

PROPOSED DRAFT RESOLUTION – Council Member Beale

A RESOLUTION relating to the Puget Sound Clean Air Agency's proposed regional Clean Fuel Standard rule.

WHEREAS, the City of Tacoma's vision of sustainability seeks to achieve an exceptional quality of life for every generation and leave a legacy of stewardship; achieve lasting and equitable prosperity; build a safe, healthy, attractive, and vibrant community; and minimize negative impacts in order to conserve the natural resources that sustain it, and

WHEREAS, the City of Tacoma's 2008 Climate Action Plan sets an aggressive greenhouse gas emissions reduction goal of 80% from 1990 levels by 2050; and the current Environmental Action Plan supports these goals with targets to register 2,000 electric vehicles and decrease City and Tacoma Public Utilities transportation-based fossil fuel use by 15% of 2014 levels by 2020; and

WHEREAS, in 2016, transportation accounted for 71% of greenhouse gas emissions in Tacoma, and

WHEREAS, diesel exhaust from fossil fuel combustion is linked to heart and lung disease, cancer, and premature death, and

WHEREAS, from 2009 to 2015, the Environmental Protection Agency formally designated part of Tacoma and most of Pierce County – as "non-attainment," meaning that the air quality did not meet federal health standards because of fine particle pollution, including diesel exhaust, and

WHEREAS poor air quality affects everyone; however, children, the elderly, pregnant women, those with respiratory or cardiovascular health problems, those situated within 500 feet of a freeway, and those without the resources to protect themselves are most at risk, and

WHEREAS, the proposed regional Clean Fuel Standard "Scenario D" projects 20% to 26% reductions in transportation fuel carbon intensity by 2030; and, a resulting reduction in fine particle pollution (PM_{2.5}) emissions is estimated to result in health benefits, presently valued at up to \$45.7 million by 2030, especially for low-income communities and communities of color, which studies show are often located near major roadways such as the Interstate-5 corridor, and

WHEREAS, a Clean Fuel Standard is consistent with the region's economic growth, and any changes to economic productivity and employment are estimated to be minimal, and

WHEREAS, Tacoma is blessed with low-cost, low-carbon electricity resources; and the City and Tacoma Public Utilities and their partners who provide clean fuels and infrastructure can earn credit sales, and

WHEREAS, the Washington State legislature has been unable to address a proposed statewide Clean Fuel Standard rule in recent years, and

WHEREAS, if adopted, a regional Clean Fuel Standard will reduce greenhouse gas emissions from transportation fuels using a flexible market-based approach that spurs technological innovation, and has the ability to improve air quality, protect public health, transform and diversify the transportation fuel

pool, decrease dependency on petroleum over the long-term, and increase predictability and consistency in the fuel market in Tacoma and the wider Puget Sound region;

THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF TACOMA that the Council affirm its support for the most robust proposal, "Scenario D", for the regional Clean Fuel Standard rule with a yea vote when it comes to the Puget Sound Clean Air Agency Board of Directors next year.

DRAFT



Analysis Finds A Clean Fuel Standard Can Significantly Reduce Pollution

Transportation is the primary source of greenhouse gas (GHG) pollution in the Puget Sound region – more than 40 percent. The Puget Sound Clean Air Agency is considering a potential Clean Fuel Standard (CFS) for the four-county Puget Sound region – King, Kitsap, Pierce, and Snohomish counties. A previous report showed that, of all the policies the Agency could consider, a CFS had the greatest potential to decrease transportation-related GHG pollution and make progress towards meeting our regional climate goal.

The Agency contracted with ICF to assess the availability of clean transportation fuels and to conduct an analysis of the economic, air quality, and health impacts of a regional Clean Fuel Standard.

The **key findings** from the analysis include:

- A Clean Fuel Standard can significantly reduce the Puget Sound region's GHG pollution – up to a 26% reduction in carbon intensity of transportation fuels by 2030.
- A Clean Fuel Standard will improve air quality and public health, especially in communities near major roadways.
- A Clean Fuel Standard is consistent with the region's economic growth. Any changes to economic productivity and employment are estimated to be very small (plus or minus one tenth of one percent).

