



Carbon Accounts

FY 2023

Disclaimer:

This report is based on the RECAP (Real Estate Carbon Accounting Principle) defined by alstria to help it assess the impact of carbon pricing change on its business and better integrate climate change consideration in its decision-making processes.*

RECAP is not a generally accepted accounting practice. Moreover, the information contained in this report has neither been audited nor reviewed. This document is being presented solely for informational purposes. It should not be treated as giving investment advice, nor is it intended to provide the basis for any evaluation or any securities and should not be considered as a recommendation that any person should purchase, hold, or dispose of any shares or other securities.

Audited financial information about alstria under IFRS and German GAAP are available on alstria's website www.alstria.de.

The information compiled in the report is based upon what management believes are reasonable assumptions. Therefore, this report may also contain forward-looking statements based on these assumptions and forecasts made by the alstria management and other information currently available to alstria. However, there can be no assurance the assumption and forecasts will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. The Company undertakes no obligation to the assumptions and forecasts if circumstances or management's estimates or opinions should change. Moreover, the Company does not intend, and does not assume any liability, to update the forward-looking statements or to conform them to future events or developments.

Certain numerical data in this presentation have been rounded according to established commercial standards.

* The RECAP framework is available at www.recap.wiki

CARBON PROFIT AND LOSS STATEMENT - FY2023 - EUR K (UNAUDITED)

	Note	FY2023		FY2022
Carbon Revenue				
	D.1			
Transaction	D.1.1			
Gain/Loss as a result of acquisition/sale of operational carbon		429		610
Gain Loss as a result of acquisition/sale of Embedded Carbon		258		884
Transaction results		687		1 494
Carbon Efficiency	D.1.2			
Gain/Loss of Embedded Carbon as a result of change in construction technology		-		-
Gain/loss as a result in change in operational carbon efficiency		29.866	-	10.525
Gain/Loss as a result increase/decrease of life of standing asset		-		-
Efficiency results		29.866	-	10.525
Carbon Market Price	D.1.3			
Gain/loss as a result of change in carbon price		3.355		1.631
Carbon Revenues		33.908	-	7.399
P&L - Expenses				
	D. II.			
Carbon Expenses resulting from operations of the assets	D II.1	-	1.418	-
Carbon expenses resulting from the write-off of construction carbon	D II.2	-	2.783	-
Carbon Expenses		-	4.201	-
Carbon Net Income		29.707	-	10.649

CARBON BALANCE SHEET - CARBON ASSETS - FY2023

EUR K (UNAUDITED)

	Note	FY2023	FY2022	YoY change
Embedded Carbon asset at fair value		122.231	107.288	- 14.493
Embedded Carbon deduction as Increase/decrease of life of standing assets		- 30.558	- 26.822	+ 3.736
Total Carbon Assets	E I.	91.674	80.466	-11.207

CARBON BALANCE SHEET - CARBON EQUITY AND LIABILITIES - FY2023

EUR K (UNAUDITED)

	Note	FY2022	FY2023	Change YoY
Carbon Retained Earning		- 22.359	7.348	+ 29.707
Green Dividend	E II.2	3.560	5.340	+ 1 780
Total Carbon Equity	E II.1	- 18.799	12.688	+ 31.487
Unpaid Carbon Acquired by the Company	E.II.3	32.731	31.699	- 1.032
Unpaid Carbon Used by the Company	E.II.4	4.465	6.886	+ 2.421
Liability linked to future Operational Carbon	E.II.5	73.277	29.194	- 44.844
Total Carbon Liabilities		110.473	67.778	- 42.694
Total Carbon Equity and Liabilities		91.674	80.466	- 11.207

Contents

- A. BASIS OF PRESENTATION..... 6**
- B. BASIS FOR CONSOLIDATION..... 6**
- C. KEY JUDGEMENTS AND ESTIMATES..... 6**
 - I. CARBON PRICE 7
 - II. FAIR VALUE OF EMBEDDED CARBON 7
 - III. LACK OF ASSET REUSABILITY 8
 - IV. FUTURE OPERATIONAL CARBON LIABILITY..... 8
 - V. LACK OF EMISSION DATA FOR STANDING OR ACQUIRED ASSETS 8
 - VI. ESTIMATED EMISSION FROM AN IDENTIFIED REFURBISHMENT 9
 - VII. ESTIMATED EMISSION FROM A NON-SPECIFIC REFURBISHMENT 9
- D. NOTES TO THE PROFIT AND LOSS STATEMENT 10**
 - I. CARBON REVENUES10
 - 1. TRANSACTION10
 - 2. CARBON EFFICIENCY10
 - 3. CHANGE IN CARBON PRICE.....10
 - II. CARBON EXPENSES11
 - 1. OPERATION OF THE ASSETS11
 - 2. CONSTRUCTION ACTIVITES11
- E. NOTES TO THE CARBON BALANCE SHEET 12**
 - I. EMBEDDED CARBON ASSETS12
 - II. EMBEDDED CARBON LIABILITY12
 - 2. UNPAID CARBON ACQUIRED BY THE COMPANY.....12
 - 3. UNPAID CARBON USED BY THE COMPANY12
 - 4. LIABILITY LINKED TO FUTURE OPERATIONAL CARBON13

