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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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
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

- Ecolabels, standards and certifications: 46%
- Monitoring and reporting SP implementation: 43%
- Climate change policy goals through procurement: 40%
- Greater linkage of environmental-social-economic aspects: 39%
- Training and capacity building: 38%
- Link of sustainable procurement to sustainable development goals (SDGs) and broad policy objectives: 37%
- Life-cycle costing: 37%
- e-procurement platforms and tools: 35%
- Recognition of procurement as a strategic tool by organizations: 35%
- Transparency in supply chains: 34%
- Business case for sustainable procurement: 34%
- Procurement of innovative products, services or works: 33%
- Estimating sustainability impacts/outcomes/benefits of sustainable procurement: 32%
- Green economy / Green growth: 31%
- Circular economy / Circular procurement: 29%
What products are targeted?


<table>
<thead>
<tr>
<th>Frequently purchased items</th>
<th>Level of applicability of life cycle costing</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very applicable</td>
</tr>
<tr>
<td><strong>Products</strong></td>
<td></td>
</tr>
<tr>
<td>Office and server ICT equipment</td>
<td></td>
</tr>
<tr>
<td>Vehicles</td>
<td></td>
</tr>
<tr>
<td>Indoor lighting</td>
<td></td>
</tr>
<tr>
<td>Outdoor lighting</td>
<td></td>
</tr>
<tr>
<td>Paper</td>
<td></td>
</tr>
<tr>
<td>Office supplies</td>
<td></td>
</tr>
<tr>
<td>Fuel</td>
<td></td>
</tr>
<tr>
<td>Furniture</td>
<td></td>
</tr>
<tr>
<td>Apparel made with modern fibres and polymers</td>
<td></td>
</tr>
<tr>
<td><strong>Services</strong></td>
<td></td>
</tr>
<tr>
<td>Software</td>
<td></td>
</tr>
<tr>
<td>Electricity</td>
<td></td>
</tr>
<tr>
<td>Transport</td>
<td></td>
</tr>
<tr>
<td>Couriers and postal services</td>
<td></td>
</tr>
<tr>
<td>Waste handling</td>
<td></td>
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<tr>
<td>Catering: food</td>
<td></td>
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<tr>
<td>Catering: beverages</td>
<td></td>
</tr>
<tr>
<td><strong>Works</strong></td>
<td></td>
</tr>
<tr>
<td>New buildings</td>
<td></td>
</tr>
<tr>
<td>Refurbishment of existing buildings</td>
<td></td>
</tr>
<tr>
<td>Landscaping</td>
<td></td>
</tr>
<tr>
<td>Railways</td>
<td></td>
</tr>
<tr>
<td>Roads</td>
<td></td>
</tr>
</tbody>
</table>
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 CO₂eq 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

<table>
<thead>
<tr>
<th>Tilstand</th>
<th>Procentvis andel af tiden</th>
<th>Effekt (Watt)</th>
<th>Totalpris pr. stk</th>
<th>Heraf stømforbrug</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tændt (for computere i tomgang/idle)</td>
<td>40%</td>
<td></td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Standby/slamre/sleeep</td>
<td>5%</td>
<td></td>
<td>0.00</td>
<td>0.00</td>
</tr>
<tr>
<td>Slukket</td>
<td>55%</td>
<td></td>
<td>0.00</td>
<td>0.00</td>
</tr>
</tbody>
</table>

TCO = B14 + 8760/1000 * (B6 * C6 + B7 * C7 + C8 * B8 + B12 * B13)

<table>
<thead>
<tr>
<th>Antal</th>
<th>El-pris:</th>
<th>Leverand:</th>
<th>Aanlægsherspic:</th>
<th>Total</th>
</tr>
</thead>
</table>

**CAD 2.3 million**

**3,625 T CO₂e**
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 subsides 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)

<table>
<thead>
<tr>
<th></th>
<th>CO₂</th>
<th>NOₓ</th>
<th>NMHC</th>
<th>Particulate matter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0.03-0.04 EUR/kg</td>
<td>0.0044 EUR/g</td>
<td>0.001 EUR/g</td>
<td>0.087 EUR/g</td>
</tr>
</tbody>
</table>
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.

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.

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