

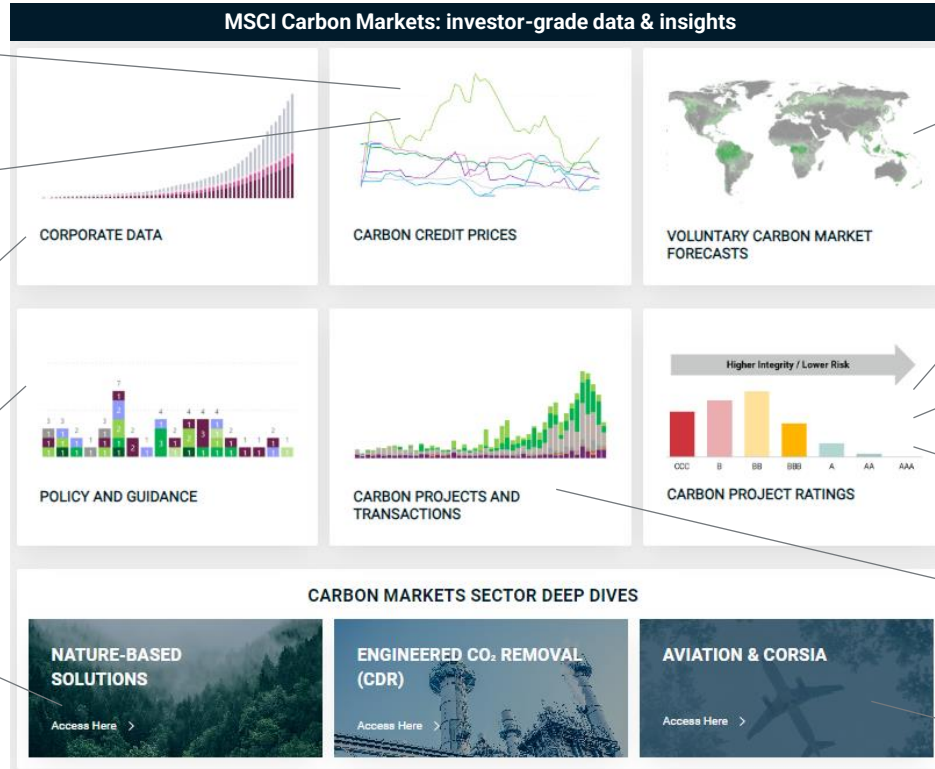
# The global carbon credit market

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**IETA MENA DIALOGUE**

**January 15, 2025**

# MSCI Carbon Markets



New "indicative quotes" dashboard

New partnership with Xpansiv CBL to display project-level traded prices

>4,000 company profiles added with MSCI data (now over 17,000)

Gabon, Cote d'Ivoire (now > 40 country profiles)

Geospatial tool to identify & cost nature restoration project development opportunities

ARR market outlook

Carbon Project Ratings for >4k projects

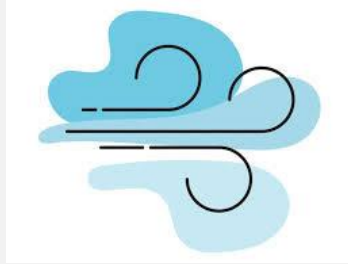
Delivery Risk assessment for ex-ante credits

'State of Integrity' research paper

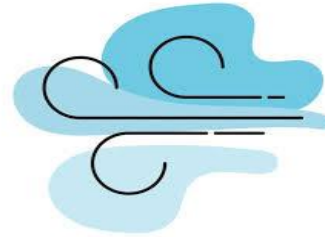
Addition of Isometric and JCM registries

> 400 airline CORSIA demand profiles

## Tailwinds



- ✓ Corporates continue to make climate commitments and use carbon credits
- ✓ Continued investment in early-stage project development: Engineered CDR, ARR, J-REDD
- ✓ New demand sources – CORSIA, Art 6, compliance – ***multipolar carbon market***
- ✓ Credit quality issue being addressed

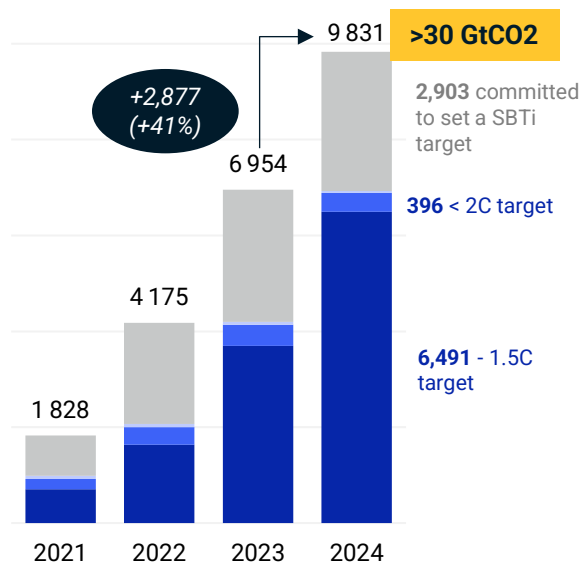


## Headwinds

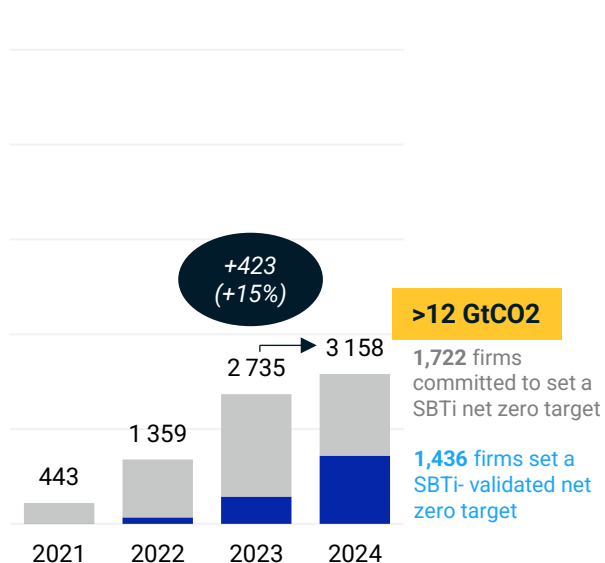
- ✗ Emphasis on disclosure and integrity of credits (not on emissions and missing targets)
- ✗ Low secondary market prices
- ✗ Low integrity credits remain on market
- ✗ Global swing to populism (DEI retractions, GFANZ, Delta)

