



DEPARTMENT OF
ECOLOGY
State of Washington

Washington's Clean Fuel Standard

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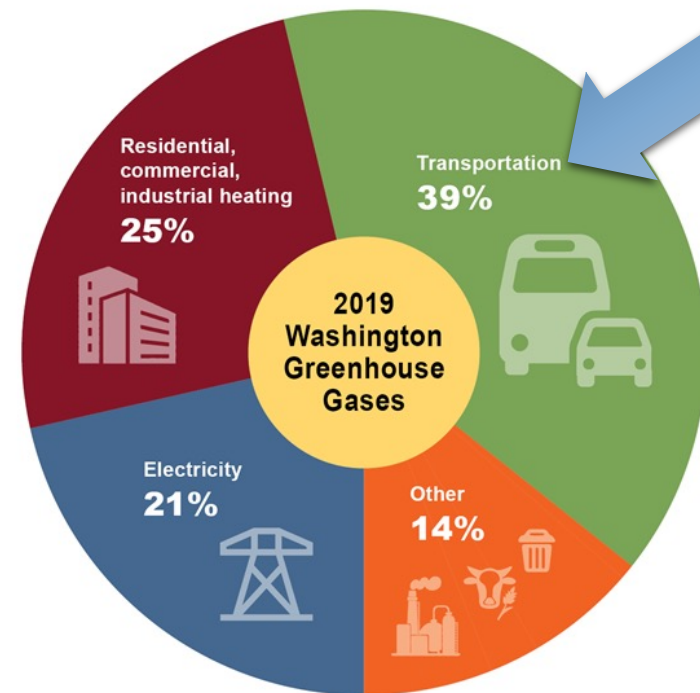
Climate Policy Section Manager
Air Quality Program



Why a Clean Fuel Standard?

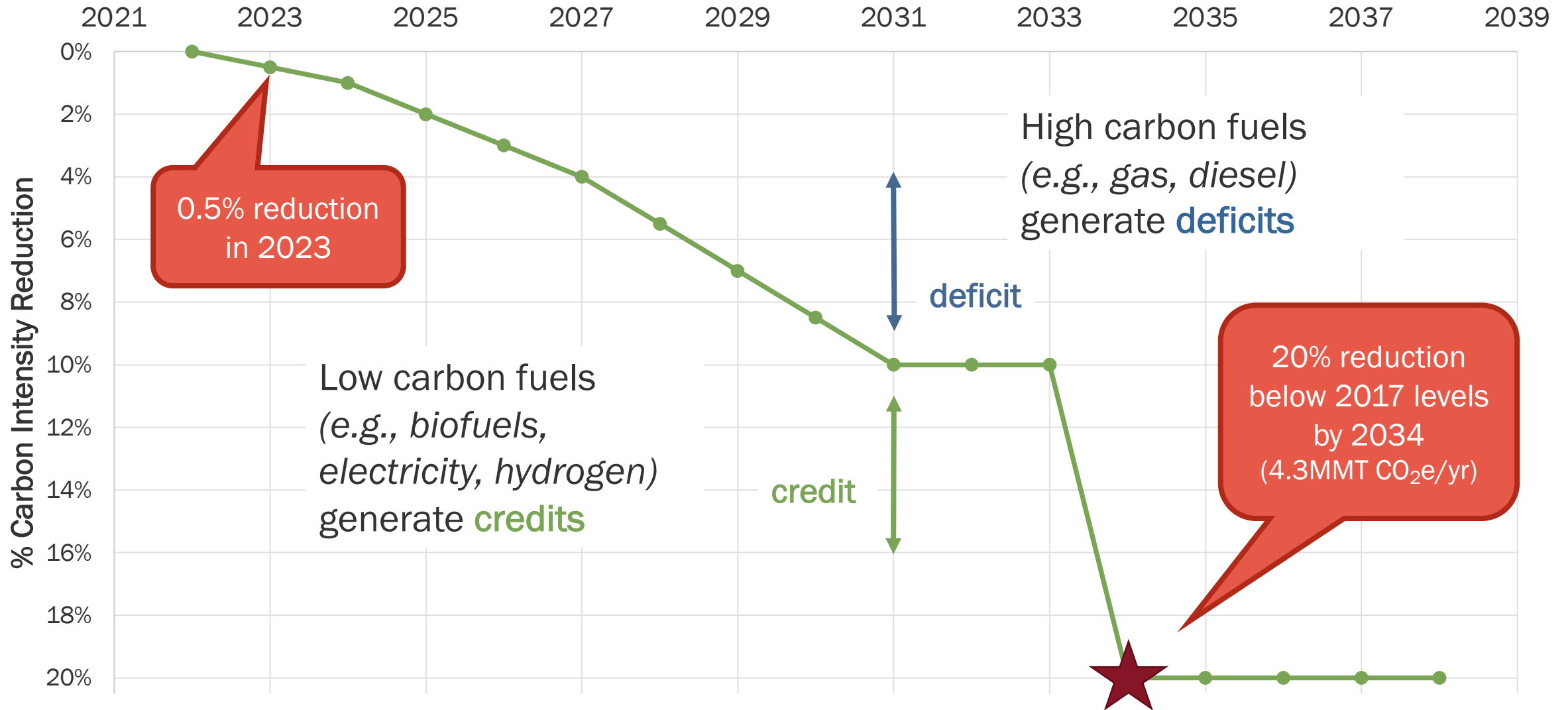
Transportation is Washington's greatest single source of greenhouse gas emissions.

