

# Independent Limited Assurance Report

to the Management of Borçelik Çelik Sanayii Ticaret A.S.

Borçelik Çelik Sanayii Ticaret A.S. (“Borçelik”) commissioned DNV Business Assurance Germany GmbH (“DNV”, “us” or “we”) to provide limited assurance over Selected Information used by Borçelik as the basis for issuing product CO<sub>2</sub>eq (carbon dioxide-equivalent) intensity reports.



**Our Conclusion:** Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that the Selected Information is not fairly stated and has not been prepared, in all material respects, in accordance with the Criteria. In our opinion the methodology for calculating product CO<sub>2</sub>eq intensities has been prepared in general alignment with the WRI/WBCSD GHG Protocol for Product Lifecycle Accounting and Reporting. Borçelik’s customers that receive these reports can utilise these product CO<sub>2</sub>eq intensities in their Scope 3 emissions reporting in accordance with the GHG Protocol Corporate Accounting and Reporting Standard. This conclusion relates only to the Selected Information and is to be read in the context of this Assurance Report, in particular the inherent limitations explained overleaf.

## Selected Information

The scope and boundary of our work is restricted to the **data** and **methodology** described below (the “Selected Information”):

- **Product CO<sub>2</sub>eq intensities:** The amount of CO<sub>2</sub>eq per tonne of products covered by the **methodology** relating to products (specified below) produced by Borçelik at the company’s site in Gemlik, Turkey (the “Entity”);
- **The methodology:** the detailed description developed by Borçelik of the processes and data sources used to calculate product CO<sub>2</sub>eq intensities;
- **Product carbon footprint tool:** the inventory spreadsheets containing 2023 year data from Borçelik’s Gemlik site and calculations to determine product CO<sub>2</sub>eq intensities in accordance with the methodology.
- The Borçelik **product groups** covered by the product carbon footprint tool are:
  - Cold Rolled (CR)
  - Hot Dip Galvanized (HDG) produced on Continuous Galvanizing Line CGL 1
  - Hot Dip Galvanized (HDG) produced on Continuous Galvanizing Line CGL 2
  - Hot Dip Galvanized (HDG) produced on Continuous Galvanizing Line CGL 3
  - Pickled and Oiled (PO)
  - Full Hard (FH)
- For details of the GHG emissions data and product CO<sub>2</sub>eq intensities covered by this assurance engagement, see Appendix below.

## Criteria

We assessed Borçelik’s methodology and data for calculating product CO<sub>2</sub>eq intensities against the following **Criteria** (the “Criteria”):

- The publicly available Greenhouse Gas Protocol for Product Life Cycle Accounting and Reporting Standard, as issued by WRI/WBCSD;
- Borçelik’s internal procedure for issuing reports and tracking customer transactions; and
- Borçelik’s methodology document [summary available on request from Borçelik] on the product CO<sub>2</sub>eq intensities, including their following definitions:
  - **product CO<sub>2</sub>eq intensities:** The amount in metric tonnes of CO<sub>2</sub>eq associated with each tonne of product. The CO<sub>2</sub>eq intensities calculation is conducted in alignment with the Greenhouse Gas Protocol for Product Life Cycle Accounting and Reporting Standard.
  - **Reporting period:** The CO<sub>2</sub>eq intensities have been calculated based on data from the time period January to December 2023.

Where HRC supplier specific values were used, DNV have reviewed these values as part of this assurance engagement.

DNV will conduct periodic reviews of the reports issued and use of the product carbon footprint tool after an initial six-month period.

## Standard and level of assurance

We performed a **limited** assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 revised – ‘Assurance Engagements other than Audits and Reviews of Historical Financial Information’ (revised), issued by the International Auditing and Assurance Standards Board. This standard requires that we comply with ethical requirements and plan and perform the assurance engagement to obtain limited assurance.

DNV applies its own management standards and compliance policies for quality control, which are based on the principles enclosed within ISO IEC 17029:2019 – Conformity Assessment – General principles and requirements for validation and verification bodies, and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement; and the level of assurance obtained is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed. We planned and performed our work to obtain the evidence we considered sufficient to provide a basis for our opinion, so that the risk of this conclusion being in error is reduced but not reduced to very low.

