

	Home Owners and Renters, Small and Medium Businesses	Commercial, Institutional, and Industrial	Support
Phase I	Community Outreach/Education	Energy Advising / Technical Assistance	
	LED Light Bulb Discounts	Prescriptive Rebate	
	Energy Efficiency Kits for Low Income	Custom Incentive	
	Appliance Recycling		
	Product Rebates		
	Online Store for Efficient Products		
Revisit in Future	Smart Thermostats for Energy Conservation and Demand Response	Facility Assessments - ASHRAE Level 1 Facility Audit	Energy Project Assessment District Financing- EPAD
	Smart Thermostats for Energy Conservation and Demand Response for Low-Income Residents		Crowdfunding for Non-profits or Donations to Support Low Income Energy Efficiency
	Energy Efficiency Education for Students		Residential and Small Business Low interest Financing (Either On-bill or Separate)
	Home Energy Reports		
	Audit and Weatherization		
	Residential Online Audit		
	Walkthrough / Direct Install (DI) for Low Income		
	Conservation / Behavior		

Target Market Sector	Programmatic Approach	Program Name	Description/Summary	Measures Incentivized and Used to Track Savings	Pros	Cons	Industry Best Practices	VEIC Recommendation to Include or not Include	Phase to Include	Potential Interactions with Other Recommended Programs	Example of a Kentucky Utility or Municipal Utility Using this Approach	Helpful Links or Notes
Renters, Homeowners, Small/Med businesses (SMB)	Education / Behavior	Community Outreach/Education	Utilize public events and/or community outreach strategies to educate residents on energy conservation and energy efficiency. Develop information sheets and website content, including information on local builders and trade allies qualified to provide energy efficiency services. Gather email addresses and cell phone numbers from residents and businesses through a number of channels, including offering a free raffle for a chance to win an energy efficiency kit. Use names/email addresses/cell phone numbers for marketing and education. Also, FPB's energy efficiency programs could be branded in a way that resonates with the local community, and combined with a broad-based social marketing campaign that works with residents, businesses, and municipal government to complete energy upgrades in homes, small businesses, and municipal buildings. Behavior change techniques would be utilized.	None	Excellent low cost way to combine education with conservation/energy efficiency. Provides positive customer and community relations. Involvement of local community organizations. Good program approach to utilize for utilities just starting energy efficiency programs with limited budgets.	Very difficult to capture savings, so utilities use this to advance customer service goals not savings goals.	<ul style="list-style-type: none"> Part of a longer term strategy for educating homeowners. Website lists events and utility participation. Utility customer support is aware of outreach offerings and can promote it during customer service inquiries. Educational material is provided, as well as links to other energy savings tips or programs offered by the utility. Raffle winner is publicized. 	Recommend to include. This fits well in a start-up energy efficiency program with limited funding. Can control number of outreach events and raffle energy efficiency kits based upon budget.	Phase I	May increase awareness and participation in other efficiency programs.	<p>Efficiency Smart, the electric energy efficiency program supported by American Municipal Power (AMP), has several municipal utilities in Ohio and Delaware using this approach during the community outreach events.</p> <p>Salt River Project included educational video developed by NRDC on their website. They also developed some tips on how to make customers homes more energy efficient and uses that with community outreach.</p> <p>JEA offers education through a Free Energy and Water Evaluation Kit. Inside the kit are worksheets and materials that can show customers how to lower monthly energy and water costs, while making their home more comfortable. The kits, which may be checked out and kept for three weeks, are available at the following libraries. They also offer Home Energy and Water Evaluation Kit one hour workshops to help residences use the kit and learn about how to save energy.</p>	<p>Example of an Efficiency Smart raffle offered as part of community outreach and education for one of the municipal utility communities: Win an energy efficiency gift basket: http://www.energysmart.org/media-room/win-an-energy-efficiency-gift-basket-10</p> <p>JEA evaluation kit: https://www.jea.com/ways_to_save/managing_consumption/diy/free_energy_and_water_evaluation_kit/</p>
