

Sustainability criteria for workplace ICT hardware

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Introduction

The Ministry of Economic Affairs and Climate Policy, responsible for providing IT equipment for the entire Dutch government, has set a precedent for future tenders on how to challenge the market on various sustainability aspects. The Dutch government's mission is to make the country's economy fully circular by 2050. By 2030, the consumption of primary raw materials should be halved. As part of this goal, all government purchases should be circular by 2023. The aim is also to ensure that the transition to a circular economy also trickles down to the Dutch governments' own purchases, thereby using circular procurement as a way to stimulate the market.

The ministry included ambitious sustainability and circularity goals in five

separate tenders prepared over a period of 1.5 years for IT equipment such as monitors, laptops and ICT workstations, iOS and MacOS devices, Android devices, and accessories and services. The contracts, collectively referred to as *ICT Werkomgeving Rijk (IWR) 2021*, illustrate the ability of public procurement to raise the bar on market standards for the supply of workplace hardware.

Procurement process

The ministry's main goal is to procure with impact and innovation. Each procurement cycle should make the contract more sustainable, with the ultimate goal of providing only sustainable products in IWR contracts. In addition, the ministry aims to become a leader in the EU, sharing knowledge and collaborating within and beyond national and European borders.

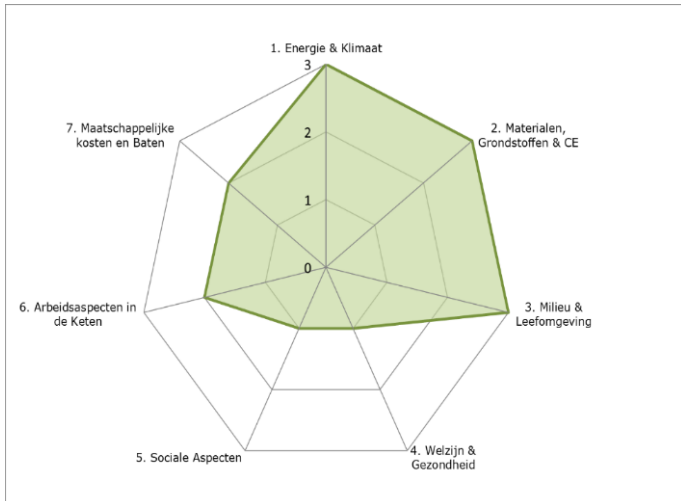


Figure 1 Ambition web

To define specific requirements and award criteria, the ministry used an 'ambition web' as a tool to prioritise sustainability goals. The ambition web, illustrated in figure 1, offers insight into the impact of the commodity on people and the environment, illustrating which areas of concern can be targeted. Based on the level of impact assessment, appropriate requirements and preferences were developed for the tenders. The highest priority was to reduce and avoid carbon emissions (number 1) and reduce and avoid the use of raw materials, and minimise the impact of chemicals on human health and the environment (numbers 2 and 3). Human rights and labour conditions in the supply chain and social costs and benefits were the next priority. There was less focus on social aspects related to social return in the services of the contract.

Developing a circular approach

Many of the approaches used in the IWR tender came from smaller pilot projects that showed positive results in terms of both price and sustainability. The approach to offsetting CO₂, which had not been tried out yet in the ICT sector before IWR 2021, was taken from a Gold Standard certification project in Uganda. The pilot involved the supply of a waste-neutral device by the Dutch government. The pilot helped to legitimise the initiative, after which it triggered wider interest to establish the certification, called 'TCO Certified e-waste Compensated'. This certification is currently being applied to ICT tenders throughout the country. The criteria for zero-emission transport were taken from the transport sector during the pandemic due to the high demand for home delivery.

Involvement of internal and external stakeholders

Risks in the tender were well anticipated by involving both internal and external stakeholders early in the procurement process (see figure 2). Internally, all departments in the Dutch government were involved. The market was also approached over a 12-month period to gather new information and develop support with the market to minimise risks. The market consultations were also a way of explaining and justifying the decisions made in the tender contracts, thereby minimising resistance to them.