Notes to the carbon P&L and balance sheet of alstria office REIT-AG for FY2022 (unaudited)

A. BASIS OF PRESENTATION

alstria office REIT-AG (the Company) is a listed real estate property corporation under the scope of the G-REIT Act. The main objectives of the Company and its subsidiaries (the Group or alstria) are the acquisition, management, operation, and sale of owned real estate property and the holding of participations in enterprises that acquire, manage, operate, and sell owned property. alstria prepared its 2020 carbon accounts in accordance with the Real Estate Carbon Accounting Principle (RECAP, which can be found at www.recap.wiki).

Emission considered in this report covers all scope 1, 2 and 3, as reported in alstria 2023 Sustainability report¹. Emission data are not audited but are third party assured.

These principles are not accepted accounting principles and have been developed by the Company to better illustrate the potential financial impact of carbon on its underlying business.

In particular, this report's use of "Asset", "Liability" and "Equity" do not meet the respective definitions of these terms under IFRS or under German GAAP.

B. BASIS FOR CONSOLIDATION

This carbon account considers all the assets on the Company's balance sheet during FY2023 and all the activities carried out by the company during the reporting year. For a full list of the assets in alstria's balance sheet, please see www.alstria.de.

C. KEY JUDGEMENTS AND ESTIMATES

Estimates, assessments, and assumptions have been made while preparing these carbon accounts. These can materially affect the reported amounts and recognition of carbon assets and carbon liabilities at the balance sheet date and the amounts of carbon income and carbon expenses reported for the overall period. The significant items that such estimates, assessments, and assumptions affect are described hereafter. Actual amounts may differ from the estimates. Changes in the estimates, assessments, and assumptions can materially impact the carbon accounts. Where not available, scope 3 emissions have been estimated. For more about the estimation of scope 3 emission and other emission boundaries, please see alstria 2023 Sustainability report

¹ https://alstria.de/wp-content/uploads/2023/11/alstria_Sustainability_Report_2022_2023.pdf

I. CARBON PRICE

The fair market value of carbon we used equals the daily closing price of the ECX EUA Futures, Continuous Contract, trading on ICE. The EUA Futures Contract is a deliverable contract where each clearing member with a position open at the cessation of trading for a contract month is obliged to make or take delivery of carbon emission allowances to or from the Union Registry under the ICE Futures Europe Regulations.

We used the spot price on balance sheet day for carbon balance sheet items. However, we used the mathematical average closing price for the year for carbon profit and loss statement items. The table below summarises the data.

Carbon price (EUR/ton CO ₂ Eq) ²	
Dec. 31, 2022	88,00
Dec. 31, 2023	77,98
Mathematical average price in 2023	84,60

II. FAIR VALUE OF EMBEDDED CARBON

The fair value of embedded carbon is defined as the cost of the amount of carbon that would need to be spent to build an equivalent building using the average construction methodology currently available.

$$\text{Fair Value} = a \times c \times p$$

Where

a is the total lettable area of the asset;

c is the average amount of carbon emitted to build one m² of office;

and

p is the market price of one ton of carbon at the reporting date.

In this report, we assumed that $c = 1 \text{ ton/m}^2$ ³.

² Source: <https://www.investing.com/commodities/carbon-emissions-historical-data>

³ Based on the estimate of LETI Embodied Carbon Primer, January 2020 (www.leti.london).

III. LACK OF ASSET REUSABILITY

The lack of asset reusability is based on an estimate of the amount of construction that cannot or will not be reused at a later stage of the asset's life cycle. Therefore, it results in a deduction of the fair value of embedded carbon. For example, this is linked to the inner fit-out of the asset that will be torn down on regular basis as the occupation of the assets evolve (partition walls, carpets, etc.) We have assumed in the report that 25%⁴ of the asset cannot be reused.

