### **Energy Efficiency in Existing Buildings**

# Policies/ Incentives to Promote Energy Efficiency in Existing Buildings: Municipal

Large Cities

Austin  949,587 The City of Austin's Energy Disclosure Law Austin City Code 6-7's Energy Conservation Audit and Disclosure (ECAD) ordinance (Ordinance 20110421-002) was approved in 2008- and amended in April 2011 to improve the energy efficiency of existing homes and buildings that receive electricity from Austin Energy. Click here for more information.  Kansas City  478,000 The City's climate protection plan calls for the City to reduce its municipal energy use by 10% by 2020 (below year 2000 levels). In the period of 2000 - 2013 the City achieved a 21% reduction in its energy use by aggressive implementation of energy efficiency improvements in its buildings, traffic signal lights, and water/wastewater operations.  Denver  690,000 We require all new city building construction and major renovation to seek platinum rating and achieve gold under the applicable LEED standard. We also pursue energy efficiency pursuant to a mandate in an executive order. For the private sector we recently enacted an ordinance requiring mandatory energy benchmarking and disclosure in commercial and multi-unit residential buildings over 25,000 square feet. We recently enacted the 2015 version of the IECC for new residential construction as well as a PACE financing structure for commercial buildings.  Orlando  270,000 City of Orlando has implemented a \$17.5M green bond to improve 10% of our government buildings. We are currently tracking a \$2.4M in annual savings across 55 buildings.  Los Angeles  4,030,904 Los Angeles's Existing Building Energy and Water Efficiency (EBEWE) ordinance (Ordinance No. 184674) was signed into law on December 15, 2016 and is the most ambitious and comprehensive local efficiency ordinance in the United States. The ordinance, the result of 2 years of inclusive stakeholder engagement, will make public the annual energy and water use of all buildings in the city over 20,000 square feet and all municipal buildings to take efficiency actions at least once every 5 years, such as energy audits or retrofits to redu	Large Cities		
municipal energy use by 10% by 2020 (below year 2000 levels). In the period of 2000 - 2013 the City achieved a 21% reduction in its energy use by aggressive implementation of energy efficiency improvements in its buildings, traffic signal lights, and water/wastewater operations.  Denver  690,000  We require all new city building construction and major renovation to seek platinum rating and achieve gold under the applicable LEED standard. We also pursue energy efficiency pursuant to a mandate in an executive order. For the private sector we recently enacted an ordinance requiring mandatory energy benchmarking and disclosure in commercial and multi-unit residential buildings over 25,000 square feet. We recently enacted the 2015 version of the IECC for new residential construction as well as a PACE financing structure for commercial buildings.  Orlando  270,000  City of Orlando has implemented a \$17.5M green bond to improve 10% of our government buildings. We are currently tracking a \$2.4M in annual savings across 55 buildings.  Los Angeles  4,030,904  Los Angeles's Existing Building Energy and Water Efficiency (EBEWE) ordinance (Ordinance No. 184674) was signed into law on December 15, 2016 and is the most ambitious and comprehensive local efficiency ordinance in the United States. The ordinance, the result of 2 years of inclusive stakeholder engagement, will make public the annual energy and water use of all buildings in the city over 20,000 square feet and all municipal buildings larger than 7,500 square feet. The ordinance also requires buildings to take efficiency actions at least once every 5 years, such as energy audits or retrofits to reduce energy and water use. Los Angeles is the first city to require water retro-commissioning of existing buildings. Buildings owned by the city of L.A. and smaller than 15,000 square feet, however, are not required to undergo energy and water auditing and retro-commissioning. If buildings owners fail to comply, there is a \$202 fee.  Portland  639,863  The City's 2015 Clima	Austin		Energy Conservation Audit and Disclosure (ECAD) ordinance (Ordinance 20110421-002) was approved in 2008- and amended in April 2011 to improve the energy efficiency of existing homes and buildings that receive electricity from Austin Energy. Click here for more information.
seek platinum rating and achieve gold under the applicable LEED standard. We also pursue energy efficiency pursuant to a mandate in an executive order. For the private sector we recently enacted an ordinance requiring mandatory energy benchmarking and disclosure in commercial and multi-unit residential buildings over 25,000 square feet. We recently enacted the 2015 version of the IECC for new residential construction as well as a PACE financing structure for commercial buildings.  Orlando  270,000  City of Orlando has implemented a \$17.5M green bond to improve 10% of our government buildings. We are currently tracking a \$2.4M in annual savings across 55 buildings.  Los Angeles  4,030,904  Los Angeles's Existing Building Energy and Water Efficiency (EBEWE) ordinance (Ordinance No. 184674) was signed into law on December 15, 2016 and is the most ambitious and comprehensive local efficiency ordinance in the United States. The ordinance, the result of 2 years of inclusive stakeholder engagement, will make public the annual energy and water use of all buildings in the city over 20,000 square feet and all municipal buildings larger than 7,500 square feet. The ordinance also requires buildings to take efficiency actions at least once every 5 years, such as energy audits or retrofits to reduce energy and water use. Los Angeles is the first city to require water retro-commissioning of existing buildings. Buildings owned by the city of L.A. and smaller than 15,000 square feet, however, are not required to undergo energy and water auditing and retro-commissioning. If building owners fail to comply, there is a \$202 fee.  Portland  639,863  The City's 2015 Climate Action Plan (CAP) lists the following actions to be completed by 2020 (Action 19B): - Implement all cost-effective (simple payback of ten years or less) resource-efficiency projects in City-owned buildings and facilities Reduce energy use from City and County operations by 2 percent each year through capital projects and operational improvements	Kansas City	478,000	municipal energy use by 10% by 2020 (below year 2000 levels). In the period of 2000 - 2013 the City achieved a 21% reduction in its energy use by aggressive implementation of energy efficiency improvements in its buildings, traffic signal lights, and
Los Angeles  4,030,904  Los Angeles's Existing Building Energy and Water Efficiency (EBEWE) ordinance (Ordinance No. 184674) was signed into law on December 15, 2016 and is the most ambitious and comprehensive local efficiency ordinance in the United States. The ordinance, the result of 2 years of inclusive stakeholder engagement, will make public the annual energy and water use of all buildings in the city over 20,000 square feet and all municipal buildings larger than 7,500 square feet. The ordinance also requires buildings to take efficiency actions at least once every 5 years, such as energy audits or retrofits to reduce energy and water use. Los Angeles is the first city to require water retro-commissioning of existing buildings. Buildings owned by the city of L.A. and smaller than 15,000 square feet, however, are not required to undergo energy and water auditing and retro-commissioning. If building owners fail to comply, there is a \$202 fee.  Portland  639,863  The City's 2015 Climate Action Plan (CAP) lists the following actions to be completed by 2020 (Action 19B): - Implement all cost-effective (simple payback of ten years or less) resource-efficiency projects in City-owned buildings and facilities Reduce energy use from City and County operations by 2 percent each year through capital projects and operational improvements	Denver	690,000	seek platinum rating and achieve gold under the applicable LEED standard. We also pursue energy efficiency pursuant to a mandate in an executive order. For the private sector we recently enacted an ordinance requiring mandatory energy benchmarking and disclosure in commercial and multi-unit residential buildings over 25,000 square feet. We recently enacted the 2015 version of the IECC for new residential construction as well as a PACE financing structure for
(EBEWE) ordinance (Ordinance No. 184674) was signed into law on December 15, 2016 and is the most ambitious and comprehensive local efficiency ordinance in the United States. The ordinance, the result of 2 years of inclusive stakeholder engagement, will make public the annual energy and water use of all buildings in the city over 20,000 square feet and all municipal buildings larger than 7,500 square feet. The ordinance also requires buildings to take efficiency actions at least once every 5 years, such as energy audits or retrofits to reduce energy and water use. Los Angeles is the first city to require water retro-commissioning of existing buildings. Buildings owned by the city of L.A. and smaller than 15,000 square feet, however, are not required to undergo energy and water auditing and retro-commissioning. If building owners fail to comply, there is a \$202 fee.  Portland  639,863  The City's 2015 Climate Action Plan (CAP) lists the following actions to be completed by 2020 (Action 19B): - Implement all cost-effective (simple payback of ten years or less) resource-efficiency projects in City-owned buildings and facilities Reduce energy use from City and County operations by 2 percent each year through capital projects and operational improvements	Orlando	270,000	10% of our government buildings. We are currently tracking a \$2.4M
to be completed by 2020 (Action 19B): - Implement all cost-effective (simple payback of ten years or less) resource-efficiency projects in City-owned buildings and facilities Reduce energy use from City and County operations by 2 percent each year through capital projects and operational improvements	Los Angeles	4,030,904	(EBEWE) ordinance (Ordinance No. 184674) was signed into law on December 15, 2016 and is the most ambitious and comprehensive local efficiency ordinance in the United States. The ordinance, the result of 2 years of inclusive stakeholder engagement, will make public the annual energy and water use of all buildings in the city over 20,000 square feet and all municipal buildings larger than 7,500 square feet. The ordinance also requires buildings to take efficiency actions at least once every 5 years, such as energy audits or retrofits to reduce energy and water use. Los Angeles is the first city to require water retro-commissioning of existing buildings. Buildings owned by the city of L.A. and smaller than 15,000 square feet, however, are not required to undergo energy and water auditing and retro-commissioning. If building owners fail to comply, there is a \$202
	Portland	639,863	The City's 2015 Climate Action Plan (CAP) lists the following actions to be completed by 2020 (Action 19B): - Implement all cost-effective (simple payback of ten years or less) resource-efficiency projects in City-owned buildings and facilities Reduce energy use from City and County operations by 2 percent each year through capital
	San Francisco	852,000	

