

HB 1091, to impose a costly and ineffective Low Carbon Fuel Standard (LCFS) on the people of Washington state

By Todd Myers, Director, Center for the Environment

March 2021

Key Findings

- 1. By focusing on a narrow subset of Washington's CO2 emissions, the low-carbon fuel standard (LCFS) is certain to be more expensive than alternatives.
- 2. The claim that the LCFS would not increase prices and that costs haven't been higher than expected is contradicted by the data and the statements of LCFS supporters themselves.
- 3. The experience of California and Oregon show the LCFS mandate is extremely expensive, with 93% of the cost doing nothing to reduce greenhouse gas emissions.
- 4. LCFS costs have been much higher than projected and biofuel companies and the Energy Information Administration agree that costs will continue to climb.
- 5. The LCFS mandate proposed in the legislature does more harm than good, spending five dollars for every one dollar of climate and environmental benefit it claims to create.
- 6. Research for the WA Department of Ecology and the Puget Sound Clean Air Agency found that the LCFS mandate would reduce particulate matter air pollution by less than one percent by 2028.
- 7. Most of those air quality improvements are likely to go to people living in wealthy communities.
- 8. The LCFS mandate is unlikely to help create a biofuel industry in Washington state and the legislation specifically would make building biofuel production more difficult.

- 9. The barriers to increasing biofuel production mean compliance with the LCFS rules would be met primarily with fuel imported from out of state.
- 10. The more concerned legislators are about climate change, the less they should support a costly and ineffective approach like the LCFS.

Introduction

Some state legislators are again proposing a low-carbon fuel standard (LCFS) rule which aims to reduce the aggregate carbon-intensity of transportation fuels.¹ They justify it as necessary to meet Washington state's CO2emission targets outlined in state law (RCW 70A.45.020).

This year's proposal, HB 1091, explains its focus on transportation emissions by noting, "As of 2017, the transportation sector contributes 45 percent of Washington's greenhouse gas emissions," accounting for the largest emissions from any sector.² Supporters point to similar programs in British Columbia, California, and Oregon, and make a range of claims, including that an LCFS will reduce CO2 emissions, improve air quality, and create jobs.

The experience of those jurisdictions demonstrates that these claims are either exaggerated or simply false. An LCFS mandate is an extremely expensive way to reduce CO2 emissions, does little to improve air quality with most of the benefits going to wealthy

LEGISLATIVE MEMO

 [&]quot;RCW 70A.45.020: Greenhouse gas emissions reductions – Reporting requirements," State of Washington, at https://apps.leg.wa.gov/rcw/default. aspx?cite=70A.45.020.

^{2 &}quot;HB 1091, to reduce greenhouse gas emissions by reducing the carbon intensity of transportation fuel, Washington State Legislature, introduced January 6, 2021, at https://app.leg.wa.gov/billsummary?BillNumbe r=1091&Year=2021&Initiative=false.

communities, and is unlikely to create jobs or benefit farmers.

About 95 percent of the cost of an LCFS mandate does nothing to reduce CO2 emissions, and the risk from climate change and the high cost undermines alternatives that would effectively reduce CO2 emissions in the near term at much lower cost. Ultimately, the more concerned legislators are about climate change, the less they should support a costly and ineffective approach like the LCFS. This Legislative Memo presents an analysis of the bill and presents data on why the claims of its sponsors are not supported by evidence.

The high cost of myopic emissions targets

The proposed legislation suffers from many flaws, but the root of the failure of the LCFS mandate is its narrow focus on a subset of CO2 emissions. Supporters justify focusing on transportation emissions because they say it accounts for the largest subset of Washington's greenhouse gas emissions. The state's electrical generation, which benefits from clean hydro power, already has one of the lowest carbon intensities in the country.³ Our relatively mild weather also means Washington residents don't use much energy for winter home heating. As a result, Washington's per capita CO2 emissions are the ninth lowest in the country.⁴ That leaves transportation with a disproportionate share as a source of Washington remaining emissions.

