



Research Report (Anno)

UmweltBank AG



**Germany's "greenest" bank with new record figures in 2021;
Solid and stable business model should prove itself in the
crisis scenario;
Target price reduction as a result of the increased cost of capital
due to the rise in interest rates**

Target price: € 17.20

Rating: HOLD

IMPORTANT NOTICE:

Please note the disclaimer/risk notice

as well as the disclosure of possible conflicts of interest pursuant to § 85 WpHG and Art. 20 MAR from page 22

Notice pursuant to MiFID II regulation for research "Minor Non-Monetary Contribution": This research meets the requirements for classification as "Minor Non-Monetary Contribution". For further information, please refer to the disclosure under "I. Research under MiFID II".

Date and time of completion of the study: 04.07.2022 (04:03 pm)

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Validity of the target price: until max. 31.12.2022

UmweltBank AG*1;4;5a;6a;7;11

Rating: HOLD

Target price: € 17.20
(previously: €19.05)

current rate: € 16.05
04.07.22 / XETRA / 3:54 pm
Currency: EUR

Master data:

ISIN: DE0005570808
WKN: 557080
Ticker symbol: UBKG
Number of shares³: 35.44
Market cap³: 568.81
³ in million / in EUR million
Free float: 85%

Transparency level:

Open Market
Market segment:
m:access
Accounting:
HGB

Financial year: 31.12.

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Company profile

Industry: Financial services

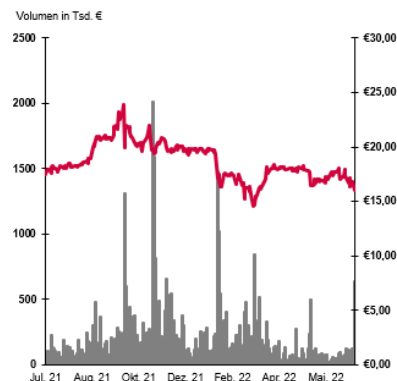
Focus: ecological investments, financing environmentally friendly projects

Employees: 299 (31.12.2021)

Foundation: 1997

Company headquarters: Nuremberg

Board of Directors: Goran Bašić, Jürgen Koppmann



UmweltBank AG stands for banking with ecological and social responsibility. It offers investors transparent ecological financial investments and supports private individuals and commercial customers throughout Germany by financing environmentally friendly projects. By exclusively offering a green product range, UmweltBank AG consistently implements its ecological orientation. In addition to the classic savings account, the company offers, among other things, green fund products, enters into ecological endeavours, offers ecological insurance and finances green projects. In doing so, UmweltBank AG acts as a direct bank, without the classic branch business. Since its founding in 1997, it has supported almost 25,000 credit projects. At the end of 2021, environmental loans (including open commitments) had a total volume of 3.5 billion euros. The majority of the loan volume consists of solar energy financing, residential real estate and wind power projects.

P&L in € million	FY 2021	FY 2022e	FY 2023e	FY 2024e
Interest income	70.90	76.34	83.52	86.02
Interest result	63.24	60.26	62.19	62.90
Other income	13.50	18.10	19.10	20.60
Result before taxes	38.09	38.10	39.78	42.37
Result after taxes	25.37	25.91	27.05	28.81

Key figures in EUR				
EPS	0.72	0.73	0.76	0.81
Dividend per share	0.33	0.33	0.35	0.35

Balance sheet key figures in € million				
Customer deposits	2,954.09	2,983.63	3,073.14	3,165.33
Credit volume	3,072.52	3,164.70	3,259.64	3,357.43
Total capital	503.50	517.70	532.35	548.76
Return on investment (before taxes)	10.0%	9.7%	9.7%	10.0%
Cost-income ratio	49.8%	50.6%	50.1%	48.2%

Financial dates
08.08.2022: Semi-annual figures
15.11.2022: MKK

**last research from GBC:
Date: Publication / Target price in EUR / Rating
24.02.2022: RS / 19.05 / BUY
27.09.2021: RS / 21.00 / HOLD
13.07.2021: RS / 20.73 / BUY
15.02.2021: RS / 18.21 / BUY
** The research studies listed above can be viewed at www.gbc-ag.de or requested from GBC AG, Halderstr. 27, D86150 Augsburg.

EXECUTIVE SUMMARY

- In the past financial year 2021, UmweltBank AG significantly expanded its business activities. With a view to its core business, the granting of loans for ecological purposes, the credit institution achieved a significant expansion of the outstanding loan volume by 10% to € 3,072.52 million (31.12.2020: € 2,792.66 million). High demand was achieved in all sectors (solar, wind energy, real estate) and relevant market shares were also secured. In the photovoltaic sector, for example, a market share of 20.5% was achieved in the financing of systems (systems larger than 250 kWp). In the financing of wind turbines, the market share was 4.7%.
- With the expansion of the lending business, interest income was 2.6 % higher than in the previous year at € 70.90 million (previous year: € 69.08 million). In the past business year, the conditions for borrowers improved further. On the interest expense side, UmweltBank AG also benefited from the low interest rates as well as from the favourable GLRG financing, so that the interest result of € 63.24 million (previous year: € 52.10 million) was 21.4 % higher than in the previous year. In addition to the core business, net commission income and net trading income also increased significantly to €9.42 million (previous year: €5.15 million). Both the fund business and the investment business contributed to this.
- Against this backdrop, the fact that the pre-tax result (before allocation to the fund for general banking risks) of € 38.09 million (previous year: € 37.85 million) was only a slight increase on the previous year's figure is due to the rise in operating costs. General administrative expenses climbed to € 33.67 million (previous year: € 27.07 million), on the one hand due to the further increase in personnel and, on the other hand, due to a higher allocation to deposit protection after the insolvency of the Greensill Group. The insolvency of the Greensill Group reduced the deposit insurance portfolio by around € 3.5 billion. The constant development of results is also due to the discontinuation of special income which, in 2020, had led to extraordinarily high other income in the amount of € 6.35 million stemming from the termination of a legal dispute. In the 2021 financial year, other income in the amount of € 0.21 million was reported.
- In balance sheet terms, UmweltBank AG has an above-average equity base compared to the rest of the sector. Following the successful capital increase of € 73.08 million in October 2021, equity improved visibly to € 245.12 million (31.12.2020: € 162.89 million). The regulatory equity ratio climbed to 16.6% (31.12.2020: 14.6%) and is thus significantly above the minimum requirement of 12.0%.
- According to corporate guidance, a stable development of the interest margin is expected for the current financial year 2022, but the absolute net interest income should decrease moderately due to the expiry of special corona conditions for GLRG funds. Personnel expenses and the introduction of a new core banking system are expected to increase operating expenses, so that a pre-tax result at the level of the previous year is again anticipated.
- We concur with the company's guidance and expect continued high levels of new client activity. With regard to the company's core sectors, demand remains high, even though the real estate sector, for example, is currently characterised by a high degree of uncertainty. However, shifts in project financing could be countered by an increase in lending rates, so that an increase in interest income could still be achieved. Apart from the war and pandemic-related burdens, both the real estate sector and especially the wind energy and solar sectors should benefit from a positive market environment.

