

# Market engagement

ZERO EMISSION TRANSPORT WITHIN THE CITY OF ROTTERDAM  
FOR REAL ESTATE MAINTENANCE

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# 1. Management summary

Rotterdam has identified the **transportation of workmen and supplies** in carrying out maintenance activities for buildings owned by the city (e.g. painting, cleaning, plumbing, etc.) as a priority area for promoting zero emission delivery in the city. This sector was identified as having the second largest transportation emissions footprint within the city<sup>1</sup>. The city is now exploring potential procurement strategies to drive this development. This report contains the results of a market engagement held on March 27 and 28, 2018 in Rotterdam for Zero Emission (ZE) transportation within the City of Rotterdam.

Our main conclusions from this market engagement:

- In most cases, suppliers are small and medium enterprises (SMEs). They showed a positive attitude towards our ZE transportation policy, but emphasised a great deal of attention must be paid to its practicality and cost when applied in tenders.
- A certain continuity and sufficient volume (long-term contracts) of work load is required to cover investments in expensive ZE vehicles.
- Instead of lots dedicated to specific maintenance activities all over the city, lots should be organised geographically combining several activities within a certain area. Combine activities with similar transport needs.
- Arrange parking and charging facilities on work locations.
- The knowledge level among suppliers about ZE transportation options is limited, they would welcome information about existing possibilities for ZE vehicles and about technology developments (hydrogen, electricity).
- Consider tendering transport separately (apart from the maintenance service activities). This way the cost for sustainability is not hidden in the hourly tariffs, but the additional cost becomes explicitly available as the price to be paid for obtaining for zero emission transport
- Apply a zero emission scale model in tendering: e.g. start with requiring 20% ZE in the first year, which grows progressively to 100% ZE over the following 5 years.
- Reward the use of ZE transport with an extension of the contract duration.
- Purchase and order more systematically and jointly (first internally, then externally with other buyers).
- Allow for small good and tools depots in the city.

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<sup>1</sup> See Rotterdam's [BuyZET transportation footprint mapping report](#), and [Initial Analysis Report](#) for more background on why this was selected

## 2. Approach

Parties were invited to participate in the BuyZET market engagement to discuss about zero emission transport within the City of Rotterdam for real estate maintenance activities. An invitation was announced through a publication on March 7, 2018 on the public tender platform [www.negometrix.com](http://www.negometrix.com). Furthermore, known prior applicants for contracts were actively approached by the City of Rotterdam contract managers to inform them of the market engagement activities and encourage them to participate. Interested parties were asked to register their interest.

After signing up, parties received a briefing letter in which date and location were stated and that the engagement would go into the aspects of:

- Selection criteria (minimum demands) for contractors.
- Selection criteria (minimum demands) for contracts.
- Tendering criteria for the quality of the contract.

Furthermore, parties were approached by telephone to confirm their attendance.

During the engagement, five out of a group of six people representing the City of Rotterdam were present. Only one of the two contract managers Mr Wildeboer and Mr Schlosser was present during the engagement on each of the two days.

- Ab Bruinekoel. City of Rotterdam. Head of Facility management. Responsible for real estate maintenance for the City of Rotterdam (contract owner).
- Henk Schlosser. City of Rotterdam. Contract manager for real estate maintenance for the City of Rotterdam. Only present on day 1.
- Jan Wildeboer. City of Rotterdam. Contract manager for real estate maintenance for the City of Rotterdam. Only present on day 2.
- Jos Streng. City of Rotterdam. Transport Planner at the Traffic and Transport Division.
- Léon Dijk. City of Rotterdam. Consultant sustainability and BuyZET project manager.
- Han van der Steen. Coriolis EPC. Consultant and ZE project manager.

In a maximum of 45 minutes private dialogue, parties were invited to deliberate on the aspects that were stated in the briefing letter. Rotterdam ensured that the interviews would not be disclosed, to stimulate maximum openness.

7 market parties signed up for the market engagement. After the confirmation call, 2 of these parties were identified as consultancies that were only interested in the process and the content of the documentation and not in the engagement itself. These were excluded from the process.

All team members took notes individually during the engagement interviews. These notes were grouped and discussed. Because there was no one-to-one relation between the meetings and the three aspects mentioned in the briefing letter, the notes were categorised into four groups.

### 1. Attitude towards zero emission

2. Company business model & logistics profile
3. Zero emission preconditions and purchasing criteria
4. Possibilities to optimize logistics

In contrast with the previous market engagement for construction materials, participants were not sent an individual report with the conclusions of their engagement and the possibility to respond. No minutes of meeting were produced, to avoid the opportunity to intensively comment on the minutes, to promote the company rather than comment on the aspects at hand. This time, parties were informed that the engagement was documented but for internal purposes only.



