



FERREXPO PLC

REPORTING CRITERIA FOR 2021 ANNUAL REPORT

External Assurance (ISAE 3000)

July 2022



EXTERNAL ASSURANCE PROCESS OF SUSTAINABILITY DATA

The following document aims to provide an overview of the methodology for calculating the sustainability data that has been presented by Ferrexpo plc (“Ferrexpo” or the “Group”) in its Annual Report and Accounts (2021).

In 2021/2022, the Group undertook a process to gain external assurance of selected sustainability data, to ensure transparency and clarity to the Group’s internal and external stakeholder. The Group’s Independent Auditor, MHA MacIntyre Hudson (“MHA”) was selected to conduct this process on the basis of having the relevant expertise, as well as an existing understanding of Ferrexpo and its operations, to conduct an effective review.

The external assurance process undertaken on the sustainability data outlined below has been conducted in accordance with International Standard on Assurance Engagements 3000 (“ISAE 3000”).

The Group has selected its reporting of the following selected health and safety metrics on the basis of these being key elements to the Group’s reporting of this topic:

- Lost time injury frequency rate per million hours worked.
- Total recordable injury frequency rate per million hours worked.

The Group has also selected its reporting of greenhouse gas (“GHG”) emissions on the basis of this being a key element to the Group’s reporting of its sustainability.

The Group envisages the work conducted to date to be an initial phase and will look to gain external assurance on additional forms of its broader sustainability reporting, as presented in the Group’s Annual Reports and Accounts and Responsible Business Reports, which are available on the Group’s website (www.ferrexpo.com).

GREENHOUSE GAS EMISSIONS

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RESOLUTION OF DATA

The data of Scopes 1 and 2 CO₂e greenhouse gas (“GHG”) emissions and certain categories of Scope 3 emissions (e.g. business travel, transportation and distribution), purchased electricity, water withdrawn with breakdown by source, water discharge with breakdown by destination, waste generation from direct operations with breakdown by destination (e.g. recycling, landfill), is collected from six business units in two countries.

Reporting by each business unit is submitted monthly, with submissions made by local CSR teams.

DATA OVERSIGHT

Data consolidated for the Group is reviewed and reported either monthly in the CEO Reports and quarterly in the Group’s Health, Safety, Environment and Communities (“HSEC”) Committee, with reports provided to appropriate internal stakeholders, including the Executive Committee and Board of Directors.

REPORTING PERIOD COVERED

The reporting period for data reviewed is the 2021 calendar year (January 2021 to December 2021 inclusive).

REPORTING BOUNDARIES

Within Ferrexpo, the main operating entities are the following subsidiaries in Ukraine: Ferrexpo Poltava Mining (“FPM”), Ferrexpo Yeristovo Mining (“FYM”) and Ferrexpo Belanovo Mining (“FBM”), which collectively accounted for 95% of the Group’s headcount within its workforce (comprising employees and contractors).

The Group’s reporting for GHG emissions includes FPM, FYM and FBM, as well as the following entities:

- First-DDSG Logistics (inland waterway logistics, central Europe);
- Iron Destiny (transshipment vessel, Ukraine); and
- Ferrotrans (maintenance facilities, Ukraine).

The Group reports Scope 1 and Scope 2 emissions for the above entities.

Entities with the Group that are excluded from the calculation of Ferrexpo’s GHG footprint are the Group’s corporate and marketing offices, which collectively account for 0.5% of the Group’s workforce. Operations at the Port of Pivdennyi, where the Group holds a minority stake (49.9%) are also excluded.

COVERAGE (SCOPE 1 AND SCOPE 2 EMISSIONS)

As disclosed in the Group's Responsible Business Report, Ferrexpo's GHG Emissions calculation includes the consumption of the following as sources of Scope 1 emissions:

- Gaseous fuels (natural gas);
- Liquid fuels (diesel, petroleum, gasoil, fuel oils, waste oils and burning oils);
- Solid fuels (domestic thermal coal and coking coal);
- Hydrochlorofluorocarbons ("HCFCs) and chlorofluorocarbons ("CFCs");
- Blasting materials – comprising emulsions and heavy ammonium nitrate and fuel oil ("ANFO");
- Lubricants and grease;
- Graphite electrodes; and
- Biofuels (sunflower husks).