Renters, Homeowners, SMB	Education / Prescriptive	LED Light Bulb Discounts	Develop a memorandum of understanding with Frankfort-based hardware stores to offer discounted ENERGY STAR® rated LED bulbs to Frankfort residents.	ENERGY STAR® rated LED bulbs	Excellent low cost way to combine education with conservation/energy efficiency. Easy, low-cost, self-installed technology makes this a good first step for interested customers. Provides positive customer and community relations, and involves local retailers. Improves in-store stocking of LED lightbulbs and possibly other energy efficient products such as dimmers, occupancy sensors. Advanced Power strips. Good program approach to utilize for utilities just starting energy efficiency programs with limited budgets.	Must account for reduced savings from sales to customers outside of service territory ("leakage rate"). Need to use point of sale customer surveys to estimate leakage rate. Not able to verify customer address or that customer actually installs the LED bulbs in high-use areas. Savings from LED lighting will be dramatically reduced if proposed lighting standards for screw-in LED lightbulbs go into effect in January 2020.	<ul style="list-style-type: none"> Offer marketing and messaging attributing the product discount to the utility. Include product purchase maximum per store visit. Part of a longer term strategy for educating homeowners. Utility customer support is aware of offering and can promote it during customer service inquiries. Educational material is included with the lightbulbs, as well as links to other energy savings tips or other programs offered by the utility. Select non-chain, locally-owned stores that are geographically central to service territory to minimize leakage. Ensure marketing efforts targets very high percentage of FPB customers to minimize leakage. 	Recommend to include. This fits well in a start-up energy efficiency program with limited funding. Can control number of lightbulbs to purchase and can offer a time sensitive promotion. Can start with one local store and grow to others.	Phase I	Sales can be impacted by online product stores or free product giveaways/energy efficiency kits	<p>Through Efficiency Smart, several municipal utilities in Ohio and Delaware have partnered with local stores to provide LED's for less than \$1.00 each.</p> <p>Efficiency Works™ – a partnership between Platte River and the utilities of its owner municipalities fund instant rebates for ENERGY STAR® rated LEDs sold at local hardware stores, do-it-yourself, discount and lighting design stores located in Fort Collins, Longmont and Loveland, Colorado. Efficiency Works also offers in-store instant rebates for qualified lighting controls, such as dimmers and occupancy sensors.</p> <p>ShopSmart with JEA offers instant rebates on ENERGY STAR (LED) bulbs. Rebate amounts vary depending on the product and package quantity. JEA rebates are taken from the original price, so the sticker price shown includes your instant LED rebate. There is a large list of participating retailers including local Walmart, Costco and Home depot and small local hardware stores. These stores also recycle used bulbs.</p>	<p>Example flyer from Bowling Green on the LED Promotion: http://www.energysmart.org/Media/Default/docs/news/bowling-green-oh/2018-bowling-green-led-flyer.pdf</p> <p>Example from JEA: https://www.jea.com/Ways_to_Save/Residential_Rebates/Lighting_Rebates/</p>
Low income Renters, Homeowners	Education / Prescriptive	Energy Efficiency Kits	Partner with food pantries, community action agencies and other entities that support low income customers to provide free energy savings kits to low income residents. Kits often include: ENERGY STAR® rated LED bulbs, LED night lights and furnace filter whistle. Some utilities utilize local disadvantaged workforce to assemble kits.	ENERGY STAR® rated LED bulbs and LED night lights	Excellent low cost way to combine education with conservation/energy efficiency. Provides positive customer and community relations. Good program approach to utilize for utilities just starting energy efficiency programs and that have limited budgets. Partnership with local agencies reduces program labor cost. Local agencies are trusted by hard-to-reach customers, making outreach more successful.	Difficult to capture savings, so most utilities will use a very low estimate. Not able to verify that customer actually uses the LED bulbs. Savings from LED lighting may be short term if proposed lighting standards for screw-in LED lightbulbs go into effect in January 2020. May not have funding for this but should look to partner with companies to get grants.	