

# Index Decarbonisation Trajectory (Scope 1 & 2)

**Base Index:** FTSE US Broad Investment-Grade Corporate Bond Index (USBIG Corp)  
**Index:** FTSE US Broad Investment-Grade Climate Transition Corporate Bond Index (USBIG CTB Corp)  
**Date of report:** 9/30/2024

Year	Date of weights	Achieved results					Minimum required performance							
		USBIG Corp		Inflation Adjustment	USBIG CTB Corp		Comparison		Decarbonisation Trajectory		Relative Decarbonisation			
		Wtd avg GHG/EVIC intensity (tCO2e/USDm)	Coverage (%)		CARR since Base Year (EVIC-adjusted reduction %)	Inflation adjustment factor (%)	Wtd avg GHG/EVIC intensity (tCO2e/USDm)	Coverage (%)	CARR since Base Year (EVIC-adjusted reduction %)	GHG/EVIC reduction vs. Base Index (reduction %)	Active share (%)	CARR since Base Year (EVIC-adjusted reduction %)	Wtd avg GHG/EVIC intensity target (tCO2e/USDm)	GHG/EVIC reduction vs. Base Index (reduction %)
<i>Base Year</i>	2020	9/30/2020	83.12	94.5%	-	-	57.77	97.9%	-	30%	34.8%	-	-	-
Y1	2021	9/30/2021	71.72	94.6%	5.7%	109.2%	48.92	97.7%	7.5%	32%	30.8%	7%	49.18	30%
Y2	2022	9/30/2022	78.51	93.7%	-8.5%	124.6%	39.88	98.2%	7.3%	49%	37.3%	7%	40.12	30%
Y3	2023	10/31/2023	87.39	93.7%	-7.1%	117.4%	39.08	95.6%	7.2%	55%	28.2%	7%	39.33	30%
Y4	2024	9/30/2024	63.16	93.3%	0.2%	130.5%	32.90	96.3%	7.2%	48%	28.0%	7%	36.80	30%
Y5	2025	9/30/2025*	-	-	-	-	-	-	-	-	-	7%	34.22	30%
Y6	2026	9/30/2026*	-	-	-	-	-	-	-	-	-	7%	31.83	30%
Y7	2027	9/30/2027*	-	-	-	-	-	-	-	-	-	7%	29.60	30%
Y8	2028	9/30/2028*	-	-	-	-	-	-	-	-	-	7%	27.53	30%
Y9	2029	9/30/2029*	-	-	-	-	-	-	-	-	-	7%	25.60	30%
Y10	2030	9/30/2030*	-	-	-	-	-	-	-	-	-	7%	23.81	30%

**Notes:**

**Base Year:** October 2020 profile. The starting point of calculation of the compound annual reduction in GHG intensity.

**Wtd avg GHG/EVIC intensity:** Sum of weighted average contributions based on GHG emissions per EVIC. Contributions are calculated for each issuer based on (i) the weight of the considered issuer in the index, multiplied by (ii) the GHG/EVIC value applicable to this issuer. By default, weighted averages are rebased (result equivalent to rebasing weights to 100% if some values are missing). Private issuers owned by listed parents are assigned their parents' data when applicable conditions are met. Intensity data are based on the datasets selected for the analysis and on the latest available year of data as of the date of weights with a maximum lag of 2 years. The year of EVIC data is aligned with the year of GHG emissions for each company (GHG: greenhouse gases).

**Date of EVIC data:** EVIC values correspond to Enterprise Values Including Cash. Values are calculated on an annual basis and based on the information applicable to the fiscal year end date of each year, for each company. All inputs to the EVIC calculation are as of a particular company's fiscal year end, and the year of each specific fiscal year end date determines the assessed year of EVIC. For example, 2021 EVIC may correspond to the data applicable to the end of December 2021 or the end of March 2021, depending on the company. There are potential specific cases in which the year to which EVIC data is assigned is not the year in which the company's fiscal year ended. Such cases may occur if the fiscal year end is within a short period after the beginning of the calendar year. In such cases, the data for a fiscal year ending at a date in the beginning of a given year may be classified as the previous year's value.

**CARR (Compound annual reduction rate) since Base Year:** Average year-on-year reduction of the weighted average GHG Intensity per EVIC compared to the Base Year value, applying the corresponding EVIC-based inflation adjustment factor.

