

# ECO<sub>2</sub>L Guideline

The World's First CO<sub>2</sub> and Energy Label for Tanneries



ECO<sub>2</sub>L  
Energy  
Controlled  
Leather

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The ECO<sub>2</sub>L label (energy-controlled leather) encompasses the world's first calculation and auditing model for calculation the energy efficiency and CO<sub>2</sub> emissions of a tannery. ECO<sub>2</sub>L was developed by the Forschungsgemeinschaft Leder e.V. (Leather Research Foundation) as an active contribution towards climate protection. For the tannery, ECO<sub>2</sub>L confirms the energy-efficient production of leather and the systematic calculation of the corporate carbon footprint (CCF) by means of a defined calculation model within specified system boundaries.

Therefore, the prerequisites for awarding the ECO<sub>2</sub>L label are the determination of the corporate carbon footprint (CCF) and the calculation of the "Best Energy Efficiency for Tanning" (BEET) according to the prescribed standards as well as the assessment of actual energy consumption in relation to the BEET by approved auditors. Here the specific energy consumption is permitted not to exceed the corresponding BEET.

Certification includes the right to use the ECO<sub>2</sub>L label for promotional purposes for a period of three years.

The ECO<sub>2</sub>L certificate is assigned by the independent FILK Freiberg Institute gGmbH (Research Institute of Leather and Plastic sheeting). Auditing is conducted on behalf of FILK by independent, officially appointed auditors.

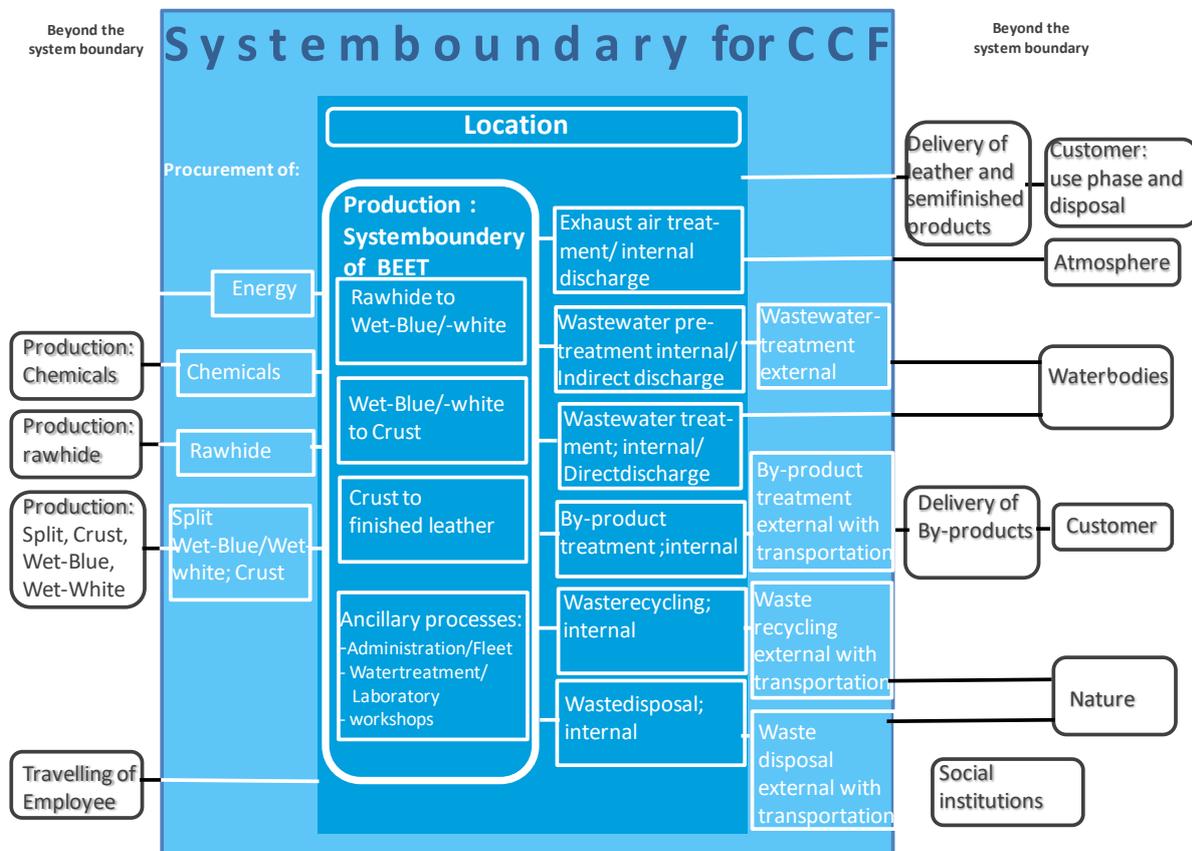
ECO<sub>2</sub>L was developed for the production of upholstery leather from cowhide, but can also be used for the production of shoe upper leather with no restrictions. The model cannot be used for the small animal sector and other types of leather at this time due to the lack of benchmark data.

### **Advantages for the tanner:**

- Knowledge of the annual specific energy consumption (MJ/m<sup>2</sup>) in production
- Identification of percentage deviations in energy consumption compared to the international benchmark, as well as developing concrete options to reduce energy consumption
- Evidence of energy-efficient production by using the ECO<sub>2</sub>L certificate
- Calculation option for planned alternative actions to improve the corporate carbon footprint (CO<sub>2</sub> emissions) through variations of production, procurement of raw material, chemicals, energy and disposal of by-products, wastes and waste water.



## System Limits and Comparability



In orientation on the “Best Available Techniques for the Tanning of Hides and Skins” specified by the EU, the BEET (Best Energy Efficiency for Tanning) benchmark establishes a strict standard reference value for the energy consumption of all production processes at a location within defined limits. With the help of BEET, a leather factory can therefore compare its own energy data to the benchmark, appreciate the energy efficiency of the production processes by comparing the variance of the results. All internally and externally used energy sources are taken into account.

A direct comparison with other tanneries is possible at any time for the pure production process of all tanneries by means of the percentage deviation of the BEET values. In principle however, only the percentage difference (% of BEET) for all leather factories is comparable, while the specific energy consumption (MJ/m<sup>2</sup> product and / or product mix) is only comparable for precisely defined, identical production chains.

The CCF (corporate carbon footprint) describes the emission of CO<sub>2</sub> equivalents from production as well as the upstream and downstream processes for the location within

defined system boundaries. It is expressed in “kg CO<sub>2</sub>/m<sup>2</sup> product and / or product mix”. The CCF can only be compared between different production facilities when the same raw material is used, the same end products are manufactured and the same processing steps are completed (identical production chain). For example, this would be possible for tanneries with complete production from the rawhide to finished leather, from the raw hide to wet-blue, from wet-blue to finished leather or for finishing operations. The CCF of tanneries with mixed feedstock and finished goods is generally not comparable.

## **Your way to determine the CCF and BEET, Auditing and Certification for the ECO<sub>2</sub>L Label**

- The handbook with application instructions is available free of charge from FILK or the publisher
- A pre-audit with training in using the application is possible
- The audits are conducted on site by qualified, especially appointed technical experts. Contact information and offers are available from FILK
- The ECO<sub>2</sub>L certificate is issued by FILK after a successful audit with an evaluation of energy efficiency and determination of the CCF
- The ECO<sub>2</sub>L label is valid for three years

## **Documents and Contact Information**

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