

| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|---------|--|--|----------------------------|--|
| Alabama | | | | |
| Alaska | | | | |
| Arizona | <p>Southwest Gas Corp: submitted an application to the Arizona Corporation Commission (ACC) to establish an RNG Program to incorporate RNG into its gas supply portfolio.</p> <p>Denied by ACC on 12/17/20.</p> <p>Southwest Gas Corp: Offers RNG services such as: biogas gathering; biogas cleaning and conditioning; RNG transportation; and interconnection to SW Gas pipelines. These services are offered to RNG producers, such as landfills and waste water treatment plants, not to residential customers.</p> <p>Program began in 2018.</p> <p>Dominion: partnered with Smithfield Foods in 2018 to create <u>Align Renewable Natural Gas</u>, the company that will be responsible for capturing and converting the RNG to be put into the pipelines for residential and commercial customers. This joint venture will operate in North Carolina, Virginia, and Utah. In October 2019, the pair announced the program would expand into Arizona and California.</p> <p>SW Gas: Pursuant to Docket G-01551A-17-0286 SW Gas is in the process of linking four RNG projects to its system including a Pima County wastewater plant in Marana and three Central Arizona dairy farms. SW Gas is also connecting to three more RNG plants planned for dairies in Maricopa, Buckeye and Gila Bend and may buy gas from those projects in the future.</p> | <p>Docket G-01551A-19-0055: SW Gas seeks approval for an RNG Program that would allow the company to meet up to 1 percent of its forecasted annual Arizona retail sales with RNG purchases by 2025, 2 percent by 2030, and 3 percent by 2035.</p> <p>Filed in 2019; ACC disapproved on 12/17/20; ordered the opening of generic docket on RNG and workshop no later than 6/1/21 to explore role of RNG in AZ.</p> <p>Docket G-01551A-17-0286: approved Southwest Gas’ new rate schedule to include RNG services to RNG producers. SW Gas offers services to RNG producers to upgrade and/or interconnect to SW Gas’ pipelines to transport RNG.</p> <p>Included RNG gas quality specifications and testing requirements.</p> <p>Approved in 2018.</p> | | <p>AGA Comments in Docket Number G-00000A-210045</p> |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|--------------------------|---|--|---|---|
| | <p>Announced May 13, 2021.</p> <p>SW Gas: Tres Rios Wastewater Project in Tucson is expected to be operational in July 2021. Sunoma Renewable Biofuel Project in Gila Bend in partnership with Paloma Dairy expected to begin production October 2021. Another project at the Butterfield Dairy in Buckeye is anticipated to be operational by December 2021. The project at Milky Way Dairy in Maricopa is anticipated to be completed by December 2022.</p> | | | |
| <p>Arkansas</p> | | | <p>SB 136: Amends state law related to gas rates allowing the PSC to consider utility purchase of natural gas or natural gas alternatives, such as RNG and hydrogen, as an operating expense if the purchase is in the public interest.</p> <p>Signed into law March 2021.</p> | |
| <p>California</p> | <p>SoCalGas (Sempra), PG&E, SDG&E and Southwest Gas Corp: submitted a Joint Utility Draft Solicitation, in compliance with a CA Public Utility Commission (“CPUC”) mandate established in SB1383, which proposed that each utility would launch a dairy biomethane pilot project to begin injection of RNG into the utility’s pipeline system.</p> <p>Joint Draft Solicitation was submitted in 2018.</p> <p>SoCalGas and SDG&E: submitted an application to the CPUC to offer a voluntary Renewable Natural Gas Tariff to residential, small commercial, and industrial customers. SoCalGas received approval from the CPUC to begin the construction of the</p> | <p>Application 19-02-015: Sempra Utilities & stakeholders agreed to settlement plan offering RNG to residential customers. As approved, Residential customers will be able to select a fixed dollar amount per month (\$10, \$25, or \$50) for the purchase of renewable natural gas. Commercial customers will be able to select a fixed dollar amount per month or select a percentage of their consumption for the purchase of renewable natural gas, up to 100%. ALJ decision proposes a three-year pilot similar to settlement plan. At least 50% of RNG must be procured from in-state. Approved by CPUC on December 17, 2020.</p> <p>ALJ decision 10/27; Approved 12/17/20</p> | <p>AB 1900: CPUC must set gas quality standards and promote in-state RNG distribution.</p> <p>Signed into law 2012.</p> <p>AB 2313: CPUC must consider factors beyond cost in rate recovery cases for investments in RNG interconnection facilities.</p> <p>Signed into law 2016.</p> <p>SB1383: CPUC must direct utilities to implement at least 5 dairy biomethane pilot projects to demonstrate interconnection to the common carrier pipeline system. Each project is targeted to</p> | <p>California Integrated Energy Policy Report (Chapter 9 is on RNG)</p> |

| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|-------|--|--|---|----------------|
| | <p>infrastructure necessary to complete these projects. SoCalGas announced a new initiative, which aims to make RNG 5% of supply by 2022 and 20% by 2030.</p> <p>Anticipated 2021 program start.</p> <p>SoCalGas: Calgren Dairy Fuels & SoCal completed a first of its kind dairy biogas facility in the state and only the sixth in the country. Calgren plans to expand operations to eight additional farms by the end of 2019.</p> <p>SoCalGas: Announced the commissioning of the nation's first scalable biomethanation reactor system at DOE's National Renewable Energy Laboratory (NREL) Energy System Integration Facility in Golden, Colo. The technology uses renewable electricity to convert hydrogen into pipeline quality methane for use in homes, businesses and in transportation. Aims to replace 20% of its natural gas supply with RNG by 2030. Anaergia Inc. has partnered with the University of California to receive 40% of its natural gas supply in the form of RNG by 2025. UC has agreed to purchase in total \$42 million worth of RNG over the next 20 years. To fulfill this demand, Anaergia is building the Rialto Bioenergy Facility - the largest organic waste diversion and renewable energy recovery facility in North America. This plant is expected to open in late 2020. The facility will divert about 400 million pounds of food scraps and other organic waste each year from SoCal landfills. That material will then be fed into an anaerobic biodigester and transformed into RNG.</p> | <p>13-02-008: Proposed decision creates CA Renewable Gas Standard requiring percentage of all gas used for core customers come from certain types of RNG. LDCs must prorate procure RNG amounting to 8 MMT of organic waste diversion by 2025 and raises the 2030 target to 12% of 2020 core gas demand by 2030. Dairy gas can only be used to satisfy the medium-term target given its higher-utilization under other state programs.</p> <p>Proposed Decision filed Jan. 3, 2022. Approved February 24, 2022.</p> | <p>be connected to the utility pipeline and flowing RNG within 2 years of the acceptance of the application.</p> <p>Signed into law in 2016.</p> <p>AB 3187: Requires the CPUC open a proceeding not later than July 1,2019 to consider options to promote the in-state production and distribution of biomethane.</p> <p>Signed into law in 2018.</p> <p>SB 1440: CPUC can adopt a biomethane procurement program that benefits rate payers, is cost-effective, and advances the state's environmental and energy policies.</p> <p>Signed into law in 2019.</p> <p>SB 457: extends the monetary incentives program established in D.15-06-029, which is set to run out on Dec. 31, 2021, until Dec. 31 2026.</p> <p>Signed into law October 2019.</p> <p>SB 1352: mandatory RPS for gas utilities. Requires the commission to establish a biomethane procurement program requiring utilities by 2030 to procure at least 20 percent of its total volume of gas delivered to core customers in California with biomethane. The bill would require the commission, in designing and implementing the program, to ensure that the biomethane procurement program is a cost-effective means to achieve forecast reductions in emissions of short-lived climate pollutants.</p> | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|-------|---|--------------------------|---|----------------|
| | <p>SoCalGas: Announced on Oct. 3, SoCal awarded Corona, Ca more than \$44,000 for completion of an RNG project at the city’s water and power facility.</p> <p>Dominion: partnered with Smithfield Foods in 2018 to create Align Renewable Natural Gas, the company that will be responsible for capturing and converting the RNG to be put into the pipelines for residential and commercial customers. This joint venture will operate in North Carolina, Virginia, and Utah. In October 2019, the pair announced the program would expand into Arizona and California.</p> <p>Socal Gas & PG&E: demonstrated further advancement of a new electrochemical technology that converts the carbon dioxide content in raw biogas to pipeline-quality RNG. June 2020.</p> <p>SoCal: Completed project with Anaergia to connect bioenergy facility producing 985,000 MMBTU/year of RNG. Marks the fifth time SoCal’s distribution system has connected to an in-state RNG producing facility. The facility is now the largest generator of RNG in California. In service March 18, 2021.</p> <p>PG&E: Partnering with Mass Energy & CA Energy Exchange to divert methane waste from 15 farms into mid-market third-party pipeline delivered to PG&E system. Historically, access and a lack of cost-effective alternatives to transport RNG to PG&E’s pipeline system hindered otherwise viable partnerships with dairies. In service December 2021.</p> | | <p>Introduced February 2020.</p> <p>AB 3163: Amended definition of biomethane to include methane produced from a number of specified organic waste feedstocks.</p> <p>Signed into law October 2020.</p> <p>CA SB 1122: Requires PUC to consider green electrolytic hydrogen as a zero-carbon resource; requires CARB to prepare strategic plan to accelerate green electrolytic hydrogen.</p> <p>NOT RNG; introduced February 2020</p> | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|------------------------|---|--|--|---|