Chula Vista	268,000	we have a reduction goal of 20% by 2020 for municipal buildings,
- W	001.51-	which include retrofits
Baltimore	621,849	Baltimore adopted the 2015 International Energy Conservation Code for new construction. Our local utility offers rebates for a range of energy conservation measures and the City has benefit from more than \$2M of rebates. And, the City receives state grant funds to upgrade buildings to be more energy efficient.
Seattle	705,000	he City of Seattle owns and maintains over 650 buildings totaling approximately 10 million square feet and each year new facilities are added or old ones remodeled. In addition, the City manages over 110,000 acres of public land. To reduce its environmental impact, the City has adopted policies and programs addressing new building construction and major renovations, as well as day-to-day operations. The Sustainable Buildings and Sites Policy (PDF; established by Resolution 31326) for municipal facilities aims to maximize the environmental quality, economic vitality, and social health of our city through the design, construction, operation, maintenance, renovation, and decommissioning of City-owned buildings and sites. Sustainable buildings and sites support overall City objectives by making efficient use of energy, water, and material resources; reducing climate change; minimizing pollution and hazardous materials; creating healthy indoor environments; reinforcing natural systems; providing habitat; creating vibrant spaces for people; and contributing to Seattle's neighborhoods. To improve resource efficiency across the City of Seattle's building portfolio, the Office of Sustainability and Environment coordinates a citywide Resource Conservation Management Initiative. In 2013, Resolution 31491 adopted the Resource Conservation Management Plan (PDF) to centralize resource use monitoring and to coordinate with capital departments to build on their existing efforts to improve the efficiency of City facility operations.
Toledo	280,000	BetterBuildings offers financing for projects that focus on conserving energy and generating savings through equipment upgrades to existing facilities. The following lists some of the energy improvements eligible for upgrades: *Lighting and Building Controls *HVAC, Boilers and Chillers *Compressor, Motors and Drives *Refrigeration *Waste Energy Recovery *Electrical Distribution *Insulation *Building Envelope (roofing, windows, etc.)
City of Phoenix	1,600,000	20% reduction in energy use by 2020 from 2010 levels
Long Beach	470,130	21.45.400 Green building standars for public and private development
Chicago	2,705,000	The city has retrofitted 60 city buildings spanning 4.9 million square feet, achieving approximately 18% energy reduction across the 60 buildings. Retrofits of additional buildings are in the planning stages.
Boston		The Building Energy Reporting and Disclosure Ordinances requires all buildings covered by it - all municipal buildings - to complete either an energy audit or show 15% improvement in their energy efficiency every 5 years.
Boise	250,000	2030 goal of 50% reduction from 2010
Houston	2,250,000	Green Building Resolution 6.23.2004 City Energy Efficiency Policy 12.31.2011
Durham	254,620	The City's Facilities Strategic Energy Conservation Policy specifically addresses retrofitting existing municipal buildings. It should be noted that NC law does not allow us to create energy efficiency policies for