As disclosed in the Group's Responsible Business Report, Ferrexpo's GHG Emissions calculation includes the consumption of the following as sources of Scope 2 emissions¹:

- Electricity (via third party generation).

(¹Note: prior to reporting of GHG emissions data for 2021, the Group previously included data for the consumption of steam used in heating as a source of Scope 2 emissions. However, as part of the External Assurance process completed in 2022, it was established that this steam is produced using the Group's consumption of natural gas, rather than produced by a third party, and is therefore covered by the Group's Scope 1 emissions calculation.)

COVERAGE (SCOPE 3 EMISSIONS)

Whilst Scope 3 emissions are not covered by the external assurance process that has been completed by the Group in 2021/2022, for completeness, the Group can confirm that its calculation of its Scope 3 (value chain) emissions includes the following categories:

- Category 3.1: Purchased goods and services;
- Category 3.3: Fuel and energy related activities;
- Category 3.5: Waste generated in operations;
- Category 3.7: Employee commuting
- Category 3.9: Downstream transportation and distribution; and
- Category 3.10: Processing of sold products.

Of the categories listed above, approximately 90% of the Group's Scope 3 emissions footprint relates to Category 3.10 (Processing of sold products), which principally relates to the conversion of iron ore to steel by the Group's customers.

The following categories of Scope 3 emissions are not considered applicable to Ferrexpo at the present time:

- Category 3.8: Upstream leased assets;
- Category 3.13: Downstream leased assets;
- Category 3.14: Franchises; and
- Category 3.15: Investments.

ASSUMPTIONS USED

The Group principally uses GHG emissions factors provided by the Greenhouse Gas Protocol (“GHG Protocol”), as stipulated by the Global Reporting Initiative (“GRI”) framework for reporting. These emissions factors are provided in the ‘Emissions Factors’ section of this report. The Group therefore presents its GHG emissions in compliance with the GHG Protocol.

Consumption data for the materials and other sources of energy, as described in the ‘Coverage’ section of this report, is based on regular monitoring and reporting of actual consumption and does not include assumptions on the volume of materials consumed by the Group.

GHG EMISSIONS FACTORS

Emissions factors used by the Group are principally provided by the Greenhouse Gas Protocol (“Protocol”), which principally covers the hydrocarbon fuels (liquid, gaseous and solid form) used across the Group’s operations. Where the Protocol does not readily provide a relevant emissions factor, the Group has sought to utilise the most widely accepted emissions factor for each consumable or source of energy.

The following represent the GHG emissions factors used, on the basis of equivalent ones not being available from the Protocol:

- Sunflower husks: DEFRA (2019);
- Ukrainian electricity grid: International Energy Agency (“IEA”) emissions factors (2020), including transmission and distribution losses;
- Nuclear power: 12g CO₂ per kWh (source: World Nuclear Association, [link](#));
- CFCs and HCFCs: UK Government ([link](#)); and
- Explosives: National Greenhouse Accounts (NGA) Factors (Department of Climate Change 2008b).

GREENHOUSE GASES INCLUDED IN CALCULATION

The Group presents its GHG emissions on the basis of carbon-equivalent tonnes (“CO₂e”), including other gases that have global warming potential. Where the Group utilises emissions factors provided by the GHG Protocol, as described earlier in this document, the Group calculates emissions of carbon dioxide (CO₂), methane (CH₄) and nitrous oxide (N₂O).

In order to produce a CO₂-equivalent figure for emissions derived using emissions factors presented by the GHG Protocol, the Group follows the recommendation made by the GHG Protocol to utilise the 100-year time horizon global warming potentials (“GWP”) relative to CO₂, as published by the Intergovernmental Panel on Climate Change (“IPCC”) in its Fifth Assessment Report. ([Link](#) to recommendation document.)

For Scope 2 emissions (electricity consumption), by using the emission factors supplied by the IEA, the Group also incorporates emissions of CO₂, CH₄ and N₂O in its calculation.