# Companies are continuing to make climate commitments

## Number of companies with a SBTi emissions reduction target

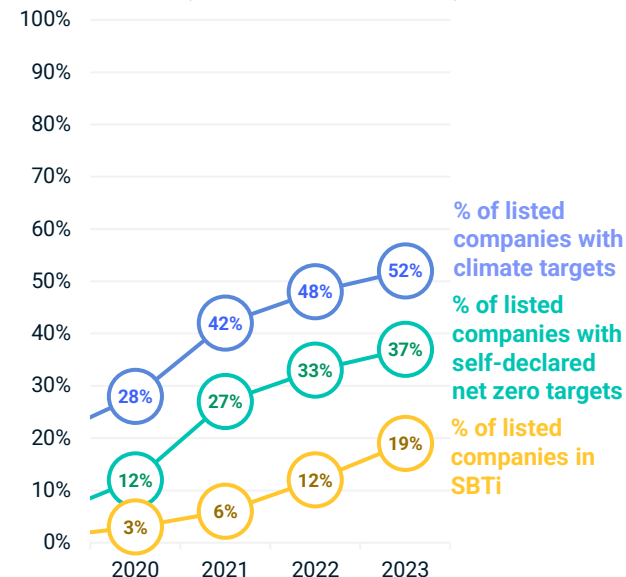


## Number of companies with a SBTi net zero target



## Percentage of listed companies that have set a climate target (~9.5k firms)

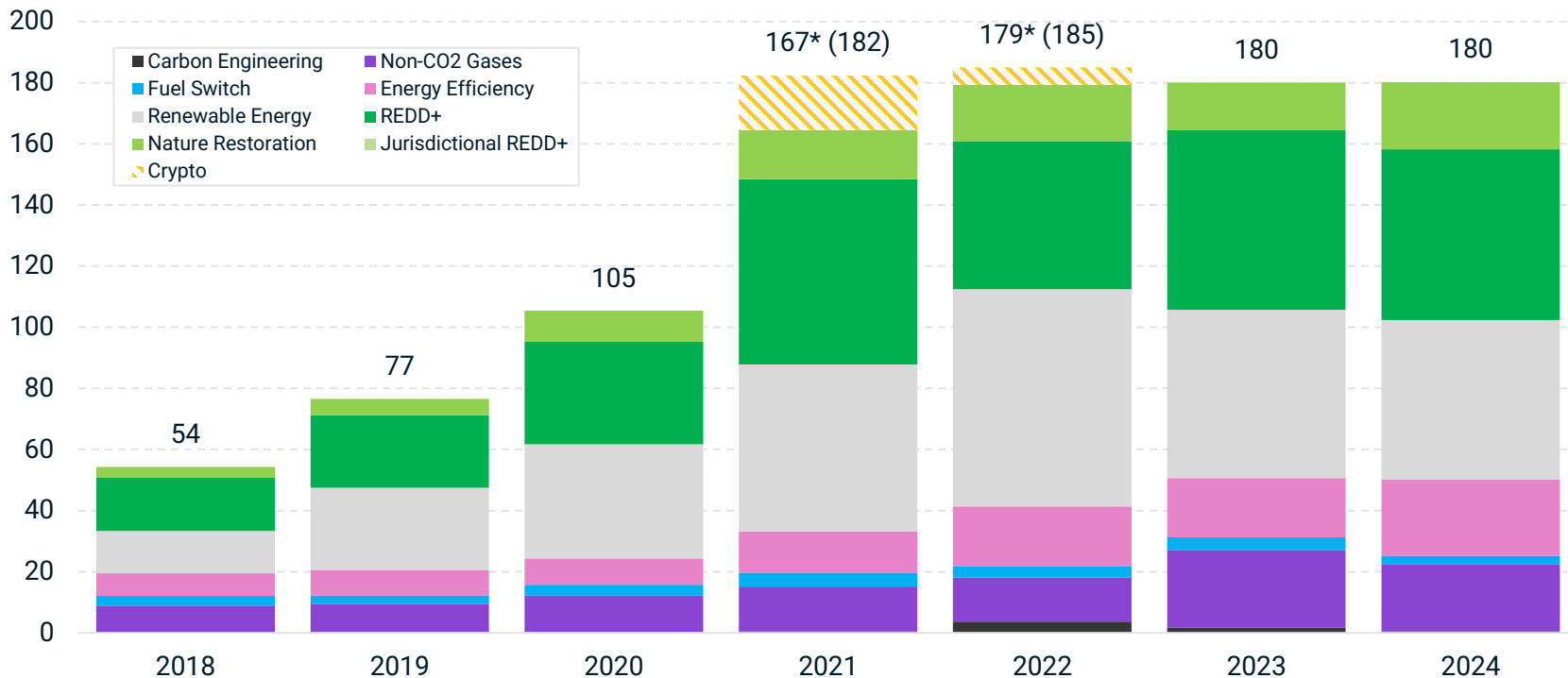
(Provisional year-end data)



Source: MSCI Carbon Markets tracking of SBTi companies, and MSCI Carbon Markets analysis of reported emissions of those companies.  
The chart on the right is provisional December 2023 data from MSCI's Net Zero Tracker compiled by MSCI ESG Research, based on companies in the MSCI ACWI IMI.

