Gold Standard for the Global Goals

TEMPLATE

1| MONITORING REPORT

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VERSION **v. 1.1**

RELATED SUPPORT **- TEMPLATE GUIDE Monitoring Report v. 1.1**

This document contains the following Sections

Key Project Information

1- Description of project

2- Implementation of project

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4- Data and parameters

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KEY PROJECT INFORMATION

Key Project Information

GS ID (s) of Project (s)	10878
Title of the project (s) covered by monitoring report	Aluminum Recycling – A Solution for CO_2 Emission Reduction by AS METAL, Romania
Version number of the PDD/VPA-DD (s) applicable to this monitoring report	Version 4
Version number of the monitoring report	1.1
Completion date of the monitoring report	11.02.2026
Date of project design certification	09/08/2023
Date of Last Annual Report	-
Monitoring period number	2
Duration of this monitoring period	14/02/2024 – 31/12/2025
Project Representative	Carbon Expert International SRL
Host Country	Romania
Activity Requirements applied	☐ Community Services Activities ☐ Renewable Energy Activities ☐ Land Use and Forestry Activities/Risks & Capacities ☒ N/A
Methodology (ies) applied and version number	AMS-III.AJ. Recovery and recycling of materials from solid wastes - Version 9.0
Product Requirements applied	☒ GHG Emissions Reduction & Sequestration ☐ Renewable Energy Label ☐ N/A

Table 1 - Sustainable Development Contributions Achieved

Sustainable Development Goals Targeted	SDG Impact	Amount Achieved	Units/ Products
SDG 4 – Quality education	GSDM-I4.4.1 Number of employees provided skill development training	**2024: 64** **2025: 64**	employees
SDG 5 – Gender equality	GSDM-I5.5.1 Number of women serving in managerial/ leadership /ownership role	**2024: 2** **2025: 2**	Women
	GSDG-I5.5.2 Proportion of women in managerial positions	**2024: 50** **2025: 50**	%
SDG 7 – Affordable and clean energy	GSDM-I7.3.1 Total energy savings	**2024: 120,366** **2025: 136,797**	MWh
SDG 8 – Decent work and economic growth	GSDM-I8.5.1 Total number of jobs	**2024: 64** **2025: 64**	employees
SDG 13 - Climate Action	GSDM-I13.2.1 Amount of GHGs emissions avoided or sequestered	**2024: 52,394** **2025: 59,474** **Total: 111,868**	VERs

Table 2 – Product Vintages

		Amount Achieved
Start Dates	**End Dates**	**Product A**
01/05/2022	31/12/2022	44,289 GS VERs
01/01/2023	31/12/2023	57,053 GS VERs
01/01/2024	13/02/2024	7,435 GS VERs
14/02/2024	31/12/2024	52,394 GS VERs
01/01/2025	31/12/2025	59,474 GS VERs

SECTION A. DESCRIPTION OF PROJECT

A.1. General description of project

AS METAL COM SRL is located in Romania on the Southern outskirts of the capital, Bucharest. The site where it operates being located within an industrial platform of 35,000 sq.m. with metallurgical specificity. We are specialized and authorized in the recycling of aluminum metal waste so that we transform this waste into secondary raw materials ready to be reintroduced into the industrial circuit. The secondary aluminum raw materials put on the market by AS METAL COM SRL correspond to the requirements of the European Industrial Standards (Recyclable materials EN 13920 1-16:2003 Aluminum and aluminum alloys, Scrap.), the American Standards Institute of Scrap Recycling Industries Inc., as well as to the Directives and the European Environmental Regulations, such as the EU Regulation 333/2011 establishing criteria determining when certain types of scrap metal cease to be waste under Directive 2008/98/EC of the European Parliament and of the Council[1].

The technologies used by AS METAL COM SRL allow to recover and separate metal waste with a fraction mass, mainly of aluminum resulting from the processing of post consumer aluminum waste and other ferrous and non-ferrous metal substances which in turn are put on the market in accordance with the industry standards that govern them. Our technological processes guarantee a high recovery efficiency not only through the reported quantities but especially through their quality. The certification of the quality of secondary aluminum raw materials produced by our company is ensured by the determinations and analyzes performed in our own laboratory and by the certifications obtained regarding the functionality of the integrated quality management system, environment management system, and occupational health and safety management system for the fields of activity "Development of Secondary Aluminum alloys, ferrous and nonferrous metal waste recovery. Pretreatment and treatment of obsolete vehicles. Wholesale of waste and scrap" (ISO 9001:2015; ISO 14001:2015;

[1] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32011R0333

ISO 45001:2018)[2] as well as the implementation of the requirements of the European Regulation 333/2011 establishing the conditions in which certain aluminum and iron waste are no longer considered waste. According to this regulation, in the case of the project activity the aluminum is considered waste as an input material in the production process and it is not considered anymore waste, but secondary or intermediary product as output, which corresponds also to the Gold Standard principle from GS4GG Section 3.1.1.1. related to types of projects and the recognistion of the recycled aluminum waste as ”a *usable product with sustainable development benefits”.*

Total emission reductions achieved in this monitoring period 14/02/2024 – 31/12/2025

The calculation of GHG emission reductions by the project activity is limited to carbon dioxide (CO_2) only and its primary source is reducing energy consumption that would otherwise be required for the production of aluminum products made of virgin inputs, and consequently reducing greenhouse gases emissions (GHGs). The GHG emissions reduction[3] under current monitoring period is **111,868 tCO_{2e}**

This project is in accordance with specific UN sustainable development goals as it contributes to local environmental sustainability. By opting for recycling over the use of virgin materials, it reduces overall energy consumption, CO2 emissions, and the environmental impact of natural resource extraction. Additionally, aluminum waste recycling helps decrease the amount of waste sent to landfills.

The project contributes to the following five UN Sustainable Development Goals:

1. SDG 4 – Quality education
2. SDG 5 – Gender equality
3. SDG 7 – Affordable and clean energy
4. SDG 8 – Decent work and economic growth
5. SDG 13 – Climate action

[2] The ISO documents can be found here: http://asmetal.ro/calitate/?lang=en. The company has been evaluated by ECOVADIS on 2021 and obtained the silver medal for its impact practices on the environment, workforce, human rights, ethics and sustainable acquisitions.