- With the increase in the ECB's key interest rate since July 2022 and the generally visible rise in lending rates, it is clear that the turnaround in interest rates has already begun, even though the general interest rate level remains at a low level. UmweltBank AG is already passing on interest rate increases in new business and in the refinancing of existing loans to customers. Parallel to this, however, the liabilities side is also likely to become more expensive. In this context, the UmweltBank Board of Managing Directors expects a constant development of the interest margin. In an environment of rising interest rates, the interest margin is expected to increase in the future.
- Even if new business remains below expectations, the existing loan portfolio provides the basis for at least a stable income development. The loans, which are usually secured, have a long-term maturity, which means that the majority of future interest income is already secured. In addition, these are project financings, so that the counterparty default risk is comparatively low.
- Against this background, we expect net interest income to decline to € 60.26 million (€ 63.24 million) in the current financial year 2022. In the coming financial years, the return to growth should be successful and we expect net interest income of € 62.19 million (2023e) and € 62.90 million (2024e). This should be accompanied by a significant increase in income from the securities, investment and fund business. At the end of the day, we expect a pre-tax result at the level of the 2021 financial year, in line with the corporate guidance. Slight increases should be achieved in the coming financial years against the backdrop of an expansion of the core business and the gradual phasing out of expenses for the introduction of the core banking system.
- We have determined the fair value of UmweltBank AG within the framework of a residual income model. Due to the market-related increase in the risk-free interest rate to 0.80% (previously: 0.25%), the cost of equity has risen to 3.50% (previously: 2.96%), which has a price target-reducing effect. The new price target of € 17.20 (previously: € 19.05) is therefore below the previous valuation result. We assign the rating HOLD (previously: BUY).

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ESG ANALYSIS

ESG/Sustainability Check

In addition to increasing regulatory aspects (keyword: EU taxonomy, disclosure regulation, etc.), the topic of sustainability has another, no less important dimension for CEOs: today, sustainability and transparency play a supporting role for the valuation of a company on the capital market and are decisive for the investment decisions of institutional investors - both for shares and bonds. Against this background, we subjected **UmweltBank AG** to a sustainability check based on our standardised and proprietary sustainability questionnaire in order to create a company-specific ESG profile and to screen concrete sustainability-oriented corporate activities.

ESG profile: Sustainability-oriented business and management activities of the company

E - Contribution to environmental and climate protection (sustainability management)

- ❖ UmweltBank exclusively finances projects and invests in companies (impact investing) that contribute to one or more of the 17 UN sustainability goals and at the same time do not violate its own exclusion criteria.
- ❖ Sustainable investment: according to Article 9 of the EU Disclosure Regulation, UmweltSpektrum funds belong to so-called dark green funds. These are only made up of financial products that demonstrably make a positive contribution to the UN's sustainability goals.
- ❖ Since 1997, the company has already financed around 25,000 environmental projects ranging from sustainable construction to renewable energy.
- ❖ The bank's operations saved more than 1,200,000 tonnes of CO₂ in 2021 alone.
- ❖ Energy efficiency systems/concepts are used and IT equipment has been converted to green IT hardware equipment.
- ❖ UmweltBank supports environmental organisations.
- ❖ Sustainable furniture, pens, paper, etc. are used for office equipment.
- ❖ All products offered to customers meet sustainability criteria



S - Measures for a sustainable working environment and staff development

- ❖ Awarded the "**Fair Company 2021**" seal of quality in the area of junior staff development. This makes UmweltBank one of the companies that offer young academics, in particular, a challenging and development-oriented working environment.
- ❖ Extensive range of free training and education opportunities such as IT training, language courses and other needs-based support and further education measures for employees
- ❖ Child support such as daycare centre allowance or childcare allowance
- ❖ Flexitime / flexible working hours
- ❖ Part-time positions for employees
- ❖ Home office / remote work
- ❖ Health offers, such as back-training programmes or stress seminars
- ❖ Free public transport for employees
- ❖ High proportion of women in management positions (45%)
- ❖ No sales-related commissions, which means that customer service is offered without conflicts of interest



G - Corporate Governance (Sustainable Corporate Governance)

- ❖ The company is a member of the "**Global Alliance for Banking on Values**". This is an international network of leading sustainability banks. The aim of the organisation is to make the banking system more transparent and sustainable.
- ❖ UmweltBank AG is fully committed to the ten principles of the UN Global Compact
- ❖ The Bank's business model is fully aligned with environmental protection and sustainability. Accordingly, the Executive Board manages the company not only through financial KPIs, but also through environmental-guarantee fulfilment.
- ❖ **Renewed distinction as a sustainable investment:** the company again received a "**Prime**" **B+** rating in the ISS-ESG sustainability rating for the 2021 financial year. This makes UmweltBank one of the pioneers in the "Financials/Specialised Finance" sector.



UmweltBank AG is a pioneer in the field of sustainability-oriented project financing (environmental and climate protection) and impact investing (sustainable investment). The elementary consideration of sustainability factors in project financing and in the investment process within the framework of sustainable investment ensures "green" and cycle-oriented capital flows, with impact within the framework of the UN's announced climate and environmental goals. The company is therefore fully focused on environmental protection and sustainability.

SDG Reference

Company-specific contribution to the 17 UN sustainable development goals (excerpt)

UmweltBank AG makes a significant contribution to Goals 5, 7, 11, 12 and 13. Thus, the company actively contributes to the fulfilment of **5 of the 17** UN sustainability goals. It is thus clear that the consideration of sustainability aspects is an essential part of their business model and corporate strategy and that the topic of sustainability has an immanent significance in the orientation of the business activities (financial sector) of UmweltBank AG.



IMPACT: As a pioneer in the field of sustainable investing (Green Investing), UmweltBank AG makes a significant contribution to the following three UN sustainable development goals.

7. Affordable and clean energy - "ensuring access to affordable, reliable, sustainable and timely energy for all".



More than half (56%) of the project financing realised relates to projects in the field of renewable energies (solar energy, wind and hydropower as well as biomass and heating concepts). In this context, UmweltBank alone financed more than 20% of their Germany-wide expansion in the area of photovoltaics (systems larger than 250 kWp) in 2021. Overall, the company has already financed more than 13,000 photovoltaic projects, including, for example, the Lauterbach solar park in Hesse. Covering an area of 80 football pitches, the plant in Hesse will generate green electricity and, thus, clean energy in the future, helping to bring about energy transition.