| | <p>SW Gas: completion of a pipeline interconnection to supply RNG from the Victor Valley Waste Wastewater Reclamation Authority (VWVRA) in San Bernardino County to its gas system. Once fully in production, the facility could divert more than 6,000 metric tons of methane, which is equivalent to 1.5 million CO2 tons, per year.</p> <p>Announced January 2022.</p> | | | |
| <p>Colorado</p> | <p>Xcel: RFI announced in May 2020 as first step in developing programs to deliver RNG across eight states including Colorado. In particular, Xcel is exploring a voluntary RNG product offering in CO.</p> <p>Dominion: building one of the largest dairy RNG projects in the country in Greeley County, Colorado. The project in conjunction with Vanguard Renewables and Johnson Dairy and Longs Peak Dairy will offset 112,175 metric tons of CO2 which is equivalent to 25,387 vehicles off the road.</p> <p>Updated August 25, 2021.</p> <p>Black Hills: Seeking PUC approval of voluntary four-year RNG/offset program to offset up to 100% of customer emissions. Pending approval, participants will be able to purchase RNG attributes/offsets in blocks of \$5 equating to about 25% of the average residential customer’s monthly usage. Seeking similar programs later this summer in KS & NB and in AR, IA, & WY by 2023.</p> | <p>Docket No. 22A-0251G: BHE seeking approval of four-year RNG/offset voluntary pilot program to begin in 2023.</p> <p>Filed June 6, 2022.</p> | <p>HB 14-1159: Provides a sales tax exemption for anaerobic digester equipment.</p> <p>Passed into law in 2019.</p> <p>SB 20-013: Establishes innovative tech program approved by PUC where utilities may seek approval of projects relating to technologies such as RNG, hydrogen, and CCS. Allows utility to fully recover costs of project and capital investments.</p> <p>SB 20-1018: Directs PUC to adopt RNG program for small and large utilities by July 31, 2021. Allows utilities to fully recover costs on RNG programs. Targets of 5% RNG by 2025, 10% in 2030, and 15% in 2035.</p> <p>Passed Senate, left on table 2019.</p> <p>SB 21-161: Directs PUC to adopt rules for programs for voluntary emissions reductions for gas utilities; using a utility's 2019 GHG emissions as a baseline:</p> | <p>Colorado Market Assessment of Agricultural Anaerobic Digesters</p> |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|---------------------------|---|---|---|----------------|
| | <p>Announced June 6, 2022.</p> | | <p>By 2025 at least 5%; by 2030 at least 10%; and after 2035 at least 15%. RNG must account for at least 35% of a utility’s emissions reductions.</p> <p>Introduced March 3, 2021. Tabled.</p> <p>SB 21-264: requires gas utilities to file a clean heat plan with the PUC. The targets are a four percent reduction below 2015 GHG emission levels by 2025 and 22 percent by 2030. Within the overall targets, RNG may only account for one percent of the 2025 target and five percent of the 2030 target.</p> <p>Enacted June 2021.</p> | |
| <p>Connecticut</p> | <p>SJI: announced the construction of a 2MM gallon anaerobic digester at Oakridge Dairy. The \$12 million facility is expected to be operational by September 2022 and will produce close to 60,000 dekatherms of RNG per year. The RNG will be integrated into the distribution system of Elizabethtown Gas.</p> <p>Announced November 2, 2021.</p> | <p>DOCKET NO. 19-07-04: PURA adopted gas quality and interconnection standards for the injection into the natural gas distribution system of conditioned biogas derived from organic material.</p> <p>Approved June 2, 2021.</p> | <p>SB 337: establish a procurement process for RNG and require natural gas utilities to have at least 5% of its gas coming from RNG. The Public Utility Reg. Auth. must create gas quality standards for RNG.</p> <p>Introduced in 2018, received favorable report in LCO, was tabled for Senate Calendar.</p> <p>HB 5350: Intended to increase the use of RNG in Connecticut and accelerate natural gas infrastructure repair and replacement. Allows for supply of biogas for injection into distribution system. Commissioner may direct utilities to enter into gas purchase agreements with biogas suppliers for periods of no more than 20 years. The bill allows utilities to recover costs on RNG-related infrastructure costs arising from a gas purchase agreement. A gas utility may elect to use the RNG procured to meet the needs of its customers or sell it to applicable third parties.</p> <p>Introduced February 2020</p> | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|------------------------------------|--|---|---|---|
| | | | <p>CT SB 60: directs the permitting and siting process for anaerobic digesters be streamlined.</p> <p>Introduced January 2021.</p> <p>CT HB 6409: Reintroduces provisions from HB 5350 (2020).</p> <p>Introduced February 2021.</p> <p>CT HB 5118: DEEP may direct utilities to enter into purchase agreements with biogas suppliers on behalf of customers. Allows for specified cost recovery. Similar to HB 5350 ('20) & HB 6409 ('21)</p> <p>Introduced February 15, 2022.</p> | |
| <p>Delaware</p> | <p>Chesapeake: Announced partnership with Bioenergy DevCo to develop anaerobic digestion facilities in Delmarva Peninsula. The RNG will then be distributed to CPK's customers.</p> <p>Announced May 2020.</p> <p>Chesapeake: partnership with CleanBay Renewables to generate RNG from chicken waste at bio-refinery and distribute to CPK customers.</p> <p>Announced July 2020.</p> | <p>Docket No. RP20- - 000: CPK filed interstate RNG gas quality tariff with FERC in October 2019.</p> <p>Approved.</p> | | |
| <p>District of Columbia</p> | | | | <p>ICF Study on the use of RNG in DC prepared for WGL</p> <p>WGL Climate Business Plan (March 2020)</p> |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|-----------------------|--|---|--|----------------|
| <p>Florida</p> | <p>TECO Peoples Gas: Offers RNG services such as: biogas gathering; biogas cleaning and conditioning; RNG transportation; and interconnection to Peoples’ Gas pipelines.</p> <p>These services are offered to RNG Producers, such as landfills and waste water treatment plants, not to residential customers.</p> <p>Program began in 2018.</p> <p>TECO Peoples Gas: Agreement with Alliance Diaries build, own and operate a RNG facility on the dairy’s property in Trenton near Gainesville. The facility is expected to produce 105,000 MMBtu of RNG, enough to serve about 4,400 homes annually.</p> <p>Announced June 15, 2021.</p> | <p>DOCKET NO. 20170206-GU: approved TECO Peoples Gas’s proposed tariff modification to receive and transport RNG through their pipelines.</p> <p>This was a two-tier tariff: the first for RNG producers that produce gas that meets pipeline standards; the second for RNG producers that produce gas that doesn’t meet pipeline standards and needs to be cleaned/conditioned.</p> <p>Approved in 2017.</p> <p>DOCKET NO. 20200216-GU: approved Florida City Gas RNG tariff application. Allows FCG to offer services to convert biogas into RNG and receive and transport RNG through its distribution system on behalf of the biogas producer.</p> | <p>SB 896: aiming to support the growth of renewable natural gas as a renewable source of energy in the state. Adds definitions of biogas and renewable natural gas, adding the term renewable natural gas to the previously existing definition of renewable energy under state law. Allows PSC to approve cost recovery by utility for purchase of RNG where pricing exceeds NG market price but otherwise deemed reasonable and prudent.</p> <p>Passed April 2021.</p> | |
| <p>Georgia</p> | | | | |
| <p>Hawaii</p> | <p>Hawaii Gas: captures and processes biogas from the City and County of Honolulu’s Honouliuli Wastewater Treatment Plant on O’ahu. Hawaii Gas includes the RNG as part of their fuel mix.</p> <p>Facility completed in 2018.</p> <p>In an effort to increase RNG supplies, Hawaii Gas issued an RFP seeking proposals from local and national suppliers who can provide up to 80,000 therms per day of RNG. Currently reviewing 4 “best and final offers” and deciding.</p> <p>RFP issued in 2018.</p> | | <p>HB 1242: The bill requires gas RPS. Following renewable portfolio requirements: 25 percent of sales by 2025; 40 percent of sales by 2030; 70 percent of sales by 2040; and 100 percent of sales by 2050. Allows for cost recovery through an automatic rate adjustment clause.</p> <p>Introduced January 2019.</p> <p>SB 289: The bill requires gas RPS. Following renewable portfolio requirements: 25 percent of sales by 2025; 40 percent of sales by 2030; 70 percent of sales by 2040; and 100 percent of sales by 2050. Allows for cost recovery through an automatic rate adjustment clause. Same as HB 1242.</p> | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|------------------------|--|--|--|----------------|
