

Case studies: Sustainable solutions for transforming the smartphones and ICT sector



Sustainable and circular ICT through procurement: learnings from the Netherlands

Representing a significant portion of global ICT demand and a mandate for social good, the public sector has the scope and scale to create sustainable change in the electronics industry.

However, public bodies currently do not always act as a unified front, nationally or internationally. To achieve the meaningful social good demanded by the citizens it serves, the public sector will need to unify its demands for products and services that respect wellbeing and the environment. Meanwhile, each government body needs up-to-date knowledge of how to build the best possible sustainability criteria into its procurement. There have been national and international government initiatives to develop guidance for public bodies on how to do this. ICT is a key focus as it often represents a large part of public spending¹.

“The Netherlands’ central government is now procuring all its furniture according to circular values.”

One country taking the lead on this is the Netherlands. Its government is taking concrete steps to make its own procurement more sustainable and to collaborate with the market to develop more circular business models. This includes breaking down barriers like regulatory hurdles and outdated procurement habits.

‘PIANOo’: The Dutch public procurement expertise network

Set up in 2005 and administered by an arm of the government, [PIANOo is a knowledge and expertise network](#) that provides guidance for public procurement in the Netherlands, including on sustainability. It works ‘for and with’ a network of 3,500 professionals in public procurement and tendering. It works to develop and spread ‘best practice’ via resources that include conferences, manuals, research papers and briefings, and via dialogue with the market. The online resources are available in Dutch and English and are also open to private sector organisations.

Part of PIANOo’s focus is ‘[Sustainable Public Procurement](#)’ (SPP), under which it defines seven key

themes. While the procurement profession has traditionally focused on value for money and legal compliance, [SPP recognises that public procurement can and should contribute towards public policy aims](#) – such as the UN Sustainable Development Goals and the Paris Agreement.

Many of these seven themes are relevant to ICT. For example, under ‘green public procurement’, guidance is given on [how to set environmental](#)

¹ For example, [in 2010 to 2016, ICT represented over 20% of asset spending](#) by the UK’s local and national government.

[criteria](#) for different product groups including various types of ICT device. Meanwhile in the ‘circular procurement’ theme, [there are examples of various projects](#) that have experimented with circular ICT procurement, and a [sector report](#) looking at how more circular ICT business models might align with public procurement.

[Seven themes of Sustainable Public Procurement \(SPP\) in the PIANOo network:](#)

1. Social conditions in global supply chains
2. Social return on investment (SROI)
3. Green public procurement (GPP)
4. Procurement of bio-based products
5. Circular procurement
6. Public procurement of innovation (PPI)
7. Opportunities for SMEs

The Dutch ‘Green Deal on Circular Procurement’: Learning through action

This [Green Deal \(GDCl\)](#) was originally a three-year project from 2013 to 2016. It convened procurement professionals from various levels of the Dutch government, along with multinational corporations such as Philips and Interface, and many smaller companies. Brokered by the Ministry of Infrastructure and Environment, this ‘community of practice’ investigated how procurement could encourage circular business models. It implemented about 80 pilot projects, which experimented with contracts that would ensure that a product has a long life, retains value, and is returned to the supply chain. This included purchase-and-buyback, purchase-and-resale, and product-as-a-service. Procurement possibilities for specific types of product, such as workwear, catering and ICT were addressed in smaller market meetings within this ‘community of practice’.

GDCl generated valuable insights that were [gathered into an online report](#) for other organisations to learn from. For example, some of the pilots failed simply because it was impossible for the market to fulfil the sustainability criteria that were initially set. In this kind of situation when the buyer is not sure what is possible, ‘[competitive dialogue](#)’ can serve as a more effective approach. It sets out a more open

set of ambitions in a tender and invites suppliers to respond with how they could innovatively fulfil the goal of sustainability or circularity.

Another lesson from some GDCl pilots is that the potential financial savings of circular purchasing may be hidden because the ‘purchase’ is not in the department where the savings will appear. A ‘product-as-a-service’ could mean a monthly fee instead of a one-off purchase price. Although this seems more expensive for the department that buys the service, the organisation as a whole could have lower costs due to the service provider taking over responsibility for the product’s maintenance and eventual disposal.

An example GDCl pilot – [reusing ICT from central government](#)

- For data security, old equipment was previously shredded and sold as scrap
- This pilot investigated the potential for data wiping and resale instead
- The State Property Service (DRZ) released a tender for data deletion and making suitable for reuse
- Analysis indicates CO₂ savings of 2-10% and material savings of 5 – 21%
- Due to a low proportion of resalable equipment, the data wiping process did not pay for itself. Not enough devices in good condition were surrendered, while others were poorly handled after disposal because they had ‘no value’
- The DRZ is now investigating ways to increase the proportion of resalable devices – e.g. selling off devices earlier in their lives while they still have good residual value, and educating staff and waste managers to handle the disposed devices with care
- GDCl leader Cuno van Geet reports that it is necessary to assure colleagues the data wiping can be trusted – that it is in fact more secure than shredding
- Another GDCl pilot that also attempted to wipe and resell ICT devices [was more successful](#).

Impact, scale-up and replication

In total, GDCI pilots [represented over €100 million](#) of circular procurement. The final report states that “thanks to the GDCI, circular procurement is now firmly established in the Netherlands, both within central government and in the business community”. The central government is also now procuring all its furniture according to circular values. As of 2018, there is a follow-on project to upscale the approach with the “[Green Deal Circular Procurement 2.0](#)”. Here, there are eight working groups, [one of which focuses on ICT](#). The success of the GDCI initiative [is being replicated in other European countries](#) – Belgium and Finland – which are also collaborating with the Dutch GDCI.



Find out more:

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Keys to success

- Government-brokered schemes like GDCI can provide space for buyers and sellers to experiment and learn how to ‘do’ circularity, starting small and building up
- Policymakers must speak with the market to address real and perceived barriers to circular economy, including regulatory hurdles
- ‘Circular’ procurement means managing the value of the product over time – the procurer becomes a ‘supply chain manager’ who connects the stages of a product’s life cycles
- Make knowledge and resources on sustainable procurement available centrally ([PIANOO](#)).

Next steps

- Follow-up Green Deal project in Netherlands 2018-2021 – [including ICT working group](#)
- Replication of the government-convened ‘green deal’ model in other countries
- International collaboration and knowledge sharing between sustainable procurement initiatives to unify the ask for sustainable products and services in order to transform the market.

About Transform Together

[Transform Together](#) works with civil society, governments and businesses to advance sustainable consumption and production in high and middle income countries. Bioregional is the convenor and secretariat of the partnership.

About Bioregional

[Bioregional](#) works with partners to create better, more sustainable places for people to live, work and do business. We call this One Planet Living®.