<ul style="list-style-type: none"> Kits are branded with utility/program logo and contact information. Utility customer support is aware of kits and can provide basic technical support. Educational material is included in the kit as well as links to other energy savings tips or programs offered by the utility. Provide training to partner agencies to ensure smooth implementation. Make agency's data collection and inventory management as easy as possible to ensure continued collaboration. 	Recommend to include. This fits well in a start-up energy efficiency program with limited funding. Can control number of kits to purchase, when to distribute and where to distribute them. Often best to start with active advocacy organizations in underserved areas.	Phase I	Local hardware sales of discounted LED bulbs can be impacted by distribution of free lightbulbs.	<p>Through Efficiency Smart several municipal utilities in Ohio and Delaware have partnered with local community action agencies to provide a kit that includes 4 LED lightbulbs.</p> <p>Duke Energy Ohio offers low income customers energy efficiency products such as LEDs, low-flow showerheads and faucet aerators, water heater wraps, HVAC cleaning, HVAC filters, and energy efficiency education. The program is offered through a partnership with People Working Cooperatively (PWC) and specifically targets elderly customers.</p>	<p>Example flyer from Bowling Green Municipal Utility on the Free LED lightbulb to low income residents http://www.energysmart.org/Media/Default/docs/news/bowling-green-oh/Bowling-Green-heap-flyer.pdf</p>
Low Income, Renters, Homeowners, and SMB	Prescriptive	Appliance Recycling	Promote the early retirement and recycling of operable, inefficient appliances by removing inefficient appliances and recycling them. Products include second refrigerators and stand alone freezers.	Inefficient refrigerator or freezer.	Excellent cost effectiveness because you are removing older, inefficient appliances from the secondary market. Programs have been effective even with a \$35-50 incentives. Easy program to administer as companies such as ARCA and Reclaim are specialists at this program. Does not require cash investment on the customer's part to participate.	Some incentive is necessary to get folks to give up their extra freezer or refrigerator, offering to just pick up and remove the appliance does not drive participation.	<ul style="list-style-type: none"> Utilize specialized vendors in recycling for all aspects of this program. Include large appliances that are not easily transported to recycling centers. Ensure partners dispose of appliances in environmentally responsible manner. 	Recommend to include. This fits well in a start-up energy efficiency program with limited funding. Can control minimum age/in service date to make sure you are incentivizing the oldest, most inefficient units if funding is limited.	Phase I		<p>East Kentucky Power Cooperative (EKPC) 16 member coops in Kentucky participate in this program offering \$50 to pick up an refrigerator or freezer through ARCA the program administrator, KU and LG&E offer a Fridge and Freezer Recycling Program until 11/2018 when they will be discontinuing the program. Currently customers receive \$50 per appliance. The website states that "Since inception customers have already recycled nearly 50,000 appliances which has prevented more than 7 million pounds of materials from being tossed in a landfill." appliance to pick up and recycle your refrigerator or freezer.</p> <p>Cedar Falls Utility in IO, offers residents an appliance recycling program managed in collaboration with the city. This program offers incentives to residents that take the appliance to the City Transfer Station or contact the City Refuse Services 629 to request curbside pick-up. Small disposal fees are collected but also incentives up to \$50 per appliance is offered.</p>	<p>Cedar Falls utility: https://www.cfu.net/save-energy/residential-rebates/#recycling</p>

Low Income, Renters, Homeowners, and SMB	Prescriptive	Product Rebates	Offer rebates on ENERGY STAR® certified products such as refrigerators, clothes washers and dryers, heat pump water heaters, select ceiling fans with lights, select furnace fan motors, and select pool pumps (possibly also advanced power strips, dehumidifiers, smart thermostats and air conditioners).	ENERGY STAR® certified products such as refrigerators, clothes washers and dryers, heat pump water heaters, select ceiling fans with lights, select furnace fan motors, and select pool pumps	Rebate amounts are transparent and upfront. Having a prescriptive list of energy efficiency products can help provide guidance to residents and SMB on most efficient products. Requires minimal interactions directly with the utility, which is often important for busy residents.	