

# Les avancées et outils utilisés par les administrations européennes leaders en achat durable

Savoir faire en achat responsable (Congrès Mondial ICLEI)  
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Aure Adell  
[aure.adell@ecoinstitut.coop](mailto:aure.adell@ecoinstitut.coop)  
[www.ecoinstitut.coop](http://www.ecoinstitut.coop)



# Ecoinstitut SCCL

- Workers cooperative based in Barcelona
- We work for the protection of the environment and the introduction of sustainability in all sectors of society
- From policy analysis and development to implementation support and results evaluation



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European Sustainable  
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**Sustainable  
Public Procurement  
PROGRAMME**

1. Is LCC/TCO being implemented?
2. Examples from EU authorities
3. The environmental dimension

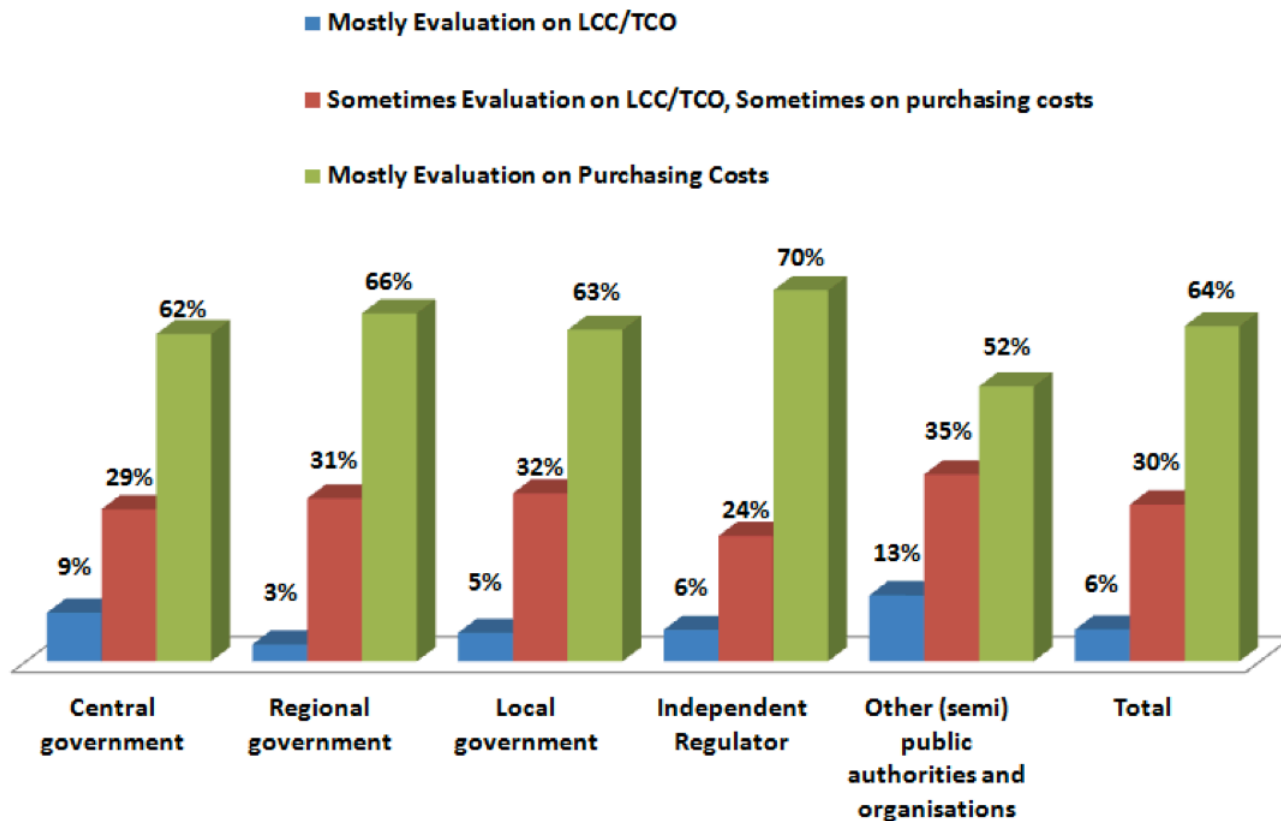


**Is LCC/TCO being implemented?**



# Is LCC/TCO being implemented?

The uptake of green public procurement in the EU27  
(Centre for European Policy Studies and College of Europe, 2012)



