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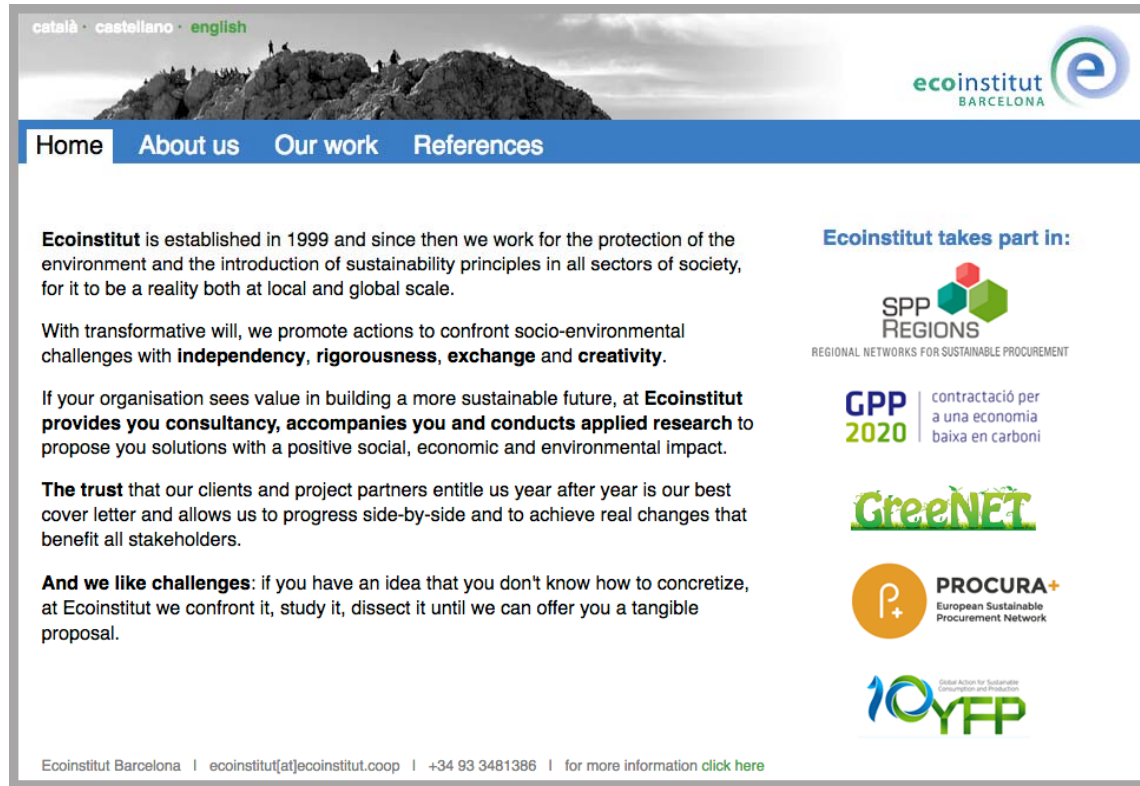
## LCC in action

Capacity building session - Group 4

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## ABOUT ECOINSTITUT



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ecoinstitut  
BARCELONA

Home About us Our work References

**Ecoinstitut** is established in 1999 and since then we work for the protection of the environment and the introduction of sustainability principles in all sectors of society, for it to be a reality both at local and global scale.

With transformative will, we promote actions to confront socio-environmental challenges with **independency, rigorousness, exchange and creativity**.

If your organisation sees value in building a more sustainable future, at **Ecoinstitut provides you consultancy, accompanies you and conducts applied research** to propose you solutions with a positive social, economic and environmental impact.

**The trust** that our clients and project partners entitle us year after year is our best cover letter and allows us to progress side-by-side and to achieve real changes that benefit all stakeholders.

**And we like challenges:** if you have an idea that you don't know how to concretize, at Ecoinstitut we confront it, study it, dissect it until we can offer you a tangible proposal.

