Union of Concerned Scientists

Jeremy Martin, Director of Fuels Policy
jmartin@ucsusa.org
240 753 0852

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Mr. Chair and Members,

Thank you for the opportunity to share written testimony in support of Senator Dibble's Clean Transportation Standard legislation (HF2584 - A10 amendment).

The Clean Transportation Standard (CTS) is a proven tool that California, Oregon, and Washington have been using to speed the path to electrification while supporting innovation in biofuels and other emerging technologies. Senator Dibble's Clean Transportation Standard builds on policies implemented in other states to develop a unique approach for Minnesota that adds key provisions and safeguards that support crops and farming practices that build soil health and protect water quality.

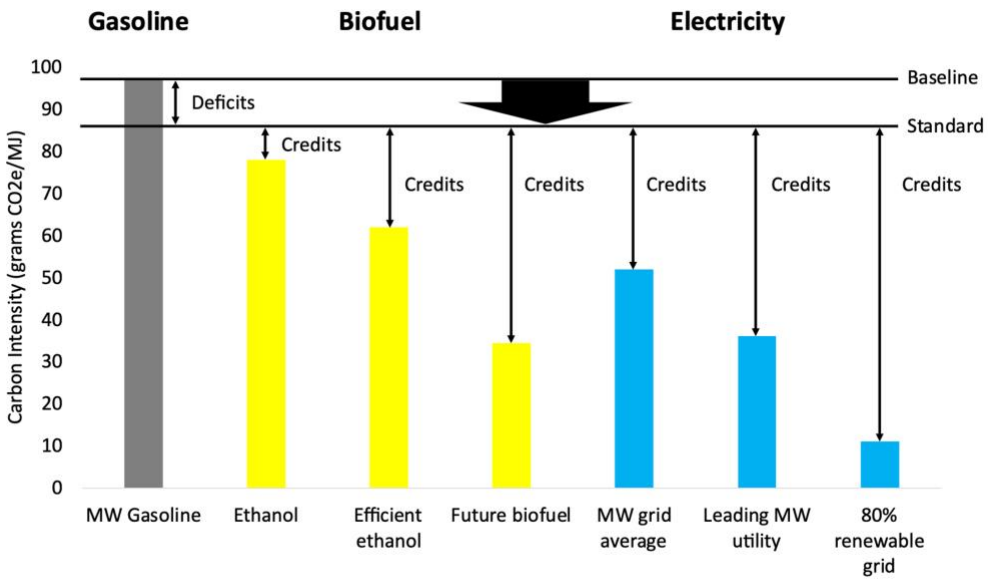
A Minnesota CTS will leverage federal support for sustainable aviation fuel, climate smart farming, and clean hydrogen to best meet Minnesota's unique needs. The CTS complements other state and federal policies for vehicle manufacturers, fuel and electricity producers and farmers that ensures that all of these industries are pulling in the same direction to decarbonize transportation across all vehicle and fuel types.

A Minnesota CTS will put Minnesota in a leadership role in the national conversation on fuel policies. Federal biofuels policies and fuel policies in biofuel importing states have significant impacts in Minnesota, given its role as one of a leading US producer of biofuels. A strong CTS that reflects Minnesota priorities and concerns will set important precedents to improve federal fuel policies.

**How does a Clean Transportation Standard work?**

The CTS sets a standard for the average carbon intensity of all transportation fuels, which goes down every year. All fuels used are assigned a carbon intensity (CI) based on the fuel's full lifecycle pollution, including tailpipe emissions and pollution associated with the full supply chain. For petroleum fuels the lifecycle includes extraction, refining, distribution, and use. For biofuels the lifecycle includes farming and fuel production and for electricity it includes electrical generation.

Fuels that are more polluting than the standard generate deficits, while fuels that are cleaner generate credits. A fuel seller can comply with the standard by blending low carbon fuels into the fuels they sell, purchasing credits generated by producers of clean fuels, or reducing emissions in their own supply chain.




By tying the value of a fuel to its lifecycle pollution, everyone in the fuel supply chain has an incentive to reduce their emissions to the maximum extent possible. This means that farmers can generate value by implementing climate smart agricultural practices. It means that a charging station operator has an incentive to use renewable energy to charge EVs. And it supports the use of green hydrogen instead of fossil hydrogen in the production of fertilizer or sustainable aviation fuel.

**How does a Clean Transportation Standard (CTS) accelerate transportation electrification?**

- Credits from residential EV charging supports charging infrastructure to increase access to EVs, electric school buses, or other programs targeting the needs of disadvantaged communities. This report from Portland General Electric shows how they used their credit value.

- CTS credits help charging station operators build more charging stations and offer lower rates.

- CTS credits dramatically improve the cost effectiveness of medium and heavy duty EVs, reducing freight pollution that disproportionately harms communities living close to highways and industrial centers with high truck trafffic.

**How does a CTS benefit biofuels?**

- A CTS has a fundamentally different approach to biofuels than most earlier biofuel policies. Instead of supporting increased volumes of biofuels use, the CTS supports emissions reductions from biofuels and all other fuels. This support makes it cost effective for biofuel producers to invest in strategies to reduce their emissions.

- The CTS will drive down the use of gasoline, and with declining gasoline use, ethanol use will also decline. The CTS helps the biofuels industry transition from blending ethanol into gasoline to producing ultra-low carbon intensity jet fuel with the most sustainable crops, farming practices and innovative biofuel production technologies.

**How does a CTS benefit farmers?**

- The carbon intensity of biofuels starts on the farm. Farmers who produce the lowest CI feedstocks using climate smart farming practices will earn a premium under a CTS policy.

- SF 2584 offers incentives for crops and practices that improve water quality and soil health, such as winter hardy oilseed and cover crops.

**Support for the fuels of the future**

- Because the CTS is comprehensive and technology neutral, it can adapt as the transportation system changes and new technologies are available.

- Federal support for a Minnesota hydrogen hub may foster innovative strategies to reduce fuel supply chain emissions. A CTS will encourage the adoption of novel technologies from green hydrogen-based nitrogen fertilizer, to the capture and reuse of carbon to make advanced synthetic jet fuel. While we can't accurately predict the future, under a CTS each new technology will be eligible to generate credits based on a scientific assessment of its full lifecycle carbon intensity.

For these reasons, I urge you to support HF 2584 as amended.

Thank you.

Jeremy Martin
Director of Fuels Policy, Senior Scientist
Clean Transportation Program
Union of Concerned Scientists

**Additional Resources**

- Report: Fueling a Clean Transportation Future
- Factsheet: Clean Fuel Standards
- Factsheet: Clean Fuels for the Midwest
- Presentation to Minnesota Governors Council on Biofuels
- National Academies Report: Current Methods for Life Cycle Analyses of Low-Carbon Transportation Fuels in the United States