IV. FUTURE OPERATIONAL CARBON LIABILITY

Future operational carbon liability represents the capitalized cost of future carbon emission that is committed by the company as it operates the asset. This amount is calculated based on the latest know operational emission of the building, which is assumed to continue unabated in the future.

Future operational carbon liability = $C_e \times C_c / E_qY$

Where

C_e = the latest annual carbon emissions;

C_c = the cost of carbon; and

E_qY = the equivalent yield used in the valuation of the asset at the reporting date for the IFRS FY financial statement.

V. LACK OF EMISSION DATA FOR STANDING OR ACQUIRED ASSETS

In a limited number of cases (and in particular for newly acquired assets), alstria does not have data related to the asset's latest annual carbon emission. In these cases, the following assumption was made

$$C_e = A_e/m^2 \times A_a$$

Where

C_e = the latest annual carbon emissions;

A_e/m^2 is the average latest annual carbon emission per m^2 calculated as the sum of the total latest annual carbon emission of each individual asset, where the information is known, divided by the sum of m^2 of the same portfolio; and

A_a is the lettable area in m^2 of the asset considered.

⁴ alstria's own estimate

VI. ESTIMATED EMISSION FROM AN IDENTIFIED REFURBISHMENT

Emission per m² of an asset's refurbishment is estimated as follows:

$$Re = Pb \times c$$

Where

Re is the carbon emission per m² for a given refurbishment;

Pb is the proportion of the building construction that is preserved by the planned refurbishment (expressed as a percentage); and c is the average amount of carbon emitted to build one m² of office (as defined in II above).

To estimate the actual emission from its refurbishment project during the year, we estimated the degree of progress of the construction site and assumed that the emission during the year is equal to the total emission anticipated multiplied by the amount of progression of the construction site.

VII. ESTIMATED EMISSION FROM A NON-SPECIFIC REFURBISHMENT

During the year, alstria invests in standing assets (for example, to realise tenants fit outs, to renew a roof or an elevator, etc.), without identifying the investment as a specific refurbishment.

To estimate the emissions of these works, the following is applied:

$$EnsR = ER/IR \times InsR$$

Where

EnsR is the emission in nonspecific refurbishments;

ER is the emission from known refurbishments (as defined in VI);

IR is the total investment related to the known refurbishment (in EUR); and InsR is the total investment in the nonspecific refurbishment (in EUR).

D. NOTES TO THE PROFIT AND LOSS STATEMENT

I. CARBON REVENUES

1. TRANSACTION

alstria disposed over the reporting period a total of one asset representing EUR 774k (2022: EUR 2,651k) of net embedded carbon assets, and a liability for future operational carbon of EUR 429k (2022: EUR 610k).

The asset sales led to a gain of EUR 687k (2022: EUR 143k) as summarized in the table below:

Assets sold (EUR K)

Carrying Value of Embedded Carbon Asset Sold	774
Fair Value of Embedded Carbon Asset Sold	1.032
Total Gain from Embedded Carbon Sold	258
Gain linked to the decrease of the liability linked to future operational carbon	429
Total Carbon gain from sales	687

No assets were acquired during the period.

In total, the transaction activities resulted in an overall gain of EUR 687k (2022: gain of EUR 1.494k), for the period.

2. CARBON EFFICIENCY

Improved carbon efficiency resulted in a gain of EUR 29.866k (2022 : loss of EUR 10.525k), over the reporting period, which reflects a material decrease in the future carbon liability. This improved carbon efficiency reflects decreased consumption in the company assets following retrofit initiatives on some assets as well as some energy conservation measures taken following the energy crisis triggered by the Russian invasion of Ukraine.

3. CHANGE IN CARBON PRICE

At the reporting date, the carbon price decreased during the year from EUR 88.00/ton of CO₂Eq to EUR 77,98/ton of CO₂Eq. The price changes led to a total revenue of EUR 3.355k (2022: EUR 1.631k).

This revenue is the net effect of the change in carbon price on (i) the embedded carbon-based assets, which decreases by EUR 10.443k (2022: increase by EUR 7.663k), (note E I.), and (ii) on the future carbon operational liability which decreases by EUR 13.788k (2022 increase by: EUR 6.032k) (note E II.4).

II. CARBON EXPENSES

The price of carbon used for calculating the carbon expenses corresponded to the average carbon price over the year of EUR 84.6/ton of CO₂Eq (2022: EUR 81,33/ton of CO₂Eq).

