement (GLCN) have an extensive track record of leading on this topic, using their public procurement power to drive sustainable change in their local transportation systems.

Sustainable public procurement of transport in practice

How can public authorities use their procurement power to address the environmental and social challenges associated with a transition to greener transport systems?

1. Procuring zero-emission delivery of goods and services
2. Procuring a clean, zero-emission public fleet
3. Procuring car-free transport infrastructure for all

GLCN cities transport commitments

GLCN cities are fully determined to using their purchasing power to deliver cleaner transport systems for all. This is reflected in a list of targets that 10 of the network's cities have set for themselves on the topic:

Auckland: 30-40% of public vehicles to be electric by 2040; zero-emission public transport by 2041.

Buenos Aires: By 2035, 50% reduction of emissions (14% of CO₂) in the transport sector; the City will achieve 1 million cycling trips per year by 2023.

Budapest: At least 900 electric charging points will be installed in the city by 2025.

Denver: 25% of city fleet vehicles to be electric by 2029.

Ghent: By 2030, the city's fleet will be diesel-free and mobility solutions in the city will be carbon neutral by 2050.

Helsinki: 69% of CO₂ emissions from traffic reduced by 2035 (from 2005 levels) and 30% of cars will be electric; moreover, the city's car fleet will be electric by 2027, 50% of the bus fleet will be electric by 2030, 90% of the CO₂ emissions and local air pollutants will be reduced by 2025 (from 2010 levels)

Oslo: By 2025, only zero-emission and biogas vehicles in all municipal goods and service contracts; by 2028, public transport will be 100% zero-emission and by 2025, zero-emission construction machines and vehicles on all municipal construction sites.

Pittsburgh: By 2030, 100% of the public fleet will be fossil fuel-free

Rotterdam: Urban delivery of all public goods and services will be zero-emission by 2025; 100% of social transport services and vehicles used for internal moving services will be zero-emission by 2024; 100% of the city's vehicle fleet will be zero-emission by 2030.

Tshwane: By 2030, 50% of the city's vehicles will run on alternative fuels.



1. Procuring zero-emission delivery of goods and services

Tackling: [→ #GHGemissions](#) [→ #Pollution](#)
[→ #AlternativeFuels](#)

What can public procurement do?

Everything which public authorities buy needs to be delivered and they can use their procurement to influence how it is delivered.

When procuring delivery services, public bodies can encourage suppliers to think outside the box to reduce the environmental impact of those activities. For example, they may require the use of an urban consolidation centre, or preferring suppliers who deliver with zero/low emission vehicles.

2. Procuring a clean, zero-emission public fleet

Tackling: [→ #GHGemissions](#) [→ #Pollution](#)
[→ #AlternativeFuels](#) [→ #MobilityForAll](#)

What can public procurement do?

Public authorities rely on a significant number of transport vehicles to run their daily activities and services.

Whether they operate their own fleet directly to deliver public services or procure services of third parties to do so on their behalf, public procurers are in a prime position to encourage the market to focus on clean fuels and zero-emission vehicles.

By showing leadership in the use of non-fossil-fuel reliant vehicles, local governments can also help mainstream them in the streets of their cities and encourage private stakeholders to follow their lead. They can do so by both:

- Purchasing clean vehicles in their own fleet
- Ensuring that third-party providers of transport services appointed through service contracts commit to using clean vehicles

When procuring new vehicles or transport services, it is however key for public authorities to encourage suppliers to minimise the wider environmental and social impacts of the transition. For example, consideration should be given to the environmental costs of disposing of old vehicles and the degree of sustainability of the supply chain of new vehicles and their components.

Cities in action

Procuring a climate-friendly food delivery system in Helsinki, Finland



As a GLCN member, the city of Helsinki decided to transform the way in which its food delivery system operates.

In the city, catering services for schools, hospitals and care homes are centrally administered by a service centre, Palvelukeskus Helsinki. This centre is in charge of delivering meals to over 100,000 people every day from its production plant on the outskirts of the city. The resulting traffic leads to a significant number of trips every day, contributing to GHG emissions and congestion.

In 2018, the Service Center went out with a courageous tender to improve the environmental performance of this system. The competitive procurement procedure, supported by extensive market engagement and a thorough analysis of delivery routes, led to the appointment of an operator able to run the system with only 51 vehicles.

Environmental and economic benefits were significant, including:

- a 22% reduction in carbon monoxide emissions compared to the previous contracts.
- a 67% reduction of nitrogen oxide emissions and
- up to -92% particulate emissions
- cost savings of up to 25%
- a 99.9% rate of successful deliveries

Those remarkable achievements demonstrate that a clever public procurement approach can transform critical urban delivery services, pushing suppliers to deliver a climate-friendly service at a competitive price.

[Explore more](#)

Cities in action

Procuring electric vehicles in Rotterdam, The Netherlands

The move to more sustainable vehicles is widely promoted by the government of Rotterdam, which launched a 31 million euros programme to increase electric vehicles mobility in the city in 2010. A key part of this initiative has been the procurement by the city of a fleet of electric service vehicles. In 2015, it notably added 10 electric vehicles and 66 plug-in-hybrids to its fleet.

Key to the success of this procurement exercise was the alignment of the tendering criteria. Based on thorough background research, the city engaged with electric vehicles suppliers and infrastructure specialists to ensure that the city was capable to effectively accommodate the transition to electric vehicles. This put Rotterdam in a good position to determine the type and number of electric vehicles that it would be able to operate when it embarked on the procurement exercise in 2015.

Building on political commitments and thorough market research, the government of Rotterdam therefore demonstrated how local public bodies can use their procurement powers to take the lead in the transition towards cleaner vehicles.

