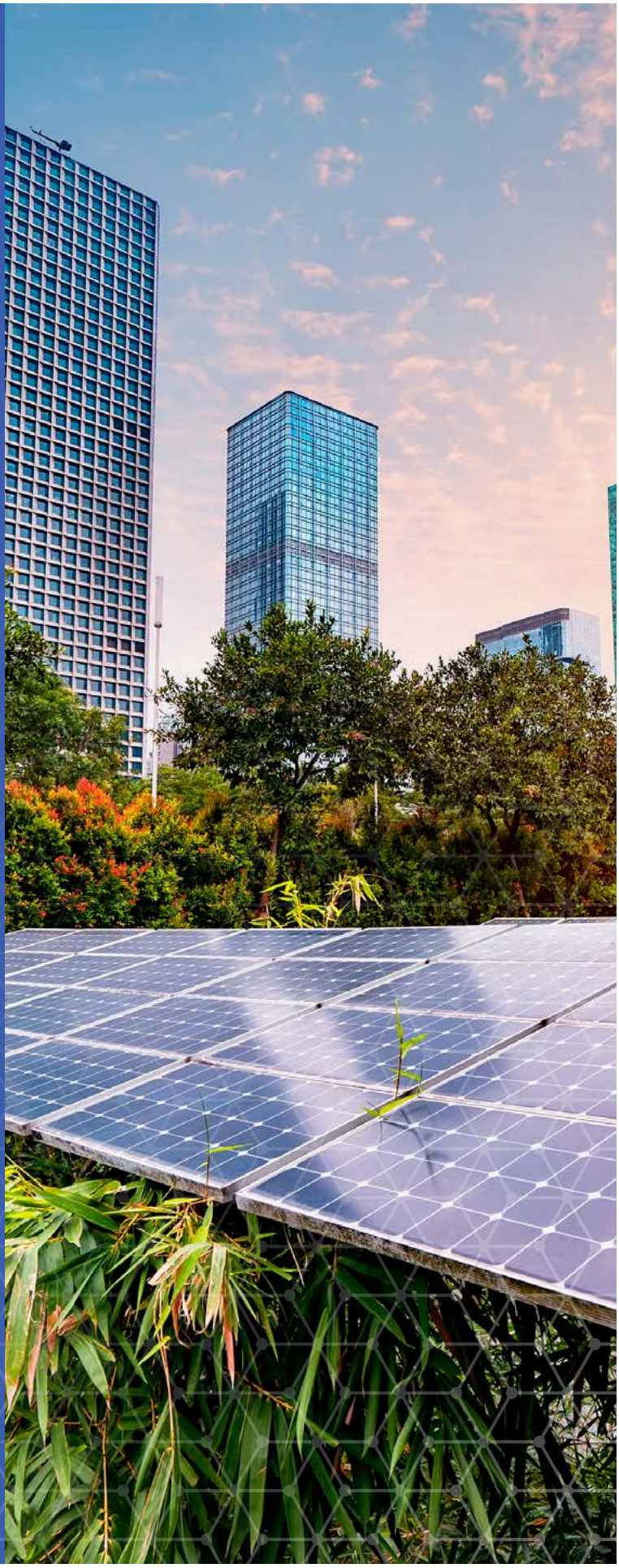
RETAIL INDUSTRY LEADERS ASSOCIATION

STATE ENERGY EFFICIENCY LAWS & CODES AND BUILDING NATURAL GAS LAWS: AN INTRODUCTION FOR RETAIL

This summary on State Level Efficiency factsheet is a part of a series on Energy Efficiency in Buildings - Standards and Codes for Retail



EXECUTIVE SUMMARY AND BACKGROUND

More than 40 percent of the total energy consumed, and 70 percent of the electricity used in the United States is used for operating buildings. Appliances and building-related equipment such as electric motors, lighting, refrigerators, and water heaters account for almost all the energy used in buildings—the U.S. Department of Energy (DOE) estimates that these products represent about 90 percent of residential energy use, 60 percent of commercial building energy use, and 30 percent of industrial energy use [EESI Fact Sheet: Energy Efficiency Standards for Appliances, Lighting and Equipment]. Making these processes more efficient in buildings saves businesses billions of dollars on energy bills, avoids unnecessary pollution, creates jobs, improves U.S. competitiveness, and reinvigorates domestic manufacturing [EERE: Energy-Saving Homes, Buildings & Manufacturing].