# Is LCC/TCO being implemented?

Sustainable public procurement - a global review (UNEP, 2013).

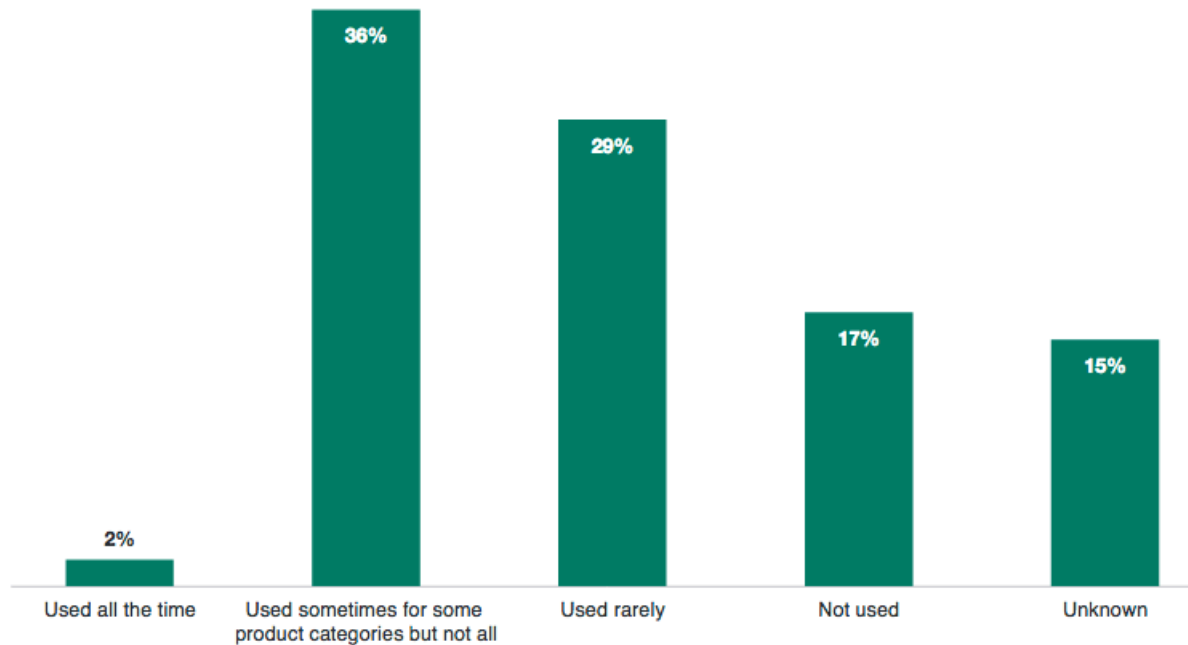


Figure 23: How well used is life cycle costing by national governments

# Is LCC/TCO being implemented?

Sustainable public procurement - a global review (UNEP, 2013).

