

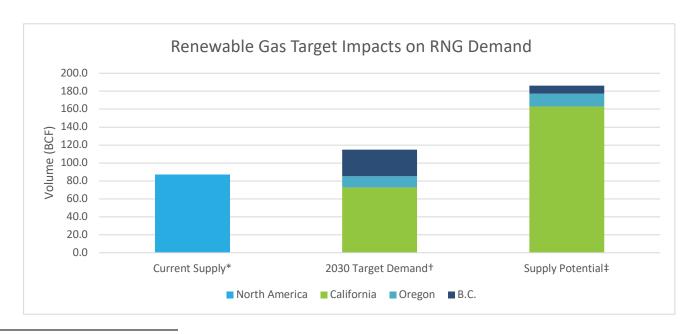
# **Understanding California's Renewable Gas Standard**

On February 24, 2022, the California Public Utilities Commission (CPUC) adopted a Renewable Gas Standard (RGS) for California's gas utilities by a unanimous vote. Pursuant to SB 1440 (2018),<sup>1</sup> a bill introduced at RNG Coalition's request, the RGS requires California's gas utilities to procure a certain amount of RNG as a portion of core customer gas demand in the state through 2040.

# **Portfolio Targets:**

CPUC's adopted Decision<sup>2</sup> sets the following mandatory RNG procurement targets for California's gas utilities:

- A short-term target of 17.6 BCF/year by 2025, sourced primarily from anaerobic digesters which utilize organic waste diverted from landfills.
- A mid-term target of 72.8 BCF/year by 2030 and beyond—equal to approximately 12.2 percent of total annual statewide gas IOU core customer consumption in 2020.
  - Includes all eligible feedstocks with dairy RNG allowed for up to 4% of the mid-term target.
  - Biomethane produced from energy crop feedstocks is prohibited.
  - This is a significant new program. New demand that must be met by 2030 is almost equivalent to the existing RNG supply at the time of adoption (February 2022).<sup>3</sup>



<sup>&</sup>lt;sup>1</sup> SB 1440 (Hueso, 2018): https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\_id=201720180SB1440

<sup>&</sup>lt;sup>2</sup> CPUC. (2022). Decision Implementing Senate Bill 1440 Biomethane Procurement Program.: https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M453/K954/453954308.PDF

<sup>&</sup>lt;sup>3</sup> Based on RNG Coalition data.

<sup>\*</sup> Based on RNG Coalition production data as of March 2022.

<sup>†</sup> Based on jurisdictions' respective RNG targets versus current consumption levels in California (2020), Oregon (2019), and BC (2019).

<sup>‡</sup> U.S. state supply potentials based on 2040 "High" scenario from ICF. (2019). Renewable Sources of Natural Gas: Supply and Emissions Reduction Assessment. B.C. supply potential in 2030 from ENVINT, CBER & Associates (2022). B.C. Renewable and Low-Carbon Gas Supply Potential Study.



# **Alignment with Key CA Policy Goals:**

California's RGS is designed to achieve broader environmental goals in the state's waste management, energy, forestry, and transportation sectors. CPUC, with consideration of other agencies' strategies and priorities, has created a policy framework designed to incent the following positive environmental outcomes:

### Reducing methane from landfills through organic waste diversion

The program's short-term RNG portfolio target is designed to incent diversion of organic waste from landfills to anaerobic digesters, in line with California's short-lived climate pollutant goals. Under the short-term goal, utilities will likely need to procure their share of RNG produced from diverted organics before purchasing RNG from other feedstocks. Tracked tonnage will be used as guidance in meeting the eight-million-ton annual waste diversion goal set by the California Department of Resources Recycling and Recovery (CalRecycle).

## Achieving carbon neutrality and providing clean fuels across all sectors

RNG facilities which utilize carbon capture and sequestration (CCS) will be prioritized under the RGS. This will help achieve further reductions in greenhouse gas (GHG) emissions, and provides a pathway for RNG facilities to be a carbon negative emissions sink (even before factoring in methane destruction).

The Decision also states that CPUC's Office of Governmental Affairs shall work to develop legislation which could create a procurement program for non-core customers. This provision is based on the need for clean fuels in hard-to-decarbonize sectors, which have yet to see significant decarbonization progress compared to power, transportation, and buildings.

## Reducing forest fire risk through wood waste management

Improved management and utilization of wood waste from California's forests can help lessen the ongoing damage caused by forest fires. The RGS is designed to support this goal by providing a one-time set aside of \$40M in cap-and-trade dollars for each utility to use for gasification pilots, and requiring Pacific Gas & Electric and Southern California Gas Company to submit applications for woody waste gasification projects.

# Reducing transportation sector criteria pollutants

As part of California's goal to reduce the non-GHG environmental impacts of criteria pollutants in the transportation sector, RNG facilities which use zero emission or near-zero emission trucks will receive procurement prioritization.

