

# Circular Procurement for Beginners

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**ICLEI** 

## Overview



### Today we will cover:

- What is circular procurement
- How to apply circular procurement principles
- Examples of circular procurement in practice

# Why circular economy?



There is a design flaw in our current system...



 $Source: C2C\ Platform, \underline{http://www.c2cplatform.tw/en/c2c.php?Key=1}.$ 

# Resource shortages...

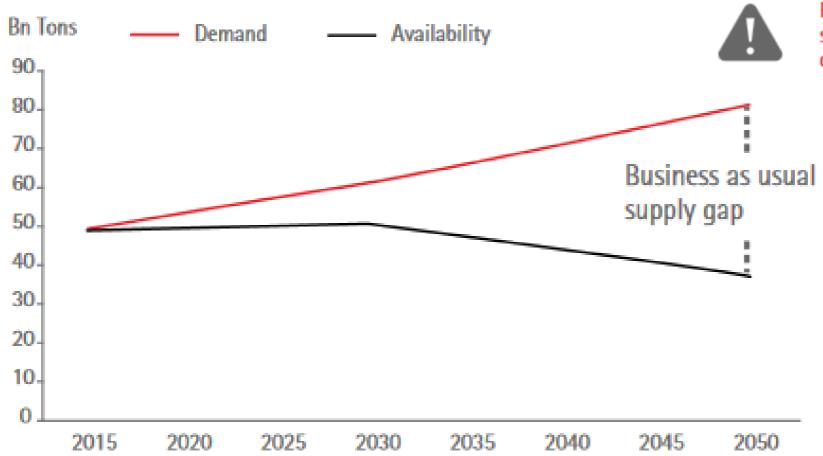


Rising costs for material, energy, land, water

Resource supply / demand imbalance 2015–2050



Extreme volatility in commodity markets



Economic and social risk of supply disruptions

Source: Accenture (2015) Circular Advantage

## **Public Procurement**



Public procurement is a powerful market force!

### €1.8 trillion

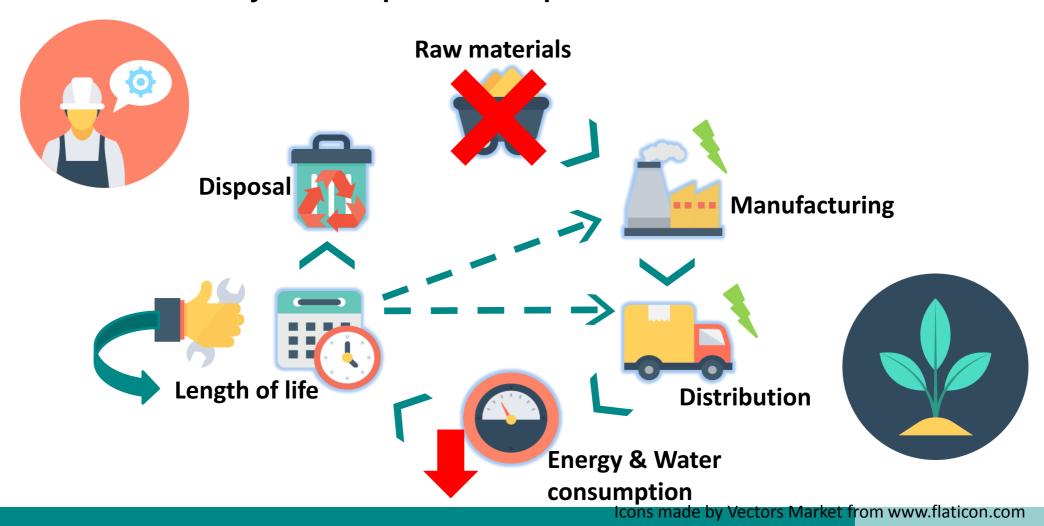
is spent by EU public authorities each year (14% of EU GDP)

Public authorities can use procurement to support economic, environmental and social outcomes