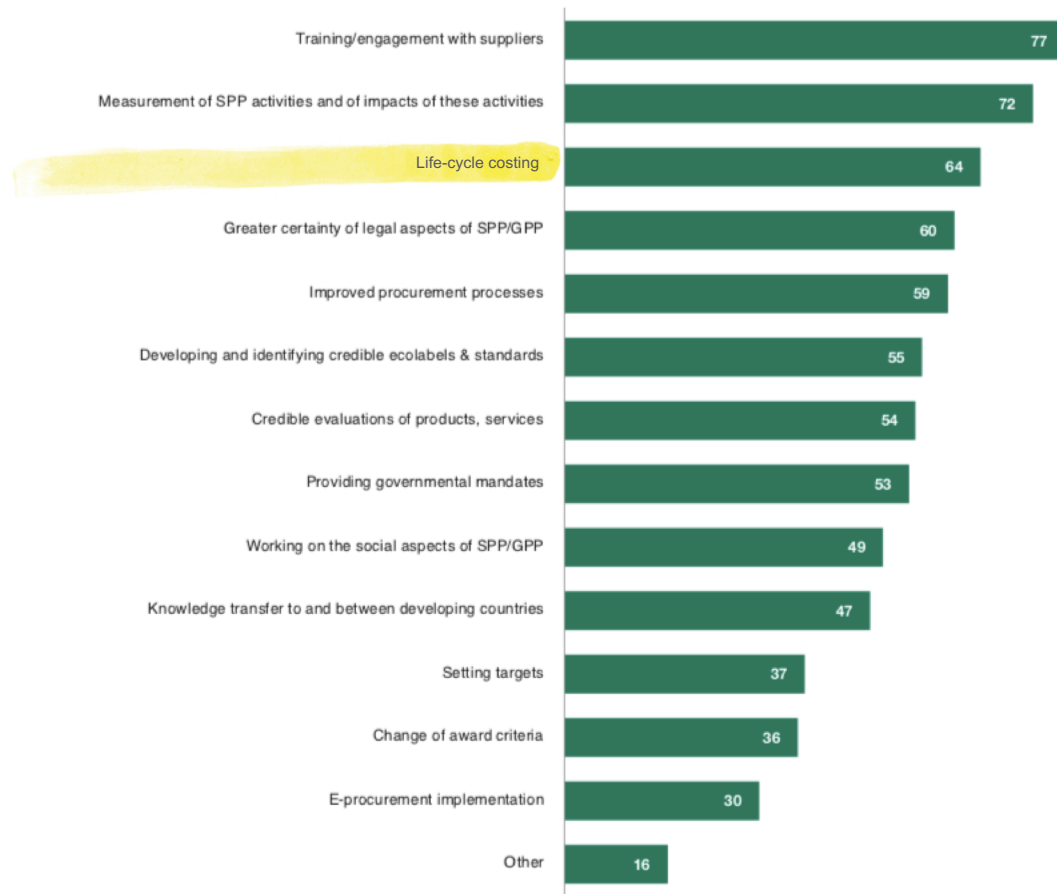


Figure 33: Activities "most needed" to grow SPP/GPP selected by survey respondents

# Is LCC/TCO being implemented?

Global Review of Sustainable Public Procurement (UNEP, 2017)

**Figure 33: Emerging SP topics, strategies and activities according to survey respondents**



# What products are targeted?

Life Cycle Costing in Sustainable Public Procurement: A Question of Value (Perera et al., 2003).

Frequently purchased items	Level of applicability of life cycle costing		
	Very applicable	Moderately applicable	Not applicable
<b>Products</b>			
Office and server ICT equipment			
Vehicles			
Indoor lighting			
Outdoor lighting			
Paper			
Office supplies			
Fuel			
Furniture			
Apparel made with modern fibres and polymers			
<b>Services</b>			
Software			
Electricity			
Transport			
Couriers and postal services			
Waste handling			
Catering: food			
Catering: beverages			
<b>Works</b>			
New buildings			
Refurbishment of existing buildings			
Landscaping			
Railways			
Roads			

# What products are targeted?

- Clean Vehicles Directive (2009) + work in the building sector
- EU Procurement Directives (2014)
- EC Tools Development:
  - First study (2016) → Externalities. Products covered: computers, printing equipment, household appliances, indoor lighting, outdoor lighting and medical equipment
  - Second contract (2018) → computers, printing equipment, indoor lighting, outdoor lighting and vending machines
- Energy consuming products, long-life products...