#### Creating a circular economy

Facilities which use their waste byproduct to create soil amendments such as biochar will receive prioritization under the RGS. Doing so promotes best practices aimed at realizing the full extent of circularity made possible by organic waste recycling.

<sup>&</sup>lt;sup>5</sup> See summary of CalRecycle's waste diversion and methane reduction strategies: https://www.calrecycle.ca.gov/organics/slcp



<sup>&</sup>lt;sup>4</sup> SB 1383 (Lara, 2016): https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill\_id=201520160SB1383



# **Additional Program Rules:**

#### **Advice Letter Requirements:**

Each RNG procurement contract must be submitted for approval by CPUC according to the following Advice Letter (AL)<sup>6</sup> and price tier categories:

- A biomethane contract for up to \$17.70 per million British thermal units (MMBtu) would require Tier 1 AL approval. A Tier 1 AL is effective upon disposition to CPUC.
- A biomethane contract priced between \$17.70/MMBtu and \$26/MMBtu—a value reflecting the social cost of methane—would require Tier 2 AL approval. A Tier 2 AL is subject to CPUC staff approval.
- A biomethane contract priced above \$26/MMBtu would require Tier 3 AL approval. A Tier 3 AL typically requires a vote by the Commission.

#### **Procurement Limitations:**

The rule limits RNG procurement contracts to no longer than 25 years, and the delivery of RNG to not beyond 2040. Utilities will not be able to procure RNG from a dairy that has an unresolved citation for violation of air or water quality rules from a state or local regulatory agency.

Importantly, SB 1440 requires that RNG procured under this program provide in-state benefits to California by either (1) reducing criteria, toxic, or GHG air pollutants; (2) reducing water pollutants; or (3) odor reduction. This will effectively limit RNG procurement to in-state RNG supply in most situations.

#### **Utility Requirements:**

Utilities must file Renewable Gas Procurement Plans by Jan 1, 2023. Furthermore, the RGS is considered separate from voluntary RNG offerings. Customers who opt-in to voluntary offers from Southern California Gas Company and San Diego Gas & Electric may procure RNG in addition to the require blend levels.

#### Use of standardized RNG tracking systems

The Commission will require tracking of all RNG volumes via M-RETS<sup>7</sup> or another attribute tracking program. This will ensure that RNG volumes are verified by a third party and prevent double-counting. Developing a standardized RNG tracking methodology is an important step toward growing a robust market for voluntary and mandatory RNG procurement in the stationary sector throughout North America.

<sup>&</sup>lt;sup>7</sup> https://www.mrets.org/



<sup>&</sup>lt;sup>6</sup> See CPUC General Order 96-B as it relates to ALs: <a href="https://docs.cpuc.ca.gov/Published/G000/M023/K381/23381302.PDF">https://docs.cpuc.ca.gov/Published/G000/M023/K381/23381302.PDF</a>



# **Other Leading Jurisdictions:**

While California's RGS is a major new development for the RNG market, other West Coast jurisdictions had already implemented similar policies that are driving significant utility procurement of RNG.

#### **British Columbia**

In Canada, the province of British Columbia has long been a leader in developing RNG programs. In 2021, the provincial government amended its Greenhouse Gas Reduction (Clean Energy) Regulation<sup>8</sup> to allow gas utilities to procure renewable gas – including RNG, renewable and waste hydrogen – to up to 15% of its customer demand levels in 2019. Utilities can pay up to CAD 30 per gigajoule (~USD 25/MMBtu) to acquire renewable gas. That cost cap is indexed to inflation. Utilities can purchase additional RNG to meet demand from voluntary customers who recover the full costs of the additional RNG delivery.

#### Oregon

Utility procurement of RNG is also well established in Oregon. Passed in 2019, Senate Bill 98<sup>9</sup> required the Oregon Public Utility Commission to adopt a renewable natural gas program for gas utilities which allows for cost recovery and targets RNG procurement for utility customers. The targets set in SB 98 gradually increase: 5% (2020-2024), 10% (2025-2029), 15% (2030-2034), 20% (2035-2039), 25% (2040-2044), and 30% (2045-2050). The Public Utility Commission adopted rules pursuant to SB 98 in 2020. According to the rules, utilities participating in the RNG program must retire environmental attributes in the M-RETS system for each dekatherm of RNG counted towards the annual targets.

<sup>&</sup>lt;sup>10</sup> https://apps.puc.state.or.us/orders/2020ords/20-227.pdf



<sup>8</sup> https://news.gov.bc.ca/releases/2021EMLI0046-001286

<sup>&</sup>lt;sup>9</sup> https://olis.oregonlegislature.gov/liz/2019R1/Downloads/MeasureDocument/SB98/A-Engrossed