| <p>Idaho</p> | <p>Intermountain Gas: provides access service to its distribution system which allows RNG producers to move RNG produced in southern Idaho to end use customers across the western United States.</p> <p>Transport Only</p> <p>Avista: seeking PUC approval to offer voluntary RNG program.</p> <p>Requested March 2022.</p> | <p>Docket INT-G-20-03: The IPUC approved Intermountain’s proposal to provide access service to enable RNG producers to move RNG to their end use customers across the western United States. The proposal insulates utility customers from any potential impact resulting from the RNG Access Service. Transport service.</p> <p>Approved June 2020</p> <p>AVU-G-22-01: Avista seeking approval to implement voluntary RNG program allowing customers to purchase blocks equal to 1.5 therms of RNG for \$5 per block.</p> <p>Filed March 1, 2022.</p> | <p>Introduced January 22, 2021.</p> | |
| <p>Illinois</p> | <p>Nicor Gas: seeking approval for its TotalGreen pilot program offering customers a voluntary RNG/carbon offset program.</p> <p>Filed January 2021.</p> | <p>Docket 20-0722: Nicor filed an application for an RNG interconnection pilot. If approved, the pilot will allow Nicor to invest \$20M in capital for RNG interconnections in its service territory, up to \$4M per project. Additionally, Nicor will negotiate for a set number of environmental attributes to be transferred from the developer to the pipeline owner. Nicor will then use these attributes to offset GHG emissions associated with its broader portfolio. The final order will allow Nicor to invest \$16M in capital and up to \$4M per project.</p> <p>Filed September 30, 2020. Approved July 2021.</p> <p>Docket 21-0098: Nicor seeking approval of proposed TotalGreen Pilot program as part of its most recent rate case. Offers customers voluntary program to offset consumption with 5-20% RNG and remaining</p> | <p>HB 3115: Under the bill natural gas utilities may seek authorization from the ICC to engage in RNG-related activities such as facility investment, gas supply contracts, pipeline expansion to interconnect with RNG, and providing customers with the option to directly purchase RNG. Includes portfolio goals of 2% of the utility's supply portfolio by January 1, 2030 and not less than 3% by 2035.</p> <p>Introduced February 2021.</p> | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|-----------|---|---|---|----------------|
| | | as carbon offsets or 0.5% RNG and 99.5% carbon offsets to test consumer price preferences. Filed January 2021. | | |
| Indiana | | | | |
| Iowa | | | HF 522 : Provides that farms may store and process manure through anaerobic digesters and produce biogas as an alternative to the current required manure storage structures. Enacted May 24, 2021. | |
| Kansas | | | | |
| Kentucky | See UGI activity in Ohio | | | |
| Louisiana | | | | |
| Maine | <p>Summit Utilities: Working on several RNG related projects. First, partnering with Maine’s dairy industry to construct an anaerobic digestion facility and produce RNG. The renewable attributes from the digester will be sold to third parties. Summit is partnering with Flood Brothers Farm, Caverly Farms, Misty Meadows Farm, Wright Place Farm, Taylor Dairy Farm, Veazland Farm, Simpson View Farm and Gold-Top Farm to obtain organic waste.</p> <p>Anticipated 2021 start date.</p> <p>Second, establishing a voluntary renewable natural gas attribute program. Customers enrolling in the voluntary program may elect to match 10 to 100 percent of their average annual usage with renewable attributes derived from landfill waste. The quantity of renewable attributes, and a flat monthly fee, will be added and shown on enrolled customers’ bills.</p> <p>Approved October 2019.</p> | <p>Docket 2019-00116: Summit Utilities filed a request for approval of new tariff sheets for the establishment of a voluntary renewable natural gas attribute program.</p> <p>Approved October 2019.</p> <p>Docket 2019-00120: Summit Utilities filed a request for approval of reorganization to establish NewCo, which will own and operate a digester facility.</p> <p>Filed in 2019.</p> | <p>LD-2017: Requires the PUC to develop and oversee a pilot project for the conversion of excess renewable energy into methane gas and hydrogen and the storage of the converted gas. Up to 3 energy-to-gas facilities, each up to 10 megawatts in production capacity, may be established. The commission is required to establish the pilot project no later than January 1, 2021; the pilot project expires December 31, 2026.</p> <p>Introduced 2020. Carried over into 2021, due to emergency adjournment.</p> <p>LD 9: The bill would require the PUC to establish and oversee a power-to fuel pilot program. The commission is required to approve up to two power-to-fuel projects between January 1, 2022 and December 31, 2027, each up to 10 megawatts in production capacity, that convert renewable energy to hydrogen gas, methane gas or other fuel.</p> <p>Introduced January 11, 2021</p> | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|-----------------------------|---|---|--|----------------|
| | <p>Unitil: issued a Request for Expressions of Interest to identify potential RNG suppliers, chiefly in Maine. Considering investing in RNG infrastructure and facilities.</p> <p>Announced October 2020</p> | | <p>LD 989: requires the PUC to allow utility to use RNG for no more than 2% of the gas it supplies to its customers starting in 2022 and to allow a utility to use an additional 2% annually thereafter. Utility may include the costs of RNG in its cost-of-gas adjustment rate.</p> <p>Introduced March 10, 2021.</p> | |
| <p>Maryland</p> | <p>Washington Gas: received approval from PSC to support Piscataway Bioenergy Project in partnership with Washington Suburban Sanitary Commission. The \$271 million facility, slated for completion in fall 2024, will capture methane generated during biosolids treatment and process it into RNG for sale on the open market.</p> <p>Announced October 28, 2021.</p> | <p>G-9: Renewable Natural Gas Interconnection Service: BGE First Maryland utility to receive regulatory approval of an RNG interconnection tariff.</p> <p>Approved October 7, 2021.</p> <p>Case No. 9680: Columbia Gas proposing a five-year RNG pilot - the Green Path Rider. Under the voluntary program CGM will purchase RNG, environmental attributes and carbon. Will match the customer's election of either a 100% reduction or a 50% reduction in emissions. Customers opting into the Green Path Rider will be charged an additional fee per therm that reflects the cost of the RNG environmental attributes and carbon offsets. The program would be offered to all residential and general service customers that are not in arrears.</p> <p>Filed May 13, 2022.</p> | | |
| <p>Massachusetts</p> | | <p>DPU 20-80: Issued order opening an investigation into role of gas LDCs in meeting MA emissions limits, "Future of Heat Proceeding."</p> <p>Ordered October 2020.</p> | <p>H 3887: seeks study on the opportunities for sustainable and cost-effective market deployment of RNG, hydrogen, and low-carbon fuels to reduce emissions associated with the supply of natural gas for heating.</p> <p>Filed February 15, 2021.</p> <p>H 4081: Beginning in 2025 the bill would establish a renewable heating standard requiring that at least</p> | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|------------------------|---|--|--|----------------|
| | | | <p>3 % percent of therms sold by obligated entities come from qualified renewable heating fuels. Beginning in 2030 it would go up to 5%, in 2035 7%, and by 2040 10%. The bill also directs the DPU to adopt regulations authorizing cost recovery by natural gas utilities of all prudent incremental costs arising from the implementation of the renewable heating fuel standards recovered by means of an automatic adjustment clause or any another recovery mechanism authorized by rule.</p> <p>Introduced August 19, 2021.</p> | |
| <p>Michigan</p> | <p>DTE: Established a Voluntary BioGreenGas Program. The program is available to all their natural gas customers. Program launched in 2013.</p> <p>DTE: CleanVision Natural Gas Balance program uses a mix of 95% carbon offsets and 5% RNG to allow customers to offset a portion or all of their monthly natural gas use in the following amounts and costs: 25% (\$4); 50% (\$8); 75% (\$12); 100% (\$16). Available January 2021.</p> <p>Consumers Energy: Announced \$17 million project with Swisslane Farms to build biodigester that could produce enough RNG to heat nearly 1,000 homes. Announced December 2021.</p> <p>SJI: Announced four new RNG facilities with REV LNG planning to construct 2 million gallon anaerobic digesters, equipment to process biogas from dairy waste into higher-quality RNG, and related equipment at four family-owned dairy farms in Michigan. Together, the facilities will have the</p> | <p>Case No. U-20839: DTE application to amend BioGreen Gas Program and implement a Voluntary Renewable Gas program pilot. Will provide customers the ability to offset up to 100% of their emissions. Filed June 2020; approved October 2020.</p> <p>Case No. U-21148: Consumers Energy included RNG production facility in rate request that it will build, own, operate, and maintain. Facility will have a net output of 56,000 mcf/year. Consumers is planning to sell the environmental attributes associated with the dairy-sourced RNG into existing carbon markets to reduce the revenue requirement for the facility. Filed December 1, 2021.</p> | <p>HB 6036: expands the state’s PACE financing program to include anaerobic digestion as a qualifying “energy program” eligible for financing. Introduced August 2020.</p> <p>SB 138: The bill directs the PSC to develop and periodically update an inventory of biogas and RNG resources available in the state. Introduced February 2021.</p> <p>SB 82: state budget bill includes \$250,000 for the PSC to conduct an RNG study assessing the potential for RNG development in the state. Passed legislature September 22, 2021.</p> | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|-------------------------|--|---|---|----------------|
