



February 10, 2020

Testimony in SUPPORT of Senate Bill 20-150: “Adopt Renewable Natural Gas Standard”

Good afternoon madam chair and members. Thank you for giving us the opportunity to provide testimony in support of Senate Bill 20-150 to adopt a renewable natural gas standard. On behalf of the American Biogas Council, we urge you to also support Senate Bill 20-150 which will create programs for large and small natural gas utilities to utilize renewable natural gas to reduce carbon emissions and support economic growth and sustainability across many sectors of Colorado's economy.

Our organization, the American Biogas Council, is the only national trade association which represents the entire biogas industry in the U.S. We represent 230 companies and over 2,000 individuals who are dedicated to maximizing the production and use of biogas from organic waste. Biogas systems recycle organic material like food scraps and animal waste into renewable energy using anaerobic digestion. Renewable natural gas, or RNG, is made from biogas. When biogas is upgraded to gas pipeline quality, it's called renewable natural gas because at that point, the molecules are exactly the same, except RNG has been renewably produced from organic material.

Today, we see 5 key reasons to support SB 20-150 to create an RNG program in the state:

1. Colorado has enormous untapped potential to recycle organic material to produce biogas and RNG
2. An RNG program is one of the most significant ways for the gas business to shrink its carbon footprint
3. Gas customers want the option to buy RNG instead of conventional natural gas
4. Creating an RNG program will allow the gas utilities and their customers to directly support more sustainable agriculture and recycling through the construction of new biogas systems and those new systems will generate new investment and jobs.
5. Two other states have RNG programs and many others are creating them. Colorado has an opportunity to be included among the leading states to promote decarbonisation of its gas supply.

1. **Colorado has enormous untapped potential to recycle organic material to produce biogas and RNG**

Today, Colorado already has 26 operational biogas systems but the potential to build more than 400 new projects which could produce RNG from their biogas ([ABC biogas state profile for Colorado](#)). If we just look at the agriculture waste from dairy, swine, turkey and broiler farms, plus the food waste from the state population and the sludge removed from wastewater at Colorado's largest wastewater plants, at least 23 billion cubic feet of gas can be produced. The clean energy produced by these biogas systems would result in emissions reductions equivalent to removing 1,453,000 cars from the road or growing 650 million coniferous tree seedlings for ten years.

2. **An RNG program is one of the most significant ways for the gas business to shrink its carbon footprint**

All over the country, gas utilities are trying to find ways to shrink their carbon footprint. They're turning to RNG from biogas to do so because of how low carbon, and in many cases deeply carbon negative, biogas is. For example, in March 2019, SoCalGas announced their commitment to replace 20 percent of its traditional natural gas supply with RNG by 2030 (and 5% by 2022) which would make them the cleanest natural gas utility in North America, even though they are the largest ([source](#)). The reason that these commitments can shrink carbon footprints so dramatically is because when you build a new biogas

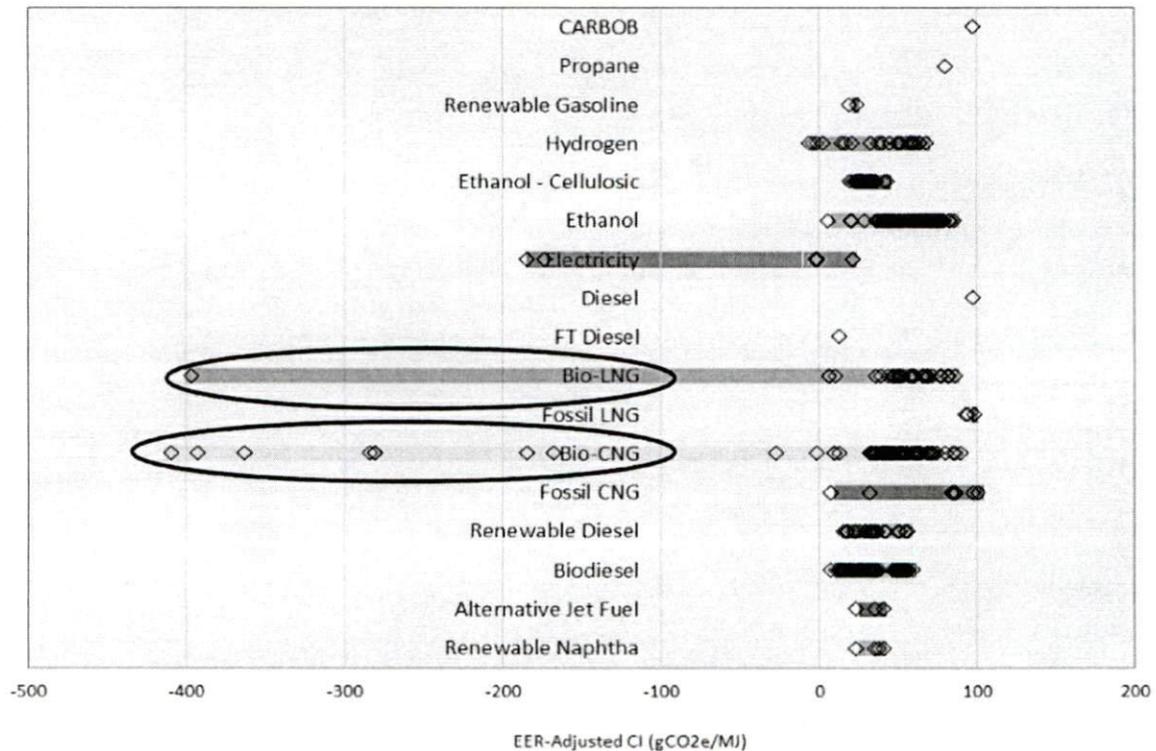
system that recycles organic waste into biogas and, often, into RNG, you're eliminating carbon emissions throughout the entire lifecycle of the material. Open manure lagoons on farms emit huge volumes of methane emissions. By putting that manure into a biogas system, those harmful methane emissions are eliminated and put to good use. In addition, when the methane, in the form of biogas or RNG, is used, it ALSO eliminates fossil fuel emissions, like those from gasoline or diesel vehicles. When you add both benefits together, you can have biogas or RNG, that's DEEPLY carbon negative.

