

Circular Procurement: The first step in a series....

The Dutch Ministry of Infrastructure & Environment proudly hosted the first International Congress on Circular Procurement in Amsterdam on 20-22 April 2016. Attended by 120 experts from over 23 countries around the world, the Congress aims were to profile examples of Circular Procurement, to share experiences and to discuss how Procurement could be used as a powerful tool to deliver more circular economies.

The Congress did not seek to define Circular Procurement but described it as the use of procurement as a mechanism to stimulate the circular economy by fulfilling the need for goods and services in a more circular, resource efficient way, by closing the loops of products, their components and the resources used as far as possible. Circular procurement therefore acts as a driver to help develop the circular economy by creating a demand for circular products. Collaboration, especially with the market, is an essential element in finding the best possible circular option available at the current time.

'The case for Circular Procurement is even stronger in the EU. The EU Commission's Action Plan to achieve a Circular Economy, published in 2015, aims at unlocking the potential of government purchasing power – [estimated to represent at least 20% of GDP in industrialized countries] to promote innovation in technologies and systems that are more material-efficient and responsible. Circular Procurement can play a major role in achieving these goals.'

François Wakenut, EC

The inspiring opening address from Thomas Rau maintained that in order to deliver more circular economy we need to change the way we consume. **If we want to change our economy we need new business models** and to do this this we need to facilitate a new relationship between producers and purchasers, moving from ownership to usership. The examples showcased at the Congress followed the theme of 'learning by doing'. This has embodied the approach by the Dutch Government, e.g. through the Green Deal, and other countries that have recognised the potential of sustainable procurement to help them implement their emerging circular economy strategies and address the 2015 Sustainable Development Goals (SDGs), which specifically called on governments to use public procurement to achieve sustainable development.

The Congress concluded with a number of recommendations that highlight the importance of government and private sector thinking about the impacts of the procurement approach across the whole procurement cycle of design, sourcing, use and disposal (including re-use, re-purposing, and recycling). Key recommendations included:

- Collaborating within organisations and with the market to identify priority categories where product and material loops can be closed, reducing the life cycle costs and impacts;
- Behaviour change in organisations is equally as important as addressing physical barriers in closing resource loops. Evidence needs to be clear and accessible and capacity building is necessary to catalyse a shift in practice alongside the shift in circular thinking.

Evidence from Pilots

Workshops and round table discussion covered both policy and practice, with experience from practitioners on existing and completed pilots, including through the Dutch Green Deal Circular Procurement and the EU projects REBUS project (Life+), GPP2020 (IEE) and SPP Regions (Horizon2020).

Lively workshops highlighted the relevance of procurement in delivering the circular economy at a sector level. They showed the added value that circular procurement provides as a lever to existing initiatives on sustainability by extending the focus on product or material purchases into operational use, and after 1st use, how to encourage a 2nd or even 3rd life, e.g. through repair, reuse and remanufacturing. Examples also showed how procurement can act as a powerful driver

by creating demand for recycled and secondary materials to encourage an increase in recycling at end-of-life.

'Only last year, all governments of the world agreed the Sustainable Development Goals. Achievement of these goals over the next 15 years will be critical to the maintenance of a safe and healthy planet and shared development. By creating larger markets for products designed and built to reduce their adverse environmental and social impacts, Circular Procurement can make a major contribution.'

Farid Yaker, UNEP

Pilots in IT have demonstrated that the lifetime of laptops can be extended by 3 years and that selling discarded IT hardware to the market for reuse converts costs into revenues. Perceptual challenges still exist over the security of data-wiping. Trusting the market to securely reuse IT requires time and proof. Practical challenges also exist in collection for reuse rather than for recycling to avoid damage. Take-back schemes were one of a number of alternative resource efficient business models (REBMs).

Pilots in Textiles show that the market in textiles is taking the first steps in improving circularity and that professional demand can encourage this change. Sub-sectors like health care, services uniforms and workwear are also specifying recycled content, fiberizing instead of burning end-of-life garments and adopting alternative business models like leasing instead of asset purchasing. One of the pioneering SME's, DutchAwareness, stressed the need for new ways of cooperation in the supply chain, organised in a closed loop, performance based and transparent way. Marcin Kautsch from the Institute of Public Health in Poland also showed the benefits of using the Total Cost of Ownership method to evaluate choices based on the whole product life cycle. The three main recommendations identified were:

- Collaboration and transparency - making circular textile/workwear a collective responsibility to make progress;
- Circular Design - modularity and changeability are key elements in reducing waste; and
- Social issues - organising the process better and working on integrated business cases.