		commercial or residential buildings. Click here for more information.
Saint Louis	315,000	Ordinance 67803 - Energy Efficiency Ordinance 67414 - LEED Standards
New York	8,500,000	The City has made an unpreceded commitment to retrofit every Cityowned building with significant energy use by 2025. To date, the City has retrofitted more than 1,300 buildings through programs such as the Accelerated Conservation and Efficiency (ACE) program; the Expenses for Conservation and Efficiency Leadership (ExCEL) program, which provides support to City agency facility operators in their energy reduction efforts, and expense funding for energy efficiency programs; the Innovative Demonstrations for Energy Adaptability (IDEA) program, which pilots new energy efficiency technologies on City buildings; and the Clean Energy Program. Additionally, under NYC Local Law 31 of 2016, City buildings that have substantial renovation are required to be designed to LEED gold or higher rating. All buildings undergoing major renovations are subject to the NYC Energy Conservation Code.

#### **Medium Cities**

Salt Lake City	192,672	Salt Lake City has a Comprehensive Energy Management Executive Order that details energy requirements for existing municipal facilities. Click here for more information.
Newport News	181,825	1) The High Performance and Sustainable Buildings Policy, effective March 2014 is a commitment by the city to sustainable building design, construction. operation, maintenance, and renovation intended to reduce greenhouse gas emissions. minimize the use or energy, water and other natural resources, provide a healthy, productive indoor environment, and contribute to the goals of the City's Comprehensive and Sustainability Plans. 2) Energy Policy Statement, effective April 2011 states in part that it is the policy of the City of Newport News government to promote measures that will conserve and manage energy resources to the furthest extent practical while maintaining a high level of service to our citizens. 3) The Environmental Policy Statement, updated in August 2013 states in part that the City of Newport News is committed to the protection of the environment for present and future generations. All City employees are responsible for incorporating into their planning and work, the actions necessary to fulfill this commitment. The City of Newport News and its employees shall meet this responsibility by endeavoring to accomplish the following: Practice and support sustainable design, development, and operations processes.
Fremont	230,000	We are currently completing a \$9.1M ESCO project to upgrade our streetlights, park lights, and interior/exterior facility lights to LED as well as install water conserving plumbing fixtures and weather-based irrigation systems. We are able to tap into rebates, on-bill financing, and technical assistance programs offered by our utility PG&E to help facilitate these upgrades.
Columbia	120,000	Incentivized based-budgeting prioritizes energy efficiency improvements if departments have fiscal year savings.
Knoxville	186,000	Better Buildings Challenge commitment - reduce energy use in City buildings 20% by 2020.