| | <p>capacity to produce nearly 3 million therms of RNG, or roughly 300,000 MMBtu, per year.</p> <p>Announced December 2021.</p> <p>DTE: Partnership with Grand Rapids and DTE to take RNG produced by the city’s Water Resource Recovery Facility. The RNG will be used by both the city and DTE for CNG vehicles as well as DTE’S voluntary RNG program for customers.</p> <p>Approved February 23, 2022.</p> | | | |
| <p>Minnesota</p> | <p>CenterPoint Energy: proposed a Voluntary Green Tariff. This program is offered to all residential customers.</p> <p>Program denied by the Minnesota Public Utility Commission.</p> <p>Xcel: RFI announced in May 2020 as data collection for future RNG tariff. Xcel expects to file a plan with MN utility regulators by late 2020 or early 2021.</p> | <p>Docket 18-547: reviewing CenterPoint Energy’s proposal for a five-year Voluntary Green Tariff pilot program to offer RNG to residential customers.</p> <p>Submitted 8/23/2018. Oral argument held 7/26/19. On 8/29/19 Proposal denied without prejudice, PUC suggested CenterPoint address cost concerns and resubmit proposal. As of September, no decision on whether to continue pursuing the green tariff option, or to start exploring an interconnection tariff, which would allow producers to put more RNG directly on the system.</p> <p>Docket 20-434: CenterPoint request for RNG interconnection tariff. On June 25 the MN Dept. of Commerce recommended the MPUC approve the petition with minor recommended changes. Dept. of Commerce urged PUC to adopt the tariff following amendments made including the addition of an exit fee for RNG producers. MPUC approved interconnection tariff with slight modifications.</p> <p>Approved January 27, 2021.</p> | <p>In September 2019 Gov. Tim Walz announced the creation of a Biofuels Council which will advise him on how to foster the growth of Minnesota’s biofuels industry.</p> <p>SF No. 3013: The bill would establish a state regulatory policy allowing a utility to add RNG and hydrogen to its distribution system. Must submit plan to MPUC, the cost of the alternative resource plan must be no more than five percent of the utility’s total annual revenue requirement. Also calls for statewide inventory of Minnesota’s potential renewable natural gas resources.</p> <p>Passed Senate before session adjourned sine die.</p> <p>HF 239/ SF 421: allows gas utilities to propose innovative resource plans. Innovative resource is defined to include biogas, RNG, and power-to-hydrogen among others. Could invest up to 7.5% revenue requirement in RNG. May also seek separate green tariff.</p> <p>Introduced January 21, 2021.</p> | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|-------------|--|---|--|----------------|
| | | <p>Docket No. G-008/M-21: CenterPoint petition for approval of a carbon intensity framework for RNG and a threshold carbon intensity requirement for RNG interconnection producers.</p> <p>Filed May 7, 2021.</p> | <p>HF 6: reintroduced version of HF 239 in special session.</p> <p>Enacted June 26, 2021.</p> <p>SF 3336/ HF 3681: Directs grant funding to the Agricultural Utilization Research Institute to conduct AD feedstock study for the production of RNG.</p> <p>Introduced February 21, 2022.</p> | |
| Mississippi | | | | |
| Missouri | | | <p>HB 734: requires PSC to adopt rules for voluntary RNG program for utilities. Directs PSC to establish reporting requirements and a process for utilities to fully recover prudently incurred costs associated with a renewable natural gas program.</p> <p>Passed May 2021.</p> | |
| Montana | | | | |
| Nebraska | | | | |
| Nevada | <p>Southwest Gas Corp: pursuing partnerships with the City of Las Vegas Wastewater Treatment Plant and the Clark County Sanitation District to procure biogas and offer RNG to customers.</p> <p>Presented plan in 2017 at NV State Assembly Subcommittee on Energy</p> <p>SW Gas: Offers RNG services such as: biogas gathering; biogas cleaning and conditioning; RNG transportation; and interconnection to SW Gas</p> | <p>19-06006: Docket established by SB 154 requiring PUC to adopt regulations authorizing certain RNG activities.</p> <p>On December 13, 2019 the Nevada Public Utility Commission issued its initial draft regulations as required under SB 154 passed earlier this year. A utility seeking approval for RNG activity must describe the activity proposed, estimate costs and revenue requirements, an explanation of the environmental benefits of the activity, the</p> | <p>SB 154: requires the Public Utilities Commission of Nevada to adopt regulations authorizing a public utility which purchases natural gas for resale to engage in renewable natural gas activities and to recover the reasonable and prudent costs of such activities. Directs utilities to attempt to incorporate the following amounts of RNG into their supply: 1% by 2025; 2% by 2030; and 3% by 2035.</p> <p>Signed into law in 2019.</p> | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|-----------------------------|---|---|--|----------------|
| | <p>pipelines. These services are offered to RNG producers, such as landfills and waste water treatment plants, not to residential customers.</p> | <p>mechanism the utility proposes to recover costs associated with the activity, and an estimate of the activity’s impact on the utility’s rate base. A commission order approving RNG activity under the proposed regulation is not a determination of prudence of the proposed activity. The prudence of the activity shall be considered in an application filed by a utility under NRS 704.110.</p> <p><u>Adopted April 29, 2020.</u></p> <p><u>Docket 21-01015:</u> SW Gas application for authority to purchase RNG for inclusion in supply portfolio equivalent to 3% of its Nevada supply portfolio pursuant to SB 154. In its order the NVPUC stated that SW Gas must show its RNG activity will provide one or more environmental benefits as required under state law, a hearing or amended application is likely forthcoming.</p> <p>Filed January 5, 2021; Order issued April 13, 2021.</p> | <p><u>Bill Draft Request 58-108:</u> State Senator Kelvin Atkinson requested a bill draft request (BDR) for the 2019 legislative session that would “make certain changes relating to renewable natural gas.” There is no further information on this BDR.</p> <p>To-date, no such bill has been proposed.</p> | |
| <p>New Hampshire</p> | <p>Liberty Utilities: <u>Proposed</u> partnership with RUDARPA Inc., to develop RNG facility at a landfill. The proposed contract anticipates an annual RNG supply volume of 475,000 dekatherms over five years, accounting for approximately six percent of Liberty’s annual gas sales.</p> <p>Proposed in 2018; withdrawn in 18-140.</p> <p>Liberty: Amended Proposed partnership with RUDARPA Inc., to purchase RNG sourced from a landfill and with discussion to propose a voluntary RNG tariff for customers.</p> | <p><u>DG 18-140:</u> In response to SB 577 Liberty Utilities petitioned for approval of an RNG supply and transportation contract. Proposes to reduce customer costs by monetizing the thermal RECs and selling them through the established marketplace for \$3.92-\$4.62/dekatherm.</p> <p>Filed in 2018; Liberty requested PUC close docket without prejudice February 2020.</p> <p><u>DG 21-036:</u> Following DG 18-140, Liberty refiled petition for approval of an RNG supply and transportation contract. Liberty would agree to buy all RNG from the landfill for a 17-year term with the option to buy the RNG facility after four years,</p> | <p><u>SB 218:</u> included obligations for “useful thermal energy” as part of the New Hampshire Renewable Portfolio Standards by creating a carve-out which dedicated a portion of the existing Class I requirement to qualifying thermal facilities. Useful thermal energy includes energy that can be metered and that is delivered as heat, steam, or hot water directly to the New Hampshire consumer and used for heating, cooling, humidity control, process (manufacturing), or other valid thermal end uses.</p> <p>Signed into law in 2012.</p> <p><u>SB 577:</u> Allows thermal energy derived from biological sources to generate renewable energy</p> | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|--------------------------|---|---|---|--|
| | | <p>requiring separate approval. Liberty has commitments to sell 65% of the RNG and is looking at a voluntary tariff for RNG.</p> <p>Filed March 4, 2021.</p> | <p>credits under the state’s thermal energy RPS carve-out.</p> <p>Signed into law in 2018.</p> <p>SB 424: Authorizes PUC to approve utility petition for RNG procurement and qualified infrastructure investment if in public interest. RNG costs cannot exceed five percent of utility’s total gas volume delivered unless approved by PUC and total bill increase does not exceed three percent annually.</p> <p>Introduced December 30, 2021.</p> | |
