# Monash/C2Zero Real Carbon Price Index

#### Fact sheet | 29 September 2023

The Monash/C2Zero Real Carbon Price Index (RCPI) provides a weighted composite measure of the physical price of carbon<sup>1</sup> across all jurisdictions based on mandated carbon prices set by regulators and governments.

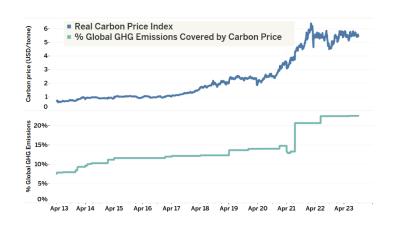
The RCPI covers national, subnational and regional jurisdictions implementing a carbon tax or carbon emissions trading schemes (ETS) <sup>2</sup>and jurisdictions with no mandatory carbon price – the latter being counted in the index using a price of zero.

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 - September 2023)



## Highlights

- Last month, global carbon prices experienced a 2.21% decrease, with the Chinese and Korean carbon markets showing significant gains that were offset by price drops in the EU.
- The China National ETS reached its highest level of USD 10.41 per tonne on September 27 since the market launched two years ago and the growing momentum may continue to the end of the compliance period.
- The Korean ETS yielded a strong gain in the last month, as the government proposed a set of new rules to ease market participation, change carryover rules, and revitalise the market.

#### **Index Price Change**

		Annualised Percentage Change					
	I Mo	3Mo	YTD	lYr	3Yr	5Yr	Since April 2013
RCPI	-2.21%	-2.39%	2.98%	18.39%	29.08%	22.14%	22.87%

#### 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%	-2.21%				5.30%
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

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

<sup>&</sup>lt;sup>2</sup> 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.

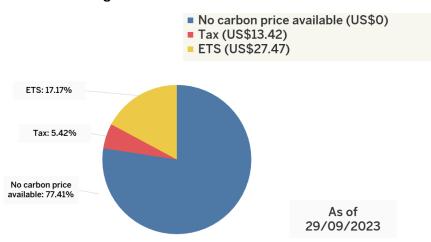
jurisdictions are excluded due to the lack of available data.

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

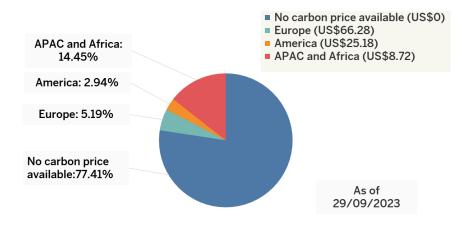
**Top 10 Constituents** 

	Jurisdiction	Instrument	% Global GHG Emissions	Price (US\$/tonne) (29/09/2023)	Percentage change (I Mo)
I	China National ETS	ETS	8.79%	10.36	9.33%
2	EU ETS	ETS	3.18%	85.47	-6.90%
3	Japan carbon tax	Tax	1.82%	1.93	-2.57%
4	Korea ETS	ETS	1.08%	9.57	63.35%
5	South Africa carbon tax	Tax	0.90%	7.61	-0.25%
5	Mexico carbon tax	Tax	0.69%	4.25	-2.21%
7	Germany ETS	ETS	0.68%	31.72	-2.50%
3	California CaT	ETS	0.60%	36.02	-0.50%
9	China-Guangdong pilot ETS	ETS	0.51%	9.33	-8.64%
10	Ukraine carbon tax	Tax	0.39%	0.81	0.00%

### **Instrument Weights**



## **Region Weights**



#### **Disclaimer**

This document is not intended as legal, financial or investment advice. Whilst every effort has been made to ensure the accuracy, completeness or reliability of the content of this document, the authors give no guarantee in that regard and accept no liability for any loss or damage occasioned by the use of this document or the information contained therein. The opinions are those of the authors and do not represent the views of Monash University. Monash University does not accept any responsibility for any loss or damage occasioned by the use of this document.

For further information, please visit https://www.realcarbonindex.org or contact us at mcfsinfo@monash.edu.