**Inflation adjustment factor:** This calculation is based on the Base Index. The inflation adjustment factor considers changes in average EVIC across issuers that have reported emissions intensity values of the current year versus the average EVIC of the Base Year. The calculation is based on issuers that are in both index profiles to avoid changes caused by issuers entering or exiting the index. Inflation adjustment factor = Average EVIC (t) of issuers in both index profiles / Average EVIC (t0) of issuers in both index profiles. See Appendix B of the index Ground Rules for more details.

**Active share:** Active share of the Index relative to the Base Index. It corresponds to the sum of absolute weight differences (sum of the [Index weight minus Base Index weight] values for each constituent, based on absolute values) divided by 2.

**Wtd avg GHG/EVIC intensity target:** GHG intensity target per EVIC without inflation adjustment, but in line with the inflation-adjusted 7% annual reduction target since Base Year. This calculation is based on the combination of the 7% annual reduction rate with the applicable inflation adjustment factor of each year in order to reflect a non-adjusted evolution. Beyond the last year of available achieved results, intensity targets are assessed based on the last available inflation adjustment factor.

\* Estimated effective dates, subject to potential change.

[Link to Index Ground Rules: https://research.ftserussell.com/products/downloads/FTSE\\_Fixed\\_Income\\_EU\\_Climate\\_Benchmarks\\_Index\\_Series\\_Ground\\_Rules.pdf](https://research.ftserussell.com/products/downloads/FTSE_Fixed_Income_EU_Climate_Benchmarks_Index_Series_Ground_Rules.pdf)

**Glossary:**

**Carbon intensity scopes:** Scope 1 emissions are direct emissions, Scope 2 emissions are indirect emissions related to energy consumption, Scope 3 emissions are other indirect emissions related to a company's activities and value chain.

**Coverage:** The coverage rate of a metric provides the share of weights for which data are available based on the data considered for the metric's assessment, within a given universe.

**EVIC:** Enterprise Value Including Cash

**GHG:** Greenhouse gases

**Disclaimer:**

© 2024 London Stock Exchange Group plc and its applicable group undertakings ("LSEG"). LSEG includes (1) FTSE International Limited ("FTSE"), (2) Frank Russell Company ("Russell"), (3) FTSE Global Debt Capital Markets Inc. and FTSE Global Debt Capital Markets Limited (together, "FTSE Canada"), (4) FTSE Fixed Income Europe Limited ("FTSE FI Europe"), (5) FTSE Fixed Income LLC ("FTSE FI"), (6) FTSE (Beijing) Consulting Limited ("WOFE") (7) Refinitiv Benchmark Services (UK) Limited ("RBSL"), (8) Refinitiv Limited ("RL") and (9) Beyond Ratings S.A.S. ("BR"). All rights reserved.  
 FTSE Russell® is a trading name of FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, WOFE, RBSL, RL, and BR. "FTSE®", "Russell®", "FTSE Russell®", "FTSE4Good®", "ICB®", "Refinitiv", "Beyond Ratings®", "WMR™", "FR™" and all other trademarks and service marks used herein (whether registered or unregistered) are trademarks and/or service marks owned or licensed by the applicable member of LSEG or their respective licensors and are owned, or used under licence, by FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, WOFE, RBSL, RL or BR. FTSE International Limited is authorised and regulated by the Financial Conduct Authority as a benchmark administrator. Refinitiv Benchmark Services (UK) Limited is authorised and regulated by the Financial Conduct Authority as a benchmark administrator.  
 All information is provided for information purposes only. All information and data contained in this publication is obtained by LSEG, from sources believed by it to be accurate and reliable. Because of the possibility of human and mechanical inaccuracy as well as other factors, however, such information and data is provided "as is" without warranty of any kind. No member of LSEG nor their respective directors, officers, employees, partners or licensors make any claim, prediction, warranty or representation whatsoever, expressly or impliedly, either as to the accuracy, timeliness, completeness, merchantability of any information or LSEG Products, or of results to be obtained from the use of LSEG products, including but not limited to indices, rates, data and analytics, or the fitness or suitability of the LSEG products for any particular purpose to which they might be put. The user of the information assumes the entire risk of any use it may make or permit to be made of the information.  
 No responsibility or liability can be accepted by any member of LSEG nor their respective directors, officers, employees, partners or licensors for (a) any loss or damage in whole or in part caused by, resulting from, or relating to any inaccuracy (negligent or otherwise) or other circumstance involved in procuring, collecting, compiling, interpreting, analysing, editing, transcribing, transmitting, communicating or delivering any such information or data or from use of this document or links to this document or (b) any direct, indirect, special, consequential or incidental damages whatsoever, even if any member of LSEG is advised in advance of the possibility of such damages, resulting from the use of, or inability to use, such information.  
 No member of LSEG nor their respective directors, officers, employees, partners or licensors provide investment advice and nothing in this document should be taken as constituting financial or investment advice. No member of LSEG nor their respective directors, officers, employees, partners or licensors make any representation regarding the advisability of investing in any asset or whether such investment creates any legal or compliance risks for the investor. A decision to invest in any such asset should not be made in reliance on any information herein. Indices and rates cannot be invested in directly. Inclusion of an asset in an index or rate is not a recommendation to buy, sell or hold that asset nor confirmation that any particular investor may lawfully buy, sell or hold the asset or an index or rate containing the asset. The general information contained in this publication should not be acted upon without obtaining specific legal, tax, and investment advice from a licensed professional.  
 Past performance is no guarantee of future results. Charts and graphs are provided for illustrative purposes only. Index and/or rate returns shown may not represent the results of the actual trading of investable assets. Certain returns shown may reflect back-tested performance. All performance presented prior to the index or rate inception date is back-tested performance. Back-tested performance is not actual performance, but is hypothetical. The back-test calculations are based on the same methodology that was in effect when the index or rate was officially launched. However, back-tested data may reflect the application of the index or rate methodology with the benefit of hindsight, and the historic calculations of an index or rate may change from month to month based on revisions to the underlying economic data used in the calculation of the index or rate.  
 This document may contain forward-looking assessments. These are based upon a number of assumptions concerning future conditions that ultimately may prove to be inaccurate. Such forward-looking assessments are subject to risks and uncertainties and may be affected by various factors that may cause actual results to differ materially. No member of LSEG nor their licensors assume any duty to and do not undertake to update forward-looking assessments.  
 No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the applicable member of LSEG. Use and distribution of LSEG data requires a licence from LSEG and/or its licensors.