1. OPERATION OF THE ASSETS

The location-based expenses were EUR 2.623k (2022 EUR 3.643k). The decrease in the location-based expense reflects mainly a decrease in the emissions across the portfolio which more than compensated for the increase in the carbon price during the year- The changes are reflected in the table below.

EUR K	
FY 2022 location-based carbon expenses	3,643
Impact of change in carbon price	101
Impact of change in emission	- 1.121

FY 2023 location-based Carbon Expenses **2.623**

The location-based expenses were partially reduced by market-based activities (procurement of non-fossil fuel electricity, etc.), which went through alstria IFRS P&L. The implementation by the German government of a carbon tax on gas used for building heating means that all the gas used by the company was covered through market-based activities. Because of these market-based activities, the total operational carbon expense was reduced by EUR 1.205k (2022: EUR 2.062k).

EUR K	
Location-based operational costs	2.623
Reduction as a result of market-based activities	- 1.205

Market-based operational costs **1.418**

The total carbon expense for the reporting period for the assets' operation was EUR 1.418K (2022, EUR 1.580k).

2. CONSTRUCTION ACTIVITIES

The total carbon expense resulting from the construction activities undertaken by the Company in the reporting period is equal to EUR 1.749k (2022: EUR EUR 1.050k) for the identified refurbishments and EUR 1.034k (2022 EUR 620k) for nonspecific refurbishments, leading to a total of EUR 2.783k (2022: EUR 1.670k).

E. NOTES TO THE CARBON BALANCE SHEET

I. EMBEDDED CARBON ASSETS

Total carbon assets were equal to EUR 88.466k (2020 EUR 91.674k).

The table below illustrates the changes in the Total Carbon assets over the reporting period.

Embedded carbon asset changes (EUR K)

Carbon Assets BoP		91.674
Net transaction impact	-	774
Change in carbon price	-	10.443
Carbon Assets EoP		<u>80.466</u>

II. EMBEDDED CARBON LIABILITY

1. CARBON EQUITY

Carbon equity represents the potential additional value to shareholders (or cost to shareholders), if all of the carbon accounting was to be included in the company financial statements. For the first time since alstria's first carbon account production, the carbon equity of the company has turned positive at EUR 12,7 m.

2. GREEN DIVIDEND

On May 5th, 2023, the general meeting of alstria approved the investment of EUR 1.780k (2022: EUR 1.780k) into Green Dividend Projects that are expected to be financially not profitable but would - if successful - help to improve alstria's current or future carbon footprint. For more information, please see www.green-dividend.com

The Green Dividend reduces the unpaid carbon used by the company as shown in table II.3 below.

3. UNPAID CARBON ACQUIRED BY THE COMPANY

As a result of the transaction activities during the year, the liability for unpaid carbon acquired by the Company was reduced by EUR 1.032k to EUR 31.699k (2022: EUR 32.731k).

EUR 31.699k represents the value of the embedded carbon assets the company acquired over its lifetime.

4. UNPAID CARBON USED BY THE COMPANY

The total unpaid carbon used by the company increased by EUR 2.241k to EUR 6.886k (2022, EUR 4.465k). This increase is the net effect of (i) the cost of carbon used by the company in the reporting year, which amounts to EUR 4.201k (2022: EUR 3.250k) and (ii) the Green Dividend of EUR 1.780k (2021: EUR 1.780k), which redeems part of the liability.

Unpaid Carbon used by the company (EUR K)	
Construction related carbon	2.783
Operation related carbon	1.418
Green Dividend	- 1,780
Total Unpaid Carbon	- 2,241


5. LIABILITY LINKED TO FUTURE OPERATIONAL CARBON

The liability linked to future operational carbon decreased during the year by EUR 44.084k (2022 increase by EUR 15.946k) to a total of EUR 29.194k (2022, EUR 73.277k).

Liability linked to future operational carbon (EUR K)	
Liability linked to future operational carbon (BoP)	73.277
Refurbishment of existing assets	- 2.649
Transactions	- 429
Change in operational efficiency	- 27.217
Change in carbon price	- 13.788
Liability linked to future operational carbon (EoP)	<u>29,194</u>

The change in operational efficiency results from the substantial reduction of the portfolio emission on one of the most carbon intensive assets in the portfolio.

BUILDING YOUR FUTURE



*The most sustainable
building is the one
that was not built.*

Contact us
Investor Relations / Public Relations
IR@alstria.de

alstria office REIT-AG
Steinstrasse 7
20095 Hamburg
www.alstria.com



alstria