- Transportation also a major source of air pollutants
- Washington will join California, Oregon and British Columbia in having clean fuel standards.

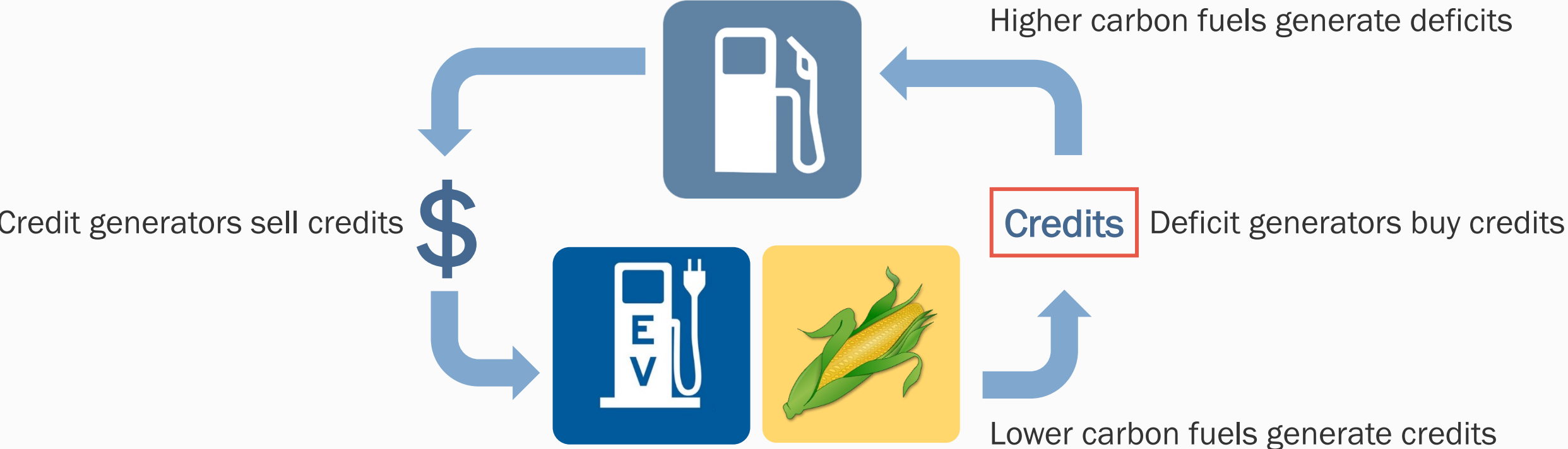


The Clean Fuel Standard will spur economic development, and will increase availability and affordability of low carbon fuels.

What is a Clean Fuel Standard?

