

# CLIMATE DECLARATION FOR CARBON STEEL REINFORCEMENT BARS

Functional unit: 1 kg of carbon steel rebar in bars

The climate declaration shows the emissions of greenhouse gases, expressed as CO<sub>2</sub>-equivalents. It is based on verified results from a lifecycle assessment (LCA) performed as basis for an EPD®, in accordance with ISO 14025 and EN 15804



## Information about the product

Steel rebar, obtained from scrap, melted in chipboard followed by hot rolling. Designed for reinforcement of reinforced concrete structures of buildings and structures. The composition of steel reinforcement products does not change during use

## Information about the company

NLMK-Kaluga LLC is a balanced steel-making complex with full production cycle from steelmaking to finished product shipment. Well established technologies and equipment are in consonance with world trends of steel production. Hence, production parameters ensure high level of energy and resource savings, high quality output and environmental safety.

## Climate declaration

The table below shows the carbon footprint of the product, calculated as carbon dioxide equivalents (kg CO<sub>2</sub> eq.) for 1 kg of carbon steel rebar in bars.

	Production A1-A3	Installation A4-A5
GWP-fossil	4.57E-01 kg CO <sub>2</sub> -eq	4.67E-02 kg CO <sub>2</sub> -eq
GWP-biogenic	1.51E-02 kg CO <sub>2</sub> -eq	4.79E-03 kg CO <sub>2</sub> -eq
GWP-luluc	1.04E-04 kg CO <sub>2</sub> -eq	6.66E-04 kg CO <sub>2</sub> -eq
GWP Total	4.57E-01 kg CO <sub>2</sub> -eq	4.71E-02 kg CO <sub>2</sub> -eq

	Disposal C1-C4	Reuse/recovery/ recycle D
GWP-fossil	1.35E-02 kg CO <sub>2</sub> -eq	-5.93E-02kg CO <sub>2</sub> -eq
GWP-biogenic	1.44E-03 kg CO <sub>2</sub> -eq	1.58E-03 kg CO <sub>2</sub> -eq
GWP-luluc	1.96E-04 kg CO <sub>2</sub> -eq	1.69E-06 kg CO <sub>2</sub> -eq
GWP Total	1.74E-02 kg CO <sub>2</sub> -eq	-5.94E-02kg CO <sub>2</sub> -eq

## Other environmental impacts

For the full EPD, see [www.environdec.com](http://www.environdec.com) and [www.epdrussia.org](http://www.epdrussia.org).

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