

Secretary Janet Yellen  
1500 Pennsylvania Avenue NW  
Washington, DC 20220

February 26, 2024

Dear Secretary Yellen and 45V guidance team,

We are submitting this comment on the proposed 45V guidance on behalf of the Minnesota Sustainable Aviation Fuel (SAF) Hub. The MN SAF Hub is actively building an industrial-scale value chain across multiple SAF technology pathways in Minnesota, in alignment with the Department of Energy's SAF Grand Challenge. Minnesota and our broader region have a pivotal role to play in reducing global carbon emissions from aviation and meeting the nation's climate goals.

Through the GREATER MSP Partnership, Delta Air Lines, Ecolab, and Xcel Energy have established the [Minnesota SAF Hub](#) – the first large-scale SAF Hub in the U.S. with unparalleled collaboration among key players across the value chain, all committed to scaling SAF production to replace conventional jet fuel. These anchor members are joined by other leading institutions, including the State of Minnesota and the Metropolitan Airports Commission, to implement an ambitious shared strategy for aggressively decarbonizing aviation. This multi-year strategy aims to create an integrated value chain capable of producing affordable, low-carbon SAF at scale. Key enablers of this strategy are:

- Environmental and water stewardship
- Innovative solutions and technological breakthroughs
- University and private-sector research and collaboration

The Hub's commitment to low-carbon SAF has led us to pursue multiple production pathways, including alcohol-to-jet (AtJ), HEFA, and power-to-liquids (PtL). The PtL pathway relies on combining green hydrogen with CO<sub>2</sub> to create a synthetic gas, which is then further refined into hydrocarbons that are chemically indistinguishable from those in conventional jet fuel. The environmental and carbon benefits of the PtL pathway depend on how the hydrogen and carbon are obtained, with hydrogen obtained through electrolysis powered by carbon-free renewables being the gold standard. A PtL pathway powered by clean hydrogen will harness Minnesota's assets such as water and established clean electricity generation (e.g., wind, solar, nuclear, etc.), as well as leverage Minnesota's participation in the DOE-selected Heartland Hydrogen Hub (HH2H). Our collective assessment has led us to the determination that to achieve our goals around volume and carbon reductions, SAF produced using clean hydrogen via the PtL pathway is a critical component of our overarching strategy.

The draft guidance, with its strict requirements for incrementality and hourly temporal matching, among other provisions, will delay investment and therefore deployment of the clean hydrogen. It will also make uncertain the development of the PtL SAF pathway, leading to prohibitive production costs that will delay the PtL SAF pathway from becoming commercially viable and at scale in the United States within the time frame needed to achieve the aviation industry's decarbonization goals.

As described in greater detail in the Xcel Energy comment letter and HH2H comments, we encourage Treasury to refine the guidance to ensure that the environmental safeguards desired by the draft guidance are preserved, without delaying hydrogen development. This balance might be achieved by:

- **Modifying the proposed incrementality provisions** so that the use of ten percent of electricity from existing clean electricity generators qualify for the hydrogen credit, including a process to consider a higher percentage qualifier based on a region's grid characteristics.
- **Delaying the transition to hourly matching** of clean energy generation and hydrogen production until 2032.
- Clarifying that there must be a **close interconnected relationship** between the clean energy generator and the hydrogen production facility.

Our first recommendation is critical to ensuring the start of clean hydrogen production is not delayed, but the grid in the part of our region served by Hub anchor Xcel Energy already has some of the most aggressive clean energy goals in the nation, and will continue to lower its emissions intensity through the company's state regulator approved clean energy resource plans. By 2031, the company is projected to deliver electricity at a lower carbon intensity than the European Union requires to be excluded from all incrementality requirements. This grid decarbonization is a key advantage our region has in producing low-carbon SAF, and should be a consideration of the Treasury as an allowable exemption from the incrementality requirement.

In summary, the 45V guidance should not limit the path to a carbon-free future including the tremendous potential for SAF to reduce emissions in the aviation sector.

We invite a dialog with Treasury to shape guidance that ensures rigorous environmental protections *and* robust incentives to accelerate the supply of clean hydrogen. To discuss, please contact me, or Julia Silvis, GREATER MSP's Managing Director of Research and Intelligence at [Julia.silvis@greatermsp.org](mailto:Julia.silvis@greatermsp.org); (651) 287-1369.

Sincerely,



Peter Frosch, CEO, GREATER MSP

### About GREATER MSP

GREATER MSP is the regional economic development partnership for the 15-county Minneapolis-Saint Paul region. Our mission is to grow the region's economy, increase its global competitiveness and ensure economic opportunity reaches every community across our region. Our partnership is comprised of 350 organizations including Fortune 500 companies, universities, cities, counties, fast-growth start-ups, private foundations, and others.