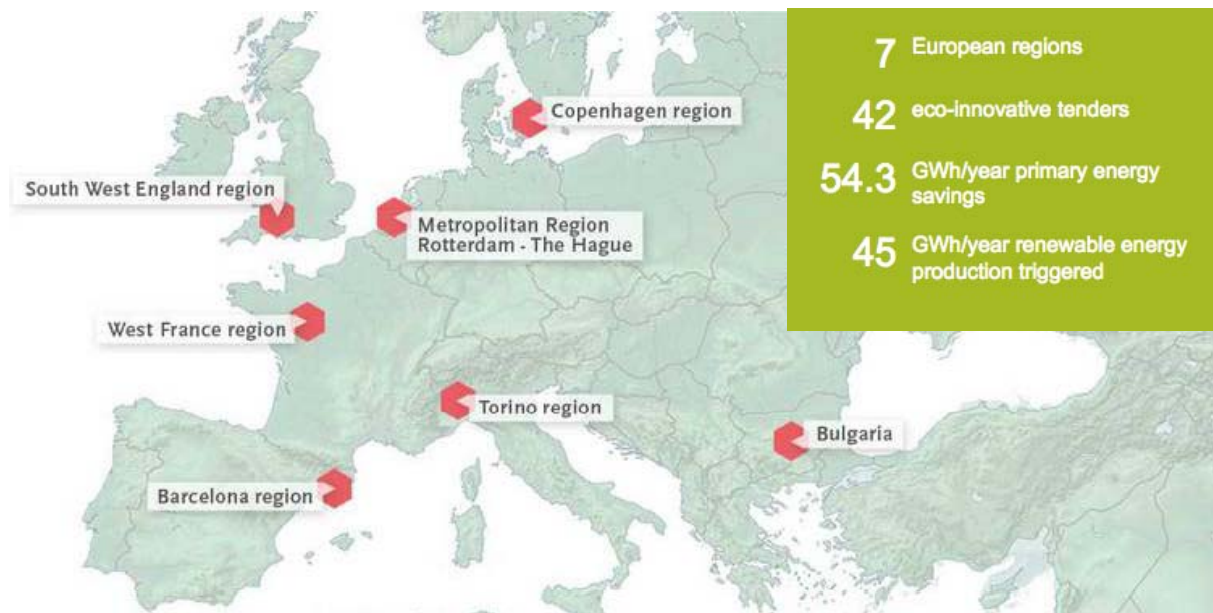
**Ecoinstitut takes part in:**

- SPP REGIONS  
REGIONAL NETWORKS FOR SUSTAINABLE PROCUREMENT
- GPP 2020 | contractació per a una economia baixa en carboni
- GreenNET
- PROCURA+  
European Sustainable Procurement Network
- 10YFP  
Digital Action for Sustainable Consumption and Production

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## ABOUT SPP REGIONS

SPP Regions promotes the creation and expansion of European regional networks of municipalities working together on sustainable public procurement (SPP) and public procurement of innovation (PPI).



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## ABOUT SPP REGIONS

The SPP Regions consortium will be producing reports, guidance and other tools for public authorities interested in sustainable procurement and procurement of innovation:

- Six reports on existing SPP and PPI networks
  - An updated Procura+ Manual, as part of the European Sustainable Procurement Network
  - Reports from regional networks on their experiences
  - State-of-the-art reports on market engagement, life cycle costing, performance-based specifications and circular procurement
  - Three tools for calculating CO<sub>2</sub> and energy savings
  - 42 eco-innovative case studies
  - How-to videos
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## ESTRUCTURE OF THE SESSIONS

12:00 - 13:30 Session 1

13:30 Lunch

15:00 - 16:30 Session 2

16:30 Coffee break

17:00 Results and outlook (plenary)

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## SESSION 1:

- Presentation of the participants and expectations
  - Brief introduction to the topic
  - Experts presentations:
    - LCC in vehicles. Benoit Taris - Ville de Niort, France
    - LCC in lighting. Karin Sonne - Syddjurs Kommune, Denmark
    - LCC in water infrastructure - Ildikó Czeglédi, European Water Association
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## SESSION 2:

- Round tables with the experts (30 min. x 2)
  - Common conclusions:
    - Problems and challenges
    - Solutions
    - Recommendations
    - Procura+ Network role
-

## SESSION 1:

- Presentation of the participants and expectations
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## SESSION 1:

### ◆ Brief introduction to the topic

#### Life Cycle Cost (LCC) definition:

*“All costs associated with the product, system or structure as applied over the defined life cycle”.*