## Circular Public Procurement



Holistic approach to sustainability which considers whole life cycle impacts of products and services

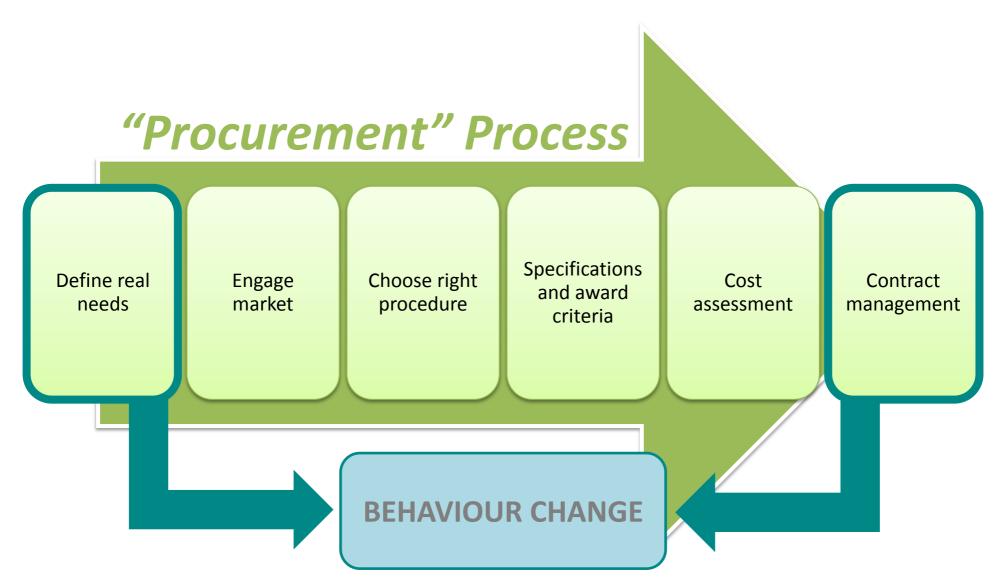




# It is not about doing "less bad", but thinking how we can do "more good"

# Is circular procurement new?





## Define real needs



Example – do you need a vehicle? Or do you need mobility?

- Typical European car parked
   92% of the time
- The utilisation rate of city owned cars is low (less than 3 hours a day).

Defining outcomes not products > innovation





# Mobility



Case study: An electric vehicle car sharing service for city workers and citizens (City of Lappeenranta, Finland)

Four electric cars plus mobile app booking service. Two cars must be reserved 100% for City during weekday working hours, otherwise, all cars are available to book by any user.

Value: €27,000 per year

- •36 tonnes CO<sub>2</sub> directly saved
- •Opportunity for citizens to use and test electric vehicles.
- •Better utilisation of city-owned cars (and city space)



# Indoor Lighting

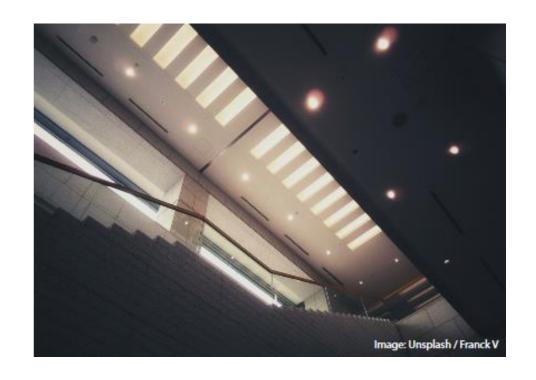


Case study: Procuring energy-efficient indoor lightingas-a-service (City of Mechelen, Belgium)

15 year lighting-as-a-service contract for four public buildings.

Value: €500,000

- •50,477kWh energy or 10 tonnes CO<sub>2</sub> saved per year
- •Potential 15 year saving of 150 tonnes CO<sub>2</sub>
- •Switch to service was 'budget neutral'



# Internal engagement



How do you define real needs?