[3] The GHG emissions reduction calculation, according to the applicable methodology, is provided into a separate Excel document, “SDG13_1 ER Calculation_AS Metal_monitoring period 01.05.2022-13.02.2024_04.11.2024”

What makes the project special?

The activity of the project is a model for other similar aluminum recycling facilities in Romania and Eastern Europe, which deliver sustainable development. Furthermore, the project is in line with specific UN requirements and with the circular economy directives, aimed at eliminating waste and the continual use of resources directives.

Therefore, the Project has the following benefits:

- contributes to local environmental sustainability since recycling decreases the overall energy use, GHGs and environmental burden from natural resources extraction.
- reduces the amount of waste to be disposed in the landfills;
- helps with one of the basic environmental principles, the proximity principle, increasing the nearby capacity for recycling;
- contributes towards better working conditions in the local region;
- improves local and regional economic development;
- contributes to the development of local technological capacity because the manpower and the technical maintenance are provided domestically in the country;
- contributes to regional integration and connection with other sectors;
- contributes to the local municipalities' funds for social insurance, such as health and pension funds, and to local and social community development;
- increases employment opportunities in the area where the project is located;

A.2. Location of project

The project is located in the South-Eastern of ROMANIA, Bucharest city, Sos. Berceni 104 G, district 4.

The host party is Romania. Romania ratified Kyoto Protocol on 2002 together with all EU countries. Romania signed Paris Agreement on 22nd April 2016 together with all EU countries and sent the instrument for ratification the Paris agreement on 1st June 2017.

The project takes place at AS METAL COM SRL's headquarter, located in the Southern part of Bucharest, Romania on an industrial platform of about 35,000 square meters. The GPS coordinates for the aluminum recycling plant are the following:
44°21'18.1"N, 26°08'44.7"E

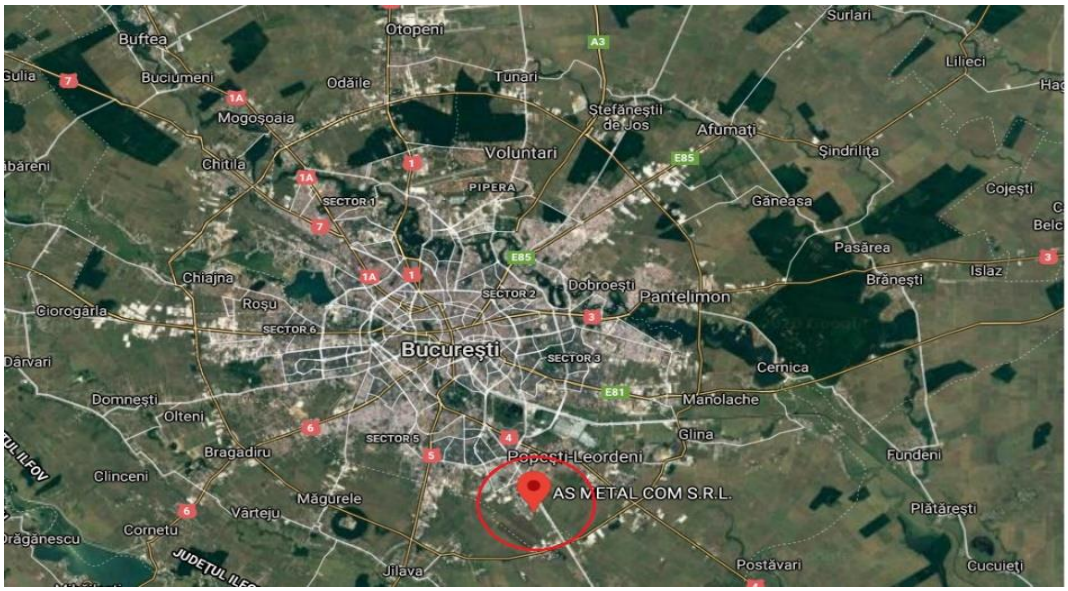

Figure 1: AS METAL Recycling plant in Bucharest

A.3. Reference of applied methodology

The project applies the existing small scale CDM methodology "AMS-III.AJ. Recovery and recycling of materials from solid wastes" - version 9.0

This methodology comprises activities for the recovery and recycling of materials in municipal solid waste (MSW) to process them into intermediate (the Project case) or finished products, displacing the production of virgin materials in dedicated facilities, thereby resulting in avoidance of energy use.

Sectoral Scope: 13. Waste handling and disposal

The Project covers the emissions associated with Scope point (c) from the above-mentioned methodology:

(c) *Production of metals (i.e. Aluminum and steel) from mined ore or virgin raw materials that is displaced by the recycled metals due to the project activity.*

Baseline emissions are assumed to include emissions associated with energy consumption for the production of aluminum from virgin material.

A.4. Crediting period of project

5 years renewable twice model: 01/05/2022 -30/04/2027

Duration of first Monitoring period under the current verification cycle is from 01/05/2022 to 13/02/2024.

Duration of second Monitoring period under the current verification cycle is from 14/02/2024 to 31/12/2025

SECTION B. IMPLEMENTATION OF PROJECT

B.1. Description of implemented project

B.1.1 Forward Action Requests

No Forward Actions Requests

B.2. Post-Design Certification changes

No Post-Design Certification changes

B.2.1. Temporary deviations from the approved Monitoring & Reporting Plan, methodology or standardized baseline

There is no request for deviation from monitoring & reporting plan, methodology or standardized baseline applied during this monitoring period.

B.2.2. Corrections

No correction made in this monitoring period.

B.2.3. Changes to start date of crediting period

There have not been any changes to start date of crediting period. The start date of the crediting period is 01/05/2022.

B.2.4. Permanent changes from the Design Certified monitoring plan, applied methodology or applied standardized baseline

There are no changes from the Design Certified monitoring plan, applied methodology or applied standardized baseline.

B.2.5. Changes to project design of approved project

There are no changes to project design of approved project.

SECTION C. DESCRIPTION OF MONITORING SYSTEM APPLIED BY THE PROJECT

The monitoring system of all SDGs of this monitoring period has been supervised by the Technical Manager who has centralized the collected data and supervised all departments involved in the process of monitoring (Operational department, Human Resources, Health&Safety, Public Relation, Financial, Technical).