The policy approach of focusing on individual sectors, however, is not scientific or economically sound. Unlike traditional air pollutants, like particulate matter (PM 2.5) or nitrous oxides (NOx), which have a local impact, carbon dioxide has a global impact. It does not matter if CO2 is emitted in Seattle, Spokane, or Samarkand in Central Asia. A strategy that narrows the focus to only one sector in one small geographic area is going to be extremely expensive, yielding tiny environmental benefits despite high costs. That is exactly what we see from the LCFS. Even in a large economy like California, the cost of the LCFS mandate is very high compared to other CO2-reducing strategies.

Although much of the justification for the LCFS is related to the risk of climate change, CO2-reduction is not the priority in the legislation. As a result, supporters have shifted their language, pointing to air pollution and jobs to justify the mandate. Research demonstrates those claims do not hold up and do not justify the myopic focus on the transportation sector that is the fundamental flaw of an LCFS mandate.

The key elements of HB 1091

The core of HB 1091 is the goal to reduce the carbon intensity of transportation fuels "10 percent below 2017 levels by 2028 and 20 percent below 2017 levels by 2035."⁵ For every metric ton of CO2 associated with gasoline or diesel fuel use, fuel producers would be required to purchase credits from others who have reduced CO2 emissions. The targets would increase each year to meet the goal outlined in the legislation.

The timeline of the targets is more aggressive than California or Oregon. In both of those states, the timeline to reach the 10 percent threshold was ten years.⁶ The legislation in Washington would require residents to hit the first 10 percent reduction in only five years.

Unlike a tax, the money paid to purchase LCFS credits would not go to the state. The state would simply set up an artificial market in which producers of gas and diesel would pay companies, utilities, and others for fuels that are less carbon intensive. The state just enforces the rules. The Department of Ecology may charge a fee to fund the program, but otherwise it would not engage in the

^{3 &}quot;Washington Electricity Profile 2019," U.S. Energy Information Administration, November 2, 2020, at https://www.eia.gov/electricity/state/washington/.

^{4 &}quot;Table 5. Per capita energy-related carbon dioxide emissions by state (1990–2018)," U.S. Energy Information Administration, at https://www.eia.gov/ environment/emissions/state/excel/table5.xlsx.

^{5 &}quot;HB 1091, to reduce greenhouse gas emissions by reducing the carbon intensity of transportation fuel," Washington State Legislature, introduced January 6, 2021, at https://app.leg.wa.gov/billsummary?BillNumbe r=1091&Year=2021&Initiative=false.

^{6 &}quot;Oregon Clean Fuels Program Overview," State of Oregon, accessed March 6, 2021, at https://www.oregon. gov/deq/ghgp/cfp/Pages/CFP-Overview.aspx.

market. Making that market work would be a challenge and much of the HB 1091 attempts to address the problems already faced by other jurisdictions with similar programs.

What an LCFS would cost consumers

Unlike a gas tax, which imposes a cost per gallon that is fixed and transparent, there is debate about how much an LCFS would add to the consumer cost of gas and diesel. Oil and gas companies would be required to buy LCFS credits and would pass on the cost to consumers in the form of higher prices at the pump. Although there is policy discussion about what that mandate would cost, the calculation is actually straightforward.

Each gallon of gas and diesel emits the same amount of CO2 when it is burned. Translating the cost of LCFS credits, measured in CO2 emissions, to a gallon of gas is simple. The state of Oregon's LCFS page has the calculation.⁷ By multiplying the cost of LCFS credits on the state credit market by the reduction in carbon intensity in state law, anyone can determine the cost per gallon.

The staff at the California Air Resources Board (CARB) have done the same, calculating that when LCFS credits cost \$100 per metric ton (MT) of CO2, the policy adds twelve cents to the price of a gallon of gas and nearly 14 cents to the price of a gallon of diesel.⁸ The current price of an LCFS credit in California is \$199/MT CO2, which translates to about 24 cents more per gallon of gas and about 28 cents more per gallon of diesel.⁹

Oregon's LCFS is only 25 percent toward their 10-year goal and the cost per MT of CO2 in January 2021 was \$124.52. Using Oregon's calculator, the estimated added cost in 2020 was slightly more than three cents per gallon, which translates to about 13.7 cents per gallon of gas when it reaches the mandated threshold of 10 percent reduction in carbon intensity in 2025.