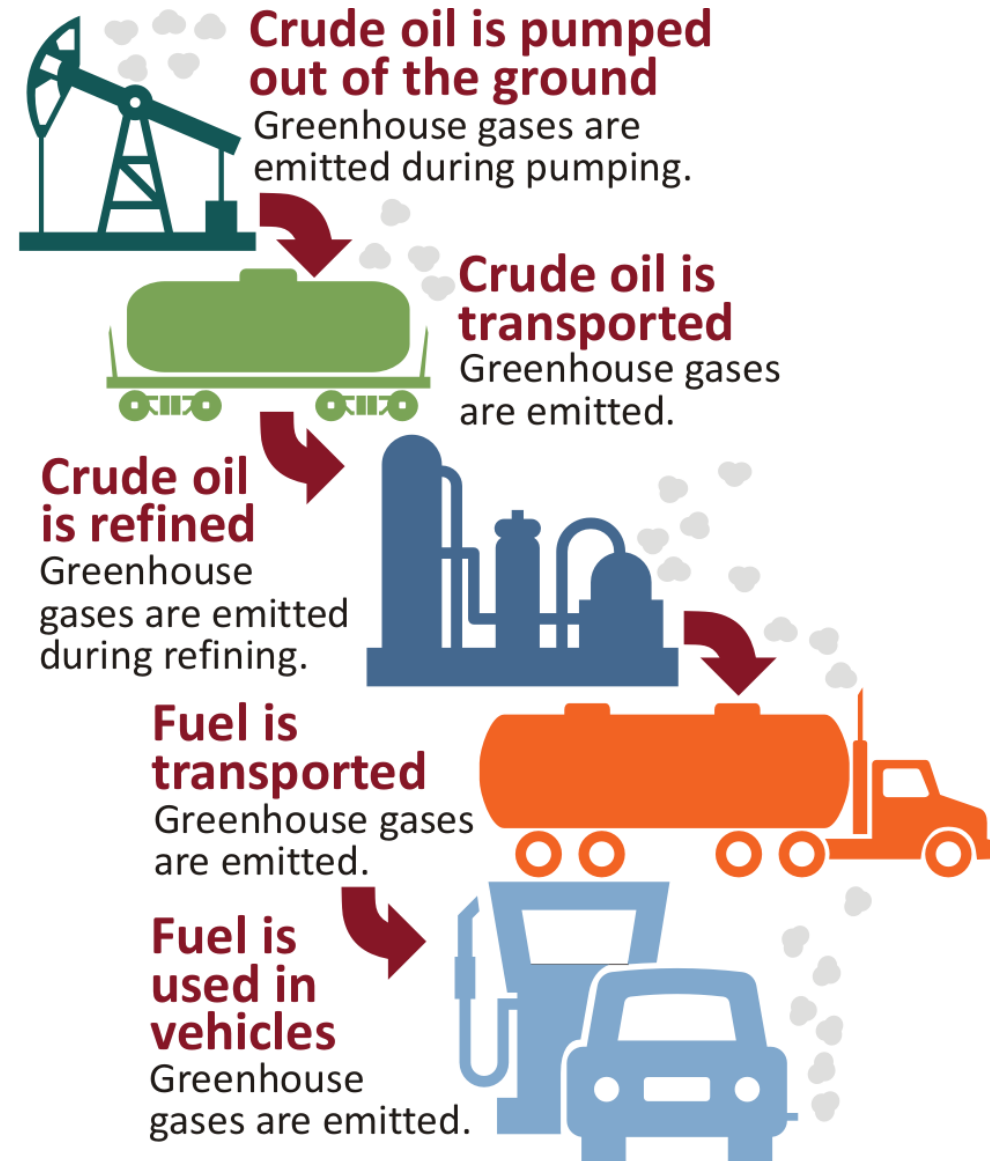


Market-Based System



What is Carbon Intensity?