Building and infrastructure projects provide a significant potential to improve circularity through procurement. Sabine Oberhuber (TurnToo) showcased the new Town hall for the Municipality of Brummen which treats the building as a 'Materials Bank'. The London 2012 Olympic Games highlighted the potential to influence circularity right from the beginning through procurement and the Alliander building in Duiven used innovation to reduce waste through lean design.

A key challenge is that the construction sector is very linear. However, examples from the UK as well as continental Europe showed it has the potential to reduce waste and close resource loops through increasing levels of recycling in demolition, increasing recycled content in new-build and in reducing waste at end-of life through modular design and design for deconstruction that enable reuse options – 'the Materials Bank' concept.

The Dutch Green Deal has seen some very progressive projects in **furniture** provision that have started to address some key challenges in closing furniture product and material loops. One challenge is predicting and incorporating a long term CP strategy for furniture in procuring organisations given existing ownership models. Moving ownership models (REBMs) e.g. to the suppliers also seen as key element in closing loops and the opportunities and risks of alternative business models need to be better understood.

Overcoming behavioural and perceptual barriers to circular design principles and recycled materials

'Circular Procurement is probably one of the most cost effective ways of transitioning to a sustainable economy. It offers not only the opportunity to reduce the cost of materials and energy used, and the often hidden cost of pollution, but also to stimulate new technologies and business models.'

Mark Hidson, ICLEI

The (video) report, presentations and photo gallery are available on the Circular Procurement Congress website (<http://www.circularprocurementevent.com>).

by designers and architects was also important. Standards and templates can act as a potential barrier as they may exclude most of refurbished/remanufacturing furniture. CP specifications and criteria in procurement can positively address these barriers.

The Ellen MacArthur Foundation (EMF) Circular Economy Policymakers toolkit highlighted Denmark as a national case study. **Denmark identified food as one of the top three contributors to developing a more circular economy** and the UNEP Working Group 4c (Circular Economy & REBMs) Procurement training pilots in Barcelona and Turin have supported this conclusion.

Sustainable Procurement has the power to close the nutrient loop by focusing on waste prevention, e.g. through smart menu planning; and, improving collection and composting of waste arising from catering operations. Market dialogues, fair trade and contracts were all seen as key. The EC CIP Innocat project provided an exemplar that is bringing together public and private buyers to publish a series of tenders for eco-innovative catering products, services and solutions.

Workshop Highlights

Policy Orientation

The Circular Economy is not a new topic as Michel Schuurman's example of Ricoh's sustainability model dating from 1994 showed. An attitude change, however, is necessary to realise a Circular Economy for example by integrating 'use' and 'disposal' within the scope of procurement as Mervyn Jones highlighted. Contrary to popular belief 'Circular Procurement' need not lead to higher costs, as long as both the buyer as well as the supplier take all long-term costs and values into account. Joan Prummel postulated that waste is the outcome of 'bad procurement', providing examples on textiles, furniture and paper in the Netherlands. The key outcomes of these cases are to

'By choosing products and materials that are energy and material efficient, maximizing lifetime through repair and reuse before finally recycling, purchasers can both reduce costs and increase their contribution to sustainable development in a direct and practical way'

Mervyn Jones, UK

- not just think in terms of pilots but also seek scale;
- it's not all about buying circular, but also about preventing bad/unnecessary procurement; and
- cost-savings can be achieved by changing the perception of waste to 'resources'.

Procurement empowering the Circular Economy

Royal Philips' experience from the healthcare and lighting sectors showed that hospitals can benefit from alternative business models, and by doing so also benefit from the high speed of innovation within the sector at a relatively lower cost. Challenges include extending circular thinking beyond a 'financing option', the commitment risk on part of the buyer, a lack of competition (especially within public tenders) and also improving inter-organisational collaboration. In most cases the shift in business model was simply the formalisation of the collaboration. Douwe Jan Joustra challenged clients and procurers to ask a different question in order to arrive at a circular solution, arguing that the suppliers *are* ready for Circular Economy thinking.

Implementation and Scaling

Scaling-up is important as the procurement of energy saving contracts in Spain highlighted that it is sometimes difficult for public procurers to scope a circular question if there is only one supplier. However, governments can encourage scale and incentivise suppliers to create a circular offering.

