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Statement of Conformity

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March 15, 2024

Verification of decarbonization for PC strand

Compliance with the veriX program (VERIsteel®) based on DIN EN ISO/IEC 17029

Producer	YAZICI DEMİR ÇELİK	
Production site	Makine İhtisas OSB 6. Cad. 8. Sokak	
	No:10 41455 Dilovası / Kocaeli, Türkiye	
Objective	**Baseline verification**	
	Status quo of specific CO_2e emissions from base year 2022	
Baseline	PC Strand	1.092 t CO_2e / t
System boundary	Cradle-to-gate	
Level of assurance	Reasonable	
Materiality threshold	10% of total CO_2e emissions	

This statement of conformity is only valid for the described scope and in conjunction with verification aim, criteria, and conclusion (page 2 - 5).

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Green Energy & Sustainability
Grazer Straße 11, 8600 Bruck an der Mur, Austria

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Business Unit Manager

TÜV®

Remarks to this verfication attestation

Brief description of the verification procedure

YAZICI DEMİR ÇELİK SAN. ve TURİZM TİC.A.Ş. (YAZICI DEMIR ÇELIK) voluntarily assigned TÜV SÜD to verify independently (third-party) the claim of the specific CO_2e emissions for the 2022 and the projectline based on usage of renewable electricity (100% of total demand). The evaluation is based on the defined and above-mentioned scope (Makine İhtisas OSB 6. Cad. 8. Sokak No:10 41455 Dilovası / Kocaeli, Türkiye). The validation/verification was conducted in general alignment with DIN EN ISO/IEC 17029 in combination with the veriX-program defined in the TÜV SÜD veriX Standard Version 06/2023.

YAZICI DEMIR ÇELIK has worked out the claim for the specific CO_2e emissions of steel billet and steel reinforcing bars. YAZICI DEMIR ÇELIK defined the approach and provided all available primary and secondary data for 2022 as well as the prognosed data for the projectline. During the data evaluation, the calculation method has been assessed via an independent calculation of the specific CO_2e emission leaned on Greenhouse Gas Protocol – Product Life Cycle Accounting and Reporting Standard and DIN EN ISO 14067.

Audits were performed by TÜV SÜD experts on 2023/05/30 – 2023/06/01 (on-site at the DNA PC strand production site in Makine İhtisas OSB 6. Cad. 8. Sokak No:10 41455 Dilovası / Kocaeli, Türkiye and EAF steel plant in 1. Ks. Dicle Caddesi, 41455 Dilovası/KOCAELİ, Türkiye). After evaluation of conformity and effectivity of all requested corrective actions and clarifications, the independent review decided to issue this conformity statement.

Roles and responsibilities

The measuring, data collection, GHG inventory, and declaration of greenhouse gas emissions are solely the responsibility of YAZICI DEMIR ÇELIK.

The role and responsibility of the TÜV SÜD verification body was to validate/verify the specific CO_2e emissions reported by YAZICI DEMIR ÇELIK and assess the compliance with veriX-program following the evidence-based approach.

Scope / System boundaries

YAZICI DEMIR ÇELIK produces PC strand out of wire rod at DNA PC strand production site in Makine İhtisas OSB 6. Cad. 8. Sokak No:10 41455 Dilovası / Kocaeli:
Therefore scale surface of the wire rod as the result of the milling process is cleaned with acid. The cleaned surface is coated with phosphate in order to easen the following process, wire drawing. In a cold drawing process wire rod gets deformed in order to make the diameter suitable for the production of prestressed PC strand as well as achieve the mechanical properties.
Then for PC strand production, seven spools of wire are braided into a strand and thermomechanical processes are applied.
Wire rod, the input material of DNA PC strand facility is produced at DILER DEMIR ÇELIK steel meltshop in Dilovası/KOCAELİ using an electric arc furnace (EAF). Steel billets are further processed to wire rod in DILER DEMIR ÇELIK operated wire rolling mill 2km away from steel plant in Dilovası.

The system boundary for this verification is cradle-to-gate, including extraction of materials, ship, and road transportation of raw materials from supplier DILER DEMIR ÇELIK, and processing

activities by YAZICI DEMIR ÇELIK until the product is ready to leave the factory gate. The system boundary includes all relevant and material greenhouse gas emissions sources and sinks described in Table 1.