## Basis of our conclusion

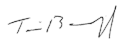
We are required to plan and perform our work in order to consider the risk of material misstatement of the Selected Information; our work included, but was not restricted to:

- Assessing the appropriateness of the Criteria for the Selected Information;
- Conducting interviews with Borçelik’s technical teams and other key personnel to obtain an understanding of the key processes, systems and controls in place to generate, aggregate and report the Selected Information;
- Site visit to Gemlik, Turkey, to review evidence to support specific site level data. We were free to request interviews, data and information to support the process;
- Performing limited substantive testing on a selective basis of the Selected Information to check that data had been appropriately measured, recorded, collated and reported; and
- Reviewing that the evidence, measurements and their scope provided to us by Borçelik for the Selected Information is prepared in line with the Criteria.
- DNV have reviewed the reference values (sourced from World Steel Association data) used by Borçelik for the upstream GHG emissions associated with hot rolled coil (HRC) production for the Electric Arc Furnace (EAF), Basic Oxygen Furnace (BOF) and direct reduced iron (DRI) routes. Borçelik will provide CO<sub>2</sub>e intensity data for its products to customers based on HRC reference values, unless HRC supplier specific values are available.

For and on behalf of DNV Business Assurance Germany GmbH



**Oliver Bley**  
Reviewer



**Timothy Bankroff**  
Lead Auditor

17<sup>th</sup> February 2025  
Essen, Germany

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## Our competence, independence and quality control

DNV established policies and procedures are designed to ensure that DNV, its personnel and, where applicable, others are subject to independence requirements (including personnel of other entities of DNV) and maintain independence where required by relevant ethical requirements. This engagement work was carried out by an independent team of sustainability assurance professionals. Our multi-disciplinary team consisted of professionals with a combination of environmental and sustainability assurance experience.

## Inherent limitations

All assurance engagements are subject to inherent limitations as selective testing (sampling) may not detect errors, fraud or other irregularities. Non-financial data may be subject to greater inherent uncertainty than financial data, given the nature and methods used for calculating, estimating and determining such data. The selection of different, but acceptable, measurement techniques may result in different quantifications between different entities. Our assurance relies on the premise that the data and information provided to us by Borçelik have been provided in good faith. DNV expressly disclaims any liability or co-responsibility for any decision a person or an entity may make based on this Independent Limited Assurance Report.

## Responsibilities of the Management of Borçelik and DNV

The Management of Borçelik have sole responsibility for:

- Preparing and presenting the Selected information in accordance with the Criteria;
- Designing, implementing and maintaining effective internal controls over the information and data, resulting in the preparation of the Selected Information that is free from material misstatements;
- Measuring and reporting the Selected Information based on their established Criteria; and
- Contents and statements contained within product carbon intensity reports

Our responsibility is to plan and perform our work to obtain limited assurance about whether the Selected Information has been prepared in accordance with the Criteria and to report to Borçelik in the form of an independent limited assurance conclusion, based on the work performed and the evidence obtained. We have not been responsible for the preparation of the reports. We have not reviewed whether or how Borçelik customers have used the reported CO<sub>2</sub>e intensities in their Scope 3 reporting.

**Appendix: 2023 GHG emissions data and product CO<sub>2</sub>eq intensities covered by this assurance engagement**

Total GHG emissions for Borçelik’s Gemlik site, based on Borçelik’s methodology document

	Scope 1 Tonnes CO <sub>2</sub> eq	Scope 2 Tonnes CO <sub>2</sub> eq	Scope 3 Tonnes CO <sub>2</sub> eq
2023	87.261	68.919	3.040.485

CO<sub>2</sub>eq intensities for product groups produced by Borçelik

Cold Rolled (kg CO <sub>2</sub> eq/t)			
Year	Material acquisition and pre-processing	Production	Total
2023	2.106,3	111,7	2.218,0

HDG on CGL1 (kg CO <sub>2</sub> eq/t)			
Year	Material acquisition and pre-processing	Production	Total
2023	2.106,3	162,8	2.269,1

HDG on CGL2 (kg CO <sub>2</sub> eq/t)			
Year	Material acquisition and pre-processing	Production	Total
2023	2.106,3	80,7	2.187,0

HDG on CGL3 (kg CO <sub>2</sub> eq/t)			
Year	Material acquisition and pre-processing	Production	Total
2023	2.106,3	134,4	2.240,7

PO (kg CO <sub>2</sub> eq/t)			
Year	Material acquisition and pre-processing	Production	Total
2023	2.106,3	14,2	2.120,4

FH (kg CO <sub>2</sub> eq/t)			
Year	Material acquisition and pre-processing	Production	Total
2023	2.106,3	47,0	2.153,3