These costs are likely on the low-end of projections because prices have continued to rise in both California and Oregon. In early 2021, the U.S. Energy Information Administration noted that the price of renewable fuel credits required to comply with U.S. law "have been steadily rising in recent months and are approaching their highest nominal levels in the history of the program."¹⁰ These already-high prices are likely to continue to increase based on state and national trends.

Despite the consensus among state agencies and the straightforward math, some LCFS advocates claim the mandate would not increase the prices of gas and diesel. A few of these claims are worth addressing.

First, Tim Zenk, representing Neste, a Finnish biofuel company with production facilities in the Netherlands and Singapore, claimed that since California implemented the LCFS mandate in 2011, "gas prices have fallen 40 cents per gallon."11 The day after his testimony, he tweeted "energy is all about math," saving, "Gasoline is \$.40 cents/gal less and renewable diesel is \$.17 cents/ gal less than regular diesel. All since the CA clean fuels standard went into effect. Period and end of story."¹² The data he used, however, were from June 2020, seven months earlier, when gas demand was artificially low due to the COVID economic lockdowns. By the time he made this claim on February 16, his statement was false.

According to the Energy Information Administration, when California's LCFS began in January 2011, the average cost of a gallon of gas was \$3.35. At the time of his testimony

^{7 &}quot;Annual Cost of the Clean Fuels Program," State of Oregon, accessed March 6, 2021, at https://www.oregon. gov/deq/ghgp/cfp/Pages/Annual-Cost.aspx.

^{8 &}quot;Staff Report: Initial Statement of Reason for Proposed Rulemaking," California Environmental Protection Agency, Air Resources Board, December 2014, page ES-20, at https://ww3.arb.ca.gov/regact/2015/lcfs2015/ lcfs15isor.pdf.

^{9 &}quot;Monthly LCFS Credit Price and Transaction Volume," California Air Resources Board, accessed March 6, 2021, at http://ww3.arb.ca.gov/fuels/lcfs/dashboard/ creditpriceserieswithoutargusopis.xlsx.

^{10 &}quot;Ethanol and biomass-based diesel RIN prices approaching all-time highs," U.S. Energy Information Administration, February 24, 2021, at https://www.eia. gov/todayinenergy/detail.php?id=46876.

^{11 &}quot;House Transportation Committee," public hearing on HB 1091, TVW, February 16, 2021, timestamp 56:58, https://www.tvw.org/watch/?clientID=9375922947&eve ntID=2021021383&startStreamAt=3417&stopStreamAt =3478&autoStartStream=true.

¹² Tweet posted by Tim Zenk @greencrude, February 17, 2021, https://twitter.com/greencrude/ status/1362149085520662528.

it was \$3.54, about 19 cents higher.¹³ This has been the case for a while, but LCFS advocates continue to make this false claim, refusing to update their information. Prices fluctuate for a variety of reasons, so this talking point is inherently misleading, but even with that caveat, the talking point relies on cherry picking data that were already out of date when the claim was made.

A better real-world estimate of the price impact of the LCFS mandate would be to compare the difference between California's average price and the national average. When California's LCFS began in January 2011, gas prices there were 23.1 cents per gallon higher than the national average, according to the Energy Information Administration. After a decade, the price differential is 84.6 cents per gallon, an increase of 61.5 cents per gallon since the LCFS was implemented. There are a number of factors that play into this differential, but gas prices are clearly higher in California since the LCFS mandate was imposed.

Another claim, made by Stu Clark of the Washington State Department of Ecology during his testimony on HB 1091, is that since the launch of California's LCFS, "There have been no price spikes...or any unintended consequences."¹⁴ The definition of "price spike" can be debated, but CARB's estimate of a 24cent per gallon increase would certainly fit the definition of a spike for some. The claim that there have not been unintended consequences, however, is demonstrably incorrect.

