Monash/C2Zero Real Carbon Price Index

Fact sheet | 29 December 2023

The Monash/C2Zero Real Carbon Price Index (RCPI) provides a weighted composite measure of the physical price of carbon¹ across all jurisdictions based on mandated carbon prices set by regulators and governments.

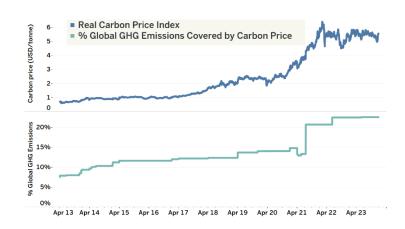
The RCPI covers national, subnational and regional jurisdictions implementing a carbon tax or carbon emissions trading schemes (ETS) ²and jurisdictions with no mandatory carbon price – the latter being counted in the index using a price of zero.

The RCPI enables an overall global carbon price and price history to be determined, reflecting the global value of carbon.

The RCPI started in April 2013, covering 20 jurisdictions, accounting for 7.88% of global GHG emissions. As of June 2023, it covered 58 jurisdictions, accounting for 22.59% of global GHG emissions.

Historical Index Value

(April 2013 - December 2023)



Highlights

- Despite experiencing considerable fluctuations throughout the year, global carbon price in 2023 concluded on a positive note with an annual increase of 5.27%.
- The China National ETS recorded a near two-month peak. This surge was largely attributed to the rush to meet the year-end compliance deadline, culminating in a notable 44% escalation in price by the end of 2023.
- Both the EU ETS and the Korean ETS witnessed substantial gains in December. However, despite this late surge, they closed the year at lower values compared to their starting positions.

Index Price Change

	F	Percentage Chang	e	Annualised Percentage Change					
	I Mo	3Mo	YTD	IYr	3Yr	5Yr	Since April 2013		
RCPI	8.06%	2.12%	5.27%	5.27%	23.95%	20.59%	20.83%		

Calendar Month Price Change

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YTD
2023	7.59%	1.02%	-2.04%	-2.77%	-5.69%	8.07%	1.25%	-1.42%	-2.11%	-1.31%	-4.24%	8.06%	5.27%
2022	8.17%	-5.68%	-5.47%	0.83%	1.67%	3.11%	-7.39%	-0.60%	-12.26%	9.22%	6.07%	-0.77%	-5.35%
2021	7.98%	5.89%	5.81%	-3.83%	12.40%	1.32%	13.96%	6.23%	1.86%	-3.49%	13.75%	6.54%	91.13%
2020	-3.79%	-0.88%	-13.53%	7.80%	2.81%	I 2.80%	-0.63%	5.96%	-4.31%	-5.50%	13.19%	7.93%	19.90%
2019	-6.01%	-0.65%	-1.28%	19.03%	-3.77%	5.68%	0.85%	-4.05%	-2.88%	4.42%	-0.07%	2.06%	11.68%
2018	8.86%	0.92%	12.05%	2.56%	3.34%	-0.35%	5.23%	8.28%	0.58%	-12.65%	11.57%	11.79%	62.34%
2017	5.37%	-0.19%	-5.59%	8.03%	3.46%	0.87%	3.96%	3.46%	3.22%	1.24%	3.63%	0.59%	31.15%
2016	-9.18%	-2.47%	6.59%	8.92%	-3.68%	-8.19%	0.51%	2.04%	4.06%	2.22%	-8.24%	8.34%	-1.37%
2015	2.32%	-0.69%	-3.01%	17.46%	-3.73%	0.59%	-0.62%	2.89%	0.09%	2.15%	-2.59%	0.53%	14.75%
2014	3.12%	12.59%	-14.57%	13.82%	-3.57%	6.40%	-0.73%	-2.04%	-6.51%	-0.14%	2.21%	-0.43%	7.03%
2013				-10.03%	5.22%	2.33%	3.26%	1.41%	5.69%	-1.13%	-0.72%	15.83%	16.01%3

 $^{^{\}rm I}$ It refers to carbon dioxide equivalents or CO2e.

² As of June 2023, 68 national, subnational and regional jurisdictions implemented a carbon tax or ETS. The RCPI covers 58 of those jurisdictions. The other 10 jurisdictions are excluded due to the lack of available data.

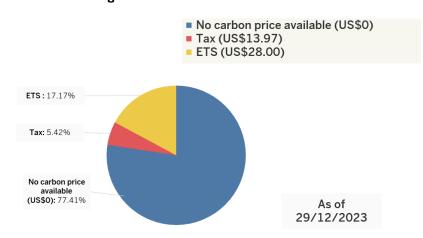
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The return is calculated as the annualised price change from April 2013 to December 2013.

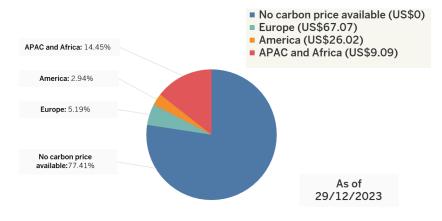
Top 10 Constituents

	Jurisdiction	Instrument	% Global GHG Emissions	Price (US\$/tonne) (29/12/2023)	Percentage change (1 Mo)
1	China National ETS	ETS	8.79%	11.19	13.29%
2	EU ETS	ETS	3.18%	85.28	10.80%
3	Japan carbon tax	Tax	1.82%	2.05	5.08%
4	Korea ETS	ETS	1.08%	6.99	6.17%
5	South Africa carbon tax	Tax	0.90%	7.84	2.68%
6	Mexico carbon tax	Tax	0.69%	4.36	2.43%
7	Germany ETS	ETS	0.68%	33.12	1.39%
8	California CaT	ETS	0.60%	39.92	1.99%
9	China-Guangdong pilot ETS	ETS	0.51%	9.64	5.31%
10	Ukraine carbon tax	Tax	0.39%	0.79	-4.67%

Instrument Weights



Region Weights



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