

## ABOUT CLEAN FUEL, CLEAN HEAT AND RENEWABLE GAS STANDARDS

Clean fuel, clean heat and renewable gas standards are policy mechanisms, generally adopted at the state level, to reduce emissions from different energy sectors—transportation, buildings and utilities, respectively.

### CLEAN FUEL STANDARD

**What it is:** A Clean Fuel Standard, such as the Low Carbon Fuel Standard (LCFS) in California, seeks to reduce GHG emissions from transportation by setting emissions caps on fuels.

**How it works:** A benchmark “carbon intensity” (CI) for fuels is established at a level below that for gasoline and diesel.<sup>1</sup> Fuels with a CI above the benchmark then generate a deficit for each unit of emissions produced, while fuels with a CI below the benchmark generate credits for each unit of emissions avoided. The further the CI is from the benchmark, the more credits (or deficits) are generated. Covered parties running deficits can buy credits from producers of cleaner fuels, enabling them to clear their deficits while supporting clean fuel production. Emissions benchmarks are periodically lowered to ensure ongoing reductions.

**Why it matters:** Transportation accounted for 27% of US greenhouse gas (GHG) emissions in 2020.<sup>2</sup> A clean fuel standard uses a market-based mechanism to incentivize the production of cleaner fuels. It is technology neutral, doesn’t impose quotas and doesn’t choose winners; the cleaner the fueling technology, the more credits it attracts. Further development and implementation of clean technologies are effectively subsidized by dirtier ones.

**Where RNG fits:** Depending on the feedstock from which it’s made, RNG can have lifecycle CIs that range from low-carbon to significantly carbon-negative. Carbon-negative RNG used in vehicles with natural gas engines is the cleanest fuel currently available. RNG can also be a feedstock for producing hydrogen and sustainable aviation fuel (SAF).

### CLEAN HEAT STANDARD

**What it is:** A Clean Heat Standard seeks to reduce and regulate emissions from heating fuels.

**How it works:** Clean Heat Standards provide regulatory frameworks for utilities to introduce cleaner energy and technologies to their service areas. In one form, utilities are required to submit action plans to public utility commissions for approval and show how the proposed plan will cut emissions. Some standards under consideration would include a “cap and trade” system, in which utilities staying below an emissions “cap” could earn

<sup>1</sup> CIs under the California program are measured in grams of CO<sub>2</sub>-equivalent per megajoule of energy consumed, or “gCO<sub>2</sub>e/MJ”.

<sup>2</sup> US EPA, [Inventory of US Greenhouse Gas Emissions and Sinks, 1990-2020](#).

credits and sell them to parties above the cap. Credits could be earned not just for cleaner fuels, but also for energy efficiency upgrades, building weatherization and the use of technologies like cold-climate heat pumps.

**Why it matters:** Including electricity use that contributes to heating and cooling, in 2020, commercial and residential buildings accounted for 30.8% of US GHG emissions.<sup>3</sup> Cleaner options for cooking and space and water heating are critical to reducing building emissions.

**Where RNG fits:** Renewable gases like RNG and hydrogen can be used to comply with Clean Heat Standards in Minnesota and Colorado and are included in legislation proposed in Massachusetts and Vermont.

## RENEWABLE GAS STANDARD

**What it is:** Renewable Gas Standards (also referred to as “gas procurement standards”) establish requirements that gas utilities procure RNG, hydrogen, or other renewable gases for inclusion in their distribution systems.

**How it works:** Procurement requirements can be established through legislation or by regulatory bodies (e.g., public utility commissions). Specific requirements might be volumetric (a percentage or volume of the total gas a utility delivers to customers) or based on a GHG emissions reduction target.

**Why it matters:** Utilities distribute natural gas to generate electricity, to provide space and water heating for buildings, and for use in natural gas fueled vehicles. A clean gas procurement standard ensures that a portion of the gas going to those end uses comes from renewable and low-emissions sources.

**Where RNG fits:** At this time, RNG is the most readily available renewable and low-emissions option that utilities can source to meet clean procurement standards. It can also be used as a feedstock to produce hydrogen.

[Click here to see where these standards are in use or under consideration.](#)

[Click here for a sample letter to send to your state or federal legislators.](#)

Revised January 2023

---

<sup>3</sup> Ibid.