To inform retailers and other commercial businesses on the latest updates in building efficiency standards and energy codes at both the national and state levels, RILA's Retail Compliance Center is producing a series of factsheets covering:

- DOE Appliance and Equipment Standards
- Light Bulb Efficiency Standards
- Building Energy Codes: ASHRAE vs. IECC
- State Energy Efficiency Laws and Codes

This fact sheet provides a starting point and quick reference tool for retailers on the energy efficiency laws and codes in the U.S. The first summary table below provides an overview of the most recent energy efficiency codes, energy disclosure laws, and energy efficiency resource standards in all 50 states. The second table provides a snapshot of gas ban-related legislation (pro and anti-gas) in various states.

SUMMARY OF STATE ENERGY EFFICIENCY LAWS AND CODES

In the U.S., model energy codes are developed two private organizations: the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE), which develops the model commercial energy code 90.1, and the International Codes Council (ICC), which develops the International Energy Conservation Code (IECC). States vary as to which codes they recognize, if they recognize energy efficiency codes at all.

Most energy efficiency (EE) codes have been adopted at the state level, although, in about 10 states, codes have been adopted at the city level. State adoption can occur directly by legislative action, or through regulatory agencies authorized by legislature. Cities can adopt codes through their mayors, councils, or committees depending on their form of government. Once adopted, the code becomes law within the specific state or local jurisdiction. [EERE: Energy Codes 101]

Twenty-seven states have adopted building EE codes, typically following IECC or ASHRAE-90.1 standards. Only a few states allow building owners or builders to petition for exemptions to the code requirements.

Building energy disclosure requirements typically only apply to larger commercial or multi-family residential buildings. As of August 2020, seven states have requirements for building disclosure, and reports may either be required to be sent to the state for EE benchmarking, to potential buyers, lenders, or lessees.

State energy efficiency resource standards (EERS) are normally written in two ways and for two types of timelines—either percentage reduction of annual sales or reduction of peak demand on either an incremental annual rate or a target goal by a given year. Often, both of these types and timelines exist within one state EERS. Thirty-three states currently have EERSs in place with five being voluntary.

Fourteen states do not have building efficiency codes, building energy disclosures, or a state EE standard.

The table below provides an overview of the most recent energy efficiency codes, energy disclosure laws, and energy efficiency resource standards in all 50 states.

STATE:	BUILDING EE CODES	BUILDING ENERGY DISCLOSURES	STATE EERSs
Alabama	Ala. Admin. Code, 305-2-4 Commercial buildings must meet the 2015 IECC or 2013 ASHRAE-90.1 standards	N/A	Ariz. Admin. Code § 14-2-2401 et seq: Effective 2011 IOUs and electric cooperatives required to achieve 22% cumulative energy savings by the end of 2020 with incremental savings of 2.5% per year 2016-20. 75% of annual targets for gas companies
Arkansas	N/A	N/A	Order No. 31, Docket No. 13-002-U, Order No. 43, Docket No. 13-002-U: Effective 2011 IOUs are required 1% savings of 2015 retail sales for electric and 0.5% for gas in 2019, 1.2% of 2018 sales for electric and 0.5% for natural gas in 2020-22
California	Performance Based Standard for commercial buildings that meet DOE's 2016 ASHRAE 90.1 standards	Assembly Bill 1103 consumption data all buildings over 5,000 sq ft reported to lender, buyer, lessees. Assembly Bill 802 creates a statewide building energy use benchmark and public disclosure program (above 50,000 sq ft) reported to Energy Commission	Senate Bill 350 ; CPUC Decision 17-09-025: Effective in 2004 (mod. 2015 w/ SB350), utility specific annual peak demand reduction targets for IOUs 2018-30 that double total energy savings for electricity and gas by 2030

