

**BEFORE THE WASHINGTON
UTILITIES AND TRANSPORTATION COMMISSION**

In the Matter of the Investigation to
Consider the Effect of Inflation on the
Cost of Greenhouse Gas Emissions

DOCKET U-190730

ORDER 04

ADOPTING AN ADJUSTED COST
OF GREENHOUSE GAS
EMISSIONS REFLECTING THE
EFFECT OF INFLATION

BACKGROUND

- 1 The Washington State Legislature enacted legislation in 2019 setting the cost of greenhouse gas emissions and tasked the Washington Utilities and Transportation Commission (Commission) with adjusting the cost to reflect the effects of inflation.^{1,2} On July 28, 2022, at its regularly scheduled open meeting, the Commission made the third inflation adjustment and subsequently published the adjusted cost of greenhouse gas emissions on the Commission’s website. The adjustment updated the cost of greenhouse gas emissions from 2007 dollars to current dollars per metric ton using the gross domestic product (GDP) price index published by the Bureau of Economic Analysis of the United States Department of Commerce (BEA).

- 2 Commission staff (Staff) recommends that the Commission continue to use the BEA’s GDP price index to adjust the cost of greenhouse gas emissions for inflation. Using the BEA’s GDP price index is reasonable because it reflects a broad measure of prices in the economy. This is especially relevant for social cost of carbon considerations because the cost of greenhouse gas emissions implicates the entire economy rather than, for example, a particular subset of costs such as the costs of consumer products.

¹ The “cost of greenhouse gas emissions” is the term used in the Washington statutory provisions at issue here, RCW 80.28.405 (electricity) and RCW 80.28.395 (natural gas). The U.S. government technical support document referenced in these state law provisions uses the term “social cost of carbon.” While these terms are not synonymous, they are used interchangeably in this order for the purpose of adjusting the inflation rate.

² The social cost of carbon codified in RCW 80.28.405 and RCW 80.28.395 is calculated from the value of 2007 dollars, and each provision requires the Commission to “adjust the costs established in this section to reflect the effect of inflation.”

3 Staff recommends using the GDP price index from the BEA as the inflation factor to update the cost of greenhouse gas emissions from 2007 dollars to current costs as shown in Table 1, below.

Table 1: Adjusted Cost of Greenhouse Gas Emissions

Year	Social Cost of CO2 (using 2.5% discount rate in 2007 dollars)	*GDP Index (2007 dollars/metric ton)	*GDP Index (2022 dollars/metric ton)	Inflation Adjusted Social Cost of CO2 (using 2.5% discount rate in 2022 dollars)
2010	\$50	92.498	127.23	\$69
2015	\$56	92.498	127.23	\$77
2020	\$62	92.498	127.23	\$85
2025	\$68	92.498	127.23	\$94
2030	\$73	92.498	127.23	\$100
2035	\$78	92.498	127.23	\$107
2040	\$84	92.498	127.23	\$116
2045	\$89	92.498	127.23	\$122
2050	\$95	92.498	127.23	\$131

**Social cost of carbon dioxide in 2007 dollars using the 2.5 percent discount rate, listed in table 2, technical support document: Technical update of the social cost of carbon for regulatory impact analysis under Executive Order No. 12866, published by the interagency working group on social cost of greenhouse gases of the United States government, August 2016.*

***U.S. Department of Commerce Bureau of Economic Analysis Gross Domestic Product Table 1.1.4 Annual Price Indexes (Line 1), last revised May 25, 2023.*

4 Staff recommends publishing the updated cost of greenhouse gas emissions table, Table 1, on the Commission’s website. Staff also recommends that the Commission review the cost of greenhouse gas emissions for inflation annually and make any necessary adjustments, relying on the latest publication of the BEA’s GDP price index available in May of each year.

5 Staff’s recommendations are consistent with its past recommendations to the Commission regarding the initial four inflation adjustments, adopted by the Commission on September 12, 2019; July 30, 2020; July 29, 2021, and July 28, 2022. The comparison between the

current cost of greenhouse gas emissions and the updated cost of greenhouse gas emissions is provided in Table 2.

Table 2: Comparison between the current cost and the updated cost

Year	Adjusted Social Cost of Carbon Dioxide ³ (in 2021 dollars per metric ton)	Adjusted Social Cost of CO2 (in 2022 dollars per metric ton)
2010	\$64	\$69
2015	\$72	\$77
2020	\$79	\$85
2025	\$87	\$94
2030	\$94	\$100
2035	\$100	\$107
2040	\$108	\$116
2045	\$114	\$122
2050	\$122	\$131

DISCUSSION

6 We agree with Staff’s recommendations. Pursuant to RCW 80.28.395 and RCW 80.28.405, the Commission is required to adjust the cost of greenhouse gas emissions resulting from the use of natural gas and from the generation of electricity to reflect the effect of inflation. Greenhouse gas emissions impact costs throughout the economy, and the broad measure of the BEA’s GDP price index thus appropriately reflects inflation of the cost of greenhouse gas emissions.

7 We additionally confirm that the annual adjustment period represents a reasonable period of review. Annually adjusting the cost of greenhouse gas emissions will assist regulated energy utilities with the increased planning required by 2019 energy legislation.

³ Commission’s webpage on adjusted values from 2007 dollars to 2022 dollars
<https://www.utc.wa.gov/regulatedIndustries/utilities/Pages/SocialCostofCarbon.aspx>.

FINDINGS AND CONCLUSIONS

- 8 (1) The Commission is an agency of the State of Washington vested by statute with the authority to regulate rates, rules, regulations, practices, and accounts of public service companies, and to exercise all the powers and perform all the duties prescribed by Title 80 RCW.
- 9 (2) The Commission is required, pursuant to RCW 80.28.395 and RCW 80.28.405, to adjust the cost of greenhouse gas emissions resulting from the use of natural gas and from the generation of electricity to reflect the effect of inflation.
- 10 (3) This matter was brought before the Commission at its regularly scheduled meeting on July 27, 2023. The Commission received no written or oral comments from any person or party.
- 11 (4) The use of the GDP price index from the BEA published in May 2023, as an inflation factor reasonably reflects the effect of inflation on the cost of greenhouse gas emissions.
- 12 (5) Annual adjustment of the cost of greenhouse gas emissions to reflect the effect of inflation is a reasonable period that is consistent with RCW 80.28.395 and RCW 80.28.405.

ORDER

THE COMMISSION ORDERS:

- 13 (1) The cost of greenhouse gas emissions shall be adjusted from 2007 dollars to 2022 dollars per metric ton to reflect inflation using the GDP price index published by the Bureau of Economic Analysis of the United States Department of Commerce.
- 14 (2) The adjusted cost of greenhouse gas emissions shall be posted to the Commission's website.

15 The Commissioners, having determined this Order to be consistent with the public interest, directed the Secretary to enter this Order.

DATED at Lacey, Washington, and effective July 27, 2023.

WASHINGTON UTILITIES AND TRANSPORTATION COMMISSION

AMANDA MAXWELL
Executive Director and Secretary