In 2015, CARB estimated the potential range of costs for LCFS credits in 2020, with officials saying they assumed a "credit price of \$100 for the period 2020."¹⁵ They even claimed that number "likely over-estimates costs." That turned out to be wildly inaccurate. The credit price was higher than \$100 just one month after CARB staff released their projections, and the price has been above \$100 every month since December 2017. As a result, the cost of the program is now double the amount CARB claimed was an over-estimate six years ago. This is clearly an unintended consequence.

Biofuel manufacturers know these costs will continue to climb. Although Neste's Washington state representative downplayed potential cost increases in Washington state, in California the company argued that the price of LCFS credits should be allowed to increase above the state's price caps. In 2019, due to high LCFS credit prices, CARB was considering implementing a price cap. In the staff's report to the board, they noted, "White Energy, Neste, Trillium, GlassPoint Solar Inc., RPMG, Clean Energy, and Shell Oil Products proposed that the amendment should not impose a maximum price cap for regular LCFS credit transactions. These entities argue that prices higher than the price cap in the CCM may be necessary to bring sufficient volumes of low carbon alternative fuels to California."16 In other words, in California, Neste argues that prices should go even higher to meet the requirements of their LCFS mandate.

The sponsors of HB 1091 recognize that these costs will impose a significant burden on some sectors of Washington's economy. Until January 1, 2028 the LCFS requirements would not apply to fuel "used off-road in vehicles used primarily to transport logs," and "dyed special fuel" used for agricultural purposes or construction. These exemptions in the bill are a clear admission that the LCFS would increase costs for these industries. Although the Department of Ecology would be given some leeway to craft rules to ease the transition to the impacts of the LCFS, the legislation would provide only temporary protection from the cost increases, potentially putting farmers and loggers in Washington state in a difficult position when the exemption would expire in 2028.

Advocates of the LCFS mandate may argue that reducing CO2 is worth imposing these

^{13 &}quot;Gasoline and Diesel Fuel Update," U.S. Energy Information Administration, accessed March 6, 2021, at https://www.eia.gov/petroleum/gasdiesel/.

¹⁴ Testimony before the House Appropriations Committee, by Stu Clark, Washington State Legislature, February 4, 2021.

^{15 &}quot;Staff Report: Initial Statement of Reasons for Proposed Rulemaking," California Environmental Protection Agency, Air Resources Board, December 2014, page VII-1, at https://ww3.arb.ca.gov/regact/2015/lcfs2015/ lcfs15isor.pdf.

^{16 &}quot;Public Hearing to Consider Proposed Amendments to the Low Carbon Fuel Standard Regulation Staff Report: Initial Statement of Reasons," State of California Air Resources Board, October 1, 2019, at https://ww3.arb. ca.gov/regact/2019/lcfs2019/isor.pdf.

costs on others. The claim that the LCFS would not increase prices and that costs haven't been higher than expected, however, is contradicted by the data and the statements of LCFS supporters themselves.

Paying a high price to reduce CO2 emissions

The central claim of LCFS supporters is that the policy is necessary to reduce Washington's CO2 emissions to fight climate change. Despite that argument, the high cost of the LCFS means it is a very poor approach to reducing CO2 emissions. Comparing the price to alternatives or to the social cost of carbon shows the LCFS does more harm than good as a climate policy.

There are two ways to measure the effectiveness of the LCFS compared to other approaches. First, we can compare it to available alternatives to reducing CO2. If it is similar in price to other methods – even if it is not the most effective – then we would not be wasting resources that could yield additional CO2 reductions. Second, we can compare the cost of the LCFS to the estimated harm it would avoid. Even if the LCFS is expensive, it might still be a net benefit for the environment if the harm it would avoid is larger than the cost it would impose. The benefit-versus-cost ratio may be low but it would still be positive and still worth doing.

The LCFS mandate badly fails both tests.

