



## machine tools - webtool and support package

### a webtool to enable machine tool manufacturers to identify potential environmental improvement options

The LCA to go webtool enables machine tool designers and manufacturers to improve their products energy or resource efficiency. By entering technical and design specifications users can quantify the energy and resource consumption of the machine tools over their lifecycle. This enables users to understand the environmental impacts of their design decisions and inform them of the environmentally important life cycle stages beyond their own production facilities. This information can be used to make energy and resource saving opportunities for customers.

The LCA to go webtool highlights components that contribute significantly to the machine tool's environmental

performance. Machine tool designers and producers can use this information to make better-informed design decisions, which will lead to a more efficient machine tool design. The LCA to go webtool further enhances the design process by providing additional guidelines on ecodesign as well as machine tool improvement strategies. The results of the LCA to go webtool can be used to inform customers of the environmental benefits, in particular energy savings of a machine tool.

*\*Machine tools are machines that shape manufacturing components in various ways. They are generally energy intensive and have long operating life spans.*

### available support package

- A free webtool that is quickly accessible without the need to install software.
- A quick and easy life cycle based environmental assessment using easily accessible information.
- Additional guidelines on ecodesign and improvement strategies of machine tools.
- Free mentoring by LCA, ecodesign and machine tool experts through workshops, site visit, online tutorials and online support.



## what is life cycle thinking?

All products have life cycles with interlinked stages that include supply chains, production, distribution, use and disposal. Every product has positive and negative environmental impacts along its life cycle. These environmental impacts are influenced by decisions made within each company involved in the product's lifecycle.

LCA to go uses Life Cycle Based Assessments to quantify these environmental interactions and relate them back to a company's decisions. The results from Life Cycle Based Assessments can be used to identify environmental and commercial performance improvements. These improvements can be in the form of reduced environmental pollutants, reduced energy consumption, improved product quality or increased use of environmentally responsible resources.

## the life cycle of machine tools

cumulative energy demand

energy efficiency index

energy and material consumption



material extraction



product manufacturing



distribution



use



disposal

icons courtesy of [www.thenounproject.com](http://www.thenounproject.com)

LCA to go is a Seventh Framework Programme led by the Fraunhofer Institute. It aims to boost Life Cycle based Assessment within Small and Medium Sized Enterprises by developing a Life Cycle Based Assessment webtool for seven sectors: bio-based plastics, industrial machinery, electronics, photovoltaics, printed circuit boards, sensors and smart textiles.

To sign up to the LCA to go webtool or support package please visit  
[www.LCA2go.eu](http://www.LCA2go.eu)  
or: contact.us@lca2go.eu