Can be more labor intensive for program implementer since applications are processed and checks cut for small amounts. Application can be perceived as difficult to navigate since each participant has different levels of understanding. Incentive costs are high relative to savings yield.	<ul style="list-style-type: none"> • Support product tiers (ENERGY STAR Most Efficient, CEE tiers, and others). • Pair with customer support to answer application and product questions. • Scale incentives to savings. • Provide broad product offerings, including products that are numerous in homes, but may have low per-unit energy savings. • Include consumer electronics. • Encourage heating equipment to be sized properly to meet current loads. • Provide education, training and marketing support to support a qualified HVAC installation contractor network . 	Recommend to include: This is a standard program offered by utilities and is expected by residents. It does not drive a large amount of savings or require high program costs because these are large purchases that happen infrequently. Great PR program to demonstrate that you are supporting the residents of the community.	Phase I		<p>EKPC's member coops in Kentucky participate in this program offering incentives for ENERGY STAR Appliances with the following rebate amounts - Refrigerator \$100, Freezer \$50, Dishwasher \$50, Clothes Washer \$75, Heat Pump Water Heater \$300, Heat Pump \$300 and Central Air Conditioning \$300</p> <p>Efficiency Smart offers a product rebate program with predetermined incentives, and eligibility requirements for quantities purchased and eligible models. Products include: Advanced Power Strips, Clothes Washers, Clothes Dryers, Refrigerators, Dehumidifiers, Ceiling Fans, Pool Pumps, Heat Pump Water Heater, Furnace Fans with ECM, and Smart Thermostats.</p> <p>LG&E/ KU offered rebates for A/C air source heat pumps (\$100-\$750), clothes washers (\$75), freezer and refrigerator (\$50-\$100), and heat pump water heater (\$300) but have discontinued the program.</p> <p>Sacramento Municipal Utility District offers prescriptive product rebates through an on-line energy store.</p>	<p>Efficiency Smart: http://www.energysmart.org/product-rebates?community=eldorado-ohio</p> <p>KU: https://lge-ku.com/home-energy-rebates</p> <p>SMUD: https://smudenergystore.com/?utm_source=smud.org&utm_medium=referral&utm_content=start_shopping_button&utm_campaign=rebates_savings_tips</p> <p>Columbia Gas: https://www.columbiagasky.com/en/ways-to-save/warmwise-energy-saving-solutions/low-income-furnace-replacement-program https://www.columbiagasky.com/en/ways-to-save/warmwise-energy-saving-solutions/natural-gas-appliance-rebate-program</p>
Renters and Homeowners	Education / Direct Install	Walkthrough / Direct Install (DI)	Provide walkthrough energy audit home visit, energy education, and direct install measures to residents. Energy efficiency education is delivered at all phases of the home visit to the homeowners or tenants while the direct installation is occurring. Typical DI measures could include ENERGY STAR® rated LED bulbs, LED night lights, energy efficient shower heads, energy efficient kitchen and bath aerators, smart thermostats, pipe wrap insulation, and water heater insulation blanket.	ENERGY STAR® rated LED bulbs, LED night lights, energy efficient shower heads, energy efficient kitchen and bath aerators, smart thermostats, pipe wrap insulation and water heater insulation blanket.	Provides for large replicable and scalable cost-effective energy savings. Provides the ability for more residents to actively participate in energy efficiency, educates customer on energy efficiency and conservation, audit identifies additional measures that customer can install using program incentives.	Best for larger regulated utility since scalability is important to the cost effectiveness and primary goal of programs is energy savings. Best for utilities that have definite annual budgets large enough to ensure consistency for a direct install program. Very difficult to end a program like this without hurting customer satisfaction. Requires electric water heat to claim savings on domestic hot water measures.	<ul style="list-style-type: none"> • Utilize contractors that specialize in large scale Direct Install Utility programs. • Document expectations of contractor and provide quality control services on installations. 	Do not recommend including this program. Uncertainty around incentive budgets and program funding would not set a program like this up for success.	None		Tends to be used by larger utilities such as DTE in Michigan and National Grid in NY/RI/MA. Works best when there is a large service territory and consistent budgets each year.	