“The quantity of life-cycle greenhouse gas emissions, per unit of fuel energy, expressed in grams of carbon dioxide equivalent per megajoule (gCO₂e/MJ)”



Regulated & Opt-in Fuels

Regulated Fuels

(must participate)

Gasoline

Diesel or diesel fuel

Ethanol and blends 10 to 100%

Biomass-based diesel and blends

Fossil CNG, LNG, L-CNG

Propane/LPG

Hydrogen, compressed or liquefied

Any other liquid or non-liquid fuel

Opt-in Fuels

(may participate)

Alternative Jet Fuel

Bio-CNG, bio-LNG, or bio-L-CNG

Electricity

The CFS applies to
producers and suppliers

Exemptions

Permanently Exempt Uses

Aircraft

Vessels

Railroad Locomotives

Military tactical vehicles

Exempt Uses Through 2027

Dyed special fuels for offroad
construction, logging, and mining

Dyed special fuel for agricultural use

How does the market work?

Register

Fuel suppliers register in the Washington Fuels Reporting System

Track energy usage

Track the fuel (e.g., kWh, gallons) used in transportation

Submit reports

Report quarterly & annually on fuel supplied

Verify

ECY reviews data, issues credits or deficits based on the CI & amount of energy used

Generate credits or deficits

Bank or sell credits in open market

Clean Fuel Project Examples



Dairy digesters & renewable natural gas



Electric vehicle charging



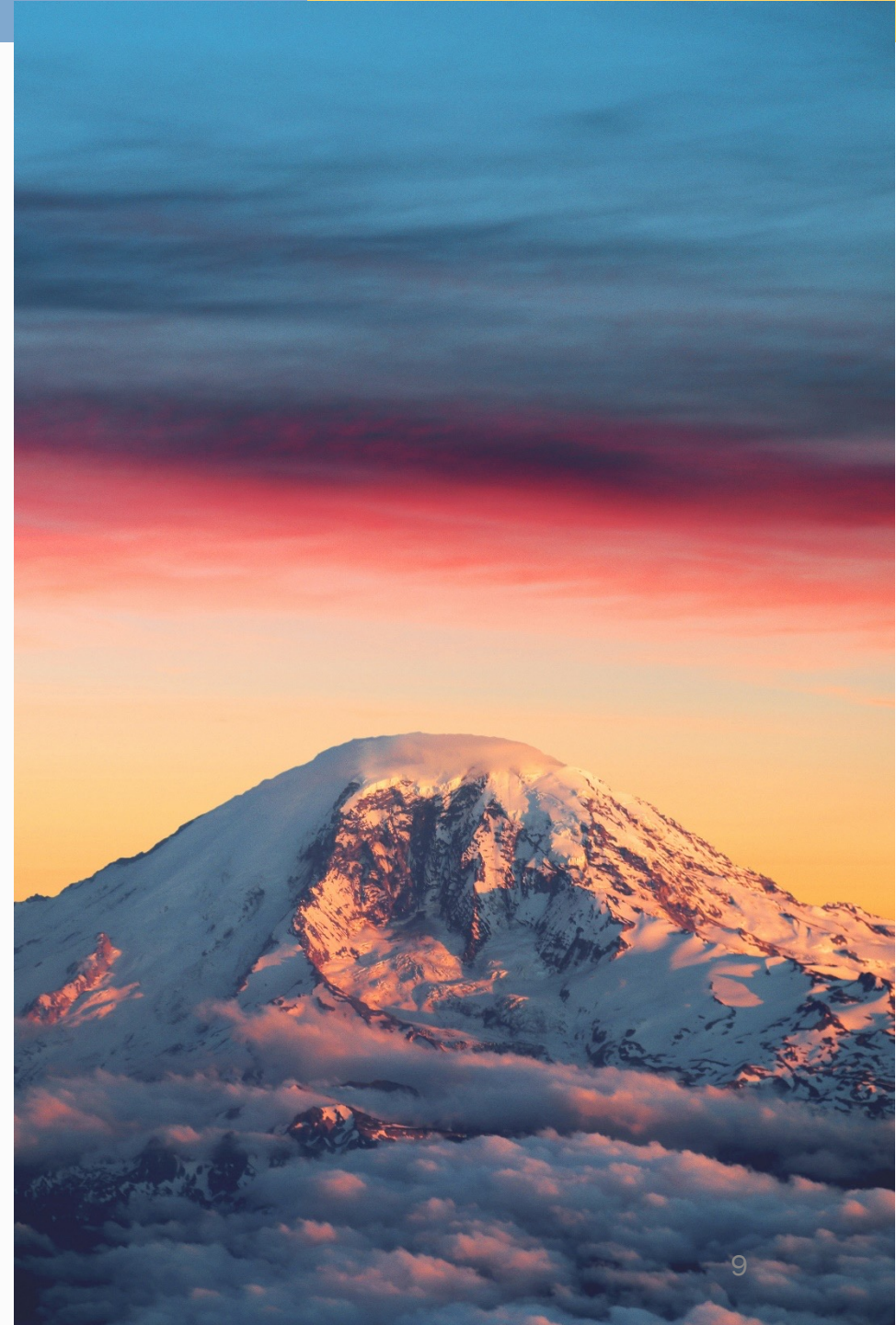
Green hydrogen



Renewable diesel

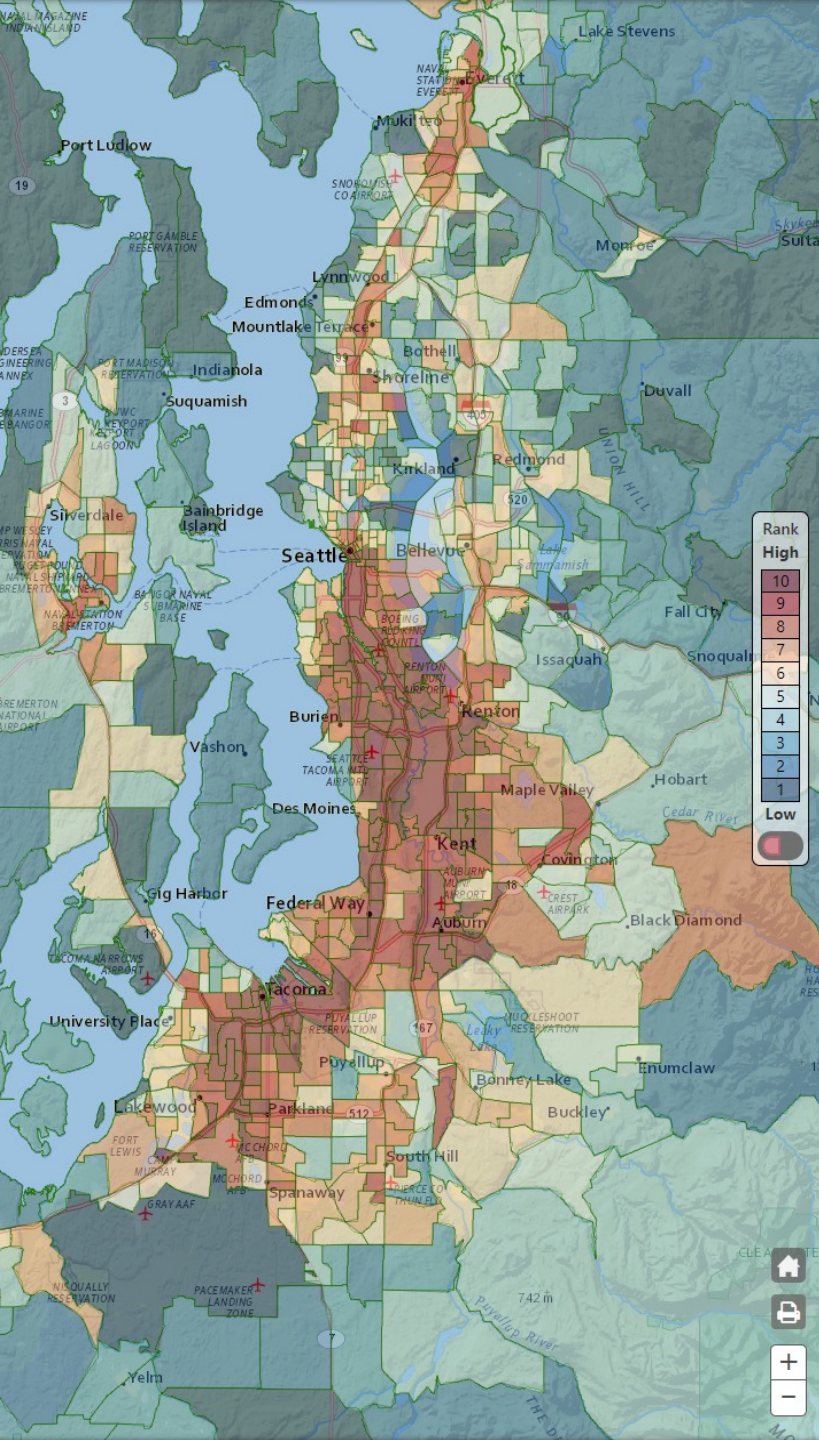


Sustainable aviation fuel



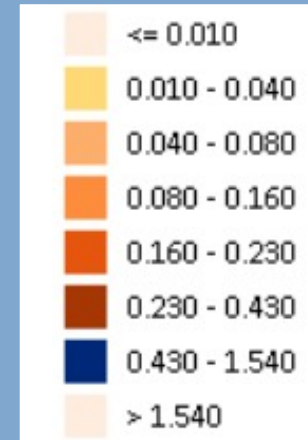