| <p>New Jersey</p> | <p>South Jersey Industries: acquired a minority interest in REV LNG, LLC - a company specializing in the development, production and transportation of renewable natural gas (RNG- along with the rights to develop anaerobic digesters at a portfolio of dairy farms to produce RNG.</p> <p>Announced February 24, 2021.</p> <p>SJI: Plans to spend \$280 million over the next five years on up to 25 RNG dairy farm facilities. Expects 8 online and profitable by 2022.</p> <p>Announced May 6, 2021.</p> | <p>Docket No. GR21060878: PSEG in its Annual gas supply commodity charge requested authority to procure up to 1% of its annual gas supply as RNG. PSEG is not seeking to purchase RNG in the instant filing.</p> <p>Filed June 1, 2021.</p> | <p>S2205 would allow electric energy produced from biofuel to be eligible as a Class II renewable energy.</p> <p>Introduced in 2018.</p> <p>A3726: Classifies landfills with gas capture as recycling facilities. The bill requires specific methods of food waste recycling and food waste-to-energy production. Sending food waste offsite for treatment with sewage sludge in an anaerobic digester for renewable natural gas or biogas recovery is an alternative authorized recycling method under the bill. Also amends the definition of “Class I renewable energy” to include methane gas from landfills, methane gas from a biomass AFacility, or methane gas from an anaerobic or aerobic digestion facility.</p> <p>Passed in 2019, conditional veto. Passed House in 2020.</p> <p>NJ S 3526/ A 5655: directs the BPU to establish a program to encourage the procurement of RNG and investment in RNG infrastructure by a gas utility.</p> | <p>Report in the Journal Sustainability “The Feasibility of Renewable Natural Gas in New Jersey”</p> |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|-------------------|--|--|--|--|
| | | | <p>The bill establishes portfolio targets starting at 5% by 2024 the bill sets targets increasing by five percent every five years ending in 30 percent RNG by 2050. Allows utility to annually invest up to 5% of total revenue requirement.</p> <p>Introduced March 9, 2021</p> <p>NJ A 577: Directs the BPU to establish a program to encourage the procurement of RNG and investment in RNG infrastructure by a gas utility. Allows utility to annually invest up to 5% of total revenue requirement.</p> <p>Introduced January 11, 2022.</p> | |
| New Mexico | | | | |
| New York | <p>Con Edison: indicated a desire to construct 3 RNG production facilities and offer incentives to customers who reduce natural gas usage. Put out a Request for Proposal for non-pipeline solutions to provide natural gas system relief during peak periods. Specifically, suggested RNG.</p> <p>Projects have not started, pending PSC approval for cost recovery.</p> <p>On March 16, 2020 Con ED and O&R filed an updated standardized interconnection procedure for RNG. Filing also includes an optional forma gas purchase agreement.</p> <p>National Grid: partnered with NYC Dept. Environ. Protect. to launch the Newtown Creek Renewable Gas Demonstration Project which turns biogas from large waste water treatment plant into RNG and injects it into pipelines to serve residential and commercial customers.</p> | <p>Case 97-G-1380: originally opened in the 1990’s. Several utilities such as Central Hudson & National Grid, as well as coalitions such as the NY Retail Choice Coalition have recently submitted modifications to their gas transportation operating procedures to include the injection of RNG into their systems for distribution to customers.</p> <p>The most recent final order filed on this ongoing case was 2003.</p> <p>Case 19-01092: National Grid’s proposed green tariff is part of its larger “Future of Heat” filing. The offering will include four tiers, allowing customers to select the level of green gas procurement that works for their budget and environmental aspirations. The filing also includes an RNG power-to-gas pilot project.</p> <p>Filed in 2019.</p> | <p>A6249: will create a credit for the production of RNG. The proposed credit would be up to 25 cents per gallon for the production of RNG that is presented to market (capped at \$2.5 million annually and only for 4 years).</p> <p>Introduced in 2017 and referred to Ways and Means in 2018.</p> <p>NY A 9392: Includes waste to energy within the definition of renewable energy systems under state law. WTE is defined as thermal and non-thermal tech able to produce energy from waste without direct combustion.</p> <p>Introduced Feb 23, 2022.</p> | <p>The “Interconnect Guide for RNG in New York State” was released by NGA & GTI in August 2019. This report outlines the ways that RNG can be effectively incorporated into local natural gas systems.</p> <p>O&R RNG Potential Study released March 2020.</p> |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|-------|---|---|----------------------------|----------------|
| | <p>The facility is expected to begin operation in the second quarter of 2021.</p> <p>National Grid proposed a Green Gas Tariff offering that will enable its Downstate New York customers to voluntarily purchase RNG to meet all or a portion of their energy needs.</p> <p>UGI: teaming up with Global Common Energy to form Cayuga RNG Holdings to make RNG from dairy waste in New York. First project in Cayuga County will produce an estimated 50 MMcf of RNG per year, will go online in second half of 2022. A UGI subsidiary will exclusively off-take and market the RNG.</p> <p>Announced May 4, 2021.</p> <p>UGI: Announced second RNG project in New York as part of the company’s Cayuga RNG partnership. The project will be located at Allen Farms in the Finger Lakes region. The project will include the construction of an anaerobic digester and a combined heat and power project. Once completed in the second half of calendar 2022, the project is expected to annually produce 85 million cubic feet of RNG.</p> <p>Announced September 7, 2021.</p> <p>Liberty: Announced it is seeking regulatory approval to build a 2.5-mile gas line to a RNG source at the Stauffer dairy farm. Liberty anticipates the project will be complete by the end of the year.</p> <p>Announced March 2022.</p> | <p>Case 19-G-066: Con Ed approved to purchase RNG, with NYPSC recognizing that RNG may be more costly than conventional supplies, and granted recovery of RNG interconnection costs through a consumer rate surcharge until rolled into base rates in the next rate case.</p> <p>January 2020.</p> <p>Docket No. 20-G-0498: National Fuel seeking approval to amend its monthly gas supply charge tariff provisions to allow for the procurement and cost recovery associated with RNG. Proposed to limit RNG commodity purchases, at this time, to 2 percent of its total volumetric purchases. Proposed October 9, 2020.</p> <p>Case 20-G-0381: National Grid authorized to procure locally sourced RNG up to one percent annually increasing one percent per year over five years. Stipulated that environmental attributes must remain with RNG project developers. Also authorizes longer-term supply contracts for RNG subject to reasonable pricing terms.</p> <p>Joint Proposal issued January 20, 2022.</p> | | |

| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|------------------------------|---|--|--|----------------|
| <p>North Carolina</p> | <p>Piedmont Natural Gas: worked with stakeholders and NC Public Staff to develop a gas quality standard and alternative gas requirement tariff. This tariff received approval through the NC Utilities Commission and is applicable for any alternative gas projects in NC.</p> <p>Tariff received approval in 2018.</p> <p>Dominion: partnered with Smithfield Foods to create <u>Align Renewable Natural Gas</u>, the company that will be responsible for capturing and converting the RNG to be put into the pipelines for residential and commercial customers. This joint venture will operate in North Carolina, Virginia, and Utah. Dominion <u>broke ground</u> in August 2019 on North Carolina’s largest RNG project, which will generate enough energy to power more than 3,500 homes annually.</p> <p>Project construction began in 2018, anticipated to be on-line 2019.</p> <p><u>Duke Energy:</u> Announced minority stake In SustainRNG, company expects its first farm-based RNG project to go live in late 2021. Projects will provide local RNG to end users via Duke’s pipeline network.</p> <p>July 31, 2020</p> <p>Dominion: Requested approval to offer customers voluntary green tariff program.</p> <p>Filed April 1, 2021.</p> | <p>Docket No. G-9, Sub 698: The NC Utilities Commission approved PNG’s Tariff which outlined the requirements for alternative gas being injected onto PNG’s system. The Commission setup the Alternative Gas Requirements Tariff as a 3-year Pilot Program. PNG is required to provide status updates, which can be found here.</p> <p>On May 21, 2021 the pilot program was extended for an additional three years for both PNG and PSNC. PUC determined that swine manure and swine processing wastewater are acceptable feedstocks and no longer need to be part of a pilot program.</p> <p>Pilot program began in 2018. Reauthorized for three more years on May 21, 2021.</p> <p>Docket No. G-9, Sub 784: Piedmont Natural Gas (Duke) filed with NCUC to offer Green Edge program allowing customers to purchase green blocks in \$3 increments, blocks comprised of environmental attributes associated with RNG production and carbon offsets. Four blocks per month would offset average residential customer annual use.</p> <p>Filed March 15, 2021. Approved March 2022.</p> <p>Docket No. G 5, Sub 635: Dominion North Carolina filed with NCUC to offer a voluntary green tariff program where customers may elect to purchase one or more half-dekatherm blocks of RNG attributes. A customer’s purchase of RNG attributes are not based on customer usage, and revenues from the program will be used to cover the Company’s cost of purchasing RNG attributes and administrative costs.</p> | <p>SB 605: streamlines permit process for turning hog waste into RNG. Would create “general permits” for animal farm operations that allow the owner to operate a farm digester system that collects methane gas.</p> <p>Introduced April 7, 2021. Passed June 25, 2021.</p> | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|----------------------------|---|------------------------------------|--|----------------|
