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CO₂ balance of LEMIX clay building boards

For the ecological balancing of buildings, it is important to know how much energy is consumed in the production and transport of a building material. This can be represented with the **GWP value**, the **global warming potential** which indicates the global warming or greenhouse gas potential in kg CO₂ equivalent per kg of a building material.

The climate compatibility of LEMIX clay building boards has now been evaluated by the IBO - Österreichisches Institut für Bauen und Ökologie GmbH (Austrian Institute for Building and Ecology) in Vienna in the course of the natureplus certification. The results were significantly below the strict natureplus guidelines RL5020:

Ecological indicators	Product parameters	Requirement value	Critical range
Global warming potential (GWP fossil) [kg CO ₂ equivalent/DE]	2.15	≤ 3	2.7-3.3
Total use of renewable and non-renewable primary energy excluding primary energy sources used as raw materials (PEE)[MJ _{lower heating value} /DE]	38.5	≤ 60	54-66
Minimum share of renewable primary energy excluding renewable primary energy sources used as raw materials (PERE) [%]	20.1	≥ 9	8-10

Table 2: Comparison of the balancing results of the tested product clay building board with the requirement values as well as presentation of the critical range according to guidelines RL5020

The GWP value was converted here to a declared unit (DE), which corresponds to one m² of LEMIX clay building board with a reference thickness of 18 mm.

For comparison with other wall building materials, the GWP value was converted to kg CO₂ equivalent per kg building material.

