

CARBON FOOTPRINT REPORT – FABRICATOR

Company: Midland Steel Reinforcement Supplies

Production location: Ireland

Reporting period: 01/01/2020 - 31/12/2020

Certificate number: 1340

INTRODUCTION

This report provides a summary of the carbon footprint assessment results for the production of construction steel forms at the location given above.

The results are reported for 1 tonne of reinforcing steel as installed in a building based on data provided by the company in a questionnaire and verified by UK CARES. The whole life cycle of the product has been assessed.

Methodology:

This carbon footprint report is calculated based on calculation rules specified in Product Category Rules for Type III environmental product declaration of construction products to EN 15804:2012 by BRE Global Ltd, as used in UK CARES' EN15804 compliant EPD Scheme.

RESULTS

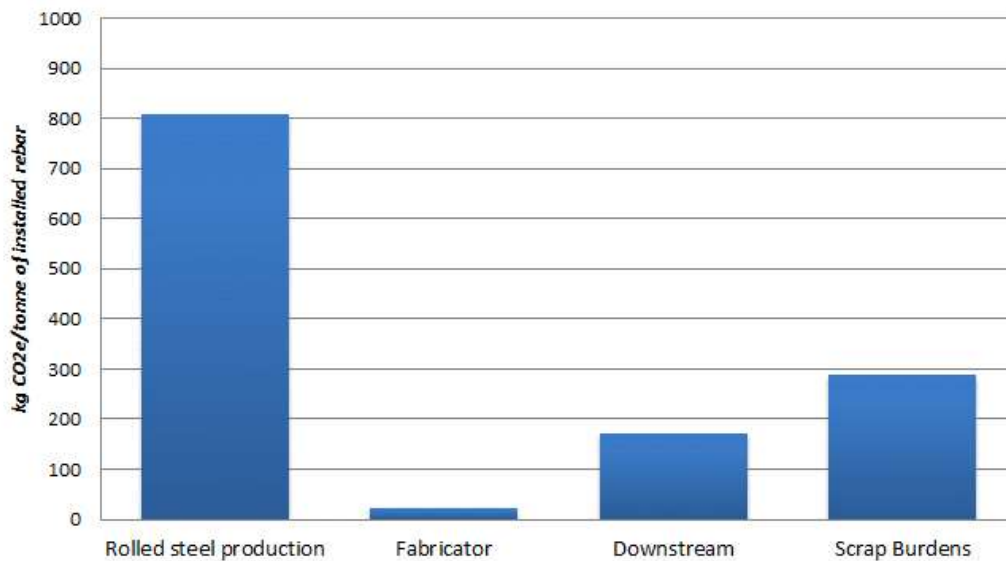
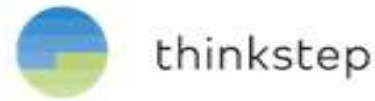


Figure 1: Carbon footprint results for production of 1 tonne of construction steel forms

Table 1: Carbon footprint results (kg CO₂e/tonne construction steel forms)

Impact Category	Rolled steel production	Fabricator	Downstream	Scrap Burdens	Total
GWP, kg CO ₂ e	807	23	171	290	1290



EXPLANATION OF TERMS

DOWNSTREAM

The scope of the EPD tool covers the manufacture of rolled steel billet, the fabricating of rebar into construction steel forms, installation of construction steel forms into the building, demolition of the building at the end of its useful life and finally end of life of the recovered rebar. However, certain aspects of this scope are beyond the direct remit of construction steel form producers. The term “Downstream” refers to these aspects and includes impacts from installation, demolition and recovery efforts; as well as associated transport where applicable.

SCRAP BURDENS

EN 15804 permits “benefits and loads beyond the system boundary” to be optionally declared. In this CF summary report these are listed as scrap burdens and account for impacts allocated to scrap consumed by the process, or recovered and recycled at end of life. In this assessment it is assumed that the recycling rate at for installation scrap and at end of life is 92%. Other methodologies, such as the “cut-off” approach, do not assign burdens to scrap inputs but equally do not give any credits to recycling at end of life. The burdens associated with scrap are clearly reported in this summary enabling the results to be interpreted according to either methodology.

----- End of report -----

Disclaimer

This document, designed to promote consistency in carbon footprint reporting in the reinforcing steel sector, has been developed through a multi-stakeholder consultative process involving representatives of building/civil engineering construction designers, specifiers, producers, processors, clients and report-users from around the world. While CARES encourages the use of the carbon footprint tool by all approved firms, the preparation and publication of reports based fully or partially on the carbon footprint tool is the full responsibility of those producing them. Neither CARES and thinkstep nor other individuals who contributed to this methodology assume responsibility for any consequences or damages resulting directly or indirectly from its use in the preparation of reports or the use of reports based on the carbon footprint tool.