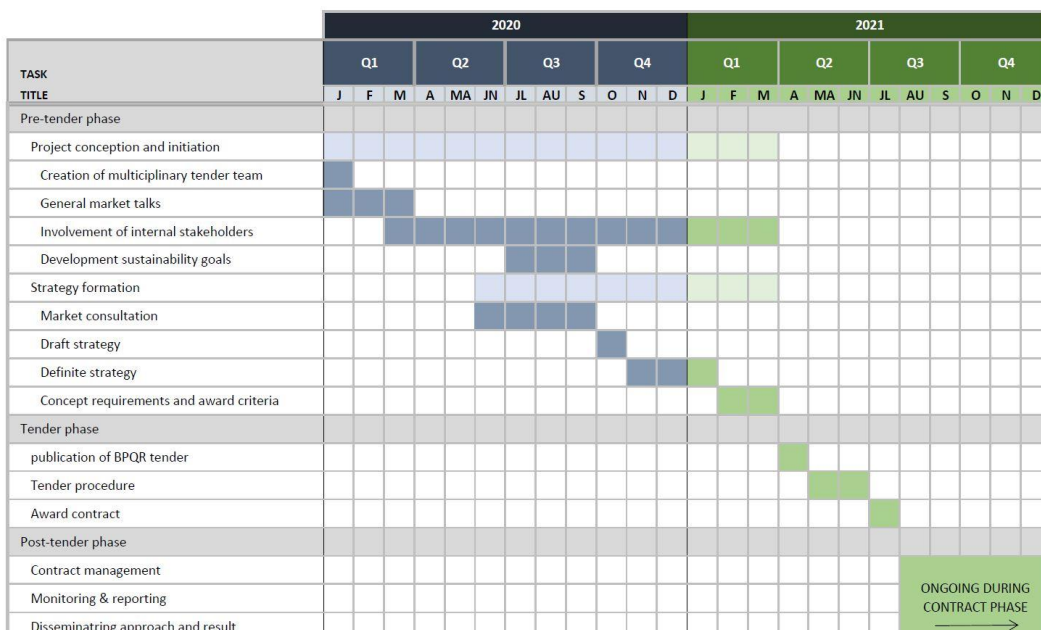


Figure 2 WR 2021 Timeline. Click on the image to view full size.



Companies that expressed their interest and enthusiasm were seen as market leaders and were given the opportunity to develop an effective strategy before the tender was announced. Topics addressed in the market consultation included product as a service, use of second¹ and third life², renting, emissions and use, which models can be used for CO2 footprint, what kind of KPI to attach to CO2 footprint, how to evaluate the business operations (CO2 performance ladder and Ecovadis), reparability, life cycle, plastic and offsetting methods (waste and CO2 emissions).

The market confirmed the product as a service model as being favourable to them, with a high potential for circularity. This aspect was included in the tenders and helped to implement the sustainability ambitions on a large scale as a framework agreement. It offers participants the opportunity to lease products. The model provides the incentive of a guaranteed residual value of a product and the circular incentive for the resources of the equipment to return to the supplier in two different ways. Either no more than 20% of the equipment is damaged and has to be recycled because reuse is no longer possible, or the focus is on reuse by maximising the life of a product, which also maximises profit. Suppliers always receive their equipment back and know the precise chemical composition of each piece of equipment, making it easier to recycle. The raw materials recovered from the recycling process will also be reused in new equipment of similar quality. Overall, it's a win-win situation.

Contract management within the internal organisation

It is essential to start thinking early in the process how the sustainability aspects of the contract will be managed in the organisation. The market advised the ministry to manage the sustainability aspects of the contracts at the level of the framework agreements. The participant buying under the framework contract does not always have the expertise to properly monitor whether the sustainability requirements of the framework agreement are actually being met. Therefore, contract management at the level of the framework agreements provides clarity to the market and helps to reduce the additional administrative burden for its participants.