All data used (electricity and fuel consumption, amount of aluminum waste received and recycled products etc.) have been obtained directly from the measures developed by the technical staff in the recycling plant.

The emission factors for electricity and fuel are consulted and updated trough official Romanian documentation.

The monitoring plan has been implemented by internal technical staff in charge of the recycling plant. The plan is made to verify that the emission reductions are real and measurable. The data needed for the emissions reduction calculations have been monitored transparently during the monitoring period. The data collection has been done by internal technical staff in the recycling plants, depending on the parameter, according to the followings:

1. Data collected

(a) Mass of aluminum waste entering in the recycling facility (input), measured by direct weighing;
(b) Mass of recycled aluminum generated by the recycling facility, measured by direct weighing;
(c) Amount of electricity consumed at the recycling facility for power equipment;
(d) Emission factor for the electrical grid system;
(e) Amount of Diesel consumption per year
(f) Amount of Natural Gas consumption per year for administration building and facilities equipped with showers for employees;

2. In addition, these documents collected by the internal technical staff will be made available at verification to auditor:

- Invoices documents regarding each fuel (diesel) consumed at the recycling facility;
- Electricity invoices regarding the electricity consumptions of the recycling facility from the national grid;
- Evidences regarding purchases of the aluminum waste and sales of recycled products (to be collected by the technical staff in charge of the recycling plant operation).

- Evidence regarding the natural gas consumptions of the administration building and facilities equipped with showers for employees;

3. The data to be monitored

The set of data to be monitored during the project operation phase has been provided in D2.

4. The equipment for monitoring

The weighting system is calibrated each year. The recycling plant checks completeness of invoices concerning electricity and fossil fuel consumptions. The recycling plant checks at least monthly, if consumption fit to the produced quantities. The project proponent also checks continuously the amount of incoming aluminum waste and produced recycled aluminum material.

The amount of electricity was collected from the readings of meter on the basis of which the invoices are issued monthly. The electricity meters are: N 36044800 Meter with the installation receipt of 10/06/2024 and N 36086022 Meter metrological verification bulletin of 27/09/2016. The valability of the calibration for each meter is 15 years as the legislation required (Order nr 77/2022 for approval of official list of measuring means subject to legal metrological control measurement and Official list of means of measurement subject to legal metrological measurement control 15.03.2022).

The amount of natural gas was collected from the readings of meter on the basis of which the invoices are issued monthly. The natural gas meter serial N 172654. Meter with the installation receipt of 16/10/2023. The validity of the calibration for meter is 8 years as the legislation required (Order nr 77/2022 for approval of official list of measuring means subject to legal metrological control measurement and Official list of means of measurement subject to legal metrological measurement control 15.03.2022).

The company AS METAL COM SRL is ISO 9001:2015, 14001 and 45001 certified and all weighting systems are calibrated each year according to operational internal procedures.

5. Verification and calibration of the equipment

The verification and calibration of the weighting system/scales, series 5210268-5FC is done annually by Romanian Bureau of Legal Metrology accordingly to the Romanian calibration legislation (Order 77/2022, point 19 page 13 of Official list of means of measurement subject to legal metrological measurement control), respecting its rules and procedure:
Weight – bridge scale Metrological verification bulletin of 06/06/2024 (series 5210268-5FC)
Weight – bridge scale Metrological verification bulletin of 05/06/2025 (series 5210268-5FC)
The verification and calibration meter of electricity is done at 15 years as it is stipulated in Order 77/2022, point 26 page 14 of Anex Official list of means of measurement subject to legal metrological measurement control), respecting its rules and procedure. The last metrological verification of the meter electricity calibration N 36086022 was done in 27.09.2016.
The verification and calibration meter of natural gas is done at 8 years as it is stipulated in Order 77/2022, point 10 page 13 of Anex Official list of means of measurement subject to legal metrological measurement control), respecting its rules and procedure.

6. Data Management and treatment

All data collected by Production, Technical and Purchasing and other departments from the recycling plant and manufacturers will be centralised at the recycling plant according to the Procedure for the control of documents foreseen by ISO 9001:2015. The recycling plant Annually has financial and energy audits and also ISO quality audits on environment and health working and safety environment.

7. Monitoring Report

All the data from production are monitored in monthly reports issued by the production department.

These documents contains the data for input raw materials, output, consumption of all utilities (electricity, gas, fuel etc.)

The data about energy and fuel for all production and departments as well as for administration department are centralised by the technical manager.

The internal technical staff is responsible for preparing the monitoring report under the supervision of the VVB. All the related records of verification, reading, cross-checking will be readily accessible for the verification of the VVB.

All reports are centrally kept by the internal staff dedicated to this project and made available to the VVB.

All collected data has been centralized in the Excel document "Monitoring parameter no.6_SDG13_ER Calculation_AS Metal_monitoring period 14.02.2024-31.12.2025_11.02.2026", which will be verified by VVB .

SECTION D. DATA AND PARAMETERS

D.1. Data and parameters fixed ex ante or at renewal of crediting period

There are four parameters fixed ex-ante, which are needed to measure the impact of SDG 13.

Ex-ante parameter no.1

Data/parameter	SE_i
Unit	tCO2/t
Description	Specific CO2e emission factor for production of aluminum
Source of data	CDM methodology: AMS.III.AJ_version 9.0
Value(s) applied	8.4
Choice of data or Measurement methods and procedures	Default value CDM methodology: AMS.III.AJ_version 9.0
Purpose of data	To calculate the baseline scenario
Additional comment	

Ex-ante parameter no.2

Data/parameter	B_i
Unit	-
Description	Correction factor based on share of production
Source of data	CDM methodology: AMS.III.AJ_version 9.0
Value(s) applied	0.72
Choice of data or Measurement methods and procedures	Default value CDM methodology: AMS.III.AJ_version 9.0

Purpose of data	To calculate the baseline scenario
Additional comment	

Ex-ante parameter no.3

Data/parameter	***Density of diesel***
Unit	Kg/liter
Description	The density of diesel
Source of data	IPCC 2006
Value(s) applied	0.832
Choice of data or Measurement methods and procedures	Default value from the IPCC 2006
Purpose of data	To calculate the project scenario
Additional comment	