11. Sustainable cities and communities - "making cities and settlements inclusive, safe, resilient and sustainable".



In addition to the thematic area of renewable energies, project financing is carried out from the area of affordable and ecological construction (43%). In 2021, affordable housing for more than 900 people and child-care places for over 350 people were financed by UmweltBank AG. In this way, the company has made a significant contribution to providing people with secure access to affordable housing and, thus, sustainably increasing the resilience of cities and communities. In addition, financing activities in the area of affordable and ecological construction strengthen sustainable urban planning. For example, UmweltBank AG is financing the "Villa Viva" project. The sustainable hotel of the non-profit organisation Viva con Agua de St. Pauli is being built in the centre of Hamburg. In addition to high ecological standards during construction, future hotel guests will support worldwide water projects with every overnight stay.

13. Climate action - "take urgent action to combat climate change and its impacts".



An integral part of UmweltBank AG's business model is to promote and finance environmental protection and climate protection projects. Therefore, the financial institution is fully oriented towards environmental protection and sustainability. In this context, an environmental management system in accordance with EMAS guidelines has been implemented, which collects and evaluates annual data on core indicators such as energy efficiency, water, waste, biodiversity or material efficiency and ultimately evaluates CO₂ emission data. Within the framework of EMAS, improvements in environmental performance are determined annually. In 2021, 1,200,000 tonnes of CO₂ have been saved.

In addition, energy demand is primarily covered by green electricity and district heating. Especially when it comes to energy procurement, the company attaches great importance to keeping environmental impact as low and energy-efficient as possible. Therefore, UmweltBank AG produces its own solar power on the roofs of its business buildings. The additional electricity required is sourced 100% from renewable energy sources.

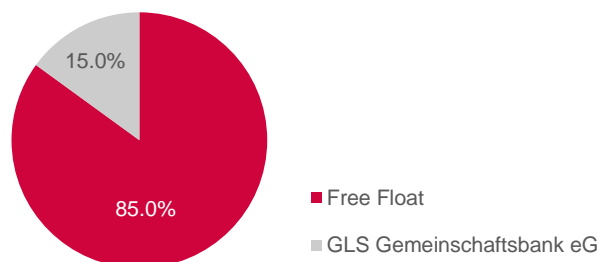
In summary, UmweltBank AG makes an active contribution to achieving the UN sustainability goals. This ensures an investment in a sustainably operating company and is thus well suited for a sustainability-oriented (ESG-compliant) portfolio. UmweltBank offers investors the opportunity to actively invest in the rapidly growing segment of sustainable investment and impact investing. In this context, the increased environmental awareness and intact sustainability management of UmweltBank AG represents an ideal ESG/impact investment.

COMPANY

Shareholder structure

Shareholders as at 31.12.2021	
GLS Gemeinschaftsbank eG	15 %
Free float	85 %

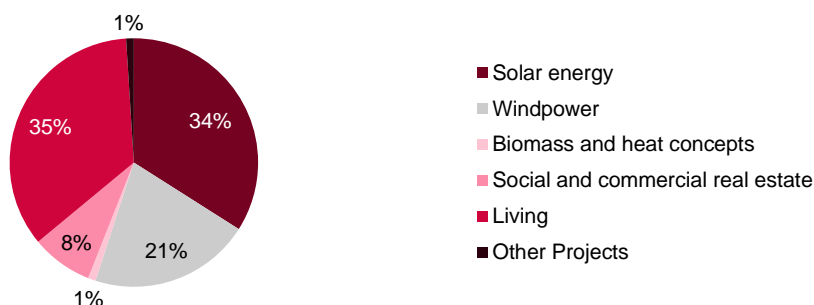
Sources: UmweltBank AG; GBC AG



Ecological core idea

UmweltBank AG is the only bank in Germany to have anchored the ecological aspect of its business activities in its by-laws. UmweltBank AG focuses on solar energy, wind and water power as well as low-energy construction. In this context, UmweltBank AG invests exclusively in sustainable projects and all third-party products offered to customers must be ecologically or socially oriented. Accordingly, for example, both ecological and economic considerations play an important role in the credit decision, whereby a self-developed environmental rating is applied:

Structure of the lending business as at 31.12.2021



Source: UmweltBank AG; GBC AG

As the customer deposits are used entirely for the financing and promotion of environmental projects, there is an environmental guarantee. This states that every euro of the customer deposits will be used in the sense of the SDGs. The bank issues the environmental guarantee and ensures that the savings deposits and equity capital are used exclusively for loans to promote environmental projects.

Product range

The **Investment & Provision** division, in which the savings, investment and insurance products of UmweltBank AG are bundled, represents the source of funds for the financing side. Particular emphasis is placed on overnight deposits in the UmweltFlex account. Overnight deposits amounted to € 1,833.32 million as of 31 December 2021. In addition to this flexibly available green overnight deposit account, the company offers savings deposits with an outstanding volume of € 841.51 million as at 31.12.2021. Environmental savings bonds are in third place, with an outstanding volume of € 279.26 million. In addition, UmweltBank customers can purchase investment products such as environmental funds or green bonds.

The **financing area**, i.e. the assets side of the credit institution, primarily contains loans that must also fulfil an ecological purpose. In addition, construction financing also includes social considerations and, thus, building communities, multi-generation houses, fair

investor projects or student housing are examples of the focus of UmweltBank AG. Tailor-made financing solutions are also offered for wind power projects (individual plants, repowering, and replacement of old financing) and photovoltaic projects (new projects, financing of portfolios, repowering, replacement, and restructuring of old financing). UmweltBank AG's team of advisors has particularly strong expertise in these three segments. It should be emphasised that UmweltBank AG's loans are generally secured by extensive collateral. In addition to the collateralisation of real estate financing, for example, assignments of future revenues are used as collateral for the projects.

In addition to classic debt financing, UmweltBank AG participates in ecological and socially responsible projects through its wholly owned subsidiary UmweltProjekt AG in accordance with its statutes and thus acts as an equity investor.

At the beginning of February 2020, UmweltBank AG launched its first sustainable mixed fund, the UmweltSpektrum Mix. This fund focuses in particular on sustainable assets in accordance with the sustainability approach anchored in the articles of association of UmweltBank AG. The assets are mainly listed shares of companies that contribute to the 17 Sustainable Development Goals (SDGs) of the United Nations. As of 31.12.2022, the fund volume amounts to € 105.8 million.

In the first half of 2022, the family of Environmental Spectrum funds was supplemented by two new funds, the UmweltSpektrum Natur and the UmweltSpektrum Mensch. The sustainability concept is also at the forefront of these two funds. While the UmweltSpektrum Natur fund aims to make an active contribution to environmental protection, the UmweltSpektrum Mensch fund addresses issues such as "health and well-being", "no poverty" and "no hunger". Currently, the fund volume in both products amounts to a total of approximately € 17 million.