## 3. Results

### 1. Attitude towards zero emission

- › Generally positive with respect to zero emission.
- › The use of ZE vehicles is only seen as feasible if daily mileage that is required for the maintenance activities is under 150 km, and if there is a charging facility available on working locations for intermediate charging.
- › Skepticism about reliability of technology (hydrogen and / or electricity), both in terms of vehicles and energy infrastructure.
- › Insufficient knowledge of what is available in the field of ZE vehicles as well as a limited confidence in the current supply of such vehicles.
- › ZE transportation is seen as important because it is beneficial to have Rotterdam as a customer.
- › Suppliers tend to stick to their preferred car manufacturer and dealer. Not all of them offer EVs.
- › Investment in ZE vehicles is only economically feasible if the contract contains a sufficient amount of work (man-years).
- › Too few charging stations, especially for charging on or in between jobs.
- › The purchase price of ZE vehicles is considered an obstacle, even if the operational costs are lower. This is especially true for small businesses with less investment capacity that cannot get sufficient financial resources against acceptable terms.

### 2. Company business model & logistics profile

- › Contractors have no direct influence on the type of vehicles that are being used by their subcontractors.
- › Contractors are not prepared to facilitate or even finance subcontractors to purchase ZE vehicles, because they also work for competitors.
- › If vehicles are taken home then charging infrastructure is needed at the home locations of employees. This is experienced as a hurdle, even though the current public charging infrastructure policy in the Rotterdam region provides a public charging point within 200 m of the home address for inhabitants who drive an electric vehicle and cannot charge on their own premises.<sup>2</sup>
- › Apart from the limited loading capacity of EV (in particular vehicles with trailers), in most cases a longer daily distance (300 km) is needed while 150 km is seen as a maximum for EV.
- › Materials needed for maintenance activities are often delivered directly to the work locations by subcontractors. Sometimes they are delivered at the main office of the contractor and then collected by the employees or subcontractors.
- › Every type of maintenance project has its own logistics needs and a different ZE approach. This complicates the design of an effective procurement strategy which fits all the activities.
- › Electric scooters and bicycles are also an option. For example in inspection work.
- › Of the parties that were able to estimate the costs, transport costs averaged between 5 and 15 percent of the cost price.

### 3. Successful implementation of ZE procurement for real estate maintenance includes

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See [http://www.sppregions.eu/fileadmin/user\\_upload/Tenders/MRDH/SPP\\_Regions\\_Tender\\_model\\_Electric\\_Vehicles\\_Rdam\\_Final.pdf](http://www.sppregions.eu/fileadmin/user_upload/Tenders/MRDH/SPP_Regions_Tender_model_Electric_Vehicles_Rdam_Final.pdf)

- › General prerequisites
    - Continuity and volume of work package is required. Possibly by bundling the procurement of various parties in the city. Current municipal contract to be renewed consists of 36 lots.
    - Purchasing parties in the city must be aware of and willing to adopt the ambition of emission-free transport in 2025.
    - Parking facilities on location.
    - Energy supply on location.
  - › Purchasing criteria
    - Progressive ZE model is considered a good idea, e.g. starting with 20%, and progressively increasing to 100% in 5 years.
    - Clear specifications in minimum requirement and award criteria are needed, also with regard to zero emission transport.
    - Provider who transports zero emission above a prescribed scale (who switches more quickly to zero emission transport than initially offered) could be rewarded with extra contract duration.
    - Enforcement of requirements and KPIs from tender is often too limited.
    - A municipality that applies provides or subsidizes electric transport itself, can inspire companies to do the same.
4. Possibilities to optimize logistics
- › Organise demand
    - Customer should adjust purchasing behavior to reduce mileage. E.g. more planned, less urgent.
    - More bundling of orders within the own organization.
    - Define geographically clustered lots (currently, working locations within one lot are often scattered).
  - › The availability of "storage boxes" in the city for goods and materials, could help transport optimization and therefore the opportunities for switching to zero emission transport.

## 4. Conclusions and recommendations

1. Attitude towards zero emission
  - › Inform market about existing possibilities for ZE vehicles and about technology developments (H2, electricity).
2. Company business model & logistics profile
  - › Provide a mechanism to reward maintenance service providers for their ZE policy with regard to their suppliers, both of labour (subcontractors) and of goods and materials used for maintenance.
  - › Consider tendering transport separately, regardless of the maintenance service itself. So you know what the eventual additional costs would be for the emission-free transport.
3. Zero emission preconditions and purchasing criteria
  - › Ensure sufficient continuity and volume (long-term contracts) of work package.
  - › Arrange facilities on location for parking and for charging.
  - › Apply a staggered growth model for ZE transport: eg start with 20% ZE in year 1 and in 5 years to 100% ZE.
  - › Reward for surpassing guaranteed ZE transport percentage: contract extension.
4. Possibilities to optimize logistics
  - › Order and purchase more systematically and jointly (first internally, then externally with other buyers).
  - › More geographical clustering of activities with similar transport needs.
  - › Provide or allow small good depots in the city.

## 5. Follow up

A short time after the market engagement, a new tender for craftsmanship and maintenance activities was prepared. We decided to use the fleet recognition methodology ECOSTARS as a requirement for obtaining the contract. Contractors are enforced to audit their fleet, while the extension of the contract period depends on the actual increase of the amount of ZE vehicles within the fleet of the contractor.



# 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

Reach us:

Visit the project website: <http://www.buyzet.eu>

Join the discussion at the BuyZET Procurement Forum Group: <https://procurement-forum.eu/>

Follow BuyZET on Twitter: [@BuyZETproject](https://twitter.com/BuyZETproject)

Join the BuyZET LinkedIn Group: [BuyZET Project](#)

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