Ex-ante parameter no.4

Data/parameter	NCV_{diesel}
Unit	TJ/Gg
Description	Net calorific value of the fossil fuel consumed in the recycling facility in year
Source of data	IPCC 2006
Value(s) applied	43.3
Choice of data or Measurement methods and procedures	Default value from the IPCC 2006, upper limit value
Purpose of data	To calculate the project scenario
Additional comment	

D.2 Data and parameters monitored

According to the Excel document provided, "Monitoring parameter no.6_SDG13_ER Calculation_AS Metal_monitoring period 14.02.2024-31.12.2025_ 11.02.2026", the recycling plant monitors 15 parameters, as follows:

Monitoring parameter no.1

SDG 4 Quality education

Data / Parameter	Number of employees provided skill development training
Unit	No. of employees trained on recycling
Description	Number of employees trained on recycling vocational skills
Source of data	Internal employment reports Monitoring parameter no.1_AS METAL _SDG4_year 2024 Monitoring parameter no.1_AS METAL _SDG4_year 2025
Value(s) applied	14/02/2024 – 31/12/2024 - 64 01/01/2025 – 31/12/2025 - 64
Measurement methods and procedures	Measured
Monitoring frequency	Annually
QA/QC procedures	The recycling plant annually monitors this parameter according to internal procedure.
Purpose of data	To quantify the impact of SDG 4
Additional comment	-

Monitoring parameter no.2

SDG 5 Gender Equality

Data / Parameter	Number of women serving in managerial/ leadership/ownership role
Unit	No. of women managers
Description	Number of women employed as managers by project activity
Source of data	Statement with no of women serving in managerial position. Monitoring parameter no.2_AS METAL _SDG5_year 2024, 2025
Value(s) applied	14/02/2024 – 31/12/2024 - 2 01/01/2025 – 31/12/2025 - 2
Measurement methods and procedures	Measured
Monitoring frequency	Annually
QA/QC procedures	The recycling plant annually monitors this parameter according to internal procedure.
Purpose of data	To quantify the impact of SDG 5
Additional comment	-

Monitoring parameter no.3

Data / Parameter	Proportion of women in managerial positions
Unit	%
Description	Proportion of women managers in total managerial positions
Source of data	Statement with % of women in total managerial position Monitoring parameter no.3_AS METAL _SDG5_year 2024, 2025
Value(s) applied	14/02/2024 – 31/12/2024 – 50% 01/01/2025 – 31/12/2025 – 50%
Measurement methods and procedures	Measured
Monitoring frequency	Annually
QA/QC procedures	The recycling plant annually monitors this parameter according to internal procedure.
Purpose of data	To quantify the impact of SDG 5
Additional comment	-

Monitoring parameter no.4

SDG 7 Affordable and Clean Energy

Data / Parameter	Total energy saving
Unit	$MWh_{electricity}$
Description	Energy saving
Source of data	Internal consumption reports Monitoring parameter no.4_AS METAL_SDG7_Energy saving_monitoring period 14.02.2024-31.12.2025_09.01.2026.xlsx
Value(s) applied	14/02/2024 – 31/12/2024 – 120,366 01/01/2025 – 31/12/2025 – 136,797
Measurement methods and procedures	Calculated
Monitoring frequency	Annually
QA/QC procedures	The recycling plant annually measures this parameter according to the methodology.
Purpose of data	To quantify the impact of SDG 7
Additional comment	-

Monitoring parameter no.5

SDG 8 Decent work and economic growth

Data / Parameter	Total number of jobs
Unit	No. of employees
Description	Number of people employed by project activity
Source of data	Declaration with number of employees for each year Monitoring parameter no.5_AS METAL_SDG 8_year 2024 Monitoring parameter no.5_AS METAL_SDG 8_year 2025
Value(s) applied	14/02/2024 – 31/12/2024 – 64 01/01/2025 – 31/12/2025 – 64
Measurement methods and procedures	Measured
Monitoring frequency	Annually
QA/QC procedures	The recycling plant annually monitors this parameter according to internal procedure.
Purpose of data	To quantify the impact of SDG 8
Additional comment	-

Monitoring parameter no.6

SDG 13 Climate Action

Data / Parameter	Emission reduction per year
Unit	tCO2e
Description	Number of emissions reductions per year achieved through the aluminum recycling activity
Source of data	Aluminum recycling plant internal document Monitoring parameter no.6_SDG13_ER Calculation_AS Metal_monitoring period 14.02.2024-31.12.2025_11.02.2026
Value(s) applied	14/02/2024 – 31/12/2024 – 52,394 01/01/2025 – 31/12/2025 – 59,474
Measurement methods and procedures	Measured
Monitoring frequency	Annually
QA/QC procedures	The recycling plant annually monitors this parameter according to the CDM methodology AMS-III.AJ. Recovery and recycling of materials from solid wastes - Version 9.0
Purpose of data	To quantify the impact of SDG 13
Additional comment	-

Monitoring parameter no.7

SDG 13 Climate Action

Data / Parameter	ECi,y = Electricity consumption of the recycling facility
Unit	MWh
Description	Quantity of electricity consumed by the project electricity consumption source *j* in year *y*
Source of data	Aluminum recycling plant Monitoring parameter no.7, 10, 11_Energy and Fuels Consumption_monitoring period 14.02.2024-31.12.2025_09.01.2026
Value(s) applied	14/02/2024 – 31/12/2024 – 536.552 01/01/2025 – 31/12/2025 – 451.148
Measurement methods and procedures	Use electricity meters installed at the electricity consumption sources
Monitoring frequency	Monthly recording based on the readings meter and invoices.
QA/QC procedures	The recycling plant checks completeness of invoices concerning electricity consumption. The recycling plant checks at least monthly, if consumption fit to the produced quantities. The electricity meter will be calibrated every 15 years according to applicable legislation (Order nr 77/2022 for approval of official list of measuring means subject to legal metrological control measurement and Official list of means of measurement subject to legal metrological measurement control 15.03.2022).
Purpose of data	To calculate the project emissions
Additional comment	-