# Demand for credits kept pace in 2024

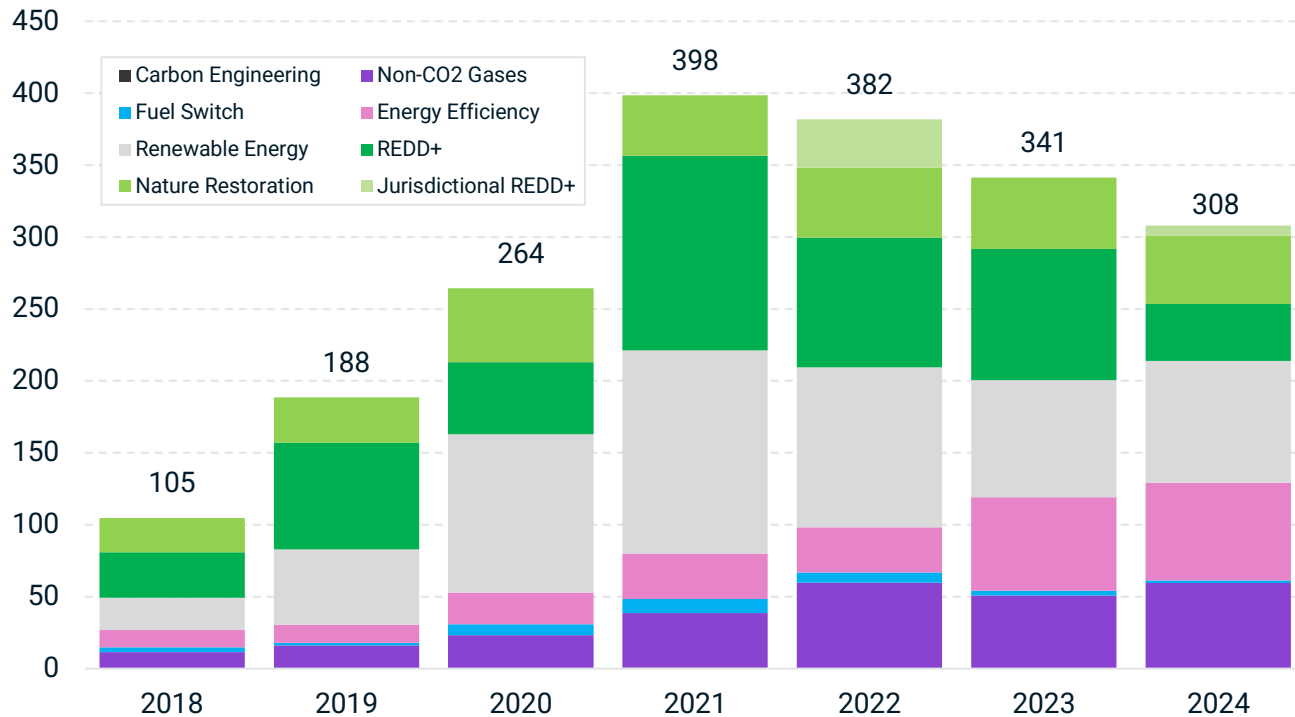
Annual retirements by project type (MtCO<sub>2</sub>e)



Data as of Dec. 31, 2024. Source: MSCI Carbon Markets. 2024 retirement excludes the 5 MtCO<sub>2</sub>e of energy efficiency credits that were retired from the market by the registry Verra due to past fraudulent over-issuance by the developer C-Quest Capital. 2021 and 2022 retirement totals are shown both including and excluding (marked with an \*) retirements made for use in cryptocurrency schemes such as Toucan.

# Supply of carbon credits continued to tighten

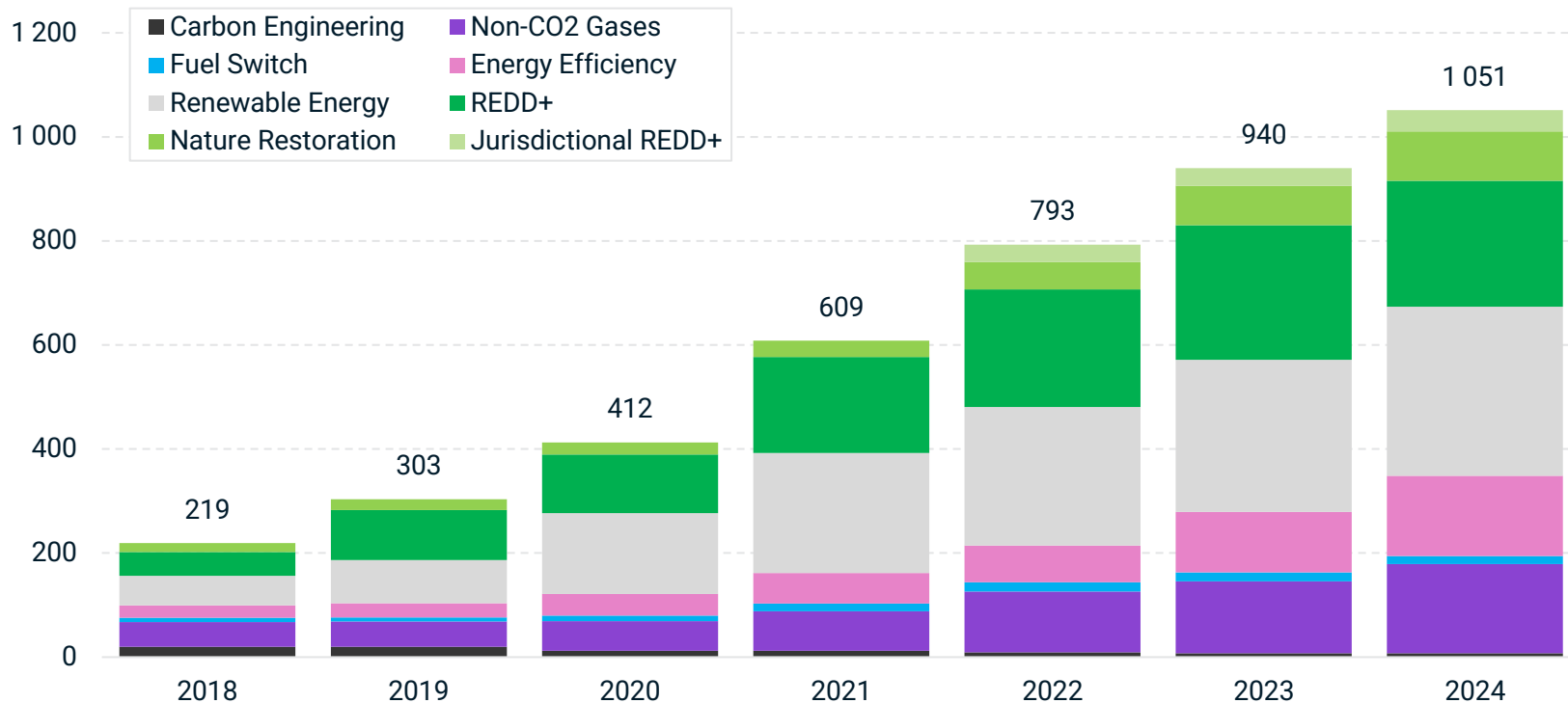
Annual issuances by project type (MtCO<sub>2</sub>e)