MARKET AND MARKET ENVIRONMENT

The business development of UmweltBank AG depends primarily on the general interest rate environment, which significantly influences both the willingness to lend and the demand for loans. Based on its exclusive lending activities in the areas of wind energy, solar energy and ecological-social construction, UmweltBank AG is also exposed to other specific market influences.

General interest rate environment

The low interest rate environment, which has now lasted for several years, has seen some movement in recent weeks. This is particularly the case against the backdrop of the inflation rate in Germany, which recently rose significantly to 8.7% (May 2022), prompting the European Central Bank to raise the key interest rate to 0.25% from July 2022. For the first time since 2016, the key interest rate is rising back into positive territory, which is interpreted as a sign of a gradual departure from loose monetary policy.

The first effects of monetary policy can already be seen when looking at the terms of newly granted loans. According to Bundesbank statistics, the effective interest rates for housing loans with 10-year fixed interest rates increased significantly from 1.33% to 1.96% in the first four months of 2022 alone. The last available value from April 2022 is likely to have risen even more in the meantime. According to information provided by UmweltBank, the construction interest rates (10-year fixed interest rate) issued by it rose from around 1.0% to around 3.0% between January 2022 and June 2022.

For UmweltBank AG, the current interest rate development means, on the one hand, more expensive refinancing, which should, however, be passed on to customers in new business or follow-up financing. In this respect, the bank's management also expects a stable development of the interest margin. In an environment of rising interest rates, an increase in the interest margin can even be expected in the future.

However, the development of the borrower sectors is likely to be of high relevance for UmweltBank AG's new business.

Development of the most important borrower sectors

In line with the structure of the lending business, the sectors primarily addressed by UmweltBank AG are the ecologically-oriented areas of solar energy, windpower as well as the financing of ecological owner-occupied homes, building communities and rental and commercial real estate.

Ecological and social housing

As of the balance sheet date of 31 December 2021, UmweltBank AG accounted for around 40% of its total outstanding loan volume in the area of sustainable real estate. Here, the company finances ecological and affordable housing and is a leading financier of building communities, i.e. non-profit housing projects. Even if real estate projects outside of housing construction (e.g. hotel project of Viva con Agua) are financed, the most important market impulses in this borrower sector are those that apply to the general market development in the housing sector in Germany.

The residential real estate sector is characterised by high demand on the one hand and a supply that is still too low on the other. In recent years, the high demand has been characterised in particular by low interest rates, positive income expectations and a lack of

investment alternatives. Even though construction interest rates have risen recently, they are still at a historically low level. For secured housing loans with a 10-year fixed interest rate, an effective interest rate of 1.93% (source: Bundesbank) was called in April 2022. Even though there are increasing signs of rising interest rates, demand for real estate is expected to remain high in view of the lack of investment alternatives and an unmet demand gap.

On the supply side, an increase in the number of completed buildings can be observed, but the necessary housing demand is still not being met. Overall, this has led to a strong increase in property prices. According to data from the Federal Statistical Office, the price index for newly built flats climbed by 41.4% between 2015 and 2021. Accordingly, there is still a high demand for affordable housing or alternative financing concepts (building communities), so that the demand for loans from this segment is likely to remain high.

Photovoltaics

The growth trend in the solar industry that has been in place since 2017 continued in the past year. Solar plants with an output of 5,007 MW (previous year: 4,807 MW) were newly installed and the gap compared to the previous record year 2012 (8,161 MW) is thus becoming smaller and smaller. One important reason for the increasing annual additions is the declining module prices, which make projects profitable even at the current lower subsidy rates. In addition, there are also important legislative impulses that support a stronger photovoltaic expansion. This includes, for example, the abolition of the solar cap, which had provided for a stop to EEG subsidies from a total installed capacity of 52 GW. At the end of 2021, solar installations with a capacity of 58.7 GW were installed in Germany.

With the introduction of the EEG 2021, the installed capacity of solar plants is expected to increase to 100 GW by 2030. However, the upcoming EEG 2023 amendment is likely to increase the expansion path even more. With the goal of increasing the share of renewable energies in consumed electricity to 80% by 2030 and achieving complete coverage by renewable energies in 2035, the capacity of photovoltaic systems is to be massively expanded by 22 GW annually. By 2030, the installed capacity is to be almost quadrupled to 215 GW. Against this background, UmweltBank AG is likely to receive high demand for solar project financing in the future.

Wind energy

The EEG 2023 amendment also affects the wind energy sector, which is important for UmweltBank AG as a borrower sector with 21% of the outstanding loan volume. The expansion rate of onshore wind energy is to be increased to a level of 10 GW per year in the next few years in order to reach an installed capacity of 115 GW by 2030.

The fact that this target is ambitious becomes particularly apparent when looking at the values achieved in recent years. In 2021, a total of 484 new wind turbines with a capacity of 1.93 GW were installed in Germany. If the decommissioned turbines are added, the net installed capacity is slightly lower at 1.69 GW. The installed capacity at the end of 2021 was 56.13 GW. Accordingly, the demand for financing from the wind energy sector is likely to remain at a high level.

BUSINESS DEVELOPMENT 2021

in € m	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021
Interest income	72.20	69.69	70.98	69.08	70.90
Interest expenses	20.03	18.45	19.98	16.97	7.66
Interest result	52.17	51.23	51.00	52.10	63.24
Commission income	3.21	2.45	3.75	3.92	6.34
Commission expenses	0.22	0.19	0.20	0.28	0.91
Commission result	2.99	2.26	3.55	3.63	5.43
Current income ¹	3.06	3.52	8.12	11.23	7.16
Administrative expenses	16.14	17.76	21.64	27.07	33.67
EBT²	40.27	37.31	37.61	37.85	38.09
EAT²	27.66	25.34	25.92	26.50	25.37

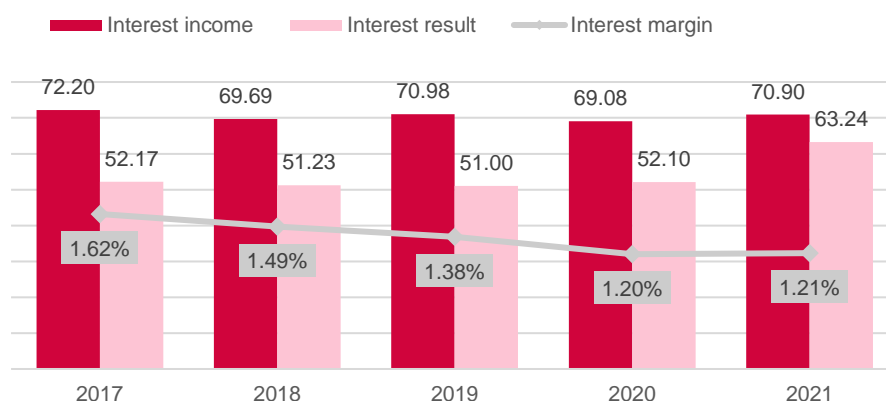
Sources: UmweltBank AG; GBC AG; ¹from shares, participations and shares in affiliated companies; other income; ² before allocation to the fund for general banking risks

Income development 2021

In February 2022, UmweltBank AG had already presented the preliminary figures for the past financial year 2021, which have now been confirmed in the published annual report. The earnings picture of UmweltBank AG is primarily characterised by the core business, i.e. the granting of loans for ecological purposes. In addition, other sources of income, such as the fund business, the securities business and the investment business, are becoming increasingly important.