STATE:	BUILDING EE CODES	BUILDING ENERGY DISCLOSURES	STATE EERSs
Colorado	HB 1260: local governments with building energy codes must adopt at a minimum one of the three most recent versions of the IECC. Encouraged to notify state office of changes		House Bill 1227: Enacted in 2017, extends EERS for electric utilities out to 2028, peak demand reduced 5% and 5% energy savings compared to 2018 baseline. Gas required to adopt expenditure targets equal to at least 0.5% of utility revenues from prior year Colo. Rev. Stat. § 40-3.2-103 Colo. Rev. Stat. § 40-3.2-104
Connecticut	N/A	N/A	Public Act No. 13-298: Utilities (gas and elec) required to submit join conservation and load management plan to state for approval. 2019-2021 plan requires annual average savings of 1.11% for electric companies and 0.59% for gas Conn. Gen. Stat. Ann. § 16-245m 2019-2021 Conservation and Load Management Plan (2018)
Delaware	N/A	N/A	The Energy Efficiency Advisory Council (EEAC) has set voluntary targets (previous target was 15% by 2015 for electric; 10% for gas) Del. Code. Ann. tit. 26, § 1500 et seq Del. Code Ann. tit. 29, § 8051 et seq

STATE:	BUILDING EE CODES	BUILDING ENERGY DISCLOSURES	STATE EERSs
District of Columbia	N/A	Clean and Affordable Energy Act of 2008: requires energy performance of public buildings over 10,000 sq ft and private buildings over 50,000 sq ft be benchmarked using ENERGY STAR Portfolio Manager for public disclosure. Clean Energy DC Act: holds buildings accountable to a building energy performance standard, if building does not meet median for building type, they must follow a prescriptive pathway to achieve compliance	D.C. Code Ann. § 8-1774.01 et seq: Contractual energy efficiency goals are set through the third-party contracting process. Voluntary
Florida	2017 Florida Building Code, Energy Conservation (Sixth Edition): based on 2015 IECC with state-specific amendments, reference 2013 ASHRAE 90.01 standards	N/A	N/A
Georgia	Georgia International Energy Conservation Code Supplements and Amendments 2020: Requires compliance with the 2015 IECC or 2013 ASHRAE 90.1 standards w/state amendments	N/A	N/A
Hawaii	Hawaii Admin. Rules § 3-181.1: Adopted the 2015 IECC with state amendments for commercial and residential buildings	N/A	Electric only, 4,300 GWh by 2030 Hawaii Rev Stat. § 269-96; Senate Bill 2474 (2004); House Bill 1464

STATE:	BUILDING EE CODES	BUILDING ENERGY DISCLOSURES	STATE EERSs
Idaho	Idaho Stat. Ann. § 39-4116: Local Governments are permitted to adopt a version of the IECC that has been adopted by the state building board with some flexibility to "reflect local concerns" 2015 IECC for commercial buildings	N/A	N/A
Illinois	Ill. Comp. Stat. Ann. 20 § 3125/15; 20 § 3125/10: Requires adoption of latest version of IECC for commercial buildings as minimum energy code	N/A	Varies by the number of customers served for electric utilities: 2030 cumulative reductions of 16% or 21.5%; for gas utilities: incremental annual savings of 1.5% in 2019 and later. Ill. Rev. Stat. ch. 220 § 5/8-103 Ill. Rev. Stat. ch. 220 § 5/8-104 Ill. Rev. Stat. ch. 220 § 5/8-103B
Iowa	N/A	N/A	Rate-regulated electric and gas utilities are required to file five-year energy efficiency plans with the Iowa Utilities Board (IUB). In 2018, an energy efficiency utility cost cap of 2% for electric and 1.5% for gas implemented Iowa Code § 476.6 Senate File 2311
Maine	House Paper 1001: State uniform building and energy code must contain two of the most recent versions of building codes and guidelines including IECC and ASHRAE 90.1 standards	N/A	"Efficiency Maine Trust Triennial Plan:" Cost-benefit analysis that includes reducing peak-load for electricity by 300MW and elec and NG savings of at least 20% by 2020. Me. Rev. Stat. Ann. tit. 35-A §10101 et seq ; House Papers 1128 (2013)