Low income Renters and Homeowners	Education / Direct Install	Walkthrough / Direct Install (DI)	Energy education program that is available to all low-income residential customers free-of-cost while producing immediate energy savings through the direct installation of energy saving measures in the home. Energy efficiency education is delivered at all phases of the home visit to the homeowners or tenants at the same time as the direct installation is occurring. Typical in-unit measures could include ENERGY STAR® rated LED bulbs, LED night lights, energy efficient shower heads, energy efficient kitchen and bath aerators, smart thermostats, pipe wrap insulation, and water heater insulation blanket. Usually Low income direct install programs include more measures than a market rate residential program.	ENERGY STAR® rated LED bulbs, LED night lights, energy efficient shower heads, energy efficient kitchen and bath aerators, smart thermostats, pipe wrap insulation, and water heater insulation blanket.	Provides for large replicable and scalable cost effective energy savings. Provides the ability for more low income residents to actively participate in energy efficiency, educates customer on energy efficiency and conservation. Some municipal utilities have piloted using in-kind services provided by a local non-profit to direct install the measures.	Best for larger regulated utility since scalability is important to the cost effectiveness and primary goal of programs is energy savings. Best for utilities that have definite annual budgets large enough to ensure consistency for a direct install program. Very difficult to end a program like this without affecting customer satisfaction, especially with low income customers. Requires electric water heat to claim electric savings on domestic hot water measures.	<ul style="list-style-type: none"> • Utilize contractors that specialize in large scale Direct Install utility programs. • Document expectations of contractor and provide quality control services on installations. • Maximize partnerships and coordination with nonprofit, state and federal entities that deliver services, funding, and programs to low-income households. • Coordinate service delivery with the state entity that delivers the Weatherization Assistance Program (WAP). • Market services to non WAP customers through affordable housing networks. • Incorporate non-energy benefits in cost-effectiveness screening. • Prioritize households with high energy usage and high energy burden (ratio of energy costs to income). 	Do not recommend including this program in Phase I. If in-kind services provided by a local non-profit can be utilized, this may be a good pilot in Phase II. Uncertainty around incentive budgets and program funding would not set a program like this up for success.	Pilot in Phase II or Future		<p>Columbia Gas offers a Home Energy Checkup, including a walkthrough and recommended list of measures, but no measures are directly installed.</p> <p>KU and LG&E calls their program WeCare (Weatherization, Conservation Advice and Recycling Energy). WeCare participants receive a walk-through analysis from a contractor which includes an inspection of the water heater and furnace certified energy analyst to ensure there are no safety issues. Customers are also educated on ways to reduce energy and receive energy-saving LEDs, aerators and shower heads. In some cases, especially for income qualified customers, they may also receive air sealing and attic insulation.</p>	<p>Columbia Gas: https://www.columbiagasky.com/ways-to-save/warmwise-energy-saving-solutions/home-energy-checkup</p> <p>KU: https://lge-ku.com/wecare</p>
Low Income, Renters, Homeowners, and SMB	Prescriptive	Online Store for Products	Offer rebates on Energy Efficiency products that are easy to ship and install by customers. Online energy efficiency product portals are available from companies like EFI and Simple Energy and can be set up to support the utilities brand and incentive amounts	Smart Thermostats, LED Lighting, water saving devices, and Advanced Power Strips	Rebate amounts are built into the price of products on the store so no incentive payment checks are required, everything is handled by companies that specialize in this program. Can help inform customers of the products that are more energy efficient to provide guidance. Very little interaction with the utility by the customer is needed. Valued by customers that often purchase on-line. Often used to complement an in-store offering for deeper outreach and savings potential.	Can compete with other programs such as the LED in store discounted program.	<ul style="list-style-type: none"> • Support product tiers (ENERGY STAR Most Efficient, CEE tiers, and others). • Pair with customer support to answer product and installation questions. • Scale incentives to savings • Tailor program messaging to electronic users. 	Recommend to include. Good for customers that only purchase online.	Phase I	Can compete with in-store lighting programs or product rebates, which can detract from local economic activity.	<p>Efficiency Smart offers an online store through EFI that discounts LED bulbs, Smart Thermostats and Advanced power strips.</p> <p>Sacramento Municipal Utility District (SMUD) offers prescriptive product rebates through an on-line energy store.</p>	<p>Efficiency Smart: http://www.energysmart.org/product-rebates?community=eldorado-ohio</p> <p>SMUD: https://smudenergystore.com/?utm_source=smud.org&utm_medium=referral&utm_content=start_shopping_button&utm_campaign=rebates_savings_tips</p>