| | <p>Duke Energy: Announced RNG projects in Caldwell and Person County with each county to produce roughly 500,000 dth of RNG/year equivalent to the average gas use of 17,000 homes. The landfill projects are already under construction and are expected to be operational in the fourth quarter of 2022.</p> <p>Announced April 28, 2022.</p> | <p>Filed April 1, 2021.</p> | | |
| <p>North Dakota</p> | | | | |
| <p>Ohio</p> | <p>UGI: Hamilton RNG Holdings, LLC announced on August 4th that it has entered into definitive agreements to develop innovative food waste digester projects to produce RNG in Ohio and Kentucky. Hamilton RNG is a joint venture owned by a subsidiary of UGI Energy Services and Synthica Energy, LLC. Hamilton RNG’s first project, “Synthica St. Bernard”, is being developed in the Village of St. Bernard, Ohio, approximately five miles north of Cincinnati. The digester is expected to be completed in the first half of calendar 2023 and will process approximately 190,000 annual tons of food waste from nearby food manufacturers in an anaerobic digester. The project is expected to generate approximately 250,000 MMBTUs of pipeline-quality RNG each year that will be injected into a local natural gas pipeline on the regional distribution system.</p> <p>Announced August 4, 2021.</p> <p>Chesapeake: Announced construction of landfill RNG project at the Noble Road Landfill in Shiloh. Invested \$7.3 million in the project, which was constructed in just over a six-month period. Throughput of the RNG is expected to begin in the fourth quarter of 2021.</p> | | <p>HB 166: Allows gas utilities to treat infrastructure related to biologically derived methane gas as “useful” facilities for distribution service, thus allowing utilities to recover on this investment as part of a normal rate case.</p> <p>Effective July 2019.</p> | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|----------|---|--|--|----------------|
| Oklahoma | <p>Announced October 14, 2021.</p> <p>ONE Gas: Partnership with Vanguard Renewables to develop and expand farm-based RNG projects across Kansas, Oklahoma, and Texas.</p> <p>Announced April 29, 2021.</p> | <p>P202000083: OCC opened notice of inquiry to identify and examine issues regarding the development of RNG, hydrogen, and related infrastructure in the state.</p> <p>Issued August 2020</p> <p>Cause No. PUD202100063: ONE Gas seeking to spend up to \$10 million per year to purchase RNG for distribution to customers. The company would recover the cost through its purchased-gas cost mechanism. The utility also asked permission to spend an additional \$10 million per year on supporting infrastructure. Settlement agreed to to recover commodity costs of up to \$5 million annually for the purchase of renewable natural gas. Permitted to request approval, by Dec. 31, 2022, of a renewable natural gas pilot program including an opt-in provision to allocate costs and benefits of renewable natural gas to customers interested in this type of service.</p> <p>Filed May 28, 2021; settlement filed 10/27/21</p> | <p>HB 3970: Requires OCC to issue a report by Dec. 2020 on recommendations regarding the ability and appropriateness of natural gas utilities to procure, transport and deliver renewable natural gas to customers.</p> <p>Introduced January 2020.</p> <p>HB 1815: Directs OCC, by December 1, 2021, to issue a report and recommendations to the legislature on the ability of utilities to procure RNG for customers. The report must also discuss the methods for recovery of associated costs from ratepayers, such as transport infrastructure and commodity costs.</p> <p>Enacted April 2021.</p> | |
| Oregon | <p>NW Natural: partnered with the City of Portland’s Bureau of Environmental Services to build an RNG production facility, pipeline monitoring, and interconnection infrastructure. NW Natural procures RNG and transports it through pipelines to fuel the Bureau’s Garbage Truck Fleet. Not for residential utility customers.</p> <p>Program began in 2017.</p> <p>NW Natural: Smart Energy program allows residential and business customers to pay a</p> | <p>Recommendation from the Oregon Dept. of Energy: As a result of SB 334, the OR DOE produced a report detailing the policy/regulatory barriers to using RNG as an energy source in OR.</p> <p>This report recommended that the PUC adopt an RNG program that allows the gas utilities to procure RNG, sell it to customers, and recover capital expenses associated with providing RNG.</p> <p>The regulations pursuant to SB 98 are being established in Docket No. AR 632.</p> | <p>SB 334: directed the Oregon Dept. of Energy to develop, maintain and periodically update inventory of available RNG resources in the state.</p> <p>Became law in 2017.</p> <p>SB 98: Requires the PUC to adopt by rule renewable natural gas program for natural gas utilities to recover prudently incurred qualified investments in meeting certain targets for including renewable natural gas in gas purchases for distribution to retail natural gas customers. Law supports RNG targets of</p> | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|-------|---|--|--|----------------|
| | <p>voluntary tariff to support the development of biogas projects.</p> <p>NW Natural: Announced partnership with BioCarbN to convert methane from some of Tyson Foods facilities into RNG. NW Natural has options to invest up to an estimated \$38 million in four separate RNG development projects. Expected to generate more than 1.2 million MMBtu of RNG annually.</p> <p>Announced January 2021.</p> <p>NW Natural: Issued RFP seeking RNG resources and/or associated environmental benefits from feedstocks including renewable hydrogen resources.</p> <p>Issued July 8, 2021.</p> <p>NW Natural: Announced second RNG contract under SB 98 with Element Markets. Under the agreement with Element Markets, NW Natural will purchase the environmental attributes, or Renewable Thermal Certificates, generated by a new RNG facility at a wastewater treatment plant in New York City and a Wisconsin-based mixed waste anaerobic digester facility. NW Natural may begin acquiring RTCs under this agreement as early as September 2021. With the addition of this most recent contract, NW Natural has signed agreements with options to purchase or develop RNG totaling about 2% of NW Natural’s annual sales volume in Oregon, enough to heat about 36,000 homes.</p> <p>Announced August 4, 2021.</p> | <p>Order No. 20-227: Pursuant to SB 98, rules under which utilities may procure RNG for customers with voluntary volumetric goals set by SB 98. Allows utilities to invest in and own the cleaning and conditioning equipment required to bring raw biogas and landfill gas up to pipeline quality, as well as the facilities to connect to the local gas distribution system. Sets on incremental costs to acquire RNG and application of cost-effectiveness calculation.</p> <p>Issued March 27, 2020, draft rules issued 7/8, Issued 7/16</p> <p>NW Natural: Application to Defer Cost of Service Associated with Tyson RNG Project filed with OPUC. Expected to produce 1.9 million therms of RNG per year, which is 0.26% of NW Natural’s Oregon sales. estimated to be approximately \$8.6 million for deferral period.</p> <p>Filed December 30, 2020.</p> <p>ADV 1378: Avista seeking approval to implement voluntary RNG program allowing customers to purchase blocks equal to 1.5 therms of RNG for \$5 per block.</p> <p>Filed March 2, 2022.</p> | <p>15% by 2030, 20% by 2035 and 30% by 2050. Requires commission to adopt rules no later than December 31, 2019.</p> <p>Became law in 2019.</p> <p>SB 314: Authorizes PUC to allow gas utilities to recover costs from retail customers for prudent investments infrastructure measures that support adoption and service of alternative forms of transportation vehicles.</p> <p>Introduced January 2021. Passed Senate 3/21.</p> | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|----------------------------|--|--|----------------------------|----------------|
| | <p>NW Natural: Announced 21-year RNG supply deal with Archaea Energy to purchase the environmental attributes generated by Archaea related up to one million MMBtu of RNG annually for a fixed fee. The agreement will commence in early 2022 with the full quantity beginning in 2025.</p> <p>Announced November 16, 2021.</p> <p>NW Natural: Metropolitan Wastewater Management Commission announced its RNG facility is now providing RNG directly NW Natural’s distribution system becoming the first Oregon public agency to do so.</p> <p>Announced November 2021.</p> | | | |
| <p>Pennsylvania</p> | <p>PGW & PECO have partnered with The Energy Co-op to offer Philadelphia-area residents RNG come January 2020. PGW will not purchase RNG as part of its gas supply portfolio, but The Energy Co-op will offer RNG as a third-party supplier on the utilities’ system.</p> <p>UGI: completed an internal project charter with the purpose of defining and documenting the requirements, processes, and standards for introducing RNG supplies into the UGI gas distribution system. UGI expects to have gas quality specifications finalized within the next 6-8 weeks.</p> <p>July 7, 2020</p> <p>UGI: Announced interconnection agreement with landfill in Northeast PA that upon completion will be the largest RNG supply point in the U.S.</p> <p>February 4, 2021. Operational January 2022.</p> | <p>PGW: Sought pilot project to procure RNG amounting to one percent of gas supply over two years. Would have spent \$500,000/ year to buy RNG. ALJ and Office of Consumer Advocate recommended approval but staff and PUC denied the project as part of PGW’s gas cost recovery proceeding.</p> <p>Ordered August 26, 2021.</p> <p>Docket No. R-2021-3025652: PUC approved UGI’s purchased gas cost settlement which includes an RNG pilot program. UGI will purchase a set amount of RNG and associated credit attributes, sourced from the Keystone Landfill in Dunmore. UGI will unbundle the RINs from the commodity and securitize them for sale to interested third parties.</p> <p>Approved October 7, 2021.</p> | | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|----------------|--|--|--|----------------|