BASELINE YEAR

The Group has selected 2019 as its baseline year for its progress on reducing GHG emissions on the basis that it represents the final year before specific activities to actively address the Group's GHG emissions footprint commenced, namely:

- In 2020, deregulation in Ukraine, where the Group's main operating assets are located, enabled the Group to commence a process to selectively purchase clean forms of electricity from producers in Ukraine. Through purchasing electricity principally generated from nuclear and hydroelectric power plants, the Group has realised a material saving to its Scope 2 emissions on both an absolute and unit of production basis.
- In 2020, the Group commenced commercial trials of higher grade (67% Fe), direct reduction pellets, which are predominantly utilised in a form of steelmaking that utilises natural gas and electricity to convert iron ore to steel via the production of direct reduced iron and conversion to steel via an electric arc furnace. This contrasts with the main form of iron ore pellet that the Group produces for the blast furnace method of steelmaking, which is a process whereby steelmakers typically utilise coal as the main fuel for producing steel. As a result of this difference in fuels used, direct reduction pellets have a significantly lower emissions footprint than blast furnace pellets, realising a material Scope 3 emissions saving for the Group from 2020 onwards.

The above projects have had a material impact on the Group's existing GHG emissions footprint and outlook.

Emissions in the Group's baseline year are as follows:

- Scope 1 emissions (CO₂e): 589 kilotonnes
- Scope 2 emissions (CO₂e): 801 kilotonnes

MONITORING OF PERFORMANCE AGAINST BASELINE YEAR

The Group primarily measures performance against its baseline year on the basis of combined Scope 1 and Scope 2 emissions, on the basis of GHG emissions per unit of production.

The Group presents its progress against its baseline year on a unit basis due to the Group's growth profile, which has a significant influence over the Group's consumption of key consumables and therefore generation of GHG emissions. The Group, however, has set itself a net-zero target for 2050 and therefore will continue to monitor its absolute emissions and target a reduction through the Group's numerous carbon reduction initiatives.

GHG REDUCTION TARGETS (SCOPE 1 AND SCOPE 2)

As of the date of this document, the Group has set itself GHG emissions targets of achieving a 30% reduction by 2030 and achieving a net-zero status by 2050.

PROGRESS AGAINST BASELINE TO DATE

As of the end of 2021, the Group has realised a 30% reduction in its GHG emissions (Scope 1 and 2 basis, per unit of production).

EXTERNAL ASSURANCE – AMENDMENTS TO BASELINE CALCULATION (2019)

As a result of the Group's work with MHA as part of the external assurance process completed, the Group has made a series of minor amendments and corrections to its calculation of its GHG emissions for 2019, against the figures for 2019 published in the Group's 2020 Annual Report and Accounts.

In total, the amendments to the calculation have amounted to a 15 kilotonnes ("kt") reduction to the Group's calculation for its Scope 1 and Scope 2 emissions in 2019, representing a 1% decrease.

Amendments of more than 1kt to the calculation for the Group's baseline year are as follows:

- **Steam**

- Change: removal of 25kt CO₂e from Scope 2 emissions.
- *Reason: steam was previously included in Scope 2 calculation but this is produced via Group's natural gas consumption, therefore previously double-counted.*

- **Lubricants**

- Change: addition of 4kt CO₂e to Scope 1 emissions.
- *Reason: correction to calculation.*

- **Explosives**

- Change: addition of 5kt CO₂e to Scope 1 emissions.
- *Reason: correction to calculation.*

In addition to the above amendments to the Group's Scope 1 and Scope 2 GHG emissions calculation, the Group has corrected the carbon emissions factor for its biofuel usage (sunflower husks), on the advice of external advisors. This has resulted in a 104kt reduction in the Group's emissions from biofuels, which sits outside of the calculation of Scope 1 and Scope 2 emissions.