STATE:	BUILDING EE CODES	BUILDING ENERGY DISCLOSURES	STATE EERSs
Maryland	Md. Public Safety Code, § 12-503: State regulators must adopt most recent IECC within 18 months after new latest code issued Md. Public Safety Code, § 12-505: Local gov. must implement and enforce a modified state code no later than 12 months after adoption	N/A	Electric IOUs 0.2% per year reaching 2% per year, began 2008, extended to 2023 Md. Public Utilities Code Ann. § 7-211
Massachusetts	Mass. Gen. Laws Ann. 143 § 94: Requires adoption of the latest version of the IECC plus state strengthening provisions (Ninth Edition Code Mass Regs. 780)	N/A	Effective 2008, Elec and Gas utilities must submit a join energy efficiency investment plan to the Department of Public Utilities for approval every 3 years. Utilities are required to deploy all available energy efficiency programs that are cost-effective Mass. Gen. Laws Ann. ch. 25 § 21 ; Massachusetts Joint Statewide Electric and Gas Three-Year Energy Efficiency Plan (2019-2021)
Michigan	Mich. Admin Code 408.31087: Commercial buildings must adhere to the 2015 IECC and 2013 ASHRAE 90.1 standards	N/A	1% of previous year sales for electricity, 0.75% for gas—2008-2021 Mich. Comp. Laws § 460.1077 ; Senate Bill 483
Minnesota	N/A	N/A	Effective 2007, 1.5% incremental savings, adjustable case-by-case by the Commissioner of Commerce's discretion Minn. Stat. § 216B.241 ; Senate File 145

STATE:	BUILDING EE CODES	BUILDING ENERGY DISCLOSURES	STATE EERSs
Missouri	N/A	N/A	(Voluntary) Effective 2011, 1.7% by 2019, 1.9% by 2020 reduction of total energy; voluntary static target annual peak demand reduction 1%, to save 9.9% total energy and 9% of peak demand
Nebraska	Mandatory statewide energy code: home-rule state but local gov. must adopt above code. State code requires minimum compliance with 2018 IECC. Legislative Bill 405: If code is locally modified State must be modified within 30 days (deletions permitted)	N/A	N/A
Nevada	Nev. Rev. Stat. 701.220: Local gov. required to adopt most recent version of the IECC standards as minimum efficiency requirements	N/A	Effective 2005, a part of state RPS, Electric IOUs can meet 20% of RPS compliance through efficiency measures in 2019, decreased to 10% in 2020-24, and fully phased out by 2025. Senate Bill 150 enacted in 2017 directed Public Utilities Commission to regulate energy savings goals and Senate Bill 358 enacted in 2019 increased RPS from 25% in 2025 to 50% by 2030 Nev. Rev. Stat. § 704.7821 Nev. Rev. Stat. § 704.783.
New Hampshire	HB 562: Requires compliance with 2015 IECC	N/A	Enacted 2016, electricity 1% savings on delivered sales in 2019, 1.3% in 2020; Gas 0.75% savings in 2019, 0.80% in 2020 Or. No. 25,932

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New Jersey	N.J. Admin Code 5:23-3:18: Requires compliance with 2016 ASHRAE 90.1 for commercial buildings	The Clean Energy Act of 2018: within five years the NJBPU require benchmarking by owners and operators of commercial buildings over 25,000 sq ft	Enacted 2018, public utilities required to achieve 2% electric reductions and 0.75% gas reductions by 2023 N.J. Rev. Stat. § 48:3-87.9
New Mexico	N/A	N/A	Electric utilizes must achieve 5% savings of 2020 total retail sales by 2025. House Bill 291 (2019) requires Public Regulation Commission to set savings targets for 2026-30 no later than June 2025 N.M. Stat. Ann. § 62-17-1
New York	N.Y. Codes, Rules and Regs., 19 § 1240: Requires compliance with 2015 IECC and 2013 ASHRAE 90.1 standards in addition to state supplement. Local gov. may adopt state coder or enforce their own pursuant to N.Y. Energy Law § 11-109	N/A	Statewide target, energy savings of 185 trillion BTU below 2025 projections, 3% incremental annual reduction in energy sales (both gas and electric) More can be found here. NY PSC Case 07-M-0548 (2008) NY PSC Case 18-M-0084 (2018) Senate Bill 6599 (2019)
North Carolina	2018 North Caroline Energy Conservation Code: Commercial buildings must comply with 2015 IECC	N/A	Electric only, lays out how much of REPS requirement my come from energy efficiency measures—25% of REPS requirement (10% of 2017 state retail sales) through 2018; 40% of requirement (12.5% of 2020 retail sales) through 2021 and beyond N.C. Gen. Stat. § 62-133.8