As noted above, the price of the LCFS is determined by credit markets. Both California and Oregon report these amounts on their web pages. Oregon's current credit price is about \$124 per metric ton, and California's is \$199. By way of comparison, the price to reduce a metric ton of CO2 in California's cap-andtrade market is only \$16.86 and the price of offsets is just \$13.71.¹⁷ Prices to reduce CO2 are lower elsewhere but using California prices for both the LCFS and alternatives allows a fair apples-to-apples comparison. Using those prices, the LCFS in California is 12 to 14 times more expensive than other projects to reduce CO2 emissions. Put another way, only seven percent of the money spent on LCFS credits goes to reducing CO2 emissions. The other 93 percent is wasted – it is lost money that could go to reducing CO2 emissions, but does not.

When announcing the LCFS proposal contained in HB 1091, Governor Inslee claimed it would reduce 2.7 million metric tons of CO2 in the year 2030. At \$199 per ton, that reduction would cost Washington residents \$537.3 million. At \$13.17 per ton, by way of comparison, that same environmental benefit would cost only \$35.6 million. That is less than the total biennial budget for the state's Clean Energy Fund, which funds a range of energy programs, of \$46.1 million.¹⁸

The LCFS mandate fails to deliver on meaningful CO2 reductions, yielding a fraction of what could be obtained with other available technologies.

Even worse, the LCFS does more harm than good, and costs more than the climate benefits it delivers. Using Obama Administration numbers, the social cost of carbon, defined as "a measure, in dollars, of the long-term damage done by a ton of carbon dioxide (CO2) emissions in a given year," was calculated to be \$42 per metric ton in 2020 and \$50 in 2030.19 Oregon's LCFS mandate spends \$124 to yield \$42 of climate benefit. California spends \$199 for \$42 of benefit. Again, the LCFS fails the test, spending up to five times as much as the estimated avoided harm. Some argue that adding in the health benefits of reducing particulate matter would make the policy appear more worthwhile, but we will show below this is not true.

Although the LCFS is justified as a key part of Washington's climate strategy, it fails both key metrics as a CO2-reduction strategy.

^{17 &}quot;Summary of Market Transfers Completed in 2020," California Air Resources Board, February 1, 2021, at https://ww2.arb.ca.gov/sites/default/files/classic//cc/capa ndtrade/2020transfersummaryfinal.xlsx.

^{18 &}quot;Substitute House Bill 1102," Washington State Legislature, introduced January 9, 2019, at https://app. leg.wa.gov/billsummary?BillNumber=1102&Year=2019 &Initiative=false

^{19 &}quot;The Social Cost of Carbon," U.S. Environmental Protection Agency, January 19, 2017, at https://19january2017snapshot.epa.gov/climatechange/ social-cost-carbon_.html.

About 93 percent of the cost does nothing to reduce CO2 and for every five dollars of cost imposed it would avoid only one dollar of climate impact.

Small and unequal reductions in air pollution

Acknowledging that the LCFS mandate is an expensive way to reduce CO2 emissions, supporters claim HB 1091 would also reduce the harmful impacts of traditional air pollutants like particulate matter (PM 2.5). Research from the Washington State Department of Ecology and the Puget Sound Clean Air Agency shows the particulate reductions are actually very small. Additionally, data from California shows that those modest particulate reductions are most likely to benefit people living in wealthy communities.

Two studies of the LCFS in Washington state have estimated the reduction in PM 2.5. In 2014, the Washington State Department of Ecology found that the LCFS would yield a maximum reduction in particulate matter of 1.5 percent in the first compliance period, equivalent to the 2028 goal provided in HB 1091.²⁰ Most estimates showed a reduction of less than one-half of one percent. These extremely small reductions are why a study by ICF for the Puget Sound Clean Air Agency noted the reductions "are small in comparison to the anticipated reductions from federal vehicle standards."²¹

ICF's study authors attempted to put a price tag on the health benefits of those reductions. Their analysis examined a proposal for the Puget Sound region and estimated the health benefits for the scenario most comparable to that proposed by HB 1091 was between \$13.8 million and \$31.1 million in 2030. Compared to the enormous cost of the LCFS mandate, these numbers are small. Using the current price of credits in California, the LCFS would cost consumers about \$537 million a year.