# **Engage Market**



### Effective market engagement > better procurement and a more circular economy!

- Identify potential bidders and / or potential solutions
- Increase suppliers'
   understanding of what you
   need, and how they can meet
   these needs
- Inform your choice of procurement procedure and contract type.



BEST PRACTICE REPORT



Market engagement

Download from: www. sppregions.eu

# Choose the right procedure



Choice of procedure can influence the outcome of your procurement:

- Open procedure
- Restricted procedure
- Competitive procedure with negotiation
- Competitive dialogue
- Pre-commercial Procurement
- Innovation Partnership

# Specifications & Award Criteria



Subject matter: defines product, service or work you want to procure.

➤ Refer to circular objectives in Subject Matter. Strong signal to market + specifications and award criteria MUST be "linked to subject matter".

**Selection criteria:** used to evaluate previous experience and technical capacity of suppliers to carry out circular aspects of contract.

For example: request method statement demonstrating how to meet stated goals of procurement

**Technical specifications:** compulsory minimum requirements. Best suited for specific, measurable needs (i.e. product warranty, spare parts, disassembly and repair, presence of chemicals etc).

Award criteria: can help assess which bids are more circular than others (i.e. guaranteed lifetime beyond min. warranty, use of recycled materials)

# Office equipment



Case study: Framework contract for sustainable office materials based on "Cradle to Cradle" principles (City of Ludwigsburg, Germany)

Provision of C2C stationary across 38 product groups to 100

delivery points

Value: €165,000

**Results:** 

•New product commissioned by winning bidder to comply with ecolabel certifications

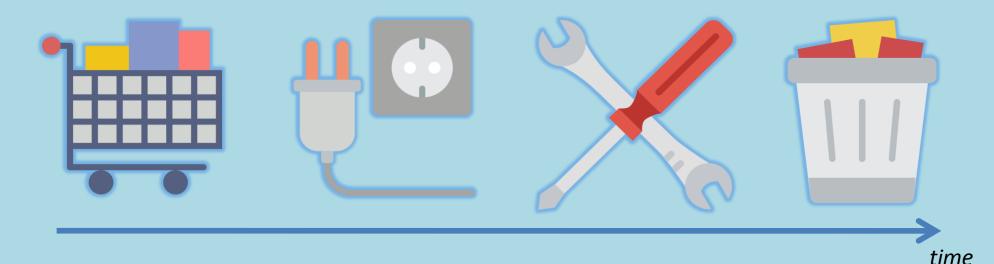


### Cost assessment



### Lowest cost ≠ best value!

Initial price + Running costs+ Service costs + Disposal costs



## ICT



# Case study: Purchase of second-hand laptops for schools (city of Forssa, Finland

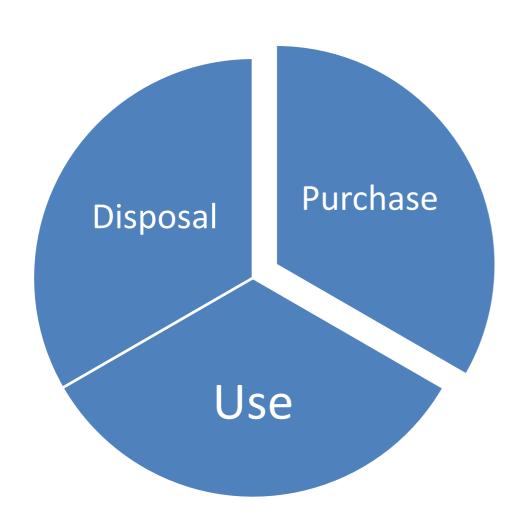
Value: €65,000

- Savings of €50,000 per year
- Lifecycle CO<sub>2</sub> reduced by over 21 tonnes per year over estimated 3 year lifetime.(equivalent to driving 114,000 kilometres by car).



