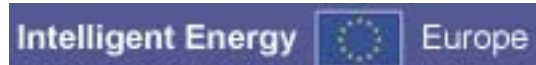


SMART SPP LCC-CO₂ Tool

How to Use the
Lifecycle Costing and CO₂ Assessment Tool

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What is the SMART SPP LCC-CO₂ Tool?

- Excel Tool for calculation of life-cycle costs (LCC) and CO₂ emissions of different products and services

LCC are the costs that a product will cause during its useful life

- Akquisition cost
- Operational cost (energy & water consumption)
- Maintenance cost
- Taxes
- Disposal cost / resale value

CO₂ emissions

- embedded emissions
- direct emissions in different use modes
- different fuels

What is the Purpose of the SMART SPP LCC-CO2 Tool?

- Supports procurement decision-making, e.g. by tender evaluation
- Can be applied for most products and services relevant in public tendering
- Can also be used for assessment of current solutions and for monitoring purposes
- Enables public communication of reduced cost and emissions

Who should fill in the tool?

- Responsibilities within contracting authority:
 - Experience with LCC and CO2 assessment favorable
 - Cooperation between all affected departments reasonable (incl. energy costs, waste disposal, ...)
- Data requirements
 - Basic data to be provided by CA (e.g. electricity mix)
 - Further explanations for full definition of cost positions, technical specifications and evaluation criteria needed
 - Bidders should provide evidence for submitted data
 - Data can be provided in a separate document

General Features of the Tool

Content of the tool

For a description of the different sheets in this tool please click on the expansion button on the left side.

Production / General / LCC_Diagrams / CO2_Diagrams / Tenders Evaluation / Conversion Factors / Glossary / LCC_Formulas / CO2_Formulas / Emission Factors

↑
All sheet tabs in **light green** are to be directly used by you in order to enter data or evaluate the results.

↑
All sheet tabs in **dark green** contain text for your information.

↑
All sheet tabs in **dark grey** are background sheets for calculations and provision of specific information. You should only access those sheets through the hyperlinks buttons in each sheet.

The Sheets of the Tool

- **Introduction:** Provides basic information
- **General:** Main worksheet for entering data
- **LCC Diagrams:** Provides result diagrams on LCC
- **CO2 Diagrams:** Provides result diagrams on CO₂ emissions
- **Tenders evaluation:** Allows for ranking of different product options
- **Conversion factors:** Provides conversion factors for different units
- **Glossary:** A glossary of terms used in the tool
- **LCC Formulas:** Explanation of the LCC related calculations
- **CO2 Formulas:** Explanation of the CO₂ related calculations
- **Emission Factors:** Example lists for emission factors (can also be adapted).
- **Periodic investments:** Input worksheet for leasing or reinvestments
- **Operation:** Calculation of cost and emissions in the use phase
- **Maintenance:** Allows for specification of maintenance cost
- **CO2:** Allows for specification of embedded emissions
- **LCC Annual Calculations:** Background calculations on LCC

Color-coded Features of the Sheets

LCC & CO2 - Calculation for Procurement Activities
 A user guide has been developed to help you use this tool. You can download it at www.smart-spp.eu.

General Information

Tender ID

Information to be specified by the procurer

Your location [country] Currency
not specified yet

Planning horizon [years]

Discount rate (nominal) [%]

Inflation rate [%]

CO₂eq emission factors
to specify emission factors]

Information to be specified by the supplier

Product Offers

Product A	Product B	Product C	Product D	Product E
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

For more product columns click on the expansion button [+]

Life-cycle Costing (LCC) Information

Discount rate [%]

Inflation rate [%]

Acquisition Costs

	Product A	Product B	Product C	Product D	Product E
Purchase price [0/unit]	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<i>or Specify annual investment costs >></i>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Installation costs for all units [0]	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Initial one-off costs [0]	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Purchase costs [after 25 years] [0/unit]	0,00	0,00	0,00	0,00	0,00
Installation costs [after 25 years] [0/unit]	0,00	0,00	0,00	0,00	0,00
Initial one-off costs [after 25 years] [0/unit]	0,00	0,00	0,00	0,00	0,00

Navigation: Introduction / General / LCC_Diagrams / CO2_Diagrams / Tenders Evaluation / Conversion Factors / Glossary / Emission Factor:

Click on **light orange cells** – the links will bring you to other sheets where you can continue your input (and back again).



Getting started

- The tool contains explanations, comments and help sections
- A User Guide Document is available which provides a step-by-step introduction to the tool
- So let's get started!