Gresham	108,000	Council-adopted goal of 100% renewable energy by 2030.
West Palm Beach	106,000	The City's internal Climate and Resiliency Policy requires LEED Silver for new buildings and substantial modifications.
Richmond	204,214	Resolution 2015-R8-15
Clarksville	150,287	The City promotes energy efficiency through participation in the Energy Right Solutions for Business and Industry program.
Macon	159,000	Energy audits performed on buildings, lighting retrofits complete on 60%, purchasing policies to consider high efficiency on all projects and purchases
Pembroke Pines	162,000	Resolution # 3432 " Green Plan"
Torrance	147,175	BEACON award program; Build It Green certified staff for review and assistance
Charleston	146,000	Energy Savings Contract
Tacoma	210,000	Public utility incentives
Elizabeth	124,969	
Rochester	210,000	The Municipal Climate Action Plan outlines operations and measures that will decrease energy use intensity in municipal buildings and reduce greenhouse gas emissions from municipal operations. Some of these measures include energy efficiency retrofits and projects implemented in municipal buildings. A copy of the Municipal Climate Action Plan can be found here:
Reno	240,000	Better Buildings Challenge will be launched in October 2017 in which the City will lead by example. City adopted the 2012 IECC in 2016, and will adopt the 2018 IECC in 2018.
Las Cruces	101,759	The City works with an ESCO
Birmingham	212,157	Yes, the City does have policies in place to require energy efficiency for existing buildings. The City has contracted with Trane Company in a \$61 million dollar project to replace all lighting fixtures and HVAC units throughout the existing City owned buildings with high efficiency replacements. This will have a substantial impact in energy use over 20 years.
Little Rock	197,706	In 2005 Resolution #11,978 was passed, recommending that all renovations to city buildings should be done to LEED/energy efficiency standards. The resolution does not require a retrofit to apply for LEED or another rating system recognition, but it recommends that an application is made for certification after a large building retrofit.

#### **Small Cities**

Official Office		
City of Walnut Creek		While we do not have ordinances in place that require this, the City has used PG&E incentives to upgrade facilities and is currently conducting an energy efficiency audit of several buildings.
New Bedford	94,845	Stretch Code
San Bruno	44,000	

Santa Monica	90,000	Green Office Certification
Encinitas	65,000	The City's Climate Action Plan includes measures that mandate energy efficiency retrofits at existing municipal buildings.
Newton	84,000	No ordinances
City of San Marcos	58,292	
Riverbank	25,000	Valley Vision Stanislaus goals and GHG reduction programs
Santa Barbara	89,000	The City has a municipal energy efficiency policy the outlines energy efficient standards and guidelines for buildings and purchases
West Sacramento	53,163	City Municipal Code Section 15.12.040 adopts by reference the California Green Building Standards Code that requires energy efficiency in retrofits of existing buildings.
Dubuque	58,000	Energy Efficiency Administrative Policy
College Park	30,000	The City has completed energy audits of most city buildings and have completed many retrofits / efficiency upgrades in the buildings.
Santa Fe	83,000	Energy performance contract.
Sheboygan	49,203	Development incentives
Burnsville	62,000	
Bonita Springs	50,137	Through Ordinance 15-19 "Green Building Plan" provides policies and incentives for the retrofitting of existing and construction of new buildings.
Hanover Park	38,000	The State of Illinois has adopted the 2015 IECC and we enforce that code.
Lima	38,000	We have been actively evaluating our buildings and systems for about a decade and making investments with relatively short term paybacks.
Wellington	62,000	Florida Statutes require new construction to meet LEEDs Silver. We target LEED's Gold.

## Policies/ Incentives to Promote Energy Efficiency in Existing buildings: Commercial

Large Cities

Austin		The City of Austin's Energy Disclosure Law Austin City Code 6-7's Energy Conservation Audit and Disclosure (ECAD) ordinance (Ordinance 20110421-002) was approved in 2008- and amended in April 2011 to improve the energy efficiency of existing homes and buildings that receive electricity from Austin Energy. Click here for more information.
Kansas City	478,000	The City's climate protection plan calls for the City to reduce its municipal energy use by 10% by 2020 (below year 2000 levels). In the period of 2000 - 2013 the City achieved a 21% reduction in its energy use by aggressive implementation of energy efficiency improvements in its buildings, traffic signal lights, and water/wastewater operations.