Table 1: Greenhouse gas sources within system boundary

Scope 1	Scope 2	Scope 3
✓ Stationary combustion	✓ Electricity	✓ Purchased goods and services
✓ Fugitive emission	✓ Cooling and heating	✓ Upstream transportation
	✓ Auxiliary energy	

Direct removals or storages of greenhouse gases are not in place.

Relevant greenhouse gases included in GHG inventory

For the production site, the following directly emitted greenhouse gases were considered:

- CO_2

Emissions of other greenhouse gases have not been identified in this case.

The inventory covers indirect emissions of CO_2 as well as other greenhouse gases, reported as CO_2-equivalents (CO_2e) following the IPCC GWP 100-year approach, including CH_4, N_2O, HFCs, PFCs, SF_6, and NF_3. Biogenic carbon emissions as well as removals are included.

Particularity in reporting

The evaluation of the greenhouse gas relevant data of the period 2022 and the prognosis for a projectline enable a basal modelling with qualification of the specific greenhouse gas emissions and their reduction potential based on the following decarbonization measure by sourcing 100% of total electricity demand from renewable sources (see separate validation statement).

The decarbonization measure of second projectline is the replacement of the current electric arc furnace (EAF) with a new EAF technology causing reduction of GHG emissions (see separate validation statement). All effects like natural gas consumption for exhaust gases, char coal demand, energy of cooling pumps, electrode consumptions were considered. Assumption regarding new technology could be estimated e.g. by data of suitable other plants operated by Diler.

Intended user of this verification declaration

- Potential customers of YAZICI DEMIR ÇELIK

YAZICI DEMIR ÇELIK uses the results of this verification for the above-mentioned products as information for their customers and business partners.

Aim of the verification

The assessment was carried out applying a risk-based approach in alignment with impartiality of TÜV SÜD experts. Rational methods were used to achieve reliable and reproducible conclusions. Our conclusions are based on the surveys and explanations from audits as well as supporting evidence that was assessed and gathered during the review.

Criteria

The check of data was carried out according to the following criteria: relevance, completeness, accuracy, transparency of information and consistency. The assessment of comparable alternatives was based on the principle of conservatism.

Agreed level of assurance

- Reasonable level of assurance

Remark:
Using a reasonable – not absolute - level of assurance the verification body inspects the emission declaration of material correctness. This includes a verification of processes, data and documents of their correctness and accuracy with correspondingly adequate random samples.

Materiality threshold

- 10% of total greenhouse gas emissions

Remark:
The materiality threshold is a value for our assessment of data gaps, false statements, and non-conformities. During the verification identified gaps, omissions, inaccuracies which lead into a value larger than the defined threshold are "material" and are a "non-conformity."

Method of verification

- Strategic analysis and risk assessment
- Validation/verification planning incl. evidence-gathering planning and audit scheduling
- Assessment of GHG-related data and information systems as well as methodology for data collection and GHG accounting
    - Interviews with relevant personnel
    - Collection and review of evidence and documents
    - Random sampling of data and supporting documents for activity data
    - Independent recalculation of GHG inventory
    - Site-inspection with assessment of relevant operations and activities, data management and control systems, equipment, process units and material flows

Summary of results

Table 2: Verification result – PC strand

Baseline – base year: 2022	Scope 1	Scope 2	Scope 3 upstream	**Total (cradle-to-gate)**
Absolute GHG emissions [t CO_2e / a]	6727	18999	7996	33721
Specific GHG emissions [t CO_2e / t]	0.218	0.615	0.259	1.092

Conclusion

YAZICI DEMIR ÇELIK operates and maintains a suitable data collection and recording system, which enabled verification of specific greenhouse gas emissions based on the reporting year 2022 as baseline.

After the review of the YAZICI DEMIR ÇELIK's claim of specific CO_2e emissions for the production of steel billet and steel reinforcing bars, TÜV SÜD verification body determined that the current and forecasted specific greenhouse gas emissions (see separate statements of conformity) are presented factually correct in all material respects. The independent review confirms the achievement of the agreed level of assurance and compliance with the materiality threshold agreed for the Verification activity.

This statement of conformity is issued in accordance with the agreement made with YAZICI DEMIR ÇELIK and within the framework of the validation and verification regulations of the verification body. The results recorded here are based on internal documentation of this Verification project T0005664.