# Index Decarbonisation Trajectory (Scope 3)

**Base Index:** FTSE US Broad Investment-Grade Corporate Bond Index (USBIG Corp)  
**Index:** FTSE US Broad Investment-Grade Climate Transition Corporate Bond Index (USBIG CTB Corp)  
**Date of report:** 9/30/2024

Year	Date of weights	Achieved results					Minimum required performance						
		USBIG Corp		Inflation Adjustment	USBIG CTB Corp		Comparison		Decarbonisation Trajectory		Relative Decarbonisation		
		Wtd avg GHG/EVIC intensity (tCO2e/USDm)	Coverage (%)		CARR since Base Year (EVIC-adjusted reduction %)	Wtd avg GHG/EVIC intensity (tCO2e/USDm)	Coverage (%)	CARR since Base Year (EVIC-adjusted reduction %)	GHG/EVIC reduction vs. Base Index (reduction %)	Active share (%)	CARR since Base Year (EVIC-adjusted reduction %)	Wtd avg GHG/EVIC intensity target (tCO2e/USDm)	GHG/EVIC reduction vs. Base Index (reduction %)
<i>Base Year</i>	2020	9/30/2020	442.42	69.3%	-	307.48	70.9%	-	30%	34.8%	-	-	-
Y1	2021	9/30/2021	505.74	68.8%	-24.9%	260.38	71.8%	7.5%	49%	30.8%	7%	261.79	30%
Y2	2022	9/30/2022	610.51	66.1%	-31.1%	212.28	79.9%	7.3%	65%	37.3%	7%	213.52	30%
Y3	2023	10/31/2023	636.63	66.6%	-18.5%	208.03	77.4%	7.2%	67%	28.2%	7%	209.34	30%
Y4	2024	9/30/2024	529.79	95.0%	-11.8%	175.12	96.6%	7.2%	67%	28.0%	7%	195.87	30%
Y5	2025	9/30/2025*	-	-	-	-	-	-	-	-	7%	182.16	30%
Y6	2026	9/30/2026*	-	-	-	-	-	-	-	-	7%	169.41	30%
Y7	2027	9/30/2027*	-	-	-	-	-	-	-	-	7%	157.55	30%
Y8	2028	9/30/2028*	-	-	-	-	-	-	-	-	7%	146.52	30%
Y9	2029	9/30/2029*	-	-	-	-	-	-	-	-	7%	136.26	30%
Y10	2030	9/30/2030*	-	-	-	-	-	-	-	-	7%	126.72	30%

**Notes:**

**Base Year:** October 2020 profile. The starting point of calculation of the compound annual reduction in GHG intensity.