In the core business, loans outstanding as at 31.12.2021 increased significantly by 10.0% to € 3,072.52 million (31.12.20: € 2,792.66 million), where a new historical record was achieved by exceeding the € 3.0 billion mark for the first time. The credit institution recorded high demand from all borrower segments. In the area of real estate project financing, the majority of new business consisted of financing larger residential construction projects. In the photovoltaic segment, the company financed plants with an output of almost 500 MWp, which corresponds to a high market share of 20.5 %. A market share of 4.7 % was also achieved in Germany for wind turbines with a new loan volume of around € 154 million.

Interest income, interest result (in € million) and interest margin (in %)



Sources: UmweltBank AG; GBC AG

Based on the expanded lending business, interest income was € 70.9 million million (previous year: € 69.08 million) and thus 2.6% higher than in the previous year. The fact that the increase in interest income did not correspond to the stronger increase in outstanding loans could be attributed to several factors. On the one hand, the increase in

outstanding financing occurred during the year. On the other hand, the average value of loan interest rates is likely to have decreased further. In relation to the average outstanding loan portfolio, this is likely to have been 1.5% in 2021 (previous year: 1.6%), according to our calculations. However, the net interest income, i.e. interest income less interest expenses, reached a new historical record of € 63.24 million (previous year: € 52.1 million). This is due to the significant decrease in interest expenses to € 7.66 million (previous year: € 16.97 million). On the one hand, this reflects the further decline in savings interest on UmweltBank savings accounts. On the other hand, the positive interest rates of the GLRG refinancing had significantly reduced the interest expense. With the repayment of the GLRG funds, interest expense should rise again significantly.

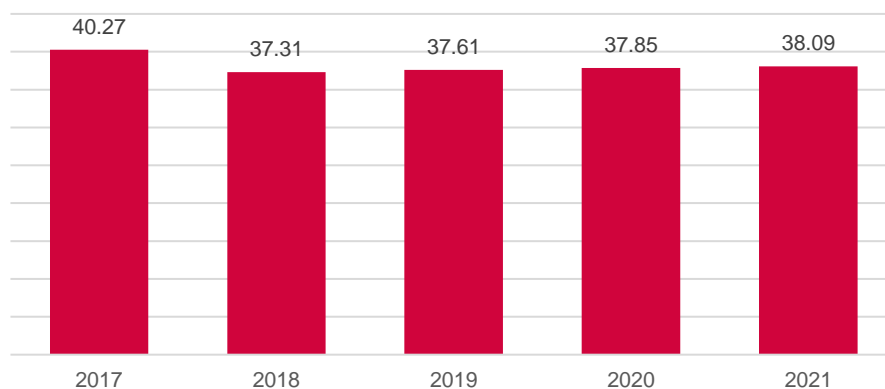
UmweltBank AG also recorded a visible increase in net commission income and trading profit to € 9.42 million (previous year: € 5.15 million). Here, the bank benefited primarily from the expanded fund and investment business, which plays an increasing role in the income picture. The volume of the UmweltSpektrum Mix, the first fund of the UmweltSpektrum family launched in February 2020, climbed from € 42.5 million (31 December 2020) to around € 100 million (31 December 2021). In addition, the investment business combined within UmweltProjekt GmbH was expanded. The volume of customer deposits under management increased significantly by almost 40% from € 682 million (31.12.2020) to € 949 million (31.12.2021).

However, the fact that the total income of € 84.40 million (previous year: € 84.23 million) was nevertheless at the level of the previous year is due to the decline in special income to € 0.21 million (previous year: € 6.35 million). In the 2020 financial year, other income was included from the successful conclusion of a legal dispute with D.U.T. UmweltTreuhand GmbH.

Costs and earnings development 2021

With the publication of the 2020 annual report, the UmweltBank management had forecast a constant development of the annual pre-tax result for the 2021 financial year. Excluding the addition to the fund for general banking risks, the pre-tax result of € 38.09 million (previous year: € 37.85 million) was marginally above the previous year's figure and thus within the company's guidance. The result achieved is also largely in line with our previous forecast (GBC estimate in the Anno study of 13 July 2021: € 38.95 million).

EBT before allocation to the fund for general banking risks (in € million)



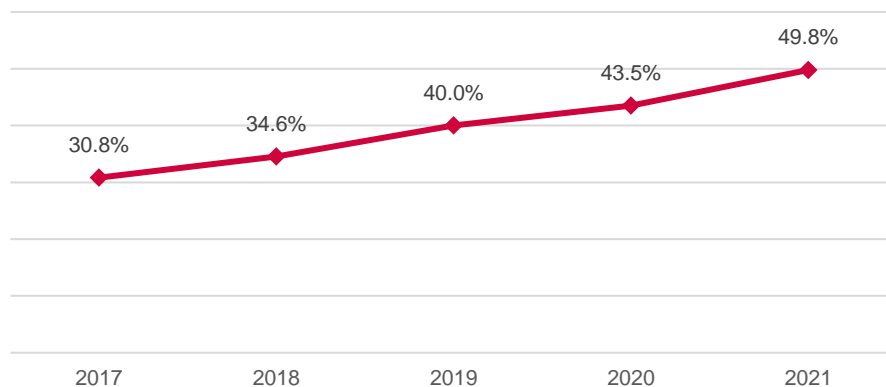
Sources: UmweltBank AG; GBC AG

The total expenses of UmweltBank AG remained constant at € 65.02 million (previous year: € 65.73 million). However, there were significant movements within the individual expense items. While interest expenses visibly decreased to € 7.66 million (previous year:

€ 16.97 million), general administrative expenses increased significantly to € 33.67 million (previous year: € 27.07 million). On the one hand, the further expansion of the workforce to 299 (31.12.2020: 250) led to an increase in personnel expenses to € 17.15 million (PY: € 13.78 million). Other administrative expenses, in particular the bank levy for deposit protection, also increased to € 4.10 million (previous year: € 2.68 million). The insolvency of the Greensill Group reduced the deposit insurance portfolio by around € 3.5 billion.