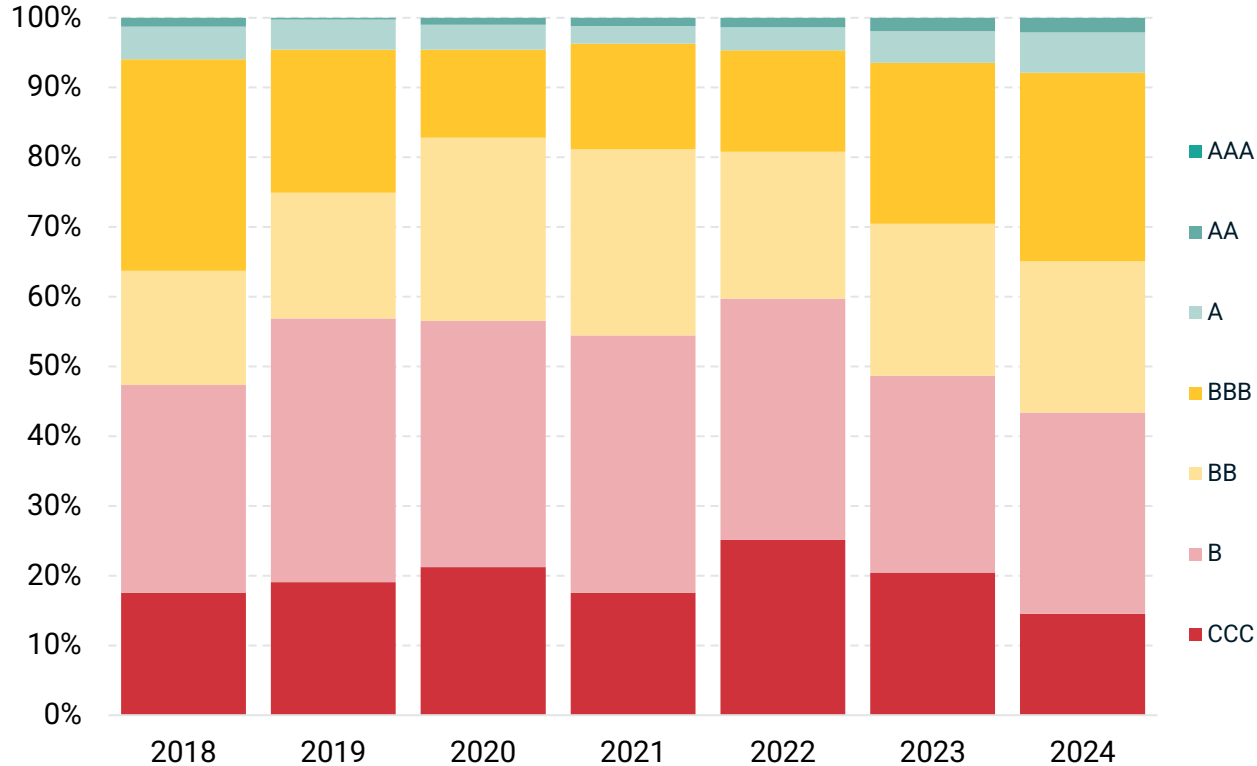
**308 Mt** Issued in 2024  
 ▼ 10% (-33 Mt) vs. 2023