Monitoring parameter no.8

SDG 13 Climate Action

Data / Parameter	Municipal solid waste
Unit	Tons/year
Description	Quantity of municipal solid waste collected at the recycling facility per year
Source of data	Aluminum recycling plant Monitoring parameter no.8_AS METAL _SDG13_year 2024.pdf Monitoring parameter no.8_AS METAL _SDG13_year 2025.pd
Value(s) applied	14/02/2024 – 31/12/2024 – 11,756.80 01/01/2025 – 31/12/2025 – 11,305.68
Measurement methods and procedures	Quantity of municipal metal waste collected – weight in a calibrated balance

Monitoring frequency	Annually
QA/QC procedures	The balance is calibrated every year.
Purpose of data	To quantify the impact of SDG 13
Additional comment	-

Monitoring parameter no.9

SDG 13 Climate Action

Data / Parameter	Quantity of metal type *i* (Steel or Aluminium) recycled and sent to a processing or manufacturing facility in year *y*
Unit	Tons/year
Description	Quantity of each of the segregated materials leaving the recycling facility with a market price, including plastic type *i* and other marketable items such as organics, container glass cullet, metals etc
Source of data	Aluminum recycling plant reports Monitoring parameter no.9_AS METAL _SDG13_year 2024 Monitoring parameter no.9_AS METAL _SDG13_year 2025
Value(s) applied	14/02/2024 – 31/12/2024 – 8,713.34 01/01/2025 – 31/12/2025 – 9,877.79
Measurement methods and procedures	Direct weighing and recording of the weight, cross checked with company's records that is invoiced and backed by receipt of payment.
Monitoring frequency	Continuously with each consignment sent to each recycling facility to processing/ manufacturing facility or other customers but aggregated annually.
QA/QC procedures	Recorded at the time of sending each consignment from recycling facility to processing/ manufacturing facility or other customers. The balance is calibrated every year.
Purpose of data	To quantify the impact of SDG 13
Additional comment	-

Monitoring parameter no.10

SDG 13 Climate Action

Data / Parameter	Diesel consumption of the recycling facility
Unit	MWh and tonnes
Description	Diesel consumption of the recycling facility
Source of data	Aluminum recycling plant reports

	Monitoring parameter no.7, 10, 11 Energy and Fuels Consumption_monitoring period 14.02.2024-31.12.2025_09.01.2026
Value(s) applied	14/02/2024 – 31/12/2024 – 486.277MWh 01/01/2025 – 31/12/2025 – 400.170 MWh 14/02/2024 – 31/12/2024 – 41.398 tonnes 01/01/2025 – 31/12/2025 – 34.068 tonnes
Measurement methods and procedures	Measured with calibrated equipment
Monitoring frequency	Monthly
QA/QC procedures	The recycling plant checks completeness of invoices concerning fuel consumption. The recycling plant checks at least monthly, if consumption fit to the produced quantities.
Purpose of data	To calculate the baseline emissions
Additional comment	-

Monitoring parameter no.11

SDG 13 Climate Action

Data / Parameter	Natural gas consumption of the recycling facility
Unit	MWh
Description	Natural consumption of the recycling facility
Source of data	Aluminum recycling plant reports Monitoring parameter no.7, 10, 11 Energy and Fuels Consumption_monitoring period 14.02.2024-31.12.2025_09.01.2026
Value(s) applied	14/02/2024 – 31/12/2024 – 335.559 01/01/2025 – 31/12/2025 – 343.262
Measurement methods and procedures	Measured with calibrated equipment
Monitoring frequency	Monthly recording based on the readings meter and invoices.
QA/QC procedures	The recycling plant checks completeness of invoices concerning fuel consumption. The recycling plant checks at least monthly, if consumption fit to the produced quantities. The natural gas meter will be calibrated every 8 years according to applicable legislation (Order nr 77/2022 for approval of official list of measuring means subject to legal metrological control measurement and Official list of means of measurement

	subject to legal metrological measurement control 15.03.2022).
Purpose of data	To calculate the baseline emissions
Additional comment	-

Monitoring parameter no.12

SDG 13 Climate Action

Data / Parameter	EF_{el}
Unit	**tCO2/MWh**
Description	CO2 emissions factor for energy consumption in the production of aluminum recycled
Source of data	The last Annual Report from National Energy Regulatory Authority(ANRE) pag 64, year 2024 Monitoring parameter no.12_Annual Report from National Energy Regulatory Authority(ANRE) pag 64, year 2024 https://anre.ro/wp-content/uploads/2025/12/Raport-anual-ANRE-2024.pdf
Value(s) applied	0.17972
Measurement methods and procedures	Annually
Monitoring frequency	The recycling plant annually monitors this parameter.
QA/QC procedures	The recycling plant monitors this parameter according to internal procedure.
Purpose of data	To quantify the impact of SDG 13
Additional comment	-

Monitoring parameter no.13

SDG 13 Climate Action

Data / Parameter	$EF_{\text{natural gas}}$
Unit	**tCO2/MWh**
Description	CO2 emissions factor for natural gas consumption in the production of aluminum recycled
Source of data	Greenhouse gases emission factors for local emission inventories, Covenant of Mators databases - Version 2022, pag 5 based on IPPC values Monitoring parameter no.13_Greenhouse gases emission factors for local emission inventories, Covenant of Mators databases - Version 2022, pag 5

Value(s) applied	0.202
Measurement methods and procedures	Annually
Monitoring frequency	The recycling plant annually monitors this parameter.
QA/QC procedures	The recycling plant monitors this parameter according to internal procedure.
Purpose of data	To quantify the impact of SDG 13
Additional comment	-

Monitoring parameter no.14

SDG 13 Climate Action

Data / Parameter	$EF_{FF,\,diesel}$
Unit	**tCO2/TJ**
Description	CO2 emissions factor for diesel consumption in the production of aluminum recycled
Source of data	Romanian publication "The list of the national values of the emission factors and net calorific values, specific to each type of fuel and type of activity - EU-ETS 2012" https://www.mmediu.ro/app/webroot/uploads/files/2014-03-18_Lista_valorilor_nationale_FE_PCN-2014.pdf Monitoring parameter no.14_The list of national values of the emission factors and net caloric values
Value(s) applied	73.56
Measurement methods and procedures	Annually
Monitoring frequency	The recycling plant annually monitors this parameter.
QA/QC procedures	The recycling plant monitors this parameter according to internal procedure.
Purpose of data	To quantify the impact of SDG 13
Additional comment	-