According to our calculations, UmweltBank AG has a cost-income ratio (CIR) of 49.8 % (previous year: 43.5 %). At last year's press conference on the preliminary figures for 2020, UmweltBank's management announced an increase in this key figure for banks. This is mainly due to the planned expansion of the workforce in preparation for the expected future growth. The additional bank levy in the context of the Greensill insolvency had led to an unexpected increase in costs here and thus in the CIR. However, this can still be classified as very low compared to other credit institutions. According to statistics from the German Bundesbank, the cost-income ratio of 1,440 German credit institutions averaged 76.0% in 2019.

Cost-income ratio



Sources: UmweltBank AG; GBC AG

Due to an increase in tax expenses, UmweltBank AG recorded an after-tax result of € 25.37 million (previous year: € 26.50 million). This figure also does not take into account the allocation to the fund for general banking risks. As the allocation to the fund for general banking risks is a freely selectable amount and is also part of the hard core capital, we do not include it in our analysis of key figures.

As in the previous year, the after-tax result is sufficient to continue the dividend policy. For the past financial year 2021, a dividend payment of € 0.33 (previous year: € 0.33) was made, which is equivalent to the 19th dividend payment in a row.

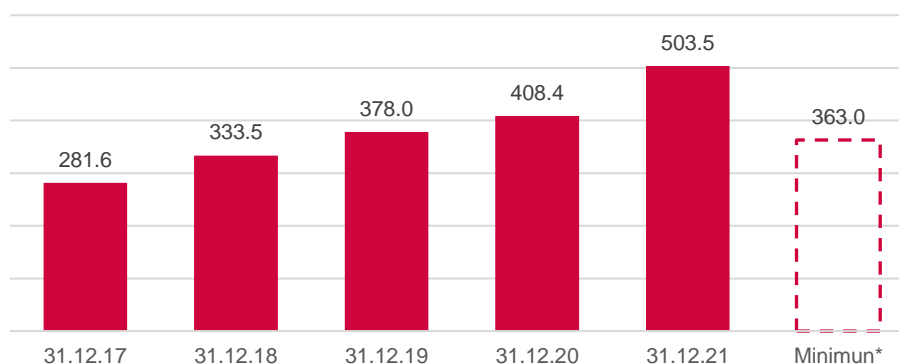
Balance sheet and financial situation as at 31.12.2021

in € m	31.12.17	31.12.18	31.12.19	31.12.20	31.12.21
Balance sheet total	3,485.00	3,699.12	4,095.05	4,944.37	5,927.80
Balance sheet equity	108.01	119.19	150.56	162.89	245.12
Regulatory capital	281.6	333.5	378.0	408.4	503.5
thereof hard core capital	202.0	221.2	260.4	275.2	366.6
thereof additional core capital	34.2	32.6	30.9	28.8	27.1
thereof supplementary capital	45.4	79.7	86.7	104.4	109.8
Total capital ratio	12.0%	14.0%	14.5%	14.6%	16.6%
Core capital ratio	10.0%	10.7%	11.2%	10.9%	13.0%
Common Equity Tier 1 ratio	8.5%	9.3%	10.0%	9.8%	12.1%
Customer deposits	2,157.01	2,330.02	2,529.34	2,694.11	2,954.09
Liabilities to credit institutions	1,011.95	1,005.59	1,155.99	1,803.32	2,440.73
Credit volume	2,273.56	2,392.77	2,566.62	2,792.66	3,072.52
Securities held	1,023.68	1,125.71	1,373.31	1,907.80	1,918.39
Cash and cash equivalents	32.46	31.56	40.52	98.66	814.23

Sources: UmweltBank AG; GBC AG

In October 2021, UmweltBank AG successfully placed a capital increase of € 73.08 million. Together with the positive after-tax result of € 25.37 million, the balance sheet equity visibly improved to € 245.12 million (31 December 2020: € 162.89 million). The regulatory equity capital, for which the recognition of the capital increase by BaFin was still pending as at 31.12.2021 (since that date, the recognition has taken place), also increased strongly to € 503.5 million (31.12.2020: € 408.4 million) taking into account the capital increase. The corresponding equity ratio climbed from 14.6% (31.12.2020) to 16.6% (31.12.2021) and remained well above the regulatory minimum of 12.0% applicable to UmweltBank AG. This means that UmweltBank AG has sufficient equity capital capacity to expand its operating business.

Development of total capital (in € million)



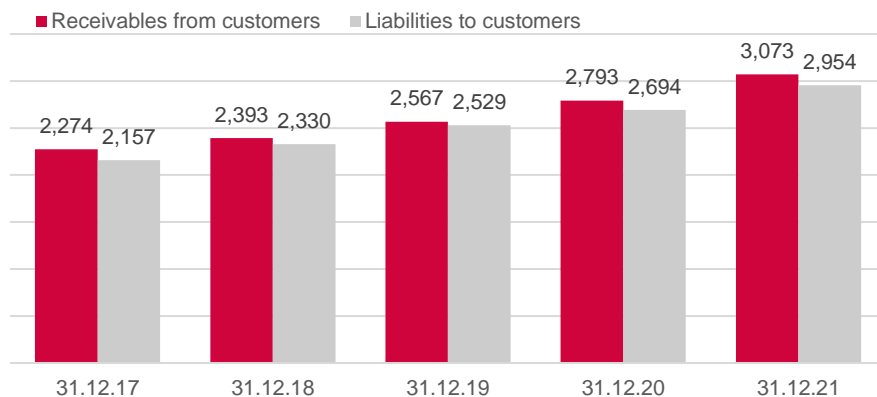
Sources: UmweltBank AG; GBC AG; *according to regulatory requirement

The described expansion of the operating business is primarily reflected in the increase in the lending volume, which exceeded the € 3 billion mark for the first time with € 3,072.52 million (31.12.2020: € 2,792.66 million). This increase was driven by the increased demand for loans from all sectors that are important for the credit institution. With the expansion of the operating business, the balance sheet total also climbed by almost € 1.0 billion to € 5,927.80 million (31.12.2020: € 4,944.37 million). In the period from 2017 to 2021, the average growth of the balance sheet total (CAGR) was 14.2 %.

On the liabilities side, i.e. on the refinancing side, liabilities to banks increased to € 2,440.73 million (31.12.2020: € 1,803.32 million) and liabilities to customers (customer

deposits) to € 2,954.09 million (31.12.2020: € 2,694.11 million). Public funding for environmental projects plays an important role in the liabilities to banks. Accordingly, KfW Förderbank accounts for outstanding liabilities of € 1,081.39 million (31.12.2020: € 845.52 million), which corresponds to 44.3% of total liabilities to banks.