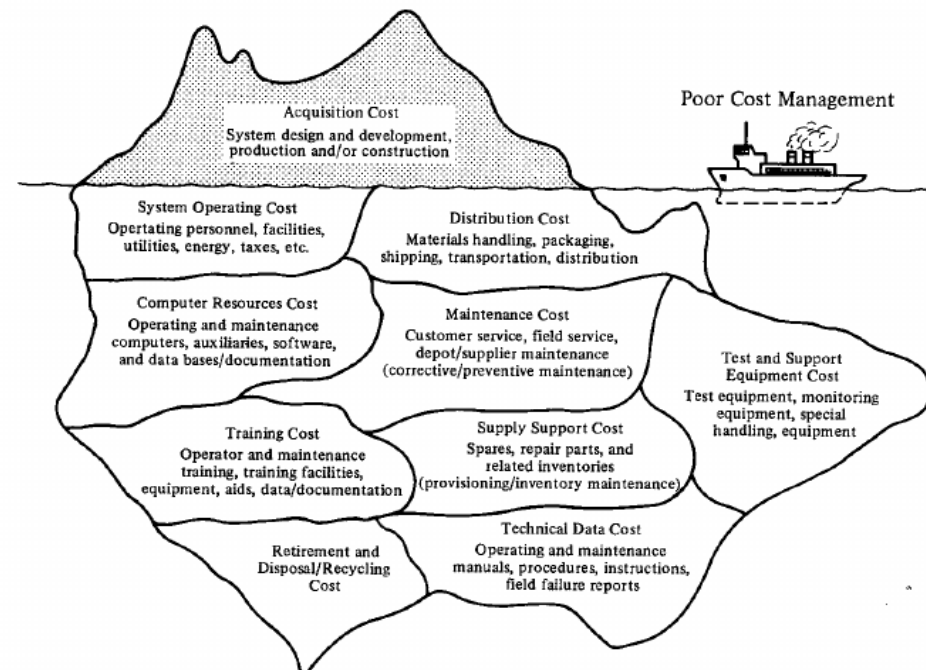
Fabrycky and Blanchard (1998)

#### LCC costs in procurement (Adell et al. 2011):

- Acquisition: purchase, investments, installation, initial costs
  - Operation: consumptions, annual taxes or fees, etc.
  - Maintenance: maintenance, spare parts, etc.
  - Remnant value or end-of-life costs
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## SESSION 1:

- ◆ Brief introduction to the topic



## SESSION 1:

- ◆ Brief introduction to the topic

### DIRECTIVE 2014/24/EU

#### Subsection 3. Award of the contract

#### Article 67. Contract award criteria

2. The **most economically advantageous tender** from the point of view of the contracting authority shall be identified on the basis of the price or cost, using a cost-effectiveness approach, such as **life-cycle costing** in accordance with Article 68, and may include the best price-quality ratio, which shall be assessed on the basis of criteria, including qualitative, environmental and/or social aspects, linked to the subject-matter of the public contract in question. [...].

## SESSION 1:

### ◆ Brief introduction to the topic

#### DIRECTIVE 2014/24/EU

#### Subsection 3. Award of the contract

#### Article 68. Life-cycle costing

1. Life-cycle costing shall to the extent relevant cover parts or all of the following costs over the life cycle of a product, service or works:

(a) costs, borne by the contracting authority or other users, such as:

- (i) costs relating to acquisition,
- (ii) costs of use, such as consumption of energy and other resources,
- (iii) maintenance costs,
- (iv) end of life costs, such as collection and recycling costs.

(b) costs imputed to environmental **externalities** linked to the product, service or works during its life cycle, **provided their monetary value can be determined and verified**; such costs may include the cost of emissions of greenhouse gases and of other pollutant emissions and other climate change mitigation costs.