Monitoring parameter no.15

Safeguard Principles

Data / Parameter	Number of accidents and incidents
Unit	Number of accidents and incidents

Description	Number of accidents and incidents at the recycling plant
Source of data	Internal reports on accidents Monitoring parameter no.15_Safeguard Principles_Health & Safety performance 2024-2025
Value(s) applied	14/02/2024 – 31/12/2024 – 0 01/01/2025 – 31/12/2025 – 1
Measurement methods and procedures	Measured
Monitoring frequency	Annually
QA/QC procedures	The recycling plant annually monitors this parameter according to internal procedure
Purpose of data	To monitor the safeguard principle 6.1 Labour rights

Monitoring parameter no.16

SDG 13 Climate Action

Data / Parameter	TDLj, y
Unit	%
Description	Average technical transmission and distribution losses for providing electricity to source *j, k* or *l* in year *y*
Source of data	Annual average value based on the most recent data available within the host country; TDL Romania 2024_DEO_Sustenabilitate_ 2024_Final_MarcaGri_pg 12
Value(s) applied	7,06
Measurement methods and procedures	For (a) from Tool05: *TDLj/k/l,y* should be estimated for the distribution and transmission networks of the electricity grid of the same voltage as the connection where the proposed CDM project activity is connected to. The technical distribution losses should not contain other types of grid losses (e.g. commercial losses/theft). The distribution losses can either be calculated by the project participants or be based on references from utilities, network operators or other official documentation.
Monitoring frequency	Annually.
QA/QC procedures	It is used the last available public TDL, which does not contain other types of grid losses (e.g. commercial losses/theft).
Purpose of data	To quantify the impact of SDG 13
Additional comment	-

D.3. Comparison of monitored parameters with last monitoring period

Not applicable for non-Community Service Activities.

D.4. Implementation of sampling plan

No sampling plan implemented.

SECTION E. CALCULATION OF SDG IMPACTS

E.1. Calculation of baseline value or estimation of baseline situation of each SDG Impact

SDG 13 Climate Action

According to the methodology AMS.III.AJ – version 9.0, the approach of calculating the outcome of SDG 13 is shown below.

The baseline emissions for the production of aluminum from virgin raw inputs are calculated using following equation:

$$BE_{metal,y} = \sum Q_{i,y} \times B_i \times SE_i$$

Where:

$BE_{metal,y}$ = Baseline emissions for metals recycling in year y (tCO2/year) i= Metal type i (i= Aluminum)

$Q_{i,y}$ = Quantity of metal type i (Steel or Aluminum) recycled and sent to a processing or manufacturing facility in year y (t/y)

SE_i = Specific CO2e emission factor for production of metal i (tCO2/t), take value specified in Table 4 from the methodology (page 14)

Moreover, the following conservative assumptions were made to determine the baseline emissions for the production of aluminum from virgin inputs:

(a) There is the same process worldwide of the aluminum production from virgin raw materials, accomplished in two phases: the Bayer process of refining the bauxite ore to obtain aluminum oxide, and the Hall-Heroult process of smelting the aluminum oxide to release pure aluminum

(b) The only source of energy consumed by the preparation and mixing of raw materials is electricity – no fossil-fuels are used;

(c) The Specific CO2e emission factor for production of aluminum (SEi) 8.4 tCO2/t shall be used as per the methodology. This value applies for Annex I countries too.

The actual GHG emissions reduction calculation, baseline and project emissions calculation, according to the applicable methodology, are provided into a separate Excel document: "Monitoring parameter no.6_SDG13_ER Calculation_AS Metal_monitoring period 14.02.2024-31.12.2025_ 11.02.2026".

SDG 7 – Affordable and clean energy

Estimating net benefit for SDG 7, indicator Energy Savings:
Net benefit SDG7 = Baseline outcome SDG7 - Project outcome SDG7
Net benefit SDG 7 = The electricity consumed from the production of aluminum from virgin materials – The electricity consumed at the recycling plant

The Baseline is calculated using the following equation:
$BE_{El,y} = Q_{aluminum} * SEC_{aluminum}$
Where:
$BE_{El,y}$: Baseline of the electricity in year y (MWh)
Q_{alu}: Quantity of aluminum recycled in year y, (t)
$SEC_{aluminum}$: Specific electricity consumption at virgin aluminum production facility (MWh/t)

The actual values of baseline calculation and project emissions of SDG 7 Energy Saving: "Monitoring parameter no.4_AS METAL_SDG7_Energy saving_monitoring period 14.02.2024-31.12.2025_09.01.2026.xlsx".

For all other SDGs (with the exception of SDG 7 and SDG 13), the Baseline is zero since in the absence of the project, none of those indicators have been existed.

Therefore, the following equations shall apply for **SDG 4, 5** and **8**:
Net benefit of SDG = Project outcome of SDG – Baseline outcome of SDG
Net benefit of SDG = Project outcome of SDG – 0
Net benefit of SDG = Project outcome of SDG

More specifically, the proposed aproach is the following:

SDG 4 Quality Education

Trough its educational programs, internships and trainings on recycling, sustainable development, climate change and circular economy dedicated to employees, young employed persons and other people, the project actively contributes to the Target 4.4:

Target 4.4 „By 2030, substantially increase the number of youth and adults who have relevants skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship."

Project Indicator for SDG 4:

1. The Number of employees provided skill development training

Baseline situation:

In the baseline situation, there are not any employees trained on recycling, sustainable development and circular economy, and no trainings to promote recycling and sustainable development. Thus, the baseline outcome benefit is zero.

SDG 5 Gender Equality

One of the main benefits of the project is its approach toward gender equality, women being promoted in management position, including the high level management, contributing to the Target 5.5:

Target 5.5: „Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life."

Project Indicators for SDG 5:

1. Number of women serving in managerial/ leadership /ownership role
2. Proportion of women in managerial positions in total management positions

Baseline situation:

In the baseline situation, there were no women employed who held any management positions. Therefore, the baseline outcome benefit is zero.