# Examples from EU authorities

From the report “Life Cycle Costing State of the Art Report” within the SPP Regions EU-funded project(Ecoinstitut 2017)



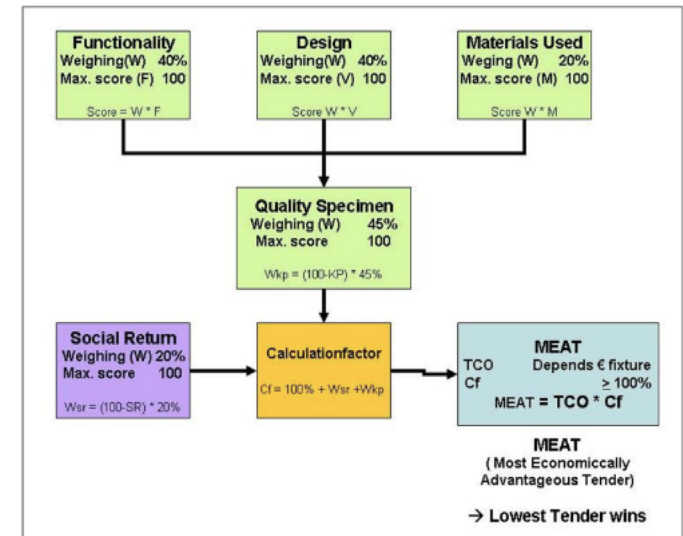
# Rotterdam TCO for street lighting

- Lighting Plan since 2012
- Tender to change the fixtures included minimum requirements:
  - LED lamps only
  - Armature durability of at least 20 years
  - Individual components should be removable and replaceable, etc.
- Bidders were evaluated based on a fictional street section complying with Dutch street lighting guidelines



# Rotterdam TCO for street lighting

- Evaluated based MEAT approach
- **Financial cost based on TCO:**
  - Number of fixtures to illuminate the street
  - Price of the fixture, LED light source and driver
  - Energy consumption and maintenance costs over a period of 20 years



1,262 T  
CO<sub>2</sub>eq not  
emitted  
2012-2015

# SKI TCO for computers

- Framework agreement for computers for 40 municipalities
- Minimum environmental requirements as defined by the Danish EPA procurement guidelines (ensure minimum environmental quality)
- Awarding considering TCO – **Purchase + Energy use** over 3 year time

Model for beregning af TCO, stationær				
Tilstand	Procentvis andel af tiden	Effekt (Watt)	Totalpris pr. stk	Heraf strømforbrug
Tændt (for computere: i tomgang/idle)	40%			
Standby/slumre/sleep	5%			
Slukket	55%			
TCO = B14 + 8760/1000 * (B6 * C6 + B7 * C7 + B8 * C8) * B12 * B13			0,00	0,00
Antal				
El-pris:				
Levetid:				
Anskaffelsespris:				
Total			0,00	

CAD 2.3  
million  
3,625 T CO<sub>2</sub>e



# Niort LCC for vehicles

- Car procurement strategy
- Evaluation criteria:
  - Guarantee and after sales service (25%)
  - Car's technical value (15%)
  - Car's safety (5%)
  - Delivery time (5%)
  - **Financial and ecologic cost** (50%)



# Niort LCC for vehicles

- **Financial and ecologic cost – LCC approach**
  - Acquisition cost (including subsidies and taxes)
  - Fuel cost (assumption of 7.000 to 10.000 km/year, 10 years lifetime, 95% urban use)
  - Maintenance costs (detailed information obtained from the Ville owned garage)
  - Environmental cost (monetised according to the Clean Vehicles Directive 2009/33/EC)

Table 2: Cost for emissions in road transport (in 2007 prices)