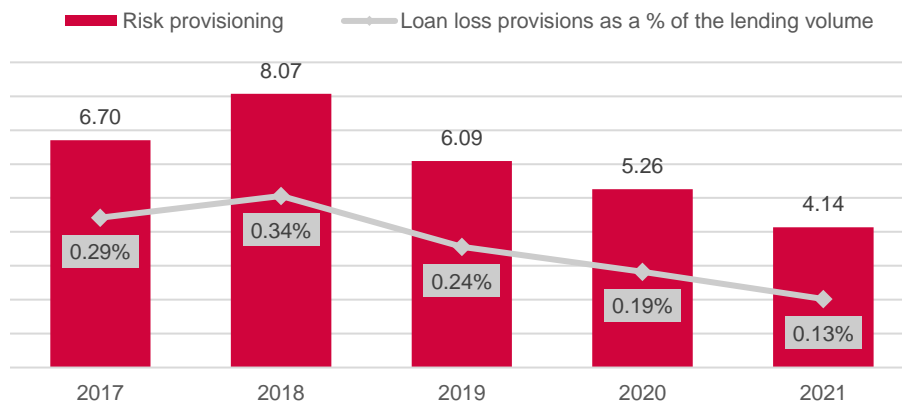
Lending volume and customer deposits (in € million)



Sources: UmweltBank AG; GBC AG

As UmweltBank AG's loans are generally secured, the credit risk can be classified as comparatively low. This is evidenced by the low level of risk provisions compared to the lending volume of € 4.14 million (31.12.2020: € 5.26 million). This corresponds to just 0.13% (31.12.2020: 0.19%) of the credit volume:

Risk provisions (in € million) and in % of the outstanding credit volume



Source: UmweltBank AG; GBC AG

FORECAST AND EVALUATION

in € m	FY 2021	FY 2022e	FY 2023e	FY 2024e
Interest income	70.90	76.34	83.52	86.02
Interest expenses	7.66	16.07	21.33	23.12
Interest result	63.24	60.26	62.19	62.90
Other income	13.50	18.10	19.10	20.60
Administrative expenses	33.67	36.13	37.46	36.86
EBT*	38.09	38.10	39.78	42.37
EAT*	25.37	25.91	27.05	28.81
EPS in €	0.72	0.73	0.76	0.81
Dividend in €	0.33	0.33	0.35	0.35
Customer deposits	2,954.09	2,983.63	3,073.14	3,165.33
Credit volume	3,072.52	3,164.70	3,259.64	3,357.43
Total capital	503.50	517.70	532.35	548.76

Source: GBC AG; *without allocation to the fund for general banking risks

Forecast basis

According to the corporate guidance, a stable development of the interest margin is expected for the current financial year 2022, but the absolute net interest income should decrease moderately due to the expiry of special corona conditions for GLRG funds. Parallel to this, a strong increase in other income is expected due to the focus on the securities business, the expected growth in the UmweltSpektrum-funds and the expected expansion of the issuing business.

The strong expansion of the workforce in recent years should continue in the current 2022 business year, albeit at a slower pace. This means that a further increase in personnel expenses is to be expected. Furthermore, UmweltBank AG has announced that it will introduce a new core banking system in the next 18 months. The introduction of the Atruvia AG system is intended to significantly expand the digital offering in order to meet contemporary demands. In this regard, extraordinary expenses of around € 3.0 million are expected to be incurred in the current financial year 2022. Adding in the general increase in costs, the slightly declining interest result and the significant increase in other income should be reflected in a pre-tax result (before additions to the fund for general risks) at the level of the previous year.

The foundation of the company's guidance is the assumption that new client business in the current financial year will be above the average value of the past five financial years of € 610 million. In the past financial year, projects with a volume of € 845 million were newly financed. Looking at the company's core sectors, demand remains high, even though the real estate sector, for example, is currently characterised by a high level of uncertainty. However, shifts in project financing could be countered by an increase in lending rates, so that an increase in interest income could still be achieved. Apart from the war and pandemic-related burdens, the real estate sector and, especially, the wind energy and solar sectors should benefit from a positive market environment. In the field of renewable energies, expansion paths are to be considerably extended within the framework of the new EEG regulations. UmweltBank AG had achieved a market share of 20.5% of the overall German market in the financing of photovoltaic systems in the relevant market above 250 kWp. UmweltBank AG is also likely to play a decisive role in any future increase in demand for financing.

Even if new business remains below expectations, the existing loan portfolio provides the basis for at least a stable income development. The loans, which are usually secured,

have a long-term maturity, which means that the majority of future interest income is already secured. Moreover, this is project financing, so that the counterparty default risk is comparatively low. In this context, UmweltBank AG has, compared to the rest of the sector, a low risk provision of only 0.13% of the total loan portfolio.

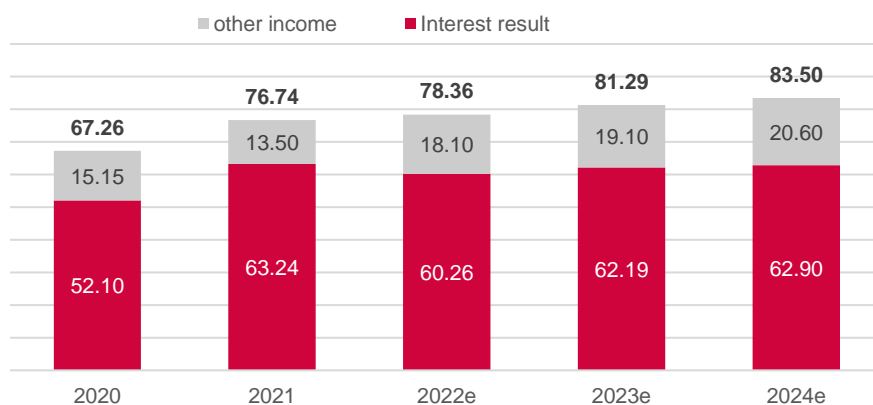
The increase in the ECB's key interest rate as of July 2022 may have heralded the turnaround in interest rates, although the general interest rate level remains low. UmweltBank AG could pass on interest rate increases in new business and in the refinancing of existing loans to customers. In parallel, however, the liabilities side is also likely to become more expensive. In this context, the UmweltBank Board of Managing Directors expects a constant development of the interest margin. We see a risk in the high level of overnight deposits (62.1% of liabilities to customers), which could react more quickly to interest rate changes due to their short-term nature, which could have a negative impact on the interest margin.

In addition to the core business, the investment, securities and fund business is to be expanded. Significant to this is the issuing of two new funds of the environmental spectrum family, which will expand the basis for commission income. In our estimates, we take into account a significant increase in other income, in line with the corporate guidance.