## SESSION 1:

- Brief introduction to the topic

### MAIN EXISTING LCC TOOLS

NAME	PRODUCT / SERVICE CATEGORIES	LINK
European Commission LCC tool (in development)	<ul style="list-style-type: none"> <li>Office IT equipment</li> <li>Office &amp; street lighting</li> <li>White goods</li> <li>Vending machines</li> <li>Electrical medical equipment</li> </ul>	<a href="http://ec.europa.eu/environment/gpp">http://ec.europa.eu/environment/gpp</a>
SMART-SPP EU project LCC and CO2 tool and users guide.	<ul style="list-style-type: none"> <li>General tool</li> </ul>	<a href="http://www.smart-spp.eu">http://www.smart-spp.eu</a> html-version: <a href="http://www.lcc-tool.eu">http://www.lcc-tool.eu</a>
Danish Environmental Protection Agency TCO calculators and guidance documents.	<ul style="list-style-type: none"> <li>Self-serving machines</li> <li>Bulbs and lighting systems</li> <li>Office IT equipment</li> <li>Refrigerators and freezers</li> <li>Bidet toilet seats</li> </ul>	<a href="http://mst.dk/virksomhed-myndighed/groen-strategi/groenne-indkoeb/totalomkostninger/">http://mst.dk/virksomhed-myndighed/groen-strategi/groenne-indkoeb/totalomkostninger/</a>
Swedish Environmental Management Council (SEMCO), currently The National Agency for Public Procurement, excel tools.	<ul style="list-style-type: none"> <li>General tool</li> <li>Professional kitchens (fridges and freezers)</li> <li>Indoor and outdoor lighting</li> <li>Bending machines.</li> </ul>	<a href="http://www.upphandlingsmyndigheten.se/en">http://www.upphandlingsmyndigheten.se/en</a>

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## SESSION 1:

### ◆ Brief introduction to the topic

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#### LCC RELATED LITERATURE

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- Adell A., Esquerria J., Estevan H., Clement S., Tepper P., Acker H., Seebach D. Existing approaches to encourage innovation through procurement. The SMART SPP consortium, c/o ICLEI – Local Governments for Sustainability (2009).
  - European Commission - DG Environment. Life-cycle costing (LCC) Fact sheet. (GPP) Training Toolkit - Module 1: Managing GPP Implementation (2008).
  - 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).
  - Huppel G., van Rooijen M., Kleijn R., Heijungs R., de Koning A. and van Oers L. Life Cycle Costing and the Environment. CML (2004).
  - Joint Research Centre. Cost-Benefit Analysis for EU GPP criteria (2015).
  - Perera O., Morton B. and Perfrement T. Life Cycle Costing in Sustainable Public Procurement: A Question of Value. A white paper from IISD. International Institute for Sustainable Development (IISD) (2009).
  - Studio Fieschi & soci Srl and Scuola Superiore Sant'Anna. LCC calculation tool. Technical specifications (2016).
  - Westminster Sustainable Business Forum. Costing the future: Securing value for money through sustainable procurement (2008).
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## SESSION 1:

- Brief introduction to the topic

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### LCC AVAILABLE CASE STUDIES

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- SMART SPP EU Project  
<http://www.smart-spp.eu/>
  - Clean Fleets EU Project  
<http://www.clean-fleets.eu/case-studies/>
  - SCI Network EU Project  
<http://www.sci-network.eu/snapshots/>
  - Danish Forum on Sustainable Procurement  
<http://www.ansvarligeindkob.dk/cases/>
  - EU GPP in practice  
[http://ec.europa.eu/environment/gpp/case\\_group\\_en.htm](http://ec.europa.eu/environment/gpp/case_group_en.htm)
  - GPP 2020 EU Project  
<http://www.gpp2020.eu/low-carbon-tenders/>
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## SESSION 1:

- Experts presentations:

- **LCC in vehicles procurement**

- Benoit Taris, Purchasing Service Manager - Ville de Niort, France

- **LCC in lighting procurement**

- Karin Sonne, Procurement Consultant - Syddjurs Kommune, Denmark

- **LCC in water infrastructure procurement**

- Ildikó Czeglédi, Coordinator of Working Group on Water Economics - European Water Association

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## SESSION 2:

- Round tables with the experts (30 min. x 2)
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## SESSION 2:

- Common conclusions:
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    - Procura+ Network role
-

Inputs, examples, resources, etc will be welcome!!  
[helena.estevan@ecoinstitut.coop](mailto:helena.estevan@ecoinstitut.coop)

**Thank you very much!**

Visit our website: [www.sppregions.eu](http://www.sppregions.eu)

Email us: [info@sppregions.eu](mailto:info@sppregions.eu)

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