**38 %** ≤ 2 years old  
 ▲ 16pp vs. 2023

# Annual surplus grows to over 1 bn tCO2e



# Annual retirements by MSCI Carbon Project Ratings



**8%**

of credits retired in 2024 were rated A or higher

▲ from <4% in 2021

**43%**














of credits retired in 2024 were rated B or CCC

▼ from 57% in 2021



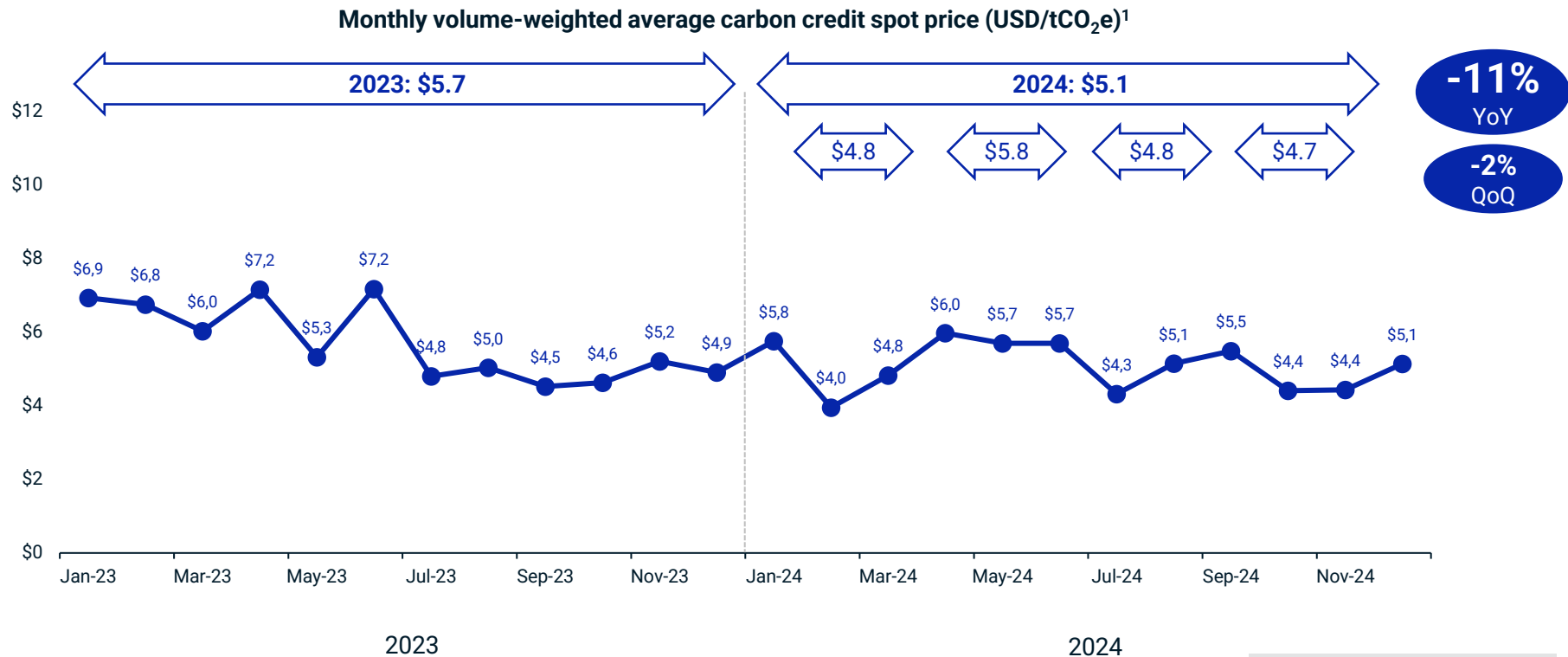
# Four sectors made three quarters of retirements

(Provisional data)

	Sector	Retired volume, 2024 share	Volume change from 2023	Average credit integrity, 2023	Change from 2023
	Fossil fuels	42%	↑ +4%	3.3	↑ +0.2
	Services	12%	↓ -24%	2.9	↑ +0.1
	Manufacturing	9%	↓ -45%	3.1	↑ +0.4
	Transportation	8%	↓ -30%	2.7	↓ -0.2
	Financial services	6%	↓ -17%	3.2	↑ +0.5
	Retail	5%	↓ -6%	3.5	↑ +0.5
	International bodies	4%	↑ +98%	3.1	---
	Biotech, health & pharma	4%	↓ -5%	3.1	↓ -0.1
	Power generation & utilities	3%	↓ -2%	2.9	↑ +0.1
	Materials	3%	↑ +5%	3.3	↑ +0.1
	Food, beverage & agriculture	3%	↓ -16%	3.1	↑ +0.1
	Infrastructure	2%	↓ -21%	2.9	---
	Real estate	1%	↓ -73%	2.9	↓ -0.2

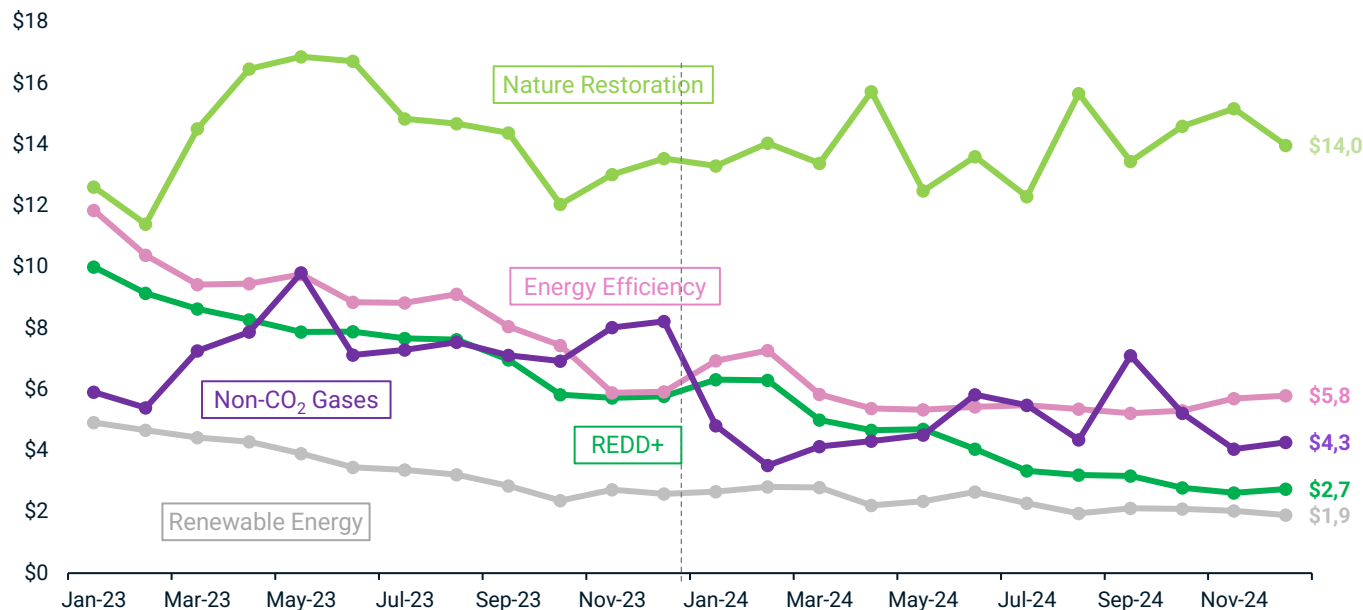
- Fossil Fuels highest retiring sector – Shell in particular
- Average integrity of credits retired by disclosed retirees increased to 3.09 in 2024 from 3.05 in 2023
- Average integrity of credits was 0.03 higher for disclosed retirees versus anonymous retirees.

