Climate and Energy Finance and Policy Committee
Chair Rep. Jamie Long

Dear Chair Long and Committee Members,

CURE appreciates this opportunity to submit written testimony concerning house bill 2083. As proposed, HF 2083 would establish a fuel-neutral clean fuels standard that aims to reduce the aggregate carbon intensity of transportation fuels supplied to Minnesota at least 20% below the 2018 baseline by 2025. However, CURE is concerned that as currently written, HF 2083 could incentivize implementation of carbon capture, utilization, and sequestration (CCUS) technology in Minnesota. Although CCUS has been touted as an essential tool for achieving our carbon emissions reduction goals, it has not been able to deliver on its promises at a large scale. For this reason, CURE supports the amendments introduced today by Representative Lippert. By including all elements of CCUS technology in a carbon intensity score, these amendments would ensure that Minnesotans are reaping the intended climate benefits of HF 2083.

In simple terms, CCUS technology purports to "capture" carbon dioxide (CO_2) emissions from industrial facilities or directly from the atmosphere, and then either use the CO_2 or store it underground.[1] Despite being heralded as an essential tool for combating climate change, CCUS technology is an expensive endeavor that will not help Minnesota achieve its carbon emissions reduction goals.

CCUS technology, even if deployed at the scale its proponents urge, is estimated to be able to remove only 210 to 250 million metric tons of CO_2 emissions by 2035—about 4% of the nation's 2020 CO_2 emissions.[2] But this total assumes that the CCUS technology would capture all of the intended CO_2 and that using the technology would not itself increase emissions due to greater energy demands. Yet recent attempts to scale up CCUS have shown that perfect capture rates may

[1] June Sekera & Andreas Lichtenberger, *Assessing Carbon Capture: Public Policy, Science, and Societal Need*, Biophysical Economics and Sustainability 5:14, 4-5 (2020), https://link.springer.com/article/10.1007/s41247-020-00080-5; *see also* Carbon Capture and Sequestration (CCS) in the U.S., Congressional Research Service, 2-7 (2021), https://sgp.fas.org/crs/misc/R44902.pdf.
[2] Nicholas Kusnetz, Inside Climate News, *Carbon Capture Takes Center Stage, But is its Promise an Illusion?*, https://insideclimatenews.org/news/09032022/carbon-capture-and-storage-fossil-fuels-climate-change/?utm_source=Energy+News+Network+daily+email+digests&utm_campaign=c263657d62-EMAIL_CAMPAIGN_2020_05_11_11_36_COPY_01&utm_medium=email&utm_term=0_724b1f01f5-c263657d62-89227619 (March 9, 2022).

not be realistic.[3] CCUS technology is also known to increase a power plant's energy usage.[4] Furthermore, those in the CCUS industry acknowledge that the large-scale deployment of the technology would not be feasible without significant financial assistance from the federal 45Q tax credit.[5]

This begs the question: who would benefit from the widespread implementation of CCUS technology in Minnesota? If CCUS technology is heavily reliant on federal tax credits, but cannot deliver on its carbon emissions reductions promises, what will Minnesotans get out of the deal?

CURE agrees with the basic premise behind HF 2083: Minnesotans need a clean fuel standard that will allow our state to be a leader in the transition to a cleaner transportation sector. But CURE also believes that a Minnesota clean fuels standard should not incentivize the widespread implementation of CCUS technology. As such, it is imperative that any clean fuel standard Minnesota adopts considers the carbon intensity of each element of CCUS technology, including generation, distillation, and compression. Without these amendments, HF 2083 will not provide Minnesotans with the climate benefits as promised.

Sincerely,

/s/ Sarah Mooradian
Sarah Mooradian
Government Relations and Policy Director
Clean Up the River Environment (CURE)
117 S. 1st St.
Montevideo, MN 56265
(320) 269-2984
info@cureriver.org

[3] Institute for Energy Economic and Financial Analysis, *Petra Nova Mothballing Post-Mortem: Closure of Texas Carbon Capture Plant is a Warning Sign*, 2-3, https://ieefa.org/wp-content/uploads/2020/08/Petra-Nova-Mothballing-Post-Mortem_August-2020.pdf (2020); David Schlissel, Institute for Energy Economics and Financial Analysis, *Boundary Dam 3 Coal Plant Achieves Goal of Capturing 4 Million Metric Tons of CO_2 But Reaches the Goal Two Years Late*, 1, http://ieefa.org/wp-content/uploads/2021/04/Boundary-Dam-3-Coal-Plant-Achieves-CO2-Capture-Goal-Two-Years-Late_April-2021.pdf (2021).

[4] Carbon Capture and Sequestration (CCS) in the U.S., Congressional Research Service, 2-7 (2021), https://sgp.fas.org/crs/misc/R44902.pdf.

[5] Carbon Capture Coalition, *Federal Policy Blueprint*, 6, https://carboncapturecoalition.org/wp-content/uploads/2019/06/BluePrint-Compressed-Updated.pdf (2019).