Analysis Results

A Clean Fuel Standard can significantly reduce the Puget Sound region's GHG pollution from transportation fuels. The analysis shows that the region can transition to cleaner transportation fuels and reduce their carbon intensity up to 26% by 2030.

The standard will achieve reductions by accelerating the transition to clean fuels through the deployment of electric vehicles, liquid biofuel blending (such as ethanol, biodiesel, and renewable diesel), and renewable natural gas. Renewable jet fuel blending and refinery efficiency improvements will further reduce GHG pollution.

The analysis shows there are enough clean fuels to achieve a regional CFS with existing and anticipated fuel facilities. The region can also take advantage of Washington's abundant low-carbon electricity to help meet a CFS.

What is a Clean Fuel Standard?

A Clean Fuel Standard makes our transportation system cleaner by requiring a gradual transition from conventional fuels (such as gasoline and diesel) to cleaner transportation fuels (such as electricity and biofuels).

The standard sets an annual target carbon intensity reduction. Fuels over the target generate deficits, while fuels below the target generate credits. Credits are then traded on the open market. The standard gives fuel producers flexibility – the market decides which fuels best achieve results.

A Clean Fuel Standard will improve air quality and public health. The standard will reduce harmful fine particle pollution (PM_{2.5}), especially in communities near major roadways (for example, along the I-5 corridor). Previous studies show these communities are often low-income or communities of color. PM_{2.5} pollution is linked with health impacts such as heart attacks, stroke, asthma attacks, and premature death. This analysis did not evaluate the likely additional benefits of reducing other types of transportation pollution (such as air toxics) as a result of a CFS.

The Puget Sound region's economy will continue to grow as expected with a Clean Fuel Standard. All scenarios (see below) showed a very small difference (plus or minus one tenth of one percent) in both regional economic output and employment, on top of the economic growth expected between now and 2030. The analysis demonstrates that the region's savings from switching to clean fuels, particularly electricity, would offset increased costs of investments to achieve pollution reductions.

Analysis Methodology – Scenarios

ICF conducted an inventory of available fuels (both current and forecasted) that could support a regional Clean Fuel Standard. They then developed four scenarios of how the Puget Sound region might achieve a Clean Fuel Standard with emphasis on different fuels, and modeled how the scenarios would affect the region's air pollution and public health, as well as the region's economy. Ranging from minimal to more significant changes, the scenarios included:

Scenario	Carbon intensity reduction target (below 2020 levels by 2030)	Primary changes to transportation fuel mix
A	10%	Increased biofuel blending
B	10%	Rapid vehicle electrification
C	16%	Increased biofuel blending & rapid vehicle electrification
D	20%, 26%	"All-in" scenario: increased biofuels, rapid vehicle electrification, & refinery improvements

Analysis Methodology – Models Used and Assumptions

ICF used the Regional Economic Models Inc. (REMI) E3+ Model to estimate macroeconomic impacts of a Clean Fuel Standard. REMI has been widely used for analyses on similar clean fuel policies in California and Oregon, as well as research by a broad range of organizations, such as the National Federation of Independent Businesses.

ICF also used EPA's C-Line model to estimate changes in PM_{2.5} pollution, EPA's Environmental Benefits Mapping and Analysis Program (BenMAP) to estimate health benefits, and Argonne National Laboratory's GREET model to calculate the carbon intensity of transportation fuels.

ICF developed assumptions for model inputs, including assumptions about how fuel suppliers will comply, future prices of vehicles, and future energy prices. ICF used conservative assumptions so as not to overestimate the benefits of the proposed policy. As a result, the benefits of the policy could be greater than modeled in the analysis.

More Information

CleanFuels@psc Clean Air

www.psc Clean Air / CleanFuelStandard

What is carbon intensity?

Carbon intensity is the total amount of carbon dioxide (or equivalent) generated from a type of fuel. It includes the complete lifecycle of the fuel pathway (often called "wells to wheels") from production to transportation to consumption.

Carbon intensity is used to measure and compare different fuels' impact on climate change, and set targets for reductions.