The framework agreement is centrally managed by the category manager and has a sustainability advisor who provided advice on specific issues in the contract. The ministry operates based on up-front controls, such as checking whether web shops are offering products that adhere to the requirements of the agreement, and subsequently through the use of reports they receive on a monthly, quarterly and annual basis.

The reports provide insight into the sustainability of ICT products based on CO2 footprint, CO2 offsetting and e-waste generation. In addition, the annual report focuses on annual totals, including CO2 footprint and reduction, raw material extraction and how much is returned to the supply chain, and the use of zero-emission transport. The parameters are reviewed annually and audits are carried out with contractors through spot checks and audits of contractors' processes with step-in rights³ if the agreement is not being met. A service credits⁴ system is also in place, with fines and the possibility of dissolving the contract.

¹ Use of second life refers to the possibility for procurers to take responsibility for what happens with equipment after it has been used within the contract of the procurer.

² Third life refers to the possibility of refurbished equipment being bought via the contract.

³ Step-in rights refer to a strict intervention measure on behalf of the procurer in which they can participate in the daily board meetings of the supplier.

⁴ Service credits is a mechanism that applies a regime of fines on different levels when the supplier fails to meet a service.



Summary tender:

The best price/quality ratio (BPQR) was used in the tender process. The evaluation offer consisted of 50% price and 50% quality. Approximately 87% of the total score for quality consisted of sustainability requirements.

Description of circular criteria:

- Priority for energy and climate (work with CO2 offsetting, CO2 efficient mix of transport possibilities) and environment
- Rethinking, design and reuse in terms of raw materials and circularity
- Transition clause for carbon neutral transport: the transport vehicles only need to comply with CO2 neutrality after the first year of the contract
- Focus on cooperation: extensive market dialogue as a prerequisite for the creation of a sustainable tender as well as the need for a broad support base in the internal organisation

Use of tools:

- MVI criteria tool, EU green public procurement criteria (JRC)
- Numerous LCAs
- TCO certified for the entire procurement process
- Fairchain (e-waste compensation and traceability)
- Ellen MacArthur Foundation – inspiration

A winning strategy:

- Process within the procuring organisation: ensure support (internal and external) for sustainability ambitions in the tender, taking enough time in the preparation/strategy phase to gather new knowledge/information on risks and opportunities
- The winning bid will stand out by virtue of the following circular characteristics: maximum adherence to sustainability goals, the use of TCO Certified, 60%-80% reuse of equipment* and all the products have the potential for a maximum life span updates)
- Examine developments in other sectors and markets and transfer best practices. IWR learned from CO2 offsetting project in Uganda about zero emissions and applied it to ICT

* The reuse of devices applies to the lease of the devices. The contract agreement makes the Dutch government responsible for the reuse of the devices after the term of the lease ends.



Results

The contract was awarded in July 2021. All new central government laptops, tablets and smartphones are now e-waste neutral (TCO Certified e-waste Compensated). In 2021, this involved 13,527 devices. This means:

- 4,400 kg less e-waste
- 46 tonnes of CO2 reduction
- Various recycled raw materials:
 - gold: 1.5 kg
 - copper: 570 kg
 - silver: 15.5 kg
 - palladium 600 g.

Lessons learned

You can only really learn during the execution phase. Key lessons so far:

1. Support from stakeholders (internal & external)
2. Taking enough time in the preparation phase and strategy phase with knowledge development, creating innovation takes time
3. Look at what other sectors/markets are doing and how you can use that in your own procurement (incremental and sustainable innovation); this way you don't have to reinvent the wheel

Additional resources

<https://www.denkdoeduurzaam.nl/actueel/nieuws/2022/04/11/rijk-wil-met-de-inkoop-van-ict-voor-de-werkomgeving-europees-koploper-co2-reductie-worden>

[Yearly results are published on the dashboard of sustainability of the Dutch Government.](#)