EXTERNAL ASSURANCE – AMENDMENTS TO CALCULATION FOR 2020

In addition to the amendments described to the Group's baseline year, the Group has also applied the same updated calculation methodology to the calculation for its GHG emissions footprint in 2020, resulting in an overall net decrease of 7kt. Changes of more than 1kt applied are as follows:

- **Steam**
 - Change: removal of 24kt CO₂e from Scope 2 emissions.
 - Reason: steam was previously included in Scope 2 calculation but this is produced via Group's natural gas consumption, therefore previously double-counted.
- **Waste oils**
 - Change: addition of 1kt CO₂e to calculation
 - Reason: inclusion of waste oils being used in boilers for heating of administrative buildings
- **Lubricants**
 - Change: addition of 5kt CO₂e to calculation
 - Reason: correction to calculation
- **Iron Destiny Fuels**
 - Change: addition of 2kt CO₂e to calculation
 - Reason: addition of Iron Destiny (transhipment vessel) to Group calculation
- **Electricity calculation**
 - Change: addition of 2kt CO₂e to calculation
 - Reason: adoption of carbon emissions coefficient published by World Nuclear Association
- **Explosives**
 - Change: addition of 5kt CO₂e to calculation
 - Reason: correction to calculation

In addition to the above amendments to the Group's Scope 1 and Scope 2 GHG emissions calculation, the Group has corrected the carbon emissions factor for its biofuel usage (sunflower husks), on the advice of external advisors. This has resulted in a 113kt reduction in the Group's emissions from biofuels, which sits outside of the calculation of Scope 1 and Scope 2 emissions.



HEALTH AND SAFETY

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RESOLUTION OF DATA

Reporting by each business unit is submitted monthly, with submissions made by local CSR teams. Health and safety data is submitted centrally to the Group's corporate function

DATA OVERSIGHT

Consolidated health and safety data for the Group is reviewed and reported both monthly in the CEO Reports and quarterly in the Group's Health, Safety, Environment and Communities ("HSEC") Committee, with reports provided to appropriate internal stakeholders, including the Executive Committee and Board of Directors.

REPORTING PERIOD COVERED

The reporting period for data reviewed is the 2021 calendar year (January 2021 to December 2021 inclusive).

Reporting Boundary

Health and safety data covers both employees and contractors. Employee data is reported for individuals that have an employment relationship with Ferrexpo. Contractor data is reported for contractors that work under Ferrexpo's direct supervision.

Entities covered by health and safety data that is presented for Ferrexpo's operations in Ukraine:

REPORTING BOUNDARY

Health and safety data covers both employees and contractors. Employee data is reported for individuals that have an employment relationship with Ferrexpo. Contractor data is reported for contractors that work under Ferrexpo's direct supervision.

Entities covered by health and safety data that is presented for Ferrexpo's operations in Ukraine:

- Ferrexpo Poltava Mining (“FPM”);
- Ferrexpo Yeristovo Mining (“FYM”);
- Ferrexpo Belanovo Mining (“FBM”); and
- Ferrotrans.

In addition to the above, the Group's inland waterways subsidiary in central Europe – Frist-DDSG, is also included in Group-level safety data.

DEFINITIONS

A health and safety accident is defined as any work-related incident, which is defined as an event or exposure in the work environment either caused or contributed to the resulting condition or significantly aggravated a pre-existing injury or illness.

In this context, an injury is a lost-time injury (“LTI”), a serious injury, or a fatality, which is an injury that results in an employee being unable to work a full assigned shift, excluding the shift on the day of the occurrence.

The definition of a LTI includes any work-related injury whereby an employee returns to work on the day following an injury or illness but can only perform restricted duties.

Injuries include, but are not limited to, acute and chronic illnesses or illness that may be caused by inhalation, absorption, ingestion, or direct contact with irritants.

The Group has a policy of reporting all injuries, including injuries where there is no lost work time. Injuries that do not result in lost time, are reported within the Group’s Total Recordable Injury Frequency Index (“TRIFR”). For the avoidance of doubt, this metric does not include minor injuries (first aid cases).

The above definitions are prescribed by the laws and regulations of Ukraine (Resolution #337, dated 17.04.2017) as approved by the Cabinet of Ministers of Ukraine. In the event of a discrepancy between the definition outlined above and the legal definition under Resolution #337, the reader should consider the definition under Resolution #337 to apply.

REPORTING METRIC USED

The lost time injury frequency index (“LTIFR”) and TRIFR are based on injuries incurred per one million hours worked, covering both work by employees and contractors under the same performance figures.