SDG 8 Decent work and economic growth contribution

Through the project activities, it will create jobs which contribute to the target 8.5:

Target 8.5: „By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value."

The number of jobs created by the project with safe and healthy work environment together with number of trainings on safety and health at working environment and

also on the technical services required to operate the recycling plant, are monitored by the PP. At the same time, the PP monitors all technical equipment checks and maintenance interventions in order to contribute at the development of SDG 8.
Project indicators for SDG 8:

1. Total number of jobs

Baseline situation:
In baseline situation no jobs created. Therefore, baseline outcome benefit is zero.

E.2. Calculation of project value or estimation of project situation of each SDG Impact

SDG 13 Climate Action

According to the methodology AMS.III.AJ – version 9.0, project emissions for the production of aluminum from virgin inputs are calculated using following equation. The electricity and fuel energy consumption (ECy, FCy) shall be directly monitored.

$$PE_y = EC_{PJ,y} \times EF_{el,PJ,y} + \sum(FC_{f,PJ,y} \times NCV_{f,y} \times EF_{f,CO2,y})$$

Where:
PE_y = Project emissions in year y (t CO2/y)
i = Material type – plastics (HDPE, LDPE, PET and PP), container glass cullet, Aluminum or steel
$Q_{i,}$ = Quantity of material type recycled in year y (t/y)
$EC_{PJ,y,}$ = Electricity consumed by the recycling facility in the year y (MWh)
$FC_{f,PJ,y}$, = Fuel type f consumed by recycling facility in the year y (unit mass or volume)
$NCV_{f,y}$ = Net calorific value of the fossil fuel consumed in the recycling facility in year y (GJ/unit mass or volume)
EF_{f,CO_2} = CO_2 emission factor of the fossil fuel consumed at the recycling facility (tCO2/GJ) in year y

Leakage

If it is demonstrated that organic biogenic waste segregated in the recycling facility would otherwise have been deposited in a landfill without methane recovery in the baseline scenario, or if the baseline scenario is the incineration of the wastes, then no leakage calculation is required.

Emission reductions

The emission reductions achieved by the project activity shall be determined as the difference between the baseline emissions and the project emissions and leakage.

$ERy = BE_y - PE_y - L_y$

Where:

ER_y = Emission reductions in year y (t CO2e)

L_y = Leakage emissions in year y (t CO2e)

BE_y: Baseline emissions in year y (tCO2)

PEy: Project emissions in year y (tCO2)

SDG 7 – Affordable and clean energy

Estimating net benefit for SDG 7, indicator Energy Savings:

Target 7.3: By 2030, double the global rate of improvement in energy efficiency.

The approach of estimating the project indicator and net benefit is the following.

Project outcome SDG7 = EC aluminum,y (MWh)

Where:

$EC_{aluminum,y}$ = Electricity consumption for aluminum production in year y, (MWh)

The electricity consumption is measured yearly with calibrated equipment.

The Net benefit of SDG7 is calculated using the following formula:

Net benefit of SDG7 = Baseline outcome of SDG7 - Project outcome of SDG7

Net benefit SDG7 = $Q_{aluminum} * SEC_{aluminum} - EC_{aluminum,y}$

Calculation of Project value and net benefit for SDG 4, 5, 8

As already explained, for all other SDGs of the project (with the exception of SDG 7 and SDG 13), the Baseline is zero since in the absence of the project, none of those indicators have been existed.

Therefore, the following equations shall apply for **SDG 4, 5, 8:**

Net benefit of SDG = Project outcome of SDG – Baseline outcome of SDG

Net benefit of SDG = Project outcome of SDG – 0

Net benefit of SDG = Project outcome of SDG

More specifically, the proposed aproach is the following:

SDG 4 Quality Education

Trough its educational programs, internships and trainings on recycling, sustainable development, climate change and circular economy dedicated to employees, young employed persons and other people, the project actively contributes to the Target 4.4:

Target 4.4 „By 2030, substantially increase the number of youth and adults who have relevants skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship."

Project Indicator for SDG 4:

1. The Number of employees provided skill development training.

Project situation:
In the project situation, the PP records the number of employees trained on recycling vocational skills, the number of people trained on recycling, sustainable development and circular economy in order to indicate the contribution to SDG 4.

SDG4 contribution = The Number of employees provided skill development training

SDG 5 Gender Equality

One of the main benefits of the project is its approach toward gender equality, women being promoted in management position, including the high level management, contributing to the Target 5.5:

Target 5.5: „Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life."

Project Indicators for SDG 5:

1. Number of women serving in managerial/ leadership /ownership role
2. Proportion of women in managerial positions in total management positions

Project situation:
In the project situation the Number of women serving in managerial/ leadership /ownership role and the proportion of women in managerial positions in total management positions are monitored.

1. SDG5 contribution = Number of women serving in managerial/ leadership /ownership role
2. SDG5 contribution = Proportion of women in managerial positions in total management positions

SDG 8 Decent work and economic growth contribution

Through the project activities, it will create jobs which contribute to the target 8.5:

Target 8.5: „By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value."

The number of jobs created by the project with safe and healthy work environment together with number of trainings on safety and health at working environment and also on the technical services required to operate the recycling plant, are monitored by the PP. At the same time, the PP monitors all technical equipment checks and maintenance interventions in order to contribute at the development of SDG 8.
Project indicators for SDG 8:

1. Total number of jobs

Project situation:

In project situation, the number of total number of jobs generated as a result of the project are monitored by the PP.

1. SDG8 contribution = Total number of jobs

E.3. Calculation of leakage

Leakage

If it is demonstrated that organic biogenic waste segregated in the recycling facility would otherwise have been deposited in a landfill without methane recovery in the baseline scenario, or if the baseline scenario is the incineration of the wastes, then no leakage calculation is required.