Turnover and earnings forecast

With a view to our forecast for the current financial year 2022, we expect a moderate decline in net interest income, with a simultaneous increase in other income. Overall, income should increase slightly compared to the previous year. For the next two financial years, both income blocks should contribute to the expected increase in total income.

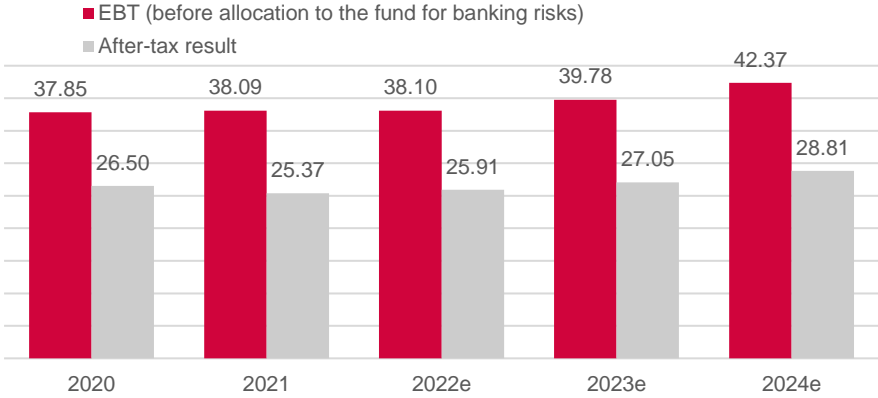
Net interest income and other income (in € million)



Source: GBC AG

Based on the slight increase in earnings, we calculate a constant earnings development in our estimates for 2022. This is mainly due to the expected cost increases, especially in connection with the expansion of the workforce and the introduction of the new core banking system. Only from the 2024 business year onwards should the cost-income ratio decrease with the successful introduction. For 2022, we expect a constant development of the pre-tax result (before allocation to the fund for banking risks), before increases should be achieved again from 2023:

EBT before allocation to the fund for banking risks (in € million)



Source: GBC AG

Evaluation

For the valuation of UmweltBank AG, we have used a residual income model, whereby the difference between the return on equity and the cost of equity is used to determine the surplus return of the estimation periods. In doing so, we have formulated concrete expectations for the estimation periods of the three financial years 2022e - 2024e with regard to the annual surpluses and the resulting changes in equity. The expected returns on equity can be derived from this. The residual income of the business year can be derived from the generated surplus return of a period. The expected residual income is then discounted to the valuation date with the cost of equity. To determine the terminal value, we apply a premium to the current book value.

$$\text{Fair Company Value} = EK_0 + \sum_{t=1}^T \frac{(ROE_t - r)EK_{t-1}}{(1+r)^t} + \frac{P_T - EK_T}{(1+r)^T}$$

EK = equity	ROE = return on equity
P = premium on book value	r = cost of equity capital
T = estimation period	T= last estimation period

Determination of the cost of capital

The relevant discount rate for use in the residual income model is the cost of equity. To determine the cost of equity, the market risk premium, the company-specific beta and the risk-free interest rate must be determined.

The risk-free interest rate is derived from current yield curves for risk-free bonds in accordance with the recommendations of the Fachausschuss für Unternehmensbewertungen und Betriebswirtschaft (FAUB) of the IDW. The basis for this is the zero bond interest rates published by the Deutsche Bundesbank according to the Svensson method. To smooth short-term market fluctuations, the average yields of the previous three months are used and the result rounded to 0.25 basis points. **The currently used value of the risk-free interest rate is 0.80 % (previously: 0.25 %).**

We use the historical market risk premium of 5.50% as a reasonable expectation of a market risk premium. This is supported by historical analyses of stock market returns. The market premium reflects the percentage by which the stock market is expected to yield better than low-risk government bonds.

The beta calculation is based on the historical price data of UmweltBank AG (monthly price development over the past four years). We used the SDAX price index and the STOXX® Europe 600 Banks price index as comparative indices and averaged them in the regression analysis over a period of five years. On this basis we calculated a beta of 0.49 (previously: 0.49), which we also adjusted and smoothed in accordance with Blume's work. Using the assumptions made, we calculate a cost of equity of 3.50% (previously: 2.96%) (beta multiplied by risk premium plus risk-free interest rate).

Valuation model and valuation result

	31.12.21	31.12.22e	31.12.23e	31.12.24e	Final value
Equity	380.27	394.48	409.13	425.55	
Net profit for the year	25.37	25.91	27.05	28.81	
ROE (after taxes)		6.69%	6.73%	6.90%	8,50%
Cost of equity		3.50%	3.50%	3.50%	3,50%
Excess return		3,19%	3,24%	3,41%	5,01%
Book value factor		1,91	1,93	1,98	2,43
Residual income		12,14	12,77	13,95	625,81

According to our valuation model, UmweltBank AG should be in a position to achieve a return on equity (after taxes) of a sustainable 8.50 %. Assuming a cost of equity of 3.50%, a sustainable excess return of 5.01% or a book value factor of 2.43 should be generated in the terminal value. To determine the terminal value, we have therefore applied a premium over the book value of 2.43.

Present value of residual income 2022 and 2023	€ 25.36 million
Present value of residual income Final value in € million	€ 584.26 million
Total present values in € million	€ 609.62 million
Shares outstanding in m	35.44 million
Fair enterprise value per share in €	€ 17.20

The sum of the discounted residual income results in a value of € 609.62 million on a target price basis of 31 December 2022. In view of an outstanding number of shares of 35.44 million, a fair enterprise value per share of € 17.20 (previously: € 19.05) is calculated. The significant price target reduction is almost exclusively a consequence of the increased cost of equity capital of 3.50% (previously: 2.96%). The increase has become necessary against the background of the rise in the risk-free interest rate to 0.80 % (previously: 0.25 %). Based on the current share price of € 16.05, we therefore assign a HOLD rating.

ANNEX

I.

Research under MiFID II

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2. the research report shall be made available simultaneously to all investment service providers interested in it.

II.

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A specific update of the present analysis(s) at a fixed point in time has not yet been scheduled. GBC AG reserves the right to update the analysis without prior notice.

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The respective recommendations/ classifications/ ratings are associated with the following expectations:

BUY	The expected return, based on the determined price target, including dividend payment within the corresponding time horizon is $\geq + 10\%$.
HOLD	The expected return, based on the determined price target, including dividend payment within the corresponding time horizon is $> - 10\%$ and $< + 10\%$.
SELL	The expected return, based on the determined price target, including dividend payment within the corresponding time horizon is $\leq - 10\%$.

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- (6) b) After receiving valid amendments by the third party or issuer, the draft of this analysis was changed.
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Cosmin Filker, Dipl. Betriebswirt (FH), Deputy Chief Analyst
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Other person involved in this study:

Jörg Grunwald, Executive Board

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