**Wtd avg GHG/EVIC intensity:** Sum of weighted average contributions based on GHG emissions per EVIC. Contributions are calculated for each issuer based on (i) the weight of the considered issuer in the index, multiplied by (ii) the GHG/EVIC value applicable to this issuer. By default, weighted averages are rebased (result equivalent to rebasing weights to 100% if some values are missing). Private issuers owned by listed parents are assigned their parents' data when applicable conditions are met. Intensity data are based on the datasets selected for the analysis and on the latest available year of data as of the date of weights with a maximum lag of 2 years. The year of EVIC data is aligned with the year of GHG emissions for each company (GHG: greenhouse gases).

**Date of EVIC data:** EVIC values correspond to Enterprise Values Including Cash. Values are calculated on an annual basis and based on the information applicable to the fiscal year end date of each year, for each company. All inputs to the EVIC calculation are as of a particular company's fiscal year end, and the year of each specific fiscal year end date determines the assessed year of EVIC. For example, 2021 EVIC may correspond to the data applicable to the end of December 2021 or the end of March 2021, depending on the company. There are potential specific cases in which the year to which EVIC data is assigned is not the year in which the company's fiscal year ended. Such cases may occur if the fiscal year end is within a short period after the beginning of the calendar year. In such cases, the data for a fiscal year ending at a date in the beginning of a given year may be classified as the previous year's value.

**CARR (Compound annual reduction rate) since Base Year:** Average year-on-year reduction of the weighted average GHG intensity per EVIC compared to the Base Year value, applying the corresponding EVIC-based inflation adjustment factor.

**Inflation adjustment factor:** This calculation is based on the Base Index. The inflation adjustment factor considers changes in average EVIC across issuers that have reported emissions intensity values of the current year versus the average EVIC of the Base Year. The calculation is based on issuers that are in both index profiles to avoid changes caused by issuers entering or exiting the index. Inflation adjustment factor = Average EVIC (t) of issuers in both index profiles / Average EVIC (t0) of issuers in both index profiles. See Appendix B of the index Ground Rules for more details.

**Active share:** Active share of the Index relative to the Base Index. It corresponds to the sum of absolute weight differences (sum of the [Index weight minus Base Index weight] values for each constituent, based on absolute values) divided by 2.

**Wtd avg GHG/EVIC intensity target:** GHG intensity target per EVIC without inflation adjustment, but in line with the inflation-adjusted 7% annual reduction target since Base Year. This calculation is based on the combination of the 7% annual reduction rate with the applicable inflation adjustment factor of each year in order to reflect a non-adjusted evolution. Beyond the last year of available achieved results, intensity targets are assessed based on the last available inflation adjustment factor.

\* Estimated effective dates, subject to potential change.

[Link to Index Ground Rules: https://research.ftserussell.com/products/downloads/FTSE\\_Fixed\\_Income\\_EU\\_Climate\\_Benchmarks\\_Index\\_Series\\_Ground\\_Rules.pdf](https://research.ftserussell.com/products/downloads/FTSE_Fixed_Income_EU_Climate_Benchmarks_Index_Series_Ground_Rules.pdf)

**Glossary:**

**Carbon intensity scopes:** Scope 1 emissions are direct emissions, Scope 2 emissions are indirect emissions related to energy consumption, Scope 3 emissions are other indirect emissions related to a company's activities and value chain.

**Coverage:** The coverage rate of a metric provides the share of weights for which data are available based on the data considered for the metric's assessment, within a given universe.

