Draft Joint Statement of Demand

Circular Electrical Vehicle Chargers

As public and private buyers, we are committed to creating a circular economy, using our combined purchasing power to change markets. In a circular economy:

> *products, services, and infrastructure are designed, used, and operated to maximise value and minimise waste, reducing demand for primary resources, lowering carbon emissions, and allowing the regeneration of natural systems.*

This will stimulate innovation and new business models, also creating economic and social impact opportunities.

The intention of this joint statement is to provide a set of commitments and 'asks' which will contribute to the circular development of EVCs . These are to be used by procurers in addition to other sustainability criteria on wider sustainability issues such as sustainable materials, labour and human rights.

By 20XX (year) we are committed to procuring circular EVCs, and therefore as a buyer we will apply the following principles to our upcoming tenders

General principles which we will apply

- Exploring charging-as-a-service business models (also their financial sustainability) and other take-back systems -reusing components leads to reduced recourses. *Functional specification*
- Explore the potential of sharing charging points/infrastructure, vehicles, space (public - semi-private)
- Let circularity and sustainability take a bigger role in awarding contracts
- Explore multifunctional use
- Apply R (reuse, etc..) strategies for Circularity/ambition chart/waste hierarchy

Asks which we will include in future tenders

As major consumers of EVCs, we will ask in future EVCs tenders that suppliers and service providers show how their offers align with the following circular procurement goals and strategies. This is an intentionally broad list and it is intended that procuring organisations have the freedom to select the strategies which are most appropriate to address the needs of each unique tender, in order to have the most beneficial impacts.

- Clear commitment from operators/manufacturers to implement the latest smart charging standards (ISO 15118-20, IEC 63110, IEC 63119) (By March 2024 for ISO 15118-20, or within 24 months after publication date for the other standards)
- Smart grid solutions

- Use % of post-consumer recycled content and increase every year to challenge the sector. Plastics and metals/minerals.
- % of reused content
- Applicants shall ensure that the infrastructure's processor and memory have sufficient resources, or can be upgraded in the future. This is important to support the simultaneous use of multiple versions of standards on all communication interfaces (e.g. a newer version as well as a fallback option for backwards compatibility, or a different standard on the same interface). Communication between the following interfaces must be ensured:
    a) car <> charging station;
    b) charging station <> charging station management system;
    c) charging station management system <> third-party roaming systems.
- Applicants shall provide full documentation of the software protocols and hardware specifications, such as physical connectors to allow for modular upgrades throughout the entire lifetime of the infrastructure.
- Modularity and Repairability (spare parts) for XX years.
- Applicants shall demonstrate a commitment to lifetime interoperability of the charging infrastructure by declaring which methodologies the company is using to determine real world interoperability with EVs, and by regular testing.
- Include the taking back of EVC's in contractual arrangements at end-of-life/end of contract
- Origins of metals, minerals.
- Two-way charging options.
- Product passports. With details on the type of materials used, the design and state of product. This can be useful for recycling/reuse/waste partners.

This Joint Statement has been developed by: Circular Flanders, Rijkswaterstaat and City of Malmö in collaborations with input from organisations that took part in the process. You see them below. ECOS and RAP have been able to contribute a little bit extra to the draft with the experience they have gained putting together the guide to smart charging.

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The Ministry of Internal Affairs in the Netherlands

Valuation Office Agency UK

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