E.4. Calculation of net benefits or direct calculation for each SDG Impact

SDG	SDG Impact	Baseline estimate	Project estimate	Net benefit
SDG 13 Climate Action	GSDM-I13.2.1 Amount of GHGs emissions avoided or sequestered	**2024: 52,698** **2025: 59,740**	**2024: 304** **2025: 266**	**2024: 52,394** **2025: 59,474**

SDG 4 Quality education	GSDM-I4.4.1 Number of employees provided skill development training	**0**	**2024: 64** **2025: 64**	**2024: 64** **2025: 64**
SDG 5 Gender equality	GSDM-I5.5.1 Number of women serving in managerial/ leadership / ownership role	**0**	**2024: 2** **2025: 2**	**2024: 2** **2025: 2**
SDG 5 Gender equality	GSDG-I5.5.2 Proportion of women in managerial positions	**0**	**2024: 50** **2025: 50**	**2024: 50** **2025: 50**
SDG 7 Affordable and clean energy	GSDM-I7.3.1 Total energy savings	**2024: 121,725** **2025: 137,992**	**2024: 1,359** **2025: 1,195**	**2024: 120,366** **2025: 136,797**
SDG 8 Decent work and economic growth	GSDM-I8.5.1 Total number of jobs	**0**	**2024: 64** **2025: 64**	**2024: 64** **2025: 64**

E.5. Comparison of actual SDG Impacts with estimates in approved PDD

SDG	Values estimated in ex ante calculation of approved PDD for this monitoring period	Actual values[4] achieved during this monitoring period
SDG 13 Climate Action	GSDM-I13.2.1 Amount of GHGs emissions avoided or sequestered. **2020: 56,282 tCO2e**	**2024: 52,394** **2025: 59,474**
SDG 4 Quality education	GSDM-I4.4.1 Number of employees provided skill development training **2020: 64**	**2024: 64** **2025: 64**
SDG 5 Gender equality	GSDM-I5.5.1 Number of women serving in managerial/ leadership /ownership role **2020: 3**	**2024: 2** **2025: 2**
SDG 5	GSDG-I5.5.2 Proportion of women in managerial positions	**2024: 50%** **2025: 50%**

[4] Whenever emission reductions are capped, both the original and capped values used for calculations must be transparently reported. Use brackets to denote original values.

Gender equality	**2020: 50%**	
SDG 7 Affordable and clean energy	GSDM-I7.3.1 Total energy savings **2020: 129,432 MWhe**	**2024: 120,366** **2025: 136,797**
SDG 8 Decent work and economic growth	GSDM-I8.5.1 Total number of jobs **2020: 64**	**2024: 64** **2025: 64**

E.5.1. Explanation of calculation of value estimated ex ante calculation of approved PDD for this monitoring period

The values for the ERs provided in the approved PDD for the ex ante calculation were based on the actual ERs from the year 2020.

E.6. Remarks on increase in achieved SDG Impacts from estimated value in approved PDD

Increase in achieved SDG 13

Taking into account the emissions reductions achieved during this monitoring period and the estimated de emissions savings in the PDD (56,282 tCO2e), the actual GHG emission reductions increased with 3,192 tCO2e in 2025. The validated ER from the PDD is based on actual data from 2020 of the project. In 2025, the quantity of the aluminum product increased with 507.79 tons as the use of the equipment has improved due to the labor efficiency of the employees, the amount of process material has increased and with it the emission reductions from the quantities produced in a year.

Increase in achieved SDG 4

As you will see on section E5, all parameters from SDG 4 are the same compared with estimated values in PDD. The same employees are trained in each year with multiple skill development.

Increase in achieved SDG 5

As you will see on section E5, the monitoring parameter no.2 with SDG Indicator GSDM-I5.5.1 from SDG 5 is the same compared with estimated values in PDD. The same number of women serving in managerial position are included in the project.

The monitoring parameter no.3 with SDG Indicator GSDM-I5.5.2 from SDG 5 is the same compared with estimated values in PDD (actual values from 2020) based on the fact that one female manager is no longer in the project.

Increase in achieved SDG 7

The increase on the achieved SDG 7_1 Energy Savings in the year 2025 (136,797 MWhe) of the monitoring period as described on E5 with 7,365 MWhe compared to the estimated ex ante energy savings in the PDD (actual values from 2020 129,432 MWhe) can be explained since the processing yield of the installations is different depending on the type of material used.

Increase in achieved SDG 8

For this monitoring parameter was not difference in the monitoring period compared to the estimated values in the PDD.

SECTION F. SAFEGUARDS REPORTING

As in the assessment of the GS4GG Safeguarding Principles and Requirements were for the question "The Project Developer shall ensure the use of appropriate equipment, training of workers, documentation and reporting of accidents and incidents, and emergency preparedness and response measures" answered was "Potentially" in the Transition Annex to GS4GG, there are one safeguard to report.

Data / Parameter	Number of accidents and incidents
Unit	Number of accidents and incidents
Description	Number of accidents and incidents at the recycling plant
Source of data	Internal reports on accidents Monitoring parameter no.15_Safeguard Principles_Health & Safety performance 2024-2025
Value(s) applied	14/02/2024 – 31/12/2024 – 0 01/01/2025 – 31/12/2025 – 1
Measurement methods and procedures	Measured
Monitoring frequency	Annually
QA/QC procedures	The recycling plant annually monitors this parameter according to internal procedure
Purpose of data	To monitor the safeguard principle 6.1 Labour rights

SECTION G. STAKEHOLDER INPUTS AND LEGAL DISPUTES

G.1. List all Inputs and Grievances which have been received via the Continuous Input and Grievance Mechanism together with their respective responses/mitigations.

There were not any grievances or inputs received via the Continuous Input and Grievance Mechanism within the current monitoring period.

G.2. Report on any stakeholder mitigations that were agreed to be monitored.

Since there were not any grievances or inputs received via the Continuous Input and Grievance Mechanism, there were not any stakeholder mitigations to be monitored.

G.3. Provide details of any legal contest that has arisen with the project during the monitoring period

In the monitoring period was not any legal contest that has arisen with the project.

Revision History

Version	Date	Remarks
1.1	14 October 2020	Hyperlinked section summary to enable quick access to key sections Improved clarity on Key Project Information Section for POA monitoring Forward action request section Improved Clarity on SDG contribution/SDG Impact term used throughout Clarity on safeguard reporting Clarity on design changes Leakage section added for VER/CER projects Addition of Comparison of monitored parameters with last monitoring period Provision of an accompanying Guide to help the user understand detailed rules and requirements
1.0	10 July 2017	Initial adoption