Here's how carbon negative biogas and RNG can be. In California, the state government agency, the California Air Resources Board, certifies every project that participates in its Low Carbon Fuel Standard based on how much carbon emissions the projects will eliminate from the atmosphere if constructed. Almost the only negative carbon projects and by far, the most deeply carbon negative projects are all biogas and RNG projects. See this chart ([source](#)):

LCFS Pathway Certified Carbon Intensities

Last updated: January 27, 2020

Carbon Intensity Values of Current Certified Pathways (2020)



3. Gas customers want the option to buy RNG instead of conventional natural gas

Across the country, the drive to create RNG programs is customer driven. Customers of products, like L'Oreal cosmetics ([source](#)) and UPS services ([source](#)) have driven those companies to buy renewable natural gas made from biogas, because gas is needed to make those products and run their business. Gas customers in Colorado need access to the low carbon and carbon negative attributes of renewable natural gas instead of geologic natural gas and the program outlined by SB 20-150 is needed to get there.

4. Creating an RNG program will allow the gas utilities and their customers to directly support more sustainable agriculture and recycling through the construction of new biogas systems and those new systems will generate new investment and jobs.

Colorado has an opportunity not noticed before: to promote sustainable agriculture and the recycling of organic material by creating an RNG program. By supporting SB 20-150, you will create the catalyst to finance and build more biogas systems. If all of the more than 400 biogas systems are built in Colorado, they would generate \$1.27 billion in new capital investments plus 10,543 construction jobs and 700 permanent jobs in the state to run these systems.

This RNG program is not just about renewable energy, it's about making farms more sustainable by reducing methane emissions and putting more advanced manure management practices in place. It's about building new infrastructure to recycle food scraps and waste that can't be eaten by people and animals. And it's about reducing municipal costs by reducing the amount of energy needed at wastewater plants to return clean water to our waterways from the sewage they process. Wastewater plants are usually the largest energy hog in any municipality, but the sludge they remove can be digested in biogas systems to eliminate 50-100% of that energy load. All of this can be possible by creating an RNG program so there will be customers who want to buy the renewable gas from new biogas systems.

5. Two other states have RNG programs and many others are creating them. Colorado has an opportunity to be included among the leading states to promote decarbonisation of its gas supply.

All across the country, we are seeing states take an interest using renewable natural gas to reduce emissions from local distribution companies.

States like Maine and Vermont have already implemented voluntary RNG programs that allow customers to choose to match their gas usage with renewable attributes or renewable natural gas. In Oregon a recently passed bill, SB 98, creates a pathway to add up to 30 percent RNG to the state's pipeline system and allows for RNG investments to be included in utility rates. The state's utility commission is currently creating their program. In Nevada, legislation was passed last year to create an RNG program and the utility commissioners think their rules to create the program will be done in March this year. And in California, SoCalGas, the nation's largest gas utility, has requested an RNG program to be created and that program is being built. More are coming, hopefully including Colorado.

Vermont's Public Utilities Commission wrote that their RNG program "represents a meaningful first step in encouraging customer interest in purchasing RNG" and they emphasized "the importance of the successful implementation of the RNG program in helping to meet the State's renewable energy policy objectives." In California, the move to develop a state program for the sale and purchase of RNG comes from the success of RNG in the state's Low Carbon Fuel Standard. California's LCFS awards credits to companies that produce low-carbon alternative fuel sources, and RNG consistently earns the best scores when it comes to lowering the carbon-intensity of fuels. California is currently considering SB 1440, which would create a mandatory program

for establishing renewable gas procurement, similarly to how SB 20-150 would create mandatory programs for large natural gas utilities in Colorado.

With Colorado's SB 20-150, the state will benefit greatly by creating an avenue for a low carbon or carbon negative fuel source to heat homes and power businesses and industry throughout the state. We urge you to support Senate Bill 20-150 and move Colorado towards a more sustainable future.

Sincerely,

A handwritten signature in black ink, appearing to read "Patrick Serfass". The signature is fluid and cursive, with the first name "Patrick" and last name "Serfass" clearly distinguishable.

Patrick Serfass, Executive Director