Non-profits (grant recipient), Low income Renters and Homeowners	Financing/grants	Crowdfunding for Non-profits or Donations to Support Low Income Energy Efficiency	Since funding for rebates and efficient products may be limited there could be two options to help fund energy efficiency that would benefit low income communities. 1. A crowdfunding program that allows businesses and residents to fund energy efficiency improvement to non-profit organizations that support the low-income population as a loan with paybacks coming from the energy savings. 2. A grant-soliciting program to ask businesses and more affluent residences to consider a tax deductible contribution to purchase EE products such as energy efficiency kits, LED lighting, refrigerators for the low income population. The products could then be offered as a no cost or very low cost low income programs.	Depends on the measure to be purchased	Tax deduction for donations to help community members. Provides funding for energy efficiency products. Community engagement and positive public relations for donors and the utilities.	Need to identify or create a non-profit that supports low income customers and ensure that the funding gets used for energy efficiency measures and services. Need to train selected non-profit on program needs for reporting savings. Limited attribution to the utility since donations are from community members not the utility. Not currently utilized by utilities but by non-profits looking for ways to help their low income community members. Not a consistent, secure, funding stream.	<ul style="list-style-type: none"> • Community perception of the non-profit accepting the donation is very positive. • Funding goals are transparent. • Public relations including donor, projects, and recipients are utilized. 	Recommend further discussions on this program with low income community organizations and respected non-profits in the community	Phase II or Future as the community becomes more educated on energy efficiency and starts to see the results and impacts of the program.	Crowdfunding supports C & I Product Rebate and Custom programs; Donations support Energy Efficiency Kit or Smart Thermostat Low income programs	None found, however Blue Planet Foundation in Hawaii offers an innovative crowdfunding platform, WEfficiency, to help nonprofit access energy efficiency by eliminating the barrier of upfront costs for efficiency upgrades and engaging a crowd of supporters to fund them. Nonprofits install energy-efficient equipment that will lower their electricity bills. With the money they save, they can pay back their donors and do more good work for their communities.	https://blueplanetfoundation.org/wefficiency/

Low Income, Renters, Homeowners	Education/ Behavior	Residential Online Energy Audit	Energy Savvy and Apogee have an online audit tool to help identify energy savings opportunities for residents. Can be partnered with a no-cost energy kit containing easy-to-install energy saving measures mailed to the home. Energy efficiency information and recommendations are also delivered with the kit, as well as being available online. The measures mailed in the kit often include LED night lights, energy efficient showerheads, energy efficient kitchen and bath aerators, and pipe wrap insulation. A website offering instructions for a self-audit could be offered without the inclusion of a self-install kit.	Behavior Programs have savings associated with them. Additional measures depend on measures included in the kit, if a kit approach is used. A self-audit website without toolkit options would not have any savings associated with it.	Helps customers learn about energy and conservation while identifying savings opportunities specific to them. Technology focused audit appeal to a customer group that often is not participant in energy efficiency programs. Can be low cost if Great PR and customer service offering. A self-audit website offered as a resource, without kits, would be a low-cost alternative.	Initial costs may be cost-prohibitive for smaller utilities. Most effective if utility has access to customer emails and has been providing information to residential customers via email and website.	<ul style="list-style-type: none"> Use as initial customer touch point to promote energy efficiency. Complement educational offering and promote other energy efficiency programs offered by the utility. Communities that are most successful have collected many emails from their residents and have been communicating via email with its community members on a regular basis. 	Not recommended at this time. Would recommend that FPB improves its website by including an energy efficiency section. Would also recommend that FPB develop a marketing campaign to gather email addresses from its customers.	Future	Local hardware sales of discounted LED bulbs can be impacted by distribution of free lightbulbs.	<p>EKPC's member utilities offer BillingInsights working with Apogee</p> <p>Orlando Municipal Utility has this program in place working with Apogee. Residents enter their account number and answer some questions to receive customized recommendations based on their actual consumption history.</p> <p>Columbia Light and Power offers Energy Depot®, by Enercom a set of online tools and resources to help customers better understand and manage their home's energy use and costs</p>	<p>EKPC: http://c03.apogee.net/calcs/rescalc5x/Question.aspx?hectype=CustomerBI&utilityid=skrecc</p> <p>Orlando Municipal Utility: http://c03.apogee.net/mvc/home/hes?utilityname=ouc&hecmode=bi</p> <p>Columbia Light & Power: http://www.columbiapowerpartners.com/residential/online-audit/ and https://como.gov/AtticRule/</p>
Homeowners	Full Audit/Prescriptive	DOE Home Performance with Energy Star (also called Audit and Weatherization if not following the DOE program protocol)	Full energy audit with blower door testing to determine savings opportunities. Often the utility subsidizes the audit and the contractor will credit back to the customer audit cost if they move forward with any of the energy efficiency measures. Prescriptive measures can be tiered based upon performance. Often measures include: air sealing, duct sealing and insulation in tier I and replacement high energy efficiency rated air conditioners