Denver		We require all new city building construction and major renovation to seek platinum rating and achieve gold under the applicable LEED standard. We also pursue energy efficiency pursuant to a mandate in an executive order. For the private sector we recently enacted an ordinance requiring mandatory energy benchmarking and disclosure in commercial and multi-unit residential buildings over 25,000 square feet. We recently enacted the 2015 version of the IECC for new residential construction as well as a PACE financing structure for commercial buildings.  City of Orlando has implemented a \$17.5M green bond to improve
Chango	·	10% of our government buildings. We are currently tracking a \$2.4M in annual savings across 55 buildings.
Los Angeles	4,030,904	Los Angeles's Existing Building Energy and Water Efficiency (EBEWE) ordinance (Ordinance No. 184674) was signed into law on December 15, 2016 and is the most ambitious and comprehensive local efficiency ordinance in the United States. The ordinance, the result of 2 years of inclusive stakeholder engagement, will make public the annual energy and water use of all buildings in the city over 20,000 square feet and all municipal buildings larger than 7,500 square feet. The ordinance also requires buildings to take efficiency actions at least once every 5 years, such as energy audits or retrofits to reduce energy and water use. Los Angeles is the first city to require water retro-commissioning of existing buildings. Buildings owned by the city of L.A. and smaller than 15,000 square feet, however, are not required to undergo energy and water auditing and retro-commissioning. If building owners fail to comply, there is a \$202 fee.
Portland	639,863	The City's 2015 Climate Action Plan (CAP) lists the following actions to be completed by 2020 (Action 19B): - Implement all cost-effective (simple payback of ten years or less) resource-efficiency projects in City-owned buildings and facilities Reduce energy use from City and County operations by 2 percent each year through capital projects and operational improvements
San Francisco	852,000	r r r r r r r r r r r r r r r r r r r
Chula Vista	268,000	we have a reduction goal of 20% by 2020 for municipal buildings, which include retrofits
Baltimore		Baltimore adopted the 2015 International Energy Conservation Code for new construction. Our local utility offers rebates for a range of energy conservation measures and the City has benefit from more than \$2M of rebates. And, the City receives state grant funds to upgrade buildings to be more energy efficient.
Seattle	705,000	he City of Seattle owns and maintains over 650 buildings totaling approximately 10 million square feet and each year new facilities are added or old ones remodeled. In addition, the City manages over 110,000 acres of public land. To reduce its environmental impact, the City has adopted policies and programs addressing new building construction and major renovations, as well as day-to-day operations. The Sustainable Buildings and Sites Policy (PDF; established by Resolution 31326) for municipal facilities aims to maximize the environmental quality, economic vitality, and social health of our city through the design, construction, operation, maintenance, renovation, and decommissioning of City-owned buildings and sites. Sustainable buildings and sites support overall City objectives by making efficient use of energy, water, and material resources; reducing climate change; minimizing pollution and hazardous materials; creating healthy indoor environments; reinforcing natural systems; providing

		habitat; creating vibrant spaces for people; and contributing to Seattle's neighborhoods. To improve resource efficiency across the City of Seattle's building portfolio, the Office of Sustainability and Environment coordinates a citywide Resource Conservation Management Initiative. In 2013, Resolution 31491 adopted the Resource Conservation Management Plan (PDF) to centralize resource use monitoring and to coordinate with capital departments to build on their existing efforts to improve the efficiency of City facility operations.
Toledo		BetterBuildings offers financing for projects that focus on conserving energy and generating savings through equipment upgrades to existing facilities. The following lists some of the energy improvements eligible for upgrades: *Lighting and Building Controls *HVAC, Boilers and Chillers *Compressor, Motors and Drives *Refrigeration *Waste Energy Recovery *Electrical Distribution *Insulation *Building Envelope (roofing, windows, etc.)
Long Beach	470,130	21.45.400 Green building standars for public and private development
Chicago	2,705,000	The city has retrofitted 60 city buildings spanning 4.9 million square feet, achieving approximately 18% energy reduction across the 60 buildings. Retrofits of additional buildings are in the planning stages.
Boston	670,000	The Building Energy Reporting and Disclosure Ordinances requires all buildings covered by it - all municipal buildings - to complete either an energy audit or show 15% improvement in their energy efficiency every 5 years.
Saint Louis	315,000	Ordinance 67803 - Energy Efficiency Ordinance 67414 - LEED Standards
New York	8,500,000	The City has made an unpreceded commitment to retrofit every Cityowned building with significant energy use by 2025. To date, the City has retrofitted more than 1,300 buildings through programs such as the Accelerated Conservation and Efficiency (ACE) program; the Expenses for Conservation and Efficiency Leadership (ExCEL) program, which provides support to City agency facility operators in their energy reduction efforts, and expense funding for energy efficiency programs; the Innovative Demonstrations for Energy Adaptability (IDEA) program, which pilots new energy efficiency technologies on City buildings; and the Clean Energy Program. Additionally, under NYC Local Law 31 of 2016, City buildings that have substantial renovation are required to be designed to LEED gold or higher rating. All buildings undergoing major renovations are subject to the NYC Energy Conservation Code.

