

providing industry career skills. Energy-efficiency is exclusively implemented by in-state external contractors as well as in-state Company employees. BHCG vets its energy-efficiency contractors and coordinators to ensure proof of W-9 for taxing purposes, proof of insurance, certificate of liability, proof of workman's compensation, and any other types of certifications necessary to be in good standing with the State of Colorado. BHCG is cognizant of the requirement that utilities shall make use of a certified contractor list maintained by the Colorado Department of Labor in implementing DSM measures for which customers apply for a rebate directly with the utility. However, BHCG is unaware of a "certified contractor list" from which to validate use of contractors. Notwithstanding the absence of a certified contractor list, BHCG will continue to vet its energy-efficiency contractors as specified above.

viii. Green Hydrogen

1. Reliability and Safety

Infrastructure impact studies, pilot scale projects and full-scale system blending have demonstrated that hydrogen can be blended with natural gas creating a lower carbon fuel that can be reliably and safely delivered to customers. Hydrogen blending up to 20% by volume has been successfully implemented on select gas distribution systems in Europe.⁹ In the United States, industry is still working to understand hydrogen blending capabilities and develop cost competitive clean hydrogen markets.

Hydrogen molecules have a density of 0.00009 g/cm³, and existing natural gas distribution systems in the United States are tested with nitrogen or natural gas at a density of 0.00125 g/cm³. Hydrogen has an atomic radius roughly half the size of nitrogen and a quarter the size of methane (the primary constituent of natural gas)¹⁰, which can be a cause for concern regarding system leakage when high hydrogen blending rates are implemented. Prior to pursuing full-system hydrogen blending in the distribution network, BHCG would first conduct a pilot-scale demonstration project to evaluate the cost of integration, safety, reliability, and impacts to infrastructure and customer appliances.

⁹ UK pilot demos hydrogen in gas grid - reNews - Renewable Energy News, German gas operator says 20% hydrogen blending trial in 100 homes has been '100% trouble-free' after six months | Hydrogen news and intelligence (hydrogeninsight.com).

¹⁰ <https://material-properties.org/>