Marcel Jacobs (Royal Philips) noted that shorter supply chains can contribute to circularity. Circular thinking is advancing in the B2B environment but accelerating circularity in the B2C environment is

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still challenging, partly because of communication and circular business models are not yet optimised. The EU LIFE+ ReBUS (Resource Efficient Business Models) project being led by UK WRAP and the Rijkswaterstaat is addressing this in both a public and private sector context.

The next steps

Definitions

The Danish, Dutch and Finnish are all currently developing processes for procuring more circular 'outcomes and definitions will be both useful and necessary to avoid confusion between terms like Sustainable', 'Green' and 'Circular Procurement'. These should encompass the broader 'whole life' perspective including use and 'end-of-life' in order to close material and product loops. Practitioners felt there needed to be sufficient flexibility to recognise local variations in delivery and that developing definitions should not hinder 'learning by doing'.

Finance and business models

In the context of Circular Procurement, key issues include how to assess and show short and long term costs and benefits to move towards resource efficiency business models. There is no 'one-size-fits-all' solution to incentivising the market to transform the business models.

The public and private sector also need to rethink their annual budget systems in order to identify the impacts, opportunities and risks over the whole life cycle, taking all externalities into account. Shifts towards a more service oriented economy, integrating performance, quality and impacts, would also benefit circularity and help close material and product loops.

Regulation and legislation

Procurement rules and regulations, e.g. waste legislation, are often cited as barriers to innovation and REBMs. Practical experience from all over Europe and around the world shows this need not be the case and examples of 'workarounds' in every field are available. Therefore, capacity building and the provision of timely information and evidence is critical to overcoming these perceptions. **Using existing networks and communication platforms to address these informational barriers can rapidly increase the momentum in change.** The EC will provide an overview of existing networks to facilitate this.

Even with the provision of information, actually starting the process of change can be challenging. Key elements include:

- Recognition of circular procurement benefits and capacity building, e.g. bringing this to developing EU member states through bilateral discussions and training of public procurers in various EU Member States by frontrunner member states.
- Identification of circular criteria in Green Public Procurement criteria and adding circular criteria where gaps are present.

Measurement

Metrics, measurements and benchmarking are important elements in all aspects of sustainable procurement especially in determining how circular a procurement or a product/service really is. Measuring needs to be undertaken at all stages – not just in terms of tendering but in initial forecasting and in monitoring in-use performance after contract award. Targeting measurement on the impact hotspots, e.g. the production, in-use or end-of-life is necessary to get a true whole-life perspective. Environmental, social impacts and monetization are particularly important for impact analyses on larger scale. Most importantly though the view from the Congress was don't wait until

everything is covered. Just get started, be transparent and learn by doing. Not necessarily as a tool for procurement to measure one product.

Collaboration

Circularity is not a static concept and Circular procurement is most successful when there is strong internal support and collaboration, when other business models are used and when it is flexible - adapting to market developments. In some countries, such as Austria, the Federal organisational structure is seen as a barrier because it is difficult to create collaboration within the country. The Dutch used parliamentary demand to lay the foundation for the transition to Circular Procurement and in Belgium, the regions such as Flanders are taking a leading role in Circular Procurement.

Internal collaboration is therefore equally important as external to gain buy-in and transparency in owning and mitigating risk. Mark Hidson (ICLEI) noted that typically, it is a matter of the 'interpretation' of the laws and that evidence and exemplars, like pilots and case studies, were useful tools as part of wider guidance. Building on the case of NNOF in Belgium encouraging more suppliers to stimulate circular procurement and using the 'Innovation partnership' approach as a potential route to encourage circular thinking where suppliers are limited are both options. In order to stimulate circular procurement within Europe existing platforms such as ICLEI's *Procura+* and the *Procurement Forum* could be used more frequently to share of best practice.

What is ultimately important is the 'power of one' in initiating the decision to start scaling up. Well conceived and targeted action by individuals cannot be underestimated and as Thomas Rau said in his introduction, we are guided by the future. We can all play a part in using procurement to help close product and materials loops and create more circular economies. One person, Farid Yaker, from the United Nations Environment Programme (UNEP), led by example in announcing at the end of the Congress that UNEP would take the next step in organising a follow-up Circular Procurement Congress in 2017, in Paris.