**EVIC:** Enterprise Value Including Cash

**GHG:** Greenhouse gases

**Disclaimer:**

© 2024 London Stock Exchange Group plc and its applicable group undertakings ("LSEG"). LSEG includes (1) FTSE International Limited ("FTSE"), (2) Frank Russell Company ("Russell"), (3) FTSE Global Debt Capital Markets Inc. and FTSE Global Debt Capital Markets Limited (together, "FTSE Canada"), (4) FTSE Fixed Income Europe Limited ("FTSE FI Europe"), (5) FTSE Fixed Income LLC ("FTSE FI"), (6) FTSE (Beijing) Consulting Limited ("WOFE") (7) Refinitiv Benchmark Services (UK) Limited ("RBSL"), (8) Refinitiv Limited ("RL") and (9) Beyond Ratings S.A.S. ("BR"). All rights reserved. FTSE Russell® is a trading name of FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, WOFE, RBSL, RL, and BR. "FTSE®", "Russell®", "FTSE Russell®", "FTSE4Good®", "ICB®", "Refinitiv", "Beyond Ratings®", "WMR™", "FR™" and all other trademarks and service marks used herein (whether registered or unregistered) are trademarks and/or service marks owned or licensed by the applicable member of LSEG or their respective licensors and are owned, or used under licence, by FTSE, Russell, FTSE Canada, FTSE FI, FTSE FI Europe, WOFE, RBSL, RL or BR. FTSE International Limited is authorised and regulated by the Financial Conduct Authority as a benchmark administrator. Refinitiv Benchmark Services (UK) Limited is authorised and regulated by the Financial Conduct Authority as a benchmark administrator. All information is provided for information purposes only. All information and data contained in this publication is obtained by LSEG, from sources believed by it to be accurate and reliable. Because of the possibility of human and mechanical inaccuracy as well as other factors, however, such information and data is provided "as is" without warranty of any kind. No member of LSEG nor their respective directors, officers, employees, partners or licensors make any claim, prediction, warranty or representation whatsoever, expressly or impliedly, either as to the accuracy, timeliness, completeness, merchantability of any information or LSEG Products, or of results to be obtained from the use of LSEG products, including but not limited to indices, rates, data and analytics, or the fitness or suitability of the LSEG products for any particular purpose to which they might be put. The user of the information assumes the entire risk of any use it may make or permit to be made of the information. No responsibility or liability can be accepted by any member of LSEG nor their respective directors, officers, employees, partners or licensors for (a) any loss or damage in whole or in part caused by, resulting from, or relating to any inaccuracy (negligent or otherwise) or other circumstance involved in procuring, collecting, compiling, interpreting, analysing, editing, transcribing, transmitting, communicating or delivering any such information or data or from use of this document or links to this document or (b) any direct, indirect, special, consequential or incidental damages whatsoever, even if any member of LSEG is advised in advance of the possibility of such damages, resulting from the use of, or inability to use, such information. No member of LSEG nor their respective directors, officers, employees, partners or licensors provide investment advice and nothing in this document should be taken as constituting financial or investment advice. No member of LSEG nor their respective directors, officers, employees, partners or licensors make any representation regarding the advisability of investing in any asset or whether such investment creates any legal or compliance risks for the investor. A decision to invest in any such asset should not be made in reliance on any information herein. Indices and rates cannot be invested in directly. Inclusion of an asset in an index or rate is not a recommendation to buy, sell or hold that asset nor confirmation that any particular investor may lawfully buy, sell or hold the asset or an index or rate containing the asset. The general information contained in this publication should not be acted upon without obtaining specific legal, tax, and investment advice from a licensed professional. Past performance is no guarantee of future results. Charts and graphs are provided for illustrative purposes only. Index and/or rate returns shown may not represent the results of the actual trading of investable assets. Certain returns shown may reflect back-tested performance. All performance presented prior to the index or rate inception date is back-tested performance. Back-tested performance is not actual performance, but is hypothetical. The back-test calculations are based on the same methodology that was in effect when the index or rate was officially launched. However, back-tested data may reflect the application of the index or rate methodology with the benefit of hindsight, and the historic calculations of an index or rate may change from month to month based on revisions to the underlying economic data used in the calculation of the index or rate. This document may contain forward-looking assessments. These are based upon a number of assumptions concerning future conditions that ultimately may prove to be inaccurate. Such forward-looking assessments are subject to risks and uncertainties and may be affected by various factors that may cause actual results to differ materially. No member of LSEG nor their licensors assume any duty to and do not undertake to update forward-looking assessments. No part of this information may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the applicable member of LSEG. Use and distribution of LSEG data requires a licence from LSEG and/or its licensors.