STATE:	BUILDING EE CODES	BUILDING ENERGY DISCLOSURES	STATE EERSs
Ohio	Ohio Admin. Code 4101:1-13: Requires compliance with either 2012 IECC or 2010 ASHRAE 90.1 for commercial buildings	N/A	Electric IOUs much achieve 1% annual incremental savings 2017-2020, 2% 2021 and beyond, must be more than 22% total savings by the end of 2027. Incremental annual peak demand reduction of 0.75% 2017-2020 Ohio Rev. Code Ann. § 4928.66 Note: In 2019 House Bill 6 enacted which effectively eliminates the state's EERS program provided a certain level of energy savings has been achieved
Oregon	Zero Energy Ready Commercial Code: Based on 2016 ASHRAE 90.1 standards. Also requires certain commercial buildings comply with 2018 IECC	Statewide Building Energy Scoring administrative rule (commercial and residential) Portland- mandatory disclosure for com. Buildings over 20,000 sq ft	Electric savings of 240 average MW and 24 million therms of gas between 2015 and 2019, 2020-24 plan is in process Or. Rev. Stat. § 757.612 (1999)
Pennsylvania	Penn. Code tit. 34 § 403.21: Adopts 2015 IECC for commercial with state-specific amendments with certain portions of the 2018 IECC	EO 2019-01 requiring benchmarking for public buildings over 20,000 sq ft	Electric utilities with more than 100,000 customers are provided with utility specific goals beyond the previous 2013 3% total consumption savings and 4.5% annual peak demand savings. PUC re-evaluates customer and utility cost and establishes reasonable goal every 5 years Pa. Cons. Stat. Ann. tit. 66, § 2806.1

STATE:	BUILDING EE CODES	BUILDING ENERGY DISCLOSURES	STATE EERSs
Rhode Island	N/A	N/A (brainstorming stage)	Annual incremental savings increasing up to 2.53% for electric and 0.99% for gas by 2020 based on 2015 energy load R.I. Gen. Laws § 39-1-27.7 National Grid 2018-2020 Energy Efficiency and System Reliability Procurement Plan National Grid 2018-2020 Energy Efficiency and System Reliability Procurement Plan
South Dakota	N/A	N/A	Voluntary, electric providers may participate in 10% reduction by 2015 S.D. Admin. R. 20:10:38:01 et seq
Texas	Tex. Health & Safety Code § 388.003: Enables the state energy conversation office to adopt the International Residential Code's latest edition for commercial and industrial buildings	N/A	Utility specific- required to meet savings of no less than 30% of annual growth in demand; 0.4% of peak demand Tex. Utilities Code Ann. § 39.905
Utah	HB 218: Requires compliance with the 2018 IECC for commercial buildings only	N/A	Voluntary, electric companies may use demand-side management programs to achieve voluntary statewide 20% renewable portfolio goals Utah Code Ann. §54-17-101 et seq Utah Code Ann. §10-19-101 et seq