# Contract Management





- Contract Performance Clauses
- Remedies in case of nonperformance
- Performance monitoring clause

# Food and Catering



# Case study: Healthy and sustainable school meals (Ottingnies-Louvain-la-Neuve, Belgium)

Catering services with focus on healthy food, training people far from employment, and requirement to monitor food waste

Value: €1.6 million

- Food waste must be weighed daily
- Data is reported and used to adjust orders
- Foodwaste reduced from 20% to 11%





## Circular Procurement in Practice

## **Textiles**



- Design for reusability (removable labels)
- Recycled fibres
- Textiles as service





## **Textiles**



# Case study: Purchasing textiles made from recycled fibres (Ministry of Defence, The Netherlands)

100,00 towels and 56,000 overalls with at least 10% recycled content

Value: €430,000 and €1.38 million (respectively)

- •36% and 14% recycled content
- •233,478,000 litres of water saved
- •68,880 kg CO2
- •23,520 MJ of energy consumption

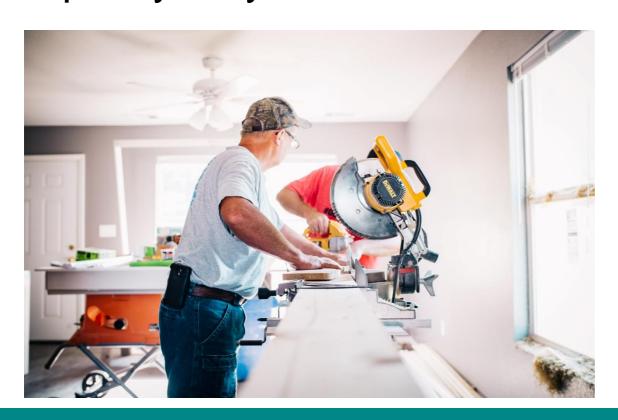


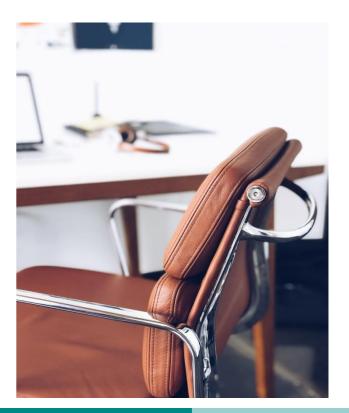
Photo: Clarysse Bath & Kitchen

## **Furniture**



- Reuse and remanufacture already owned furniture
- Design new furniture to be fully recyclable
- Specify recycled content in furniture





## **Furniture**



# Case study: Reuse and refurbishment of office furniture (Public Health Wales, UK)

Design office space and supply furniture (using as much existing furniture as possible)

Value: €460,000

#### Results:

- •94% of furniture reused or remanufactured
- 41 tonnes waste diverted from landfill
- •134 tonnes of CO2 avoided



Photo: Public Health Wales

## Construction



- Design out waste (design for deconstruction)
- Extend lifetime (refurbishment over new build)
- Use recycled materials (including from demolition)



## Construction



### Case study: Using recycled concrete in the design of new buildings (State of Berlin, Germany)

Structural works for the Berlin Institute for Medical Systems Biology

Total building value: €33.5 million Results:

- •880m² of virgin gravel avoided
- •66% of production energy saved
- •7% of associated CO<sup>2</sup> saved



Photo: Staab Architekten

## **Demolition**



Case study: Increasing brick recovery for reuse when procuring demolition services (Hjørring Municipality, Denmark)

Demolition of two brick buildings

Value: c. €300,000

- •16,000 bricks salvaged
- •10,950kg CO<sub>2</sub>
- Same price as traditional demolition



## Additional Resources



- Public Procurement for a Circular Economy Brochure
   http://ec.europa.eu/environment/gpp/pubs\_en.htm

**Circular Procurement: Best** 

Practice Report:

<a href="https://sppregions.eu/fileadmin/user-upload/Resources/Circular Procure-ment Best Practice Report.pdf">https://sppregions.eu/fileadmin/user-upload/Resources/Circular Procure-ment Best Practice Report.pdf</a>



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