

# CASE STUDY - Green Procurement for Construction

## Learning from the Big Buyers Initiative June 2020



### Investing in systems innovation

EIT Climate-KIC is a Knowledge and Innovation Community (KIC), working to accelerate the transition to a zero-carbon economy.

Supported by the European Institute of Innovation and Technology, we identify and support innovation that helps society mitigate and adapt to climate change.

We believe that a decarbonised, sustainable economy is not only necessary to prevent catastrophic climate change, but presents a wealth of opportunities for business and society.

## Public Innovation and Green Procurement

*EIT Climate-KIC is exploring how to support governments deliver on their climate and sustainable commitments through innovations of both governance and policy. One tool that is relatively simple but powerful, is circular public procurement. This is an approach to greening procurement and can be defined as the process by which public authorities purchase works, goods or services that seek to contribute to closed energy and material loops within supply chains, whilst minimising, and in the best case avoiding, negative environmental impacts and waste creation across their whole life-cycle. The Big Buyers Initiative is a case study illustrating how this works.*

## Issue addressed under Zero Emission Construction Site

Conventional construction sites are important sources of pollution. The global construction industry contributes 23% of the world's CO<sub>2</sub> emissions across its entire supply chain. Approximately 5.5% of these emissions come directly from activities on construction sites, predominantly through the combustion of fossil fuels to power machinery and equipment. Diesel-driven construction machinery causes harmful local air pollution (such as NO<sub>x</sub> and PM), noise and greenhouse gas emissions.

## Policy goals achieved through procurement innovation

The objective of the Big Buyers for Zero Emission Construction Site initiative is to ensure a better quality of life for citizens by achieving:

- Reductions in noise and pollution at construction sites achieved by zero emission machinery, and addressing gaps in current EU stage regulation on emissions.
- An increase in cities' ambition for low carbon development.
- Develop joint demands for zero-emission construction sites on an EU scale, aiming to increase the implementation rate of pilot procurements in this sector.

## How will these goals be achieved?

Large public buyers such as cities have the power to create demand for zero emission machines as early adopters, which presents a benefit to the wider construction sector and their local communities and citizens. By working together, and pooling their resources, cities, central purchasing bodies, and other major public procurers can maximise their market power and impact.

## Lessons learned

More cities are realizing the potential in green public procurement (GPP), but not fully utilizing this potential due to budget restrictions, questions around market readiness and lack of supporting policies and standards. The following key insights emerged:

## Summary

**Implementing partners** ICCLEI, Euro Cities, EIT Climate KIC C40, and DG Grow

**Key objectives:** The purpose of this initiative is to stimulate collective knowledge sharing and to promote the use of strategic procurement for sustainable and innovative projects. BBI is a pilot, and has now been extended until October 2020.

Currently the Big Buyers Initiative works on 3 areas, one of which is the EIT Climate-KIC managed working group on Zero Emission Construction Sites, bringing together the cities of Amsterdam, Brussels, Budapest, Copenhagen, Helsinki, Lisbon, Oslo, Trondheim and Vienna to promote zero emission construction sites. Focussing on alternatives to conventionally diesel-driven construction machines, these cities work together as big public buyers to develop and pilot innovative sustainable procurement approaches. Their aim is to reduce the environmental impact of construction activities and encourage market innovation.

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Oslo has launched a procurement policy and strategy to help bring all construction work to zero-emission by 2030. The city has initiated the first zero-emission construction site, a pilot right outside the Oslo Climate Agency. Heidi Sørensen, Director of Oslo Climate Agency, explained that the early engagement with the industry and innovative procurement initiatives are key to success and that the project proved “not to be too difficult” once the city found the industry’s perception of risk and addressed it.

The city of Copenhagen has also laid out plans to further reduce carbon emissions. Jørgen Abildgaard, Executive Climate Program Director City of Copenhagen, explained how the City of Copenhagen’s ambition is to become the world’s first carbon-neutral capital by 2025, where construction has one of the highest potentials for carbon savings.

Moreover, Copenhagen is joining forces with Oslo and Stockholm on procuring for low-emission construction to uncover the benefits of scaling demand and sending a clear signal to the market.

There is also a global competition for innovative carbon-free and resilient urban projects “Reinventing Cities”, which 14 cities joined, and which is “opening the pathway for other projects, emphasising the need for more larger scale experiments and pilots”, explained Helene Chartier, Head of Zero Carbon Development at C40.

#### Are targets for Clean Construction translating into market opportunities?

Throughout the last three years, the city of Oslo has been in regular dialogue with key market stakeholders in order to shape their procurement strategy and criteria. As a result, Espen Nicolaysen, Head of Sustainability for the procurement department in the City of Oslo, announced in October 2019 that Oslo city council agreed to change the award criteria, applying 30% weighing in environmental criteria, 50% of which is zero-emission non-road mobile machines (NRMM).

Amsterdam is taking a strategic and collaborative approach to procurement in their strategy and have extended projects to 8 years in order to build long term relationships. This allows buyers to set minimum criteria for contractors on carbon reductions and then increase targets throughout the contract length. Amsterdam is joining forces with Copenhagen, Oslo, and 4 other cities through programmes including Big Buyers Initiative and Clean Construction to drive zero-emission construction sites through joint GPP. The next step is for the city of Amsterdam to agree who will pay initial investments to initiate pilots.

Barriers continue to remain in the scaling of solutions. Issues like infrastructure, energy supply, cost of ownership were mentioned - these continue to pose challenges. But one conclusion is clear to everyone – a joint approach is necessary. When it comes to construction and supply and demand, it is not a simple buyer and supplier relationship – multiple parties are involved and need to be aligned in order to deliver emission reduction targets on the construction sites as well as the building.

## Implications

**Green procurement requires careful design and consideration. It is a powerful tool that can really address climate change and resource efficiency. Whilst common in goals, application is very much context specific. Collaborations however are key to enable governments to have impact on supply chains.**

EIT Climate-KIC Policy Innovation

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