| | | <p>Docket No. R-2022-3032167: Columbia Gas proposing a five-year RNG pilot - the Green Path Rider. Under the voluntary program CGM will purchase RNG, environmental attributes and carbon. Will match the customer's election of either a 100% reduction or a 50% reduction in emissions. Customers opting into the Green Path Rider will be charged an additional fee per therm that reflects the cost of the RNG environmental attributes and carbon offsets. The program would be offered to all residential and general service customers that are not in arrears.</p> <p>Filed April 26, 2022.</p> | | |
| Rhode Island | | | | |
| South Carolina | | | | |
| South Dakota | | | | |
| Tennessee | <p>Southern: Announced ownership of Meadow Branch Landfill Methane Recovery Facility in Athens, Tenn. In 2020, the facility produced 340,000 MMBtu of RNG, enough to serve about 3,400 homes for a year.</p> <p>Announced May 5, 2021.</p> | | <p>SB 1959: authorizes utility to seek cost recovery on innovative resources, including RNG and hydrogen. Incremental rate adjustment cannot exceed 2% of annual revenue requirement. Third party procurements cannot exceed 3% of annual total cost of gas.</p> <p>Introduced January 27, 2022. Passed March 2022.</p> | |
| Texas | <p>Texas Gas Service (ONE Gas): Worked with Austin City Council in supporting natural gas sustainability resolution. Resolution requests TGS to develop feasibility study for RNG in Austin area by late Spring 2020. Final Report from July 2020 here.</p> <p>ONE Gas: ONE Gas is exploring offtake options for RNG for its largest industrial and commercial customers to align the higher costs of RNG with</p> | | | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|-----------------------|--|---|----------------------------|----------------|
| | <p>corporate sustainability goals. Looking at Austin which is the utility’s fastest growing customer base.</p> <p>Announced at AGA Financial Forum May 2021.</p> | | | |
| <p>Utah</p> | <p>Dominion: Completed the first RNG project under its Align RNG subsidiary in Milford, UT producing RNG from 26 family hog farms.</p> <p>Completed December 2020.</p> <p>Dominion announced partnership with Vanguard Renewables to invest \$200 million over five years in dairy farm RNG projects across Utah, Georgia, Nevada, Colorado, and New Mexico. Dominion will own the projects and market the RNG while Vanguard will design, develop, and operate the projects.</p> <p>Dominion’s GreenTherm Voluntary RNG Program will begin November 2019.</p> | <p>Docket No. 19-057-T04: The Utah Public Service Commission approved a settlement stipulation, dated July 9, 2019, authorizing Dominion Energy Utah to implement the GreenTherm Voluntary Renewable Natural Gas Program.</p> <p>Effective November 1, 2019.</p> | | |
| <p>Vermont</p> | <p>Vermont Gas Systems: started a voluntary RNG program for all classes of customers.</p> <p>Program began in 2017.</p> <p>Vermont Gas Systems: Broke ground for new anaerobic digester in a partnership with Middlebury College and Vanguard Renewables. RNG produced at the dairy farm will piped to Middlebury College’s main power plant.</p> <p>Construction will be completed in 2020.</p> <p>The City of Burlington has released its Net Zero Energy Roadmap which has a goal of net zero fossil</p> | <p>Docket No. 8667: approved Vermont Gas’s petition to establish a voluntary RNG program.</p> <p>Approved April 2016.</p> <p>Case No. 19-3529-PET: VGS received approval of its alternative regulatory plan allowing it to blend up to 2% per year of RNG into its supply.</p> <p>Approved August 11, 2021.</p> | | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|------------------------|--|--|---|----------------|
| | <p>fuel use by 2030. Central to the city’s goal is the use of RNG to reduce emissions from buildings.</p> <p>In October 2019 Vermont Gas and NG Advantage announced it would start offering RNG for distribution to customers currently receiving CNG and who are not connected to pipelines. Vermont Gas is confident it can use the same trucking equipment for RNG distribution as it currently uses to distribute CNG. This offering is believed to be the first of its kind in the country.</p> | | | |
| <p>Virginia</p> | <p>Dominion: partnered with Smithfield Foods to create Align Renewable Natural Gas, the company that will be responsible for capturing and converting the RNG to be put into the pipelines for residential and commercial customers. This joint venture will operate in North Carolina, Virginia, and Utah.</p> <p>Project construction began in 2018, anticipated to be on-line 2019.</p> <p>Roanoke Gas: Announced entered into a cooperative agreement with Western VA Water Authority to produce RNG from the Roanoke Regional Water Pollution Control Plant. This RNG product, the first of its kind in the Commonwealth, will necessitate construction of a digester gas conditioning system and interconnect facility at the Water Pollution Control Plant. At full buildout, the proposed digester gas conditioning system will have the ability to treat a biogas design flow of 550,000 cubic feet per day to create commercial quality RNG.</p> <p>Announced May 16, 2022.</p> | <p>CASE NO. PUR-2020-00095: Virginia Natural Gas proposed interconnection tariff for suppliers to deliver RNG to VGS’s system.</p> <p>Filed June 1, 2020. Withdrawn without prejudice July 2021.</p> <p>PUR-2021-00298: Virginia Natural Gas proposed sustainable gas program including interconnection allowance pilot program. Would allow VNG to spend no more than \$4 million annually for five years in capital investment, capped at \$2 million for a single facility. VNG will receive a level of enviro attributes from interconnect facilities that participate. VNG is also proposing to purchase both RNG and NextGen Gas for delivery and use on VNG’s system. The recovery of any incremental costs would be limited to 15% of the total annual projected comparable gas cost for traditional geologic production.</p> <p>Filed December 21, 2021.</p> <p>PUR-2022-00036: Columbia Gas proposing a five-year RNG pilot - the Green Path Rider. Under the voluntary program CGM will purchase RNG, environmental attributes and carbon. Will match the</p> | <p>HB 461: establishes a tax credit for renewable energy property placed in service. The bill in part defines "renewable energy property" to include certain biomass equipment that uses renewable biomass resources and combined heat and power systems using waste heat to produce electricity or thermal or mechanical energy.</p> <p>Introduced 2020.</p> <p>HB 558: Authorize VCC to approve utility application to incorporate RNG, hydrogen, and low-emission gas into supply portfolio. Allows utilities to recover certain costs relating to biogas supply infrastructure projects. No project may provide an annual volume of biogas that exceeds 3% of the utility's annual demand, and no combination of projects may provide an annual volume that exceeds 15%.</p> <p>Introduced January 12, 2022. Passed March 2022.</p> | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|--------------------------|---|--|--|--|
| | | <p>customer's election of either a 100% reduction or a 50% reduction in emissions. Would cost the average residential customer an additional \$16.20/month for the 100% option. The program would be offered to all residential and general service customers that are not in arrears.</p> <p>Filed April 29, 2022.</p> | | |
| <p>Washington</p> | <p>Puget Sound Energy: entered into a 20-year agreement with Bio Energy Washington (BEW) to procure all the pipeline-quality RNG recovered from the Cedar Hills Landfill.</p> <p>Agreement entered into in 2009</p> <p>Puget Sound Energy: In public comments made at 2019 summer NARUC meeting, PSE is projecting that 2% of its throughput will be RNG.</p> <p>Puget Sound Energy: Agreed to 20-year RNG contract with Klickitat Public Utility District. Under the first phase of the agreement, PSE will purchase an estimated 550,000 dekatherms per year for the first three years. Under phase two, PSE will purchase an estimated 1.65 million to 1.9 million dekatherms per year which could grow to as much as 2.5 million, for the remainder of the contract.</p> <p>Announced May 2020</p> <p>NW Natural: Smart Energy program</p> <p>Avista: Avista's 2021 gas IRP identifies it is developing a voluntary RNG program in addition to other efforts to get more RNG onto its system.</p> | <p>Docket UG-152164: Puget Sound Energy filed a tariff revision with the Utility and Transportation Commission to procure RNG from biomethane producers in their service territory and inject it into PSE pipelines to provide RNG to customers.</p> <p>Filed in 2015 and withdrawn in 2016.</p> <p>U-190818: Staff investigation into renewable natural gas programmatic design and pipeline safety standards under HB 1257.</p> <p>Opened September 2019. Issued December 2020.</p> <p>Advice No. 2020-17: PSE sought tariff revision of its PGAM allowing it to implement its RNG program. RNG purchased pursuant to RCW 80.28.385(1) will come from Klickitat starting in July 2020. Notes PSE plans to file an offering of a voluntary RNG tariff in the near future.</p> <p>Filed June 11, 2020</p> <p>WUTC RNG Policy Statement - makes clear that the five percent cap will be calculated as five percent of the total retail revenue requirement for all retail gas customers, rejecting several other potential approaches to this calculation that likely would have been more restrictive.</p> | <p>HB 2580: reinstate and expand tax incentive for certain digesters to promote investment in production and use of RNG.</p> <p>Became law in 2018.</p> <p>HB 1070: provides a public utility tax exemption for sales of RNG by a gas distribution business, thereby subjecting the gas to the same (and therefore lower) tax rate as RNG used as transportation fuel.</p> <p>Passed the House, sent to Senate. Reintroduced and retained in present status for 2020 session.</p> <p>HB 1257: Requires gas utilities to offer by tariff voluntary RNG service for customers with participation limited by availability of supply. Customer charge for RNG cannot be more than 5% of amount charged to retail customers for natural gas.</p> <p>Became law in 2019.</p> | <p>RNG Report conducted by Washington State University with funding from the WA Dept. of Commerce.</p> |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|-----------------------------|--|-------------------------------|--|----------------|