# Credit prices 2024: slightly weaker than 2023 but still stable



# Project-level prices in 2024: weaker save Nature Restoration

Monthly unweighted average carbon credit spot price (USD/tCO<sub>2</sub>e)<sup>1</sup>



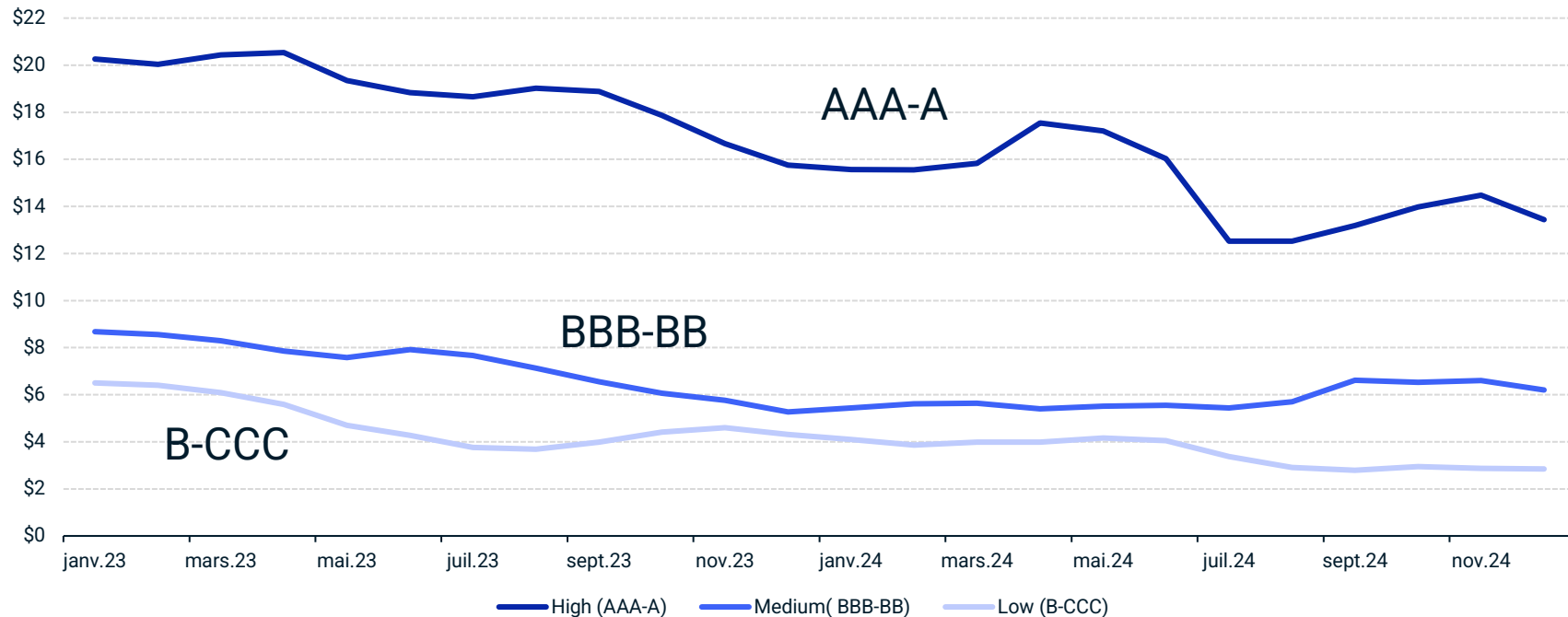
1Q24	2Q24	3Q24	4Q24	Q/Q
13.6	13.9	13.8	14.6	+6%

6.7	5.4	5.4	5.6	+5%
4.2	4.9	5.6	4.5	-20%
5.9	4.5	3.2	2.7	-16%
2.8	2.4	2.1	2.0	-5%

1. Includes both exchange and OTC trades and offers. Volume-weighted averages are weighted by reported volumes of offers and transactions with offers given a lower weighting based on various factors. Source: MSCI Carbon Markets.

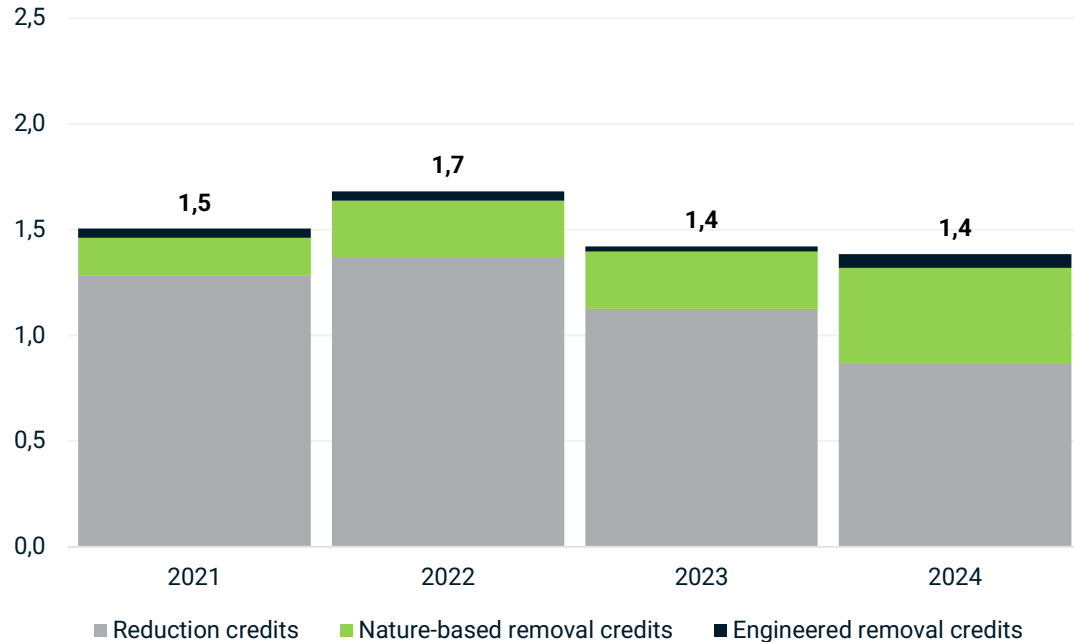
# Prices by credit ratings and quality spreads