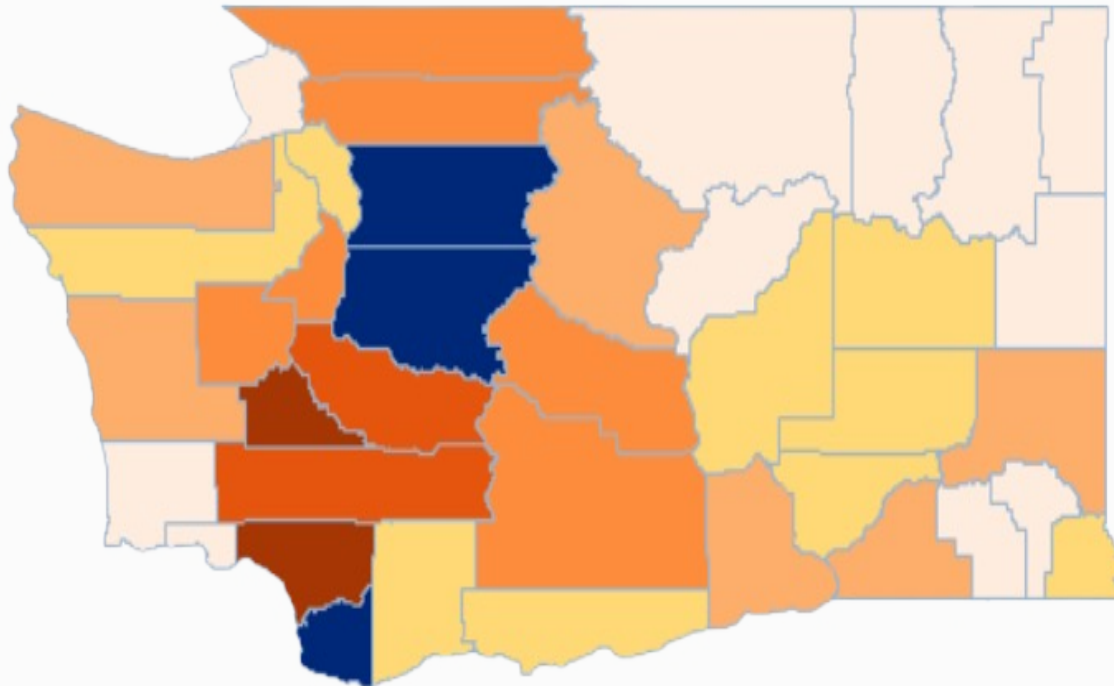
Equity & Environmental Justice

- Reducing emissions in near-road communities
- Electric utilities *must* invest at least 30% of credit revenue (80% encouraged) in transportation electrification in overburdened communities
- Backstop aggregator invests unclaimed credits invested in overburdened



Health Benefits of Policies

Distribution of health benefits in Washington by county



Shown as: delta
in mean hourly
PM 2.5 concentration

Economic Value of Reduced Mortality (2020 dollars)

Estimate Range	Study Author	Economic Value of Reduced Mortality
Low-End	Krewski et al (2009)	\$1.8 billion
High-End	Lepeule et al (2012)	\$3.8 billion

Thank you

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<https://www.ecology.wa.gov/cfs>