When combining the social cost of carbon and the health benefits of reducing PM 2.5, the LCFS would yield a total estimated benefit in 2028 of about \$135 million in CO2 reduction benefits (using the 2030 social cost of carbon) and \$22.45 million in health benefits from reducing PM 2.5 (using the median estimate from the ICF study). Adding both of these amounts shows the LCFS would yield an estimated \$157.4 million in benefits in 2030 for \$537 million in cost, assuming that LCFS credit prices don't increase in the meantime. The policy therefore would spend \$3.40 for every one dollar of benefit. Even in the most generous scenario, the LCFS mandate is a tremendous waste of money and of the opportunity to improve the health and wellbeing of Washington residents.

Even these small health benefits are likely to accrue mostly to people living in wealthy communities. One common way to create LCFS credits is to install electric vehicle charging stations or switch company vehicle fleets to liquid natural gas. The projects are cited as the potential source of improvements in air quality because electric and natural gas vehicles emit few, if any, air pollutants.

Using California data, we examined the location of all of the electric car charging stations, hydrogen and natural gas filling stations that generate LCFS credits in California using data provided on the state's LCFS information page. Electric and natural gas vehicles are the primary source of PM 2.5 reduction in the LCFS system. The scenarios in the Puget Sound Clean Air Agency's analysis show that the scenario that is most effective at reducing average PM 2.5 is the one with the greatest number of electric vehicles (EVs).

We matched those locations to median household income data from the U.S. Census, sorted by census tract. If the goal is to reduce PM 2.5 in low-income communities, policymakers would want EVs to be located in low-income communities. As California's experience demonstrates, the reality shows exactly the opposite.

The wealthiest 10% of census tracts have the most EV charging stations and natural

^{20 &}quot;A Clean Fuel Standard in Washington State," Live Cycle Associates, December 12, 2014, page 76.

^{21 &}quot;Puget Sound Regional Transportation Fuels Analysis," ICF, September 2019, at https://pscleanair.gov/ DocumentCenter/View/3809/Clean-Fuel-Standard-Technical-Analysis---Final-Report?bidId=.

gas filling stations in the state.²² The census tracts representing the top 30% of income earners have 43% of the charging stations. By way of contrast, the census tracts with the poorest 30% of earners have only 22% of the EV stations. Under an LCFS mandate the rich receive twice the air-quality benefit as those living in poor communities.

Despite the rhetoric from some LCFS advocates, the health benefits accrue to the rich, not the poor. Some LCFS advocates argue that EVs from wealthy communities will drive across the region, reducing emissions in poor communities as well. This is speculative at best and represents trickle-down environmentalism; that imposing a mandate, for the benefit of the rich will eventually help the poor.

Unlikely to build Washington's biofuel industry

Advocates of the LCFS mandate argue that requiring Washington residents to buy biofuels will create jobs and expand the industry in the state. The logic of this argument is fundamentally flawed. The claim that forcing the people of a particular state to purchase a product will, therefore, increase production in that state makes little sense. If Oregon lawmakers required everyone to purchase a 20-ounce coffee every day, claiming it would make Oregon a leader in coffee production, people would recognize the obvious logical fallacy and Starbucks executives would laugh all the way to the bank. But they would not move their headquarters to Portland.

Data from California and Oregon back up this logic. Rather than the LCFS mandate making California a leader in biofuel production, the California Air Resources Board reports that the state imports 88 percent of the liquid biofuels needed to meet the requirements from out of state.²³ Data from the U.S. Energy Information Administration show that after nearly a decade with the LCFS in place, California produced only 1.4 percent of the nation's ethanol and 2.5 percent of the biodiesel in 2018.²⁴ Oregon produced only 0.3 percent of the ethanol and 0.7 percent of biodiesel.