MSCI Carbon Market credit ratings: monthly unweighted average price (USD/tCO<sub>2</sub>e)<sup>1</sup>



# Annual market size for global carbon credit market

Historical market size of credits retired (USD billion, 2024 prices)



▼ **20%**

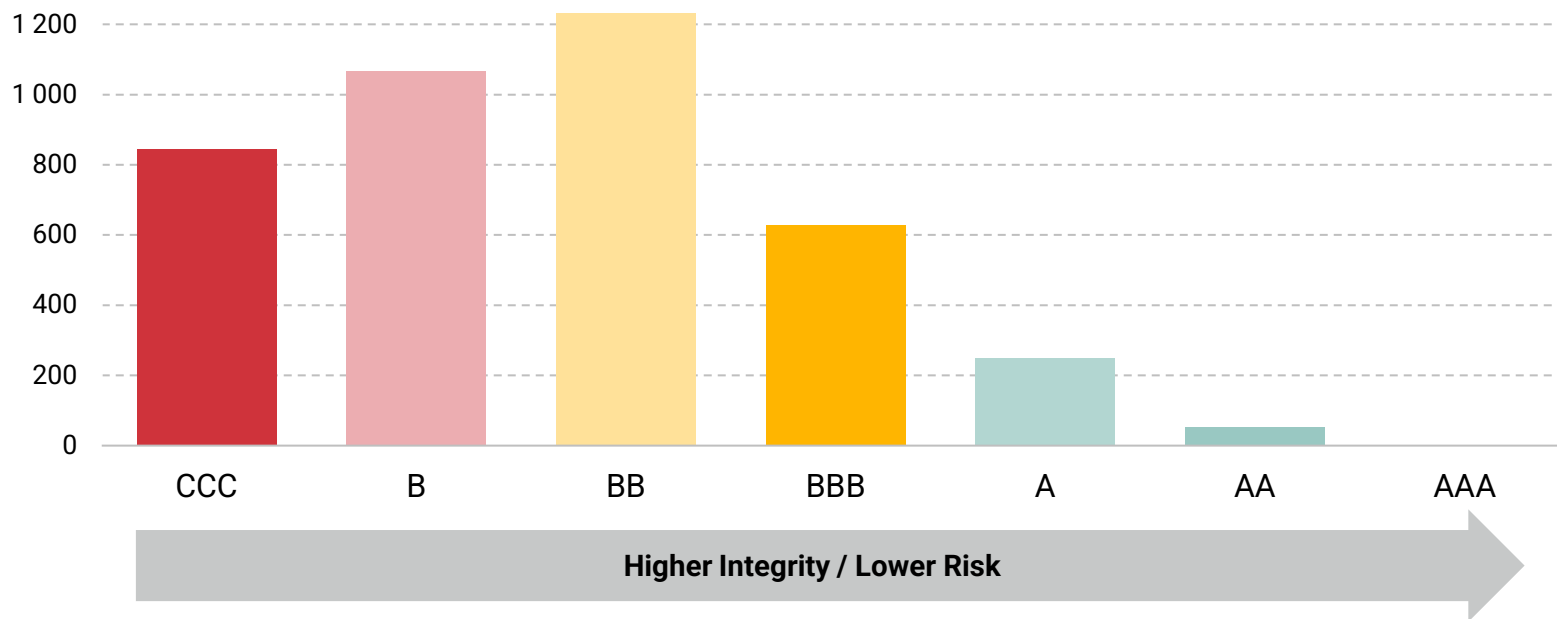
Fall in overall market size from peak valuation