#### **Medium Cities**

Salt Lake City  192,672  Project Skyline is an initiative that provides incentives for commercial building owners to reduce energy waste. Thro this initiative, commercial building owners and operators a publicly recognized by Salt Lake City's Mayor at an annua awards event for benchmarking energy use, setting energy savings goals, and implementing projects that reduce energy use. An ordinance has been proposed by the Mayor, and in currently under consideration by the City Council, that will large commercial building owners and managers to bench energy use annually and share the data with the City. Through this program least efficient buildings will be required to every salt to be a support of the commercial buildings will be required to every salt to be a support of the commercial buildings will be required to every salt to be a support of the commercial buildings will be required to every salt to be a support of the commercial buildings will be required to every salt to be a support of the commercial buildings will be required to every salt to be a support of the commercial buildings will be required to every salt to be a support of the commercial building owners and operators a public projects that reduce energy savings goals, and implementing	re gy s require mark
---	----------------------------------

		available utility-sponsored incentive programs designed to reduce energy waste. <u>Click here for more information.</u>
Newport News	181,825	1) The Newport News City Council enacted an ordinance to encourage commercial rehabilitation in the city by providing a five-year partial exemption of real estate taxes. The Commercial Rehabilitation Property Tax Abatement (CRPTA) provides for a reduction of the post-rehabilitation assessment of a qualifying property by fifty percent (50%) of the eligible rehabilitation costs. Eligible rehabilitation costs include sustainability/energy efficiency improvements. 2) The Newport News Facade Improvement Grant (FIG) program objective is to restore, sustain, and improve commercial properties located within the City of Newport News. The FIG program, managed by Department of Development, provides matching grant funds, up to a maximum of \$30,000, to assist with eligible facade improvements on properties citywide that are used for commercial, industrial, office or mixed-use purposes. A FIG may assist in financing the cost of eligible facade improvements such as "Green"/Sustainable exterior improvements.
Fremont	230,000	The East Bay Energy Watch local government partnership with PG&E provides free energy audits and offers rebates to help small to medium businesses to upgrade their lighting and refrigeration systems. The City also passed and energy reach code that requires outdoor lighting retrofits to install high efficiency lighting technologies such as LEDs.
Columbia	120,000	Municipal utility has a commercial lighting incentive program that provides rebates for kW drops due to lighting retrofits.
Gresham	108,000	GREAT Business Program
West Palm Beach	106,000	The Community Redevelopment Authority and Economic Development offer additional funding for projects that include energy efficiency measures.
Clarksville	150,287	The City promotes energy efficiency through participation in the Energy Right Solutions for Business and Industry program.
Macon	159,000	Energy audits performed on buildings, lighting retrofits complete on 60%, purchasing policies to consider high efficiency on all projects and purchases
Pembroke Pines	162,000	
Torrance	147,175	Same as above also PACE financing; education and promotion for Energy Upgrade California, rebates through Southern CA Edison and the South Bay Cities Council of Governments.
Tacoma	210,000	public utility incentives
Rochester	210,000	The community-wide City of Rochester Climate Action Plan encourages commercial and residential energy efficiency. Given the City's recent endorsement, the Climate Action Plan's ongoing implementation will have a major focus on commercial and residential energy efficiency. Click here for more information on the Climate Action Plan.
Reno	240,000	Better Buildings Challenge will be launched in October 2017 in which the City will lead by example. City adopted the 2012 IECC in 2016, and will adopt the 2018 IECC in 2018.

#### **Small Cities**

Small Cities		
City of Walnut Creek	70,018	The City has 3 PACE financing programs available in our jurisdiction. We also promote our East Bay Energy Watch local government partnership with PG&E and the BayREN energy efficiency programs.
New Bedford	94,845	Stretch Code
San Bruno	44,000	
Santa Monica	90,000	PACE and utility programs
Encinitas	65,000	The City's Climate Action Plan includes measures that promote energy efficiency retrofits at existing commercial buildings.
Newton	84,000	No ordinances
City of San Marcos	58,292	The City of San Marcos Commercial Lighting Retrofit Program encourages replacement of older inefficient lighting products with newer energy-efficient technologies. Common lighting upgrades include replacing existing T12 fluorescent lighting with T8 or T5 lighting systems, replacing incandescent, fluorescent or neon lighting with LED, replacing incandescent exit signs with LED, and installing lighting controls such as occupancy sensors. The lighting rebate program is open to all City of San Marcos multi-family, commercial, institutional and industrial electric customers. For more information:
Riverbank	25,000	
West Sacramento	53,163	City Municipal Code Section 15.12.040 adopts by reference the California Green Building Standards Code that requires energy efficiency in retrofits of existing buildings.
Dubuque	58,000	The City finances the Commercial Energy Efficiency Revolving Loan Fund which can be used for commercial energy efficiency improvements, and renewable energy investments if all feasible efficiency improvements have been made. Click here for more information.
Bonita Springs	50,137	Through Ordinance 15-19 "Green Building Plan" provides policies and incentives for the retrofitting of existing and construction of new buildings.
Hanover Park	38,000	The State of Illinois has adopted the 2015 IECC and we enforce that code.
Hallandale Beach	39,500	Green Building Ordinance 2009-20 "In addition to Sec. 32-787(j)(1), the following projects shall be required to obtain a green building certification from a recognized environmental rating agency accepted by the City's Development Services Department: New commercial building or major renovation projects grater than 50,000 gross square feet"
Everett	41,667	(IECC) is a building energy code created by the International Code Council. It is a model code adopted by many state and municipal governments in the United States for the establishment of minimum design and construction requirements for energy efficiency, and is updated on a three-year cycle. The baseline energy conservation requirements of the MA State Building Code

