ENERGY GLOBAL

SUMMER 2020

Partnerships of power

The potential of green public procurement (GPP) for facilitating the energy transition from traditional fossil fuels to renewable energy sources (RES) is widely acknowledged. It is also evident that the exploitation of this potential is far from being fully developed. In order to overcome this problem, Horizon 2020 project XPRESS is organising co-creation workshops to bring together cities and enterprises across Europe. Public authorities all across Europe consider lowering their greenhouse gas emissions by using RES as a very high priority in their political agendas. More specifically, the 10 000 European local governments that have adhered to the Covenant of Mayors have committed themselves to lowering their CO_2 emissions by 40% within the end of the year 2030. Even if municipalities are only responsible for 2 - 3% of emissions in their territories, their climate emergency actions are highly visible, especially those focused on renewable energy solutions.

In early March 2020, in its co-creation workshop in Frankfurt/Main, Germany, the XPRESS project discussed the case of a tender launched by a provider of green electricity for the Marburg Biedenkopf county in Germany – which comprises 22 small and medium sized towns. "The goal was simple," says Björn Kajewski, the climate protection and energy manager of the county, "buying reliably certified electricity with zero CO_2 emissions would result in boosting the production of renewables while committing to low administrative efforts and costs." In total, 14 of these local administrations decided to co-operate by launching a public procurement tender, buying 15 500 MWh/y of certified electricity deriving from renewables, avoiding the emission of 8000 tpy of CO_2. "The overall administrative effort was reduced by the collaboration across towns, which also allowed smaller towns, who normally would not have been able to manage public procurement on their own, to benefit from taking part in the

Paola Zerilli (University of York, UK), Karl-Ludwig Schibel (Climate Alliance, Italy), and Riccardo Coletta (Agency for the Promotion of European Research, Italy), XPRESS Consortium, describe the need for collaboration between public authorities and SMEs to remove the barriers to green public procurement.

tender." In Kajewski's opinion, the remaining eight towns did not take part in this advantageous tender because of barriers such as demanding tender criteria, long running time for the contracts, and lengthy procedures related to the collaboration among procurement offices across the administrations involved.

The example of Marburg county shows that some of the barriers to public procurement are perceived rather than actual. The 14 cities within the Marburg Biedenkopf county agreed to give power of attorney to a single representative, showing actual willingness to co-operate and trust in the procedure.

This is trust that can be built and consolidated through the dissemination of good practices. Recently, Mr. Sergio Zabot from Milan Politecnico highlighted the case of the Metropolitan City of Venice which succeeded to aggregate 16 medium and small cities and towns, all signatories of the Covenant of Mayors, to form a critical mass for retrofitting their public lighting and 101 of their public buildings while installing RES technologies. The procedure, performance contracting with guaranteed results, and third-party financing, was carried out by the Metropolitan City of Venice, which took benefit from the technical assistance and financial support provided by the European Investment Bank through the European Local ENergy Assistance (ELENA) programme for the elaboration of the tender, including energy audits and the definition of the economic and financial strategies.

The results are remarkable, including 420 m^2 of thermal solar collectors in 26 schools, 200 kW photovoltaic panels, 23 heat pumps, together with 42 600 m^2 of insulated roofs, ceilings and building envelopes, and 3800 m^2 of highly insulated windows. According to Mr. Zabot, expert in public procurement in the energy field in Italy, the case of the Metropolitan City of Venice is not yet common practice in Italy because public procurers are unaware of the substantial technical costs related to these RES projects. These costs can account for 3% of the total cost, simply because of the complexity of technical, economic, and legal issues related to the whole tender process. The ELENA programme – which finances 90% of these costs – has achieved a lot to change this perception, but there is still significant progress needed.

Barriers to green public procurement

Useful information on barriers to GPP for both small and medium enterprises (SMEs) and public administrations was collected by the XPRESS team during the first three policy co-creation workshops in Odense, Bratislava, and Braga.

In Odense (Denmark), Martin Dietz, Architect of SolarLighting, discussed several barriers that he has experienced with public procurement. Mr. Dietz focused on the concept of risk sharing where local authorities transfer financial and technical risk in procurement directly to the SMEs. Mr. Dietz presented a specific example in explaining this barrier. In a procurement case in the Aarhus Kommune, two schools launched a procurement for solar roof panels where the procurers were not sure whether the roof could support the solar panels. This risk was not accounted for in the tender documents and therefore it was exclusively taken by the SME who won the bid and discovered the problem only after the contract award procedure.

When risks are too high, only large firms are able to face them effectively. This is a clear barrier against SME participation in public procurement. Sharing these risks with the public procurers would be a possible way for the SMEs to overcome these barriers.

A similar case has been presented in Bratislava (Slovakia) by Mr. Matúš Škvarka from the Association CITY-ENERGO, an energy expert for renewable energy sources.

Mr. Škvarka presented a project for the construction of e-mobility infrastructures in the city of Trnava. He mentioned several problems in the implementation of RES technologies. For example, with solar panels, there was a problem with the structural soundness of the buildings as old roofs would not bear the weight of the panels.

The private sector identified several additional barriers to GPP. In Braga (Portugal), Maria Ramalho from Grupo Casais and Catarina Marques, Empresa Ampere Energy do Grupo Casais, pointed out that the information presented in public tenders is often not exhaustive. To mitigate this barrier, Ms. Ramalho proposes a set of possible solutions:

- Centralised information with easy access, and the creation of guidelines for green procurements that include entry criteria and all the useful information for potential tenderers.
- A clear explanation of technical details, including the definition of which materials could be used in the building (recycled materials) and the construction phases.
- State-of-the-art with a correct alignment of energy, tax and financial policies, such as the passive construction principle.

According to Mr. Jacob Brandt, from SMV (Denmark), some solutions, mitigation proposals, and actions are currently implemented by local authorities – as presented in the Odense workshop. Only recently, the Copenhagen Municipality had a consultant company telling them that, for the municipality, electric cars are cheaper than ordinary cars. However, on the market, an electric car in Denmark costs approximately 50 000 kr (US$8000) more than a diesel car. The difference could be due to the lower lifecycle costs (LCCs) related to electric vehicles. Unfortunately, for the time being in the EU, a valid calculation method for lifecycle costs is missing. It would be helpful to have a standardised method for computing them.

Another potential barrier is the certification requirement and the costs related to the certification in order for SMEs to be able to participate in public procurement. It is very difficult to understand whether SMEs would face recurrent certification costs and whether they would be able to afford them in the long run.

During the open discussion in the Odense workshop, it was highlighted that another potential barrier to the participation of SMEs to GPPs is the certification requirements. It is very difficult to understand whether SMEs would face recurrent certification costs and whether they would be able to afford them in the long run.

In this article, XPRESS presented only a selection of the most relevant cases and obstacles encountered by European public procurers and SMEs working in the RES sector. Pinning down the most challenging barriers to innovation in RES within public buildings and transportation, and being inspired by success stories in this field, are only the initial steps towards a more sustainable environment which the XPRESS project aims for. The project will continue over the next two years to facilitate the collaboration between public authorities and innovative SMEs and, by doing so, will contribute to the removal of barriers to green public procurement.