▲ **75%**

Growth in removal credit market size 2023 - 2024

# Many low-integrity projects do remain in the market

Number of Registered Projects, by MSCI Carbon Project Rating

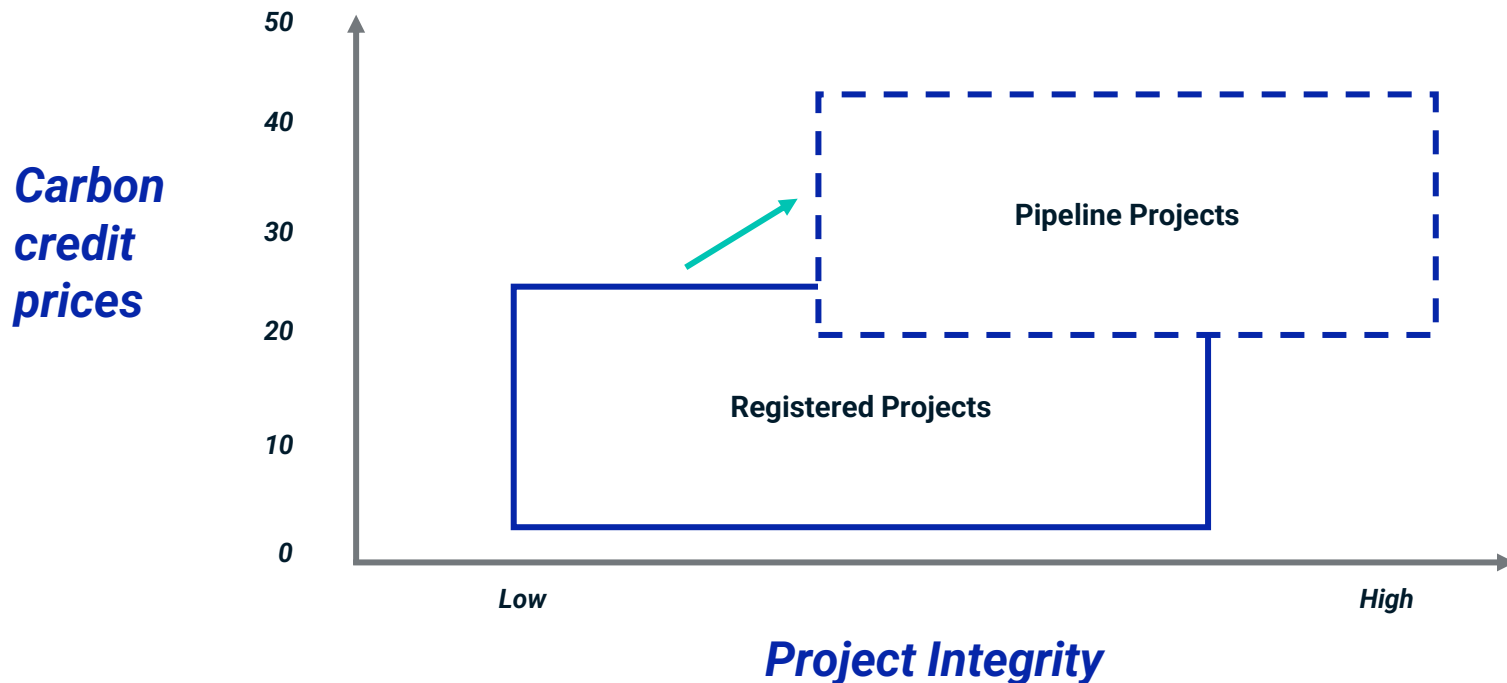


# Market demand shifting to higher integrity projects

Integrity rating	Percentage of retired credits by integrity rating		
	1Q-3Q 2022	1Q-3Q 2024	% change
<b>AAA</b>	0%	0%	-
<b>AA</b>	2%	3%	<b>+2%</b>
<b>A</b>	3%	7%	<b>+4%</b>
<b>BBB</b>	11%	25%	<b>+14%</b>
<b>BB</b>	19%	23%	<b>+4%</b>
<b>B</b>	34%	27%	<b>-7%</b>
<b>CCC</b>	31%	14%	<b>-17%</b>

# New projects with higher integrity, attracting higher prices

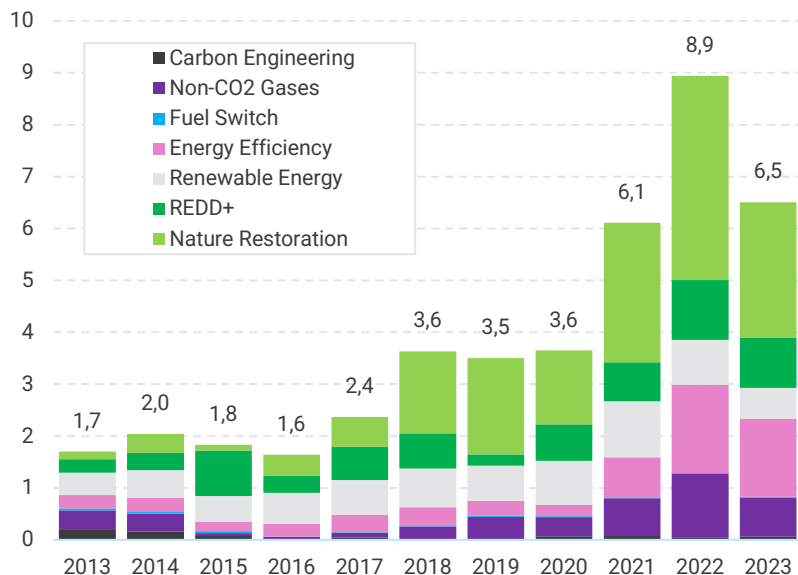
Illustrative



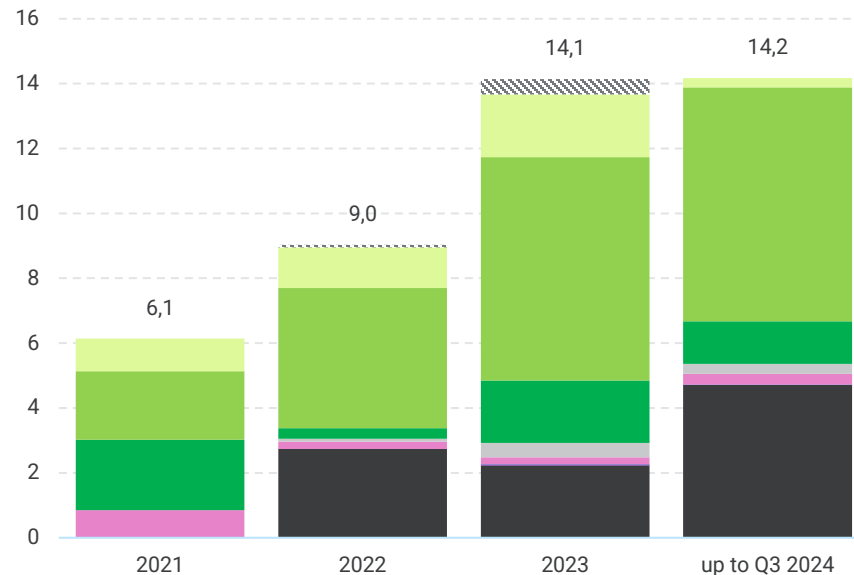


# Market Insight: Investment trends

Annual voluntary carbon credit project capital expenditure by project type (USD billion)



Capital raises and commitments for carbon projects by project type (USD billion)



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