Analysis by Puget Sound Clean Air Agency officials backs this up, arguing that the likelihood of new biofuel capacity being built in Washington state is low. Their report noted that, "It is unlikely that the introduction of a low carbon fuel standard in the study region will induce investment into these projects."²⁵ Additionally, despite the claim that Washington farmers would find a new market for oilseed crops like canola, the PSCAA's report notes "a low carbon fuel policy is unlikely to induce more consumption of canola oil as a biodiesel feedstock."²⁶

The prospects of expanding Washington's biofuel industry were diminished further when the State House recently adopted an amendment to HB 1091 that would make it difficult to issue permits for new biofuel facilities. House Amendment 155 changed the language of the bill and eliminated the provision that "the directive to the Department of Ecology to improve and expedite State Environmental Policy Act (SEPA) reviews and permit applications for projects that would produce or support the production of low carbon transportation fuels." The amendment replaced the provision with a more restrictive approach designed by the Washington State University Energy program.²⁷ As a result, Washington's biofuel industry would face significant hurdles to expansion, and compliance with the LCFS rules would be

26 Ibid.

^{22 &}quot;Data show LCFS's air pollution reduction benefits the rich, not poor," by Todd Myers, Washington Policy Center, January 27, 2020, https://www.washingtonpolicy. org/publications/detail/data-show-lcfss-air-pollutionreduction-benefits-the-rich-not-poor.

^{23 &}quot;Share of Liquid Biofuels Produced In-State by Volume 2019," California Air Resources Board, at http://ww3. arb.ca.gov/fuels/lcfs/dashboard/figure10_053120.xlsx.

^{24 &}quot;State Energy Data System (SEDS): 1960-2018 (complete) – Primary energy production in physical units," U.S. Energy Information Administration, June 26, 2020, at https://www.eia.gov/state/seds/sep_prod/ xls/P1.xlsx.

^{25 &}quot;Puget Sound Regional Transportation Fuels Analysis," ICF, September 2019, at https://pscleanair.gov/ DocumentCenter/View/3809/Clean-Fuel-Standard-Technical-Analysis---Final-Report?bidId=.

^{27 &}quot;1091-S3 AMH CHAP H1164.2," Washington State Legislature, amendment to HB 1091, adopted February 27, 2021, at http://lawfilesext. leg.wa.gov/biennium/2021-22/Pdf/Amendments/ House/1091-S3%20AMH%20CHAP%20H1164.2.pdf.

met primarily with fuel imported from out of state.

Conclusion – HB 1091 would impose a costly and ineffective mandate on Washingtonians

Washington legislators of both parties have repeatedly rejected a low-carbon fuel standard, citing the high costs and the fact that although it would increase gas prices for Washington residents, the revenues would not improve state transportation services as the gas tax does.

The basic flaw of the Low Carbon Fuel Standard mandate is that, in addition to high consumer cost, it also fails as a climate and environmental policy. There are always costs associated with reducing environmental risk, whether reducing CO2 emissions, improving air quality, or protecting endangered species. The key question is what benefits society gets for the cost. In the case of the LCFS mandate, the environmental benefits are tiny compared to the cost, and the policy does more harm than good, wasting resources that could be put to better use addressing the risk of climate change or other environmental problems.

Washington Policy Center has proposed an alternative approach that would effectively reduce more CO2 emissions in 2021 than the LCFS would in 2030, for a fraction of the economic and social cost.²⁸ That approach is not only more respectful of taxpayers, it is more sensitive and effective. If legislators are serious about addressing climate change, they should consider approaches that yield the greatest CO2 reduction per dollar while doing the least harm to our communities.

Todd Myers is the director of Washington Policy Center's Center for the Environment.

Nothing here should be construed as an attempt to aid or hinder the passage of any legislation before any legislative body.

Published by Washington Policy Center © 2021

Visit washingtonpolicy.org to learn more.

^{28 &}quot;The governor asks. I respond. A more effective and less expensive climate policy," by Todd Myers, public letter, Washington Policy Center, December 29, 2020, https://www.washingtonpolicy.org/publications/detail/ inslee-asks-i-respond-a-more-effective-and-lessexpensive-climate-policy