		are the IECC with Massachusetts amendments, as approved by the Board of Building Regulations and Standards. Stretch Energy Code - Codified by the Board of Building Regulations and Standards as 780 CMR Appendix 115.AA of the 8th edition Massachusetts building code, the Stretch Energy Code is an appendix to the Massachusetts building code, based on further amendments to the International Energy Conservation Code (IECC) to improve the energy efficiency of buildings built to this code. Section (b) Purpose The purpose of 780 CMR 115.AA is to provide a more energy efficient alternative to the Base Energy Code applicable to the relevant sections of the building code for both new construction and existing buildings. Section (c) Applicability This code applies to residential and commercial buildings. Buildings not included in this scope shall comply with 780 CMR 13, 34, 51, as applicable.
Newark	44,000	NMC 15.44.70 Green Building Standards Code

## Policies/ Incentives to Promote Energy Efficiency in Existing buildings: Residential

Large Cities

Austin	949,587	Yes, ECAD. Click here for more information
Kansas City		In its first 9 months of operation (Sept 2016 - June 2017), the residential PACE program in KC provided loans for 358 residential energy efficiency projects. During implementation of EnergyWorksKC, energy efficiency improvements were funded for 2,703 residential buildings, achieving an 18.5% average annual energy savings.
Denver	690,000	
Orlando	270,000	We have also implemented PACE (Property Assessed Clean Energy) financing in Orlando, a non-exclusive marketplace with more than \$500M in capital available for both commercial and residential customers. OUC also offers an "Efficiency Delivered" program to low-income households, subsidizing up to \$2,000 for energy and water efficiency improvements.
Los Angeles	4,030,904	The EBEWE ordinance will make public the annual energy and water use of all buildings in the city over 20,000 square feet. In regards to residential buildings, this only includes multi-family residential buildings over 20,000 square feet. The ordinance also requires buildings to take efficiency actions at least once every 5 years, such as energy audits or retrofits to reduce energy and water use. Los Angeles is the first city to require water retro-commissioning of existing buildings. If building owners fail to comply, there is a \$202 fee.
Portland		Portland City Code Chapter 17.108 requires disclosure of home energy performance at time of listing. City Charter currently prohibits time-of-sale weatherization retrofit requirements. Energy Trust of Oregon provides energy efficiency incentives for residential retrofits. The incentives are funded by a public purpose charge on energy utility customers' bills.
San Francisco	852,000	The San Francisco Department of the Environment implements, in partnership with the Association of Bay Area Governments, the Bay

		Area Regional Energy Network (BayREN) program which provides no cost, professional, comprehensive technical assistant and incentives to multifamily properties throughout the City.
Chula Vista	268,000	We offer no-cost home energy evaluations to help people identify energy efficiency upgrades including providing smart power strips, help promote discounted LED lightbulb sales, provide PACE financing, and are looking at requiring high ROI retrofits in the future. In the past we have had requirements making new homes 10 to 15% more energy efficient than code.
Baltimore	621,849	Additionally, the Baltimore Energy Challenge (BEC) is a peer to peer network outreach program teaching low to no cost ways to save energy to residents, businesses, and nonprofits through a grassroots effort in neighborhoods and schools. We ask everyone to sign a pledge committing to reducing their energy use through behavior change. The resources and education we provide has helped communities reduce their energy usage from 4-13%.
Seattle	705,000	3.
Toledo	280,000	Through the Toledo-Lucas County Sustainability Commission we work with our local gas provider to promote residential energy audits.
Long Beach	470,130	THe alteration of an exisiting residential or mixed use building that results in addition of 50 dwelling units and fifty thousand gross square or more shall be LEED certified
Chicago	2,705,000	The City's requires all homes for sale disclose the amount of energy that home has used over the past year.
Boston	670,000	The Building Energy Reporting and Disclosure Ordinances requires all buildings covered by it - residential above 35,000 sf - to complete either an energy audit or show 15% improvement in their energy efficiency every 5 years.
Saint Louis	315,000	Ordinance 69893 - Low interest loans
New York	8,500,000	In addition to the programs and requirements listed under commercial buildings above, the City also launched Community Retrofit NYC, a complementary program to the NYC Retrofit Accelerator for small- and mid-sized multifamily buildings in northern and central Brooklyn and southern Queens.