| | <p>PSE: 2021 IRP notes PSE is in final design of tariff provisions and IT enhancements to facilitate availability of a voluntary RNG program for PSE customers to take effect in 2021. RNG supply not utilized in PSE’s voluntary RNG program(s) will be incorporated into PSE’s supply portfolio, displacing natural gas purchases as provided for in HB 1257.</p> <p>PSE: Voluntary program allows customers to purchase RNG in blocks to offset up to 100% of their average household emissions. Program has 1,200 customers as of June 2022.</p> <p>Launched December 2021.</p> <p>Avista: Voluntary program allows customers to purchase RNG in blocks to offset up to 100% of their average household emissions.</p> | <p>Issued 12/16/20</p> | | |
| <p>West Virginia</p> | | | | |
| <p>Wisconsin</p> | <p>DTE Energy: partnered with Pagel's Ponderosa Dairy to produce RNG to fuel CNG vehicles. Plan to build 5 RNG facilities. The first of these projects became operational in March 2019. Three additional projects became operational in 2019 with DTE beginning construction on an additional three dairy RNG projects over summer 2019.</p> <p>Construction of facilities broke ground in 2018.</p> <p>DTE Biomass Energy announced the opening of the state’s first combined dairy RNG processing and interstate injection facility. The site takes in raw biogas and injects pipeline-quality RNG directly into the interstate system. Opened September 2019.</p> | | <p>LRB 3473: would require the state to create a \$1 million grant program to support the planning and establishment of regional biodigesters.</p> <p>Announced November 15, 2021.</p> <p>AB 1072: Directs PSC to establish interconnect standard and issue report on methods for state to support financing of RNG infrastructure.</p> <p>Introduced March 3, 2022.</p> | |
| <p>Wyoming</p> | | | | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|---------------------------------|---|---|--|---|
| <p>Regional Measures</p> | | | <p>At the 2019 meeting of the Southern States Energy Board, a policy resolution supporting the development of RNG was approved unanimously. The resolution calls for studying what steps need to be taken to facilitate the inclusion of RNG into the region’s energy supply and asks states to explore measures to promote the burgeoning RNG industry.</p> | |
| <p>Canada</p> | <p>Fortis BC allows natural gas customers to designate 5, 10, 25, 50, 100 percent of their natural gas use as RNG.</p> <p>RNG available to customers since 2011.</p> <p>Enbridge: for two dollars a month, customers can enroll in “OptUp,” a voluntary RNG program. Enbridge plans to source some of this RNG from the soon to open landfill gas project at Niagara Falls generating enough RNG to heat 8,750 homes making it the largest project in Ontario.</p> <p>Energir is currently signing up customers for its RNG program and plans to have RNG make up 5% of its gas supply by 2025.</p> <p>Enbridge: Joint venture with Walker Industries Holdings Ltd. and Comcor Environmental Ltd announced plans to convert landfill waste into carbon-neutral energy that will be injected into local natural gas distribution systems in Canada. Niagara RNG facility in Ontario is their first landfill renewable gas project. The facility, which is under construction and slated to start up in 2022, is expected to provide enough energy to heat 8,750 homes and slash greenhouse gas emissions by 48,000 tonnes per year.</p> | <p>EB-2020-0066: Ontario Energy Board approved Enbridge application to establish a pilot voluntary RNG program where customers may choose to pay an additional \$2 a month.</p> <p>Program beginning January 2021.</p> <p>BCUC Renewable Gas Program: Fortis BC seeking to modify its existing RNG program. Expects all customers to receive a one percent RNG blend starting 1/1/24 and will increase over time to meet provincial clean energy targets. All new residential connections will be serviced with 100% RNG and will continue to offer a voluntary RNG program for existing sales customers.</p> <p>Filed December 17, 2021.</p> | <p>British Columbia: The CleanBC plan calls for a minimum of 15% of natural gas be provided from renewable sources by 2030.</p> <p>Released December 2018.</p> <p>British Columbia: The Province has amended the Greenhouse Gas Reduction (Clean Energy) Regulation to enable natural gas utilities to increase the amount of RNG, green and waste hydrogen, and other renewable energy they can acquire and make available to their customers by: increasing the amount of RNG utilities can acquire and supply from 5% to 15% of their total annual supply of natural gas; broadening the methods by which utilities can obtain hydrogen, RNG and other renewable gases to include producing it or upgrading it themselves for injection into the pipeline, paying a third party to produce it or upgrade it for pipeline injection, or purchasing hydrogen, synthesis gas or lignin to displace the use of natural gas at customers’ facilities; allowing the current price cap of \$30 per gigajoule that utilities can pay to acquire any of these fuels to increase with inflation; and enabling utilities to acquire and supply green and waste hydrogen, synthesis gas and lignin.</p> <p>Announced July 2021.</p> | <p>CGA, “RNG Handbook For Canadian Municipalities” (May 2021)</p> <p>Province of BC & Fortis BC, “BC Renewable and Low-Carbon Gas Supply Potential Study” (Jan. 2022)</p> |

| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|-------|---|--------------------------|---|----------------|
| | <p>ATCO: Partnership with Future Fuel Ltd. to build and operate RNG facility in Alberta it is ATCO's first commercial RNG production facility. Will produce approximately 230,000 gigajoules per year of RNG, enough to fuel 2,500 homes. Operation of the project is expected to be achieved in late 2022.</p> <p>Announced July 8, 2021.</p> <p>Enbridge: Partnered with Toronto to produce RNG from city Green Bin program and Dufferin RNG facility. expected to produce 3.3 million cubic metres of RNG each year. This will result in a fuel blend that is approximately 7 per cent RNG. By capturing the biogas instead of flaring/burning it off, the facility will also avoid more than 9,000 tonnes of carbon being released into the atmosphere annually. The City will not start using the gas until the beginning of 2022, to ensure production capacity has stabilized. Until then, the gas will be stored in the grid.</p> <p>Announced July 221, 2021.</p> <p>Fortis: EverGen Infrastructure Group announced that the BC Utilities Commission has approved the RNG offtake agreement with FortisBC for the Company's anaerobic digester expansion project at its Net Zero Waste Abbotsford Inc. The Company previously announced that its wholly owned subsidiary NZWA entered into a 20-year offtake agreement with FortisBC. Under the agreement, FortisBC will purchase up to 173,000 gigajoules of RNG annually for injection into its natural gas system. The project is expected to convert municipal and commercial organic waste into enough energy to meet the needs of approximately</p> | | <p>British Columbia: The Province is investing \$4.28 million to expand the Vancouver landfill's gas-capture system through the CleanBC Industry Fund, with matching funds from the City of Vancouver. Landfill gases will be transported for refining into usable renewable natural gas that will be sold to FortisBC and incorporated into the company's natural-gas distribution system for residents, businesses and the city's buildings, vehicles and neighborhood energy utility.</p> <p>Announced October 18, 2021.</p> | |



| State | Utility RNG Programs | Regulatory Actions Taken | State Government Proposals | Notes/Comments |
|-------|---|--------------------------|----------------------------|----------------|
| | <p>1,900 residential homes. EverGen expects to begin supplying Renewable Natural Gas from the project to FortisBC’s network by early 2023.</p> <p>Announced October 18, 2021.</p> <p>Fortis BC: agreement, subject to Commission approval, to purchase up to 7.6 million MMBtu of RNG generated by Archaea annually for a fixed fee for a period of 20 years. The agreement is expected to commence in 2022 upon regulatory approval, with the full annual quantity beginning in 2025.</p> <p>Announced January 27, 2022.</p> | | | |

CSA Group, [“Codes and Standards for Renewable Gas Pathways”](#) (Jan. 2022)