STATE:	BUILDING EE CODES	BUILDING ENERGY DISCLOSURES	STATE EERSs
Vermont	2020 Vermont Commercial Building Energy Standards: Comply with the 2018 IECC and 2016 ASHRAE 90.1 standards	Act 89 of 2013 established working group to dev. Building disclosure tools for all building types	Utility specific, PUC develops and enforces energy efficiency targets. Vermont's EERS for electricity is implemented by a third-party 'Efficiency Vermont' Vt. Stat. Ann. tit. 30 § 209 Efficiency Vermont Triennial Plan (2018-20)
Virginia	Virginia 2015 Construction Code, pt. 1 of the Uniform Statewide Building Code: New commercial buildings must comply with the 2015 IECC (in adoption process for 2018 code)	N/A	Effective 2020, IOUs, Phase I utilities 0.5% annual incremental savings by 2022 w/ 2019 baseline increasing to 2% by 2025, Phase II utilities 1.25% annual incremental savings by 2022 w/ 2019 baseline increasing to 5% by 2025. Reassessed in 3 year increments Va. Code § 56-596.2 Senate Bill 851 (2020)
Washington	Wash. Admin. Code 51-11C: 2018 IECC for commercial buildings	SB 5854-2009-10 requires all nonresidential customers and qualifying public agency buildings to maintain records of energy data with an energy star rating system. Resulting metrics will be disclosed to a prospective buyer, lessee, or lender. (Benchmark must meet state EE codes)	Gas and electric utilities with more than 25,000 customers are required to make public biennial conservation targets and pursue all available cost-effective, feasible, and reliable conservation measures (Gas becomes effective in 2022) Wash. Rev. Code § 19.285.040 Wash. Rev. Code § 80.28.380
Wisconsin	Wis. Admin Code SPS 363: New commercial buildings must comply with 2015 IECC or 2013 ASHRAE-90.1	N/A	Statewide electric and gas target, 22,832 GWh for electricity and 1,243 million therms for gas for 2019-22 period. New goal every four years, administered by third party- 'Focus on Energy' Wis. Stat. § 196.374 PSCW Ord, Docket 5-FE-101 (2018)

SUMMAY OF NATURAL GAS LAWS

LEGISLATION PREVENTING GAS ACCESS OR REQUIRING ELECTRIFICATION

To date, all legislation altering access to natural gas are on the municipal level and applied to new construction only. The California Energy Commission passed an ordinance in December 2019 making California the first state to allow local governments to implement energy policies restricting natural gas or requiring electrification in buildings. The specifics of each municipality differ, consisting of variations for building type, timeline, and technology requirements. Most policies require complete electrification in all new residential and commercial buildings built after January 2020 with minimal exemptions. A complete list of existing California city/municipal policies can be found here.

Similar policies are proposed on the municipal level in Massachusetts but await approval from the Massachusetts Energy Commission before implementation.

ANTI-GAS BAN LEGISLATION:

Conversely, four states have passed policy to prevent municipalities from implementing gas bans. This legislation safeguards natural gas access in these states.

STATE	POLICY	DATE ENACTED
Oklahoma HB 3619	Prohibits 'certain codes and ordinances' in cities and towns including any utility connection restrictions	3/26/2020
Tennessee SB 1935/HB 1838	"As enacted, prohibits political subdivisions from prohibiting by ordinance, resolution, regulation, code, or any other requirement, the connection or reconnection of a utility service based on the type or source of energy to be delivered to an individual customer"	5/22/2020
Arizona HB 2686	Municipality cannot prohibit or restrict through fine or permit denial a builder or customer's access to any utility type or provider that is capable and authorized to provide utility service	2/21/2020
Louisiana Statue 40 revision 1730.21.1	"No code, ordinance, land use restriction or general or specific plan provision or part of a code, ordinance, land use regulation or general or specific plan provision adopted by a parish or municipality may prohibit or have the effect of restricting a person's or entity's ability to use the services of a utility provider that is capable and authorized to provide the utility service at a person's or entity's property." "For the purposes of this Section, 'utility service' means natural gas provided to an end user."	8/1/2020

RETAIL COMPLIANCE CENTER:

- The Retail Compliance Center (RCC) provides resources on environmental compliance and sustainability for all types and sizes of retailers. The RCC's goal is to develop retail-specific resources, tools and innovative solutions to help companies cost-effectively improve their compliance and environmental performance.
- Visit the Retail Compliance Center