### **Medium Cities**

Salt Lake City	192,672	Mayor Biskupski has proposed a \$200k budget for a new residential energy efficiency program that engages lower income households. City Council will vote on this budget before July 2017. The City also engages the public generally on energy efficiency opportunities and programs through our SLCgreen communications platform (website, blog, e-newsletters and social media)
Newport News	181,825	The Newport News Redevelopment and Housing Authority (NNRHA) is the primary provider of new homebuyer opportunities and affordable housing for lower and moderate income families on the Virginia peninsula. The NNRHA is the redevelopment arm for the City of Newport News and acquires property for redevelopment, undertakes property rehabilitation and manages the City's Consolidated Housing and Community Development programs. Through the Federal Low-Income Housing Tax Credit (LIHTC) Program, the NNRHA new and rehabilitation construction projects meet EarthCraft or LEED Green Building Certification that includes

		energy efficiency features such as Energy Star appliances, windows, water heaters, low flow faucets, and energy efficient HVAC systems. The program applies to residential and commercial new and existing buildings.
Fremont	230,000	The City partners with the non-profit Rising Sun Energy Center to offer free Green House Calls every summer to Fremont residents that provide no cost lighting and water efficiency measures.
Columbia	120,000	Home Performance with Energy Star
Clarksville	150,287	The City promotes energy efficiency through participation in the TVA and Clarksville Department of Electricity eScore program.
Pembroke Pines	162,000	
Torrance	147,175	Same as above.
Tacoma	210,000	public utility incentives
Rochester	210,000	The community-wide City of Rochester Climate Action Plan encourages commercial and residential energy efficiency. Given the City's recent endorsement, the Climate Action Plan's on-going implementation will have a major focus on commercial and residential energy efficiency. The Climate Action Plan can be viewed here.
Reno	240,000	City adopted the 2012 IECC in 2016, and will adopt the 2018 IECC in 2018.
Knoxville	186,000	Knoxville Extreme Energy Makeover; Smarter Cities Partnership

#### **Small Cities**

City of Walnut Creek	70,018	The City has 3 PACE financing programs available in our jurisdiction. We also promote our East Bay Energy Watch local government partnership with PG&E and the BayREN energy efficiency programs.
New Bedford	94,845	Stretch Code
San Bruno	44,000	
Santa Monica	90,000	PACE and utility programs
Encinitas	65,000	The City's Climate Action Plan includes measures that promote and incentivize energy efficiency retrofits at existing residential buildings.
Newton	84,000	No ordinances
City of San Marcos	58,292	Energy Efficient Home Rebate Program The City of San Marcos offers rebates for energy efficient heating and AC upgrades including HVAC systems, attic/wall insulation, duct sealing/replacement, radiant barrier, windows and doors, solar window film and screen, and window AC units. The program is open to City of San Marcos residential electric utility customers. F The City of San Marcos Distributed Generation Rebate Program encourages installation of grid-tied renewable energy systems such as solar photovoltaic (PV) and wind systems. The Distributed Generation Rebate Program is open to all City of San Marcos electric utility customers with an account in good standing. For

		more information:
Riverbank	25,000	
West Sacramento	53,163	City Municipal Code Section 15.12.040 adopts by reference the California Green Building Standards Code that requires energy efficiency in retrofits of existing buildings.
Dubuque	58,000	The City hosts Green Iowa Americorps, which performs free energy audits and weatherizations for all residents. The City also incorporates solar-ready construction into all Housing rehabilitation and considers solar installation on relevant rehabs. Click here for more information.
Bonita Springs	50,137	Through Ordinance 15-19 "Green Building Plan" provides policies and incentives for the retrofitting of existing and construction of new buildings.
Hanover Park	38,000	The State of Illinois has adopted the 2015 IECC and we enforce that code.
Hallandale Beach	39,500	Green Building Ordinance 2009-20 "In addition to Sec. 32-787(j)(1), the following projects shall be required to obtain a green building certification from a recognized environmental rating agency accepted by the City's Development Services Department: New residential/hotel building or major renovation projects 50 units or greater.
Everett	41,667	(IECC) is a building energy code created by the International Code Council. It is a model code adopted by many state and municipal governments in the United States for the establishment of minimum design and construction requirements for energy efficiency, and is updated on a three-year cycle. The baseline energy conservation requirements of the MA State Building Code are the IECC with Massachusetts amendments, as approved by the Board of Building Regulations and Standards. Stretch Energy Code - Codified by the Board of Building Regulations and Standards as 780 CMR Appendix 115.AA of the 8th edition Massachusetts building code, the Stretch Energy Code is an appendix to the Massachusetts building code, based on further amendments to the International Energy Conservation Code (IECC) to improve the energy efficiency of buildings built to this code. Section (b) Purpose The purpose of 780 CMR 115.AA is to provide a more energy efficient alternative to the Base Energy Code applicable to the relevant sections of the building code for both new construction and existing buildings. Section (c) Applicability This code applies to residential and commercial buildings. Buildings not included in this scope shall comply with 780 CMR 13, 34, 51, as applicable.
Newark	44,000	NMC 15.44.70 Green Building Standards Code