[Explore more](#)

Cities in action

Procuring clean transport through goods and service contracts in Oslo, Norway

Beyond its own fleet, the city of Oslo has taken on to promote cleaner vehicles through contracts with all of its providers of transport services.

Through a set of standard procurement criteria, applicable to all goods and service contracts involving transport activities in the city, Oslo is encouraging its contractors to move to zero-emission vehicles on a large scale.

By applying a great weight (between 15-30%) to environmental criteria including zero-emission vehicles in all its calls for tender, the city is making significant achievements on this front. Through a contract signed in 2018, the city for example secured a supplier of health services capable of running its activities using 100 per cent of zero-emissions vehicles.

In addition to being highly effective, this approach is also highly replicable and Oslo is cooperating with surrounding municipalities to help them implement similar procurement criteria for clean transport in goods and service contracts.

More information on this case study is [available here](#).

Cities in action

Warsaw's big move towards electric buses

In 2019, the city of Warsaw, Poland, decided to take a major step forward towards the transformation of its urban transportation system through the acquisition of 130 electric buses, representing 10% of its total fleet. The procurement of those new buses was supported by the delivery of supportive infrastructure, including the construction of aerial chargers at ends of selected bus lines and the adaptation of bus depots.

The project will massively reduce the amount of pollutants such as NOx and SO2 compared to the Diesel buses formerly used by the city. It will also help decrease noise pollution in the Polish capital.

Their success demonstrates that bold public procurement practices can help radically overturn the reliance of public transportation systems on fossil fuels.

[Explore more](#)

The ethics box

Electric vehicles and their supply chain

Whilst the move away from transport systems depending on fossil fuels is essential for the climate, the large-scale transition toward electric vehicles is not free from social and environmental risks.

Electric vehicles batteries rely heavily on rare minerals, whose mining is often associated with human rights abuses and local environmental damage. In 2016, [Amnesty International](#) notably alerted the world to cases of child labour and the mistreatment of workers in cobalt mines in the Democratic Republic of Congo. The manufacturing of EV batteries makes up for [60%](#) of the global demand for cobalt, and the growth in the EV market is fuelling abusive practices in the mining industry.

When procuring electric vehicles to support their climate targets, public authorities should therefore consider asking suppliers for accountability regarding practices in their supply chain.

3. Procuring car-free transport infrastructure for all

Tackling: → #Pollution → #SustainableInfrastructures
 → #SharedMobility → #MobilityForAll

What can public procurement do?

Through their ability to commission public works, public authorities have a significant power to re-shape transport systems in their cities.

By using their procurement powers to support sustainable mobility infrastructure, they can play a key role in impacting the way people travel.

As the environmental costs of delivering new infrastructure can be high, public authorities can further improve their performance by shaping calls for tender in a way that promotes climate-friendly construction practices.¹

¹ Please refer to the GLCN Factsheet on construction for more insights into climate-friendly procurement practices in the building sector.

Cities in action

Procuring sustainable mass-transit infrastructure in Auckland, New-Zealand

In Auckland, transport is responsible for about 40% of GHG emissions – the majority from road transport. During the 2010s, the city government therefore decided to take a bold step to address this problem and encourage higher public transport use. The result was the procurement of Auckland’s City Rail Link (CRL), the largest infrastructure project in the City. Expected to complete in 2024, this new light rail connection will help bring up to 30,000 passengers per hour to the city centre, helping to take them off the road.

Sustainability considerations were embedded throughout the contract. CRL is the first public transport project in New Zealand to measure carbon emissions associated with its construction and operation, and designers received a strong mandate to include environmentally friendly features in the plans. The project also has a social component, focusing on skills legacy, apprenticeships and new jobs for the unemployed. This approach helps ensure that the project supports the local workforce in acquiring skills that are relevant to the development of a climate-friendly economy.

[Explore more](#)

The ethics box

Making sustainable transport systems work for everyone

The transition to clean mass transit systems can perpetuate inequalities between people’s abilities to access convenient, safe and affordable transportation. A [2017 report](#) from the International Transport Forum and the OECD shows that in many cities, low income areas are often less well served by convenient, safe and affordable public transportation systems, impacting people’s abilities to access employment and other life opportunities. Additionally, the delivery of new public transport infrastructure often drives an increase in local property prices (e.g. [Strutt and Parker 2018](#)), which may price out people on a low-income and hamper their ability to benefit from new clean mobility solutions.

When procuring new climate-friendly mobility infrastructure, cities should therefore strive to consider the social impacts of the contract. For example, the city of Bogota, Colombia, provides inspiration on this topic. Upon procuring its new mass transit system, it notably introduced a [fare subsidy system](#) to ensure it was accessible to its economically-vulnerable residents. It is also [well known](#) for procuring and delivering TransMiCable, a green and innovative cable-car transit system serving over 20,000 people in the city’s poorest communities, and acclaimed internationally as an example of good practice in sustainable mobility.

When working on sustainable urban mobility projects, procurers should therefore work hand in hand with urban planners and suppliers to deliver solutions which work for everyone.



Resources

EU Green Public Procurement Criteria for Transport (2019):

<https://ec.europa.eu/environment/gpp/pdf/criteria/transport.pdf>

BUYZET Handbook on the procurement of zero-emission goods and deliveries (2019):

www.buyzet.eu/wp-content/uploads/2019/05/POLIS_BUYZET-Handbook_EN_web.pdf



About the GLCN on Sustainable Procurement

The Global Lead City Network on Sustainable Procurement is a group of cities committed to drive a transition to sustainable consumption and production by implementing sustainable and innovation procurement. All participating cities are acting as ambassadors of sustainable procurement to lead to a resource efficient, low carbon and socially responsible society.



In partnership with



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