CO <sub>2</sub>	NO <sub>x</sub>	NMHC	Particulate matter
0,03-0,04 EUR/kg	0,0044 EUR/g	0,001 EUR/g	0,087 EUR/g



**From TCO to LCC, the inclusion  
of environmental externalities**

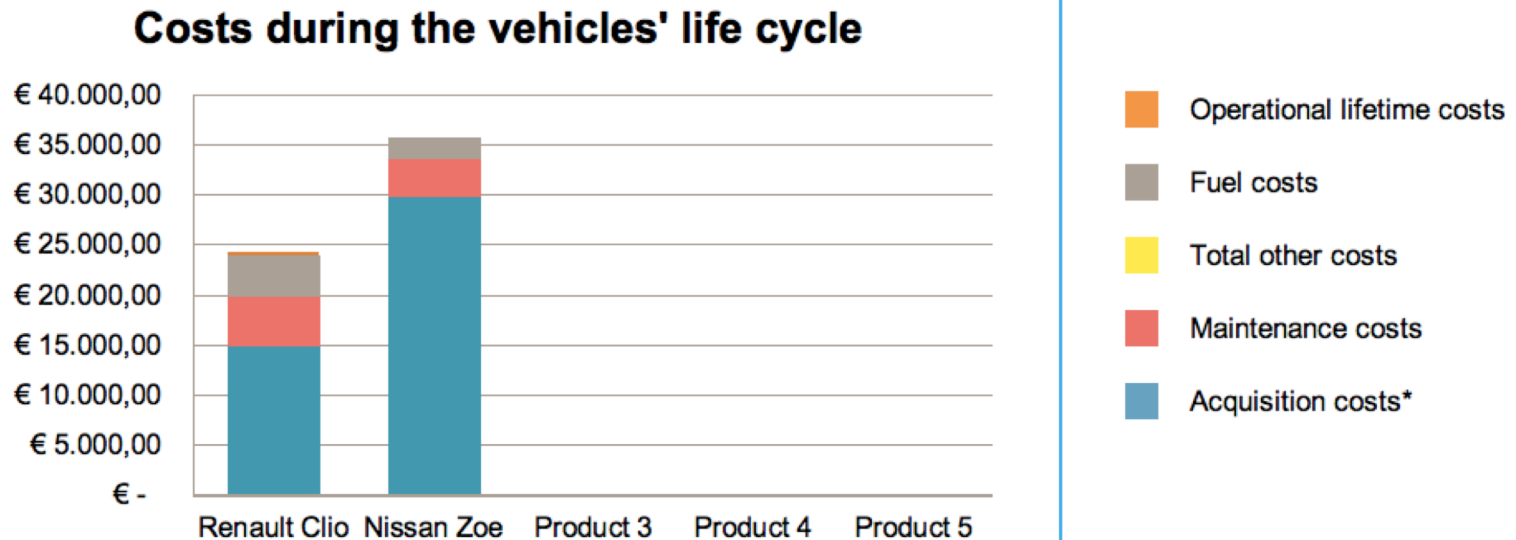
“

*... a “traditional” LCC does not become an environmental tool just because it contains the words life cycle.*

Gluch P. and Baumann H. The life cycle costing (LCC) approach: a conceptual discussion of its usefulness for environmental decision-making. Building and Environment, 39: 571–580 (2004).

# Quick example

Clean Fleets EU –funded Project (2015)



“

*Life cycle costing is primarily an economic tool and, while it may have positive implications for sustainable procurement, it is not a panacea. As such the application of whole-life costing methodology is necessary but not sufficient to guarantee sustainable procurement*

Westminster Sustainable Business Forum. Costing the future: Securing value for money through sustainable procurement (2008).



Gràcies | Eskerrik asko | Gracias | **Thank you** | **Merci** | Dank

Aure Adell  
**Ecoinstitut SCCL**

[aure.adell@ecoinstitut.coop](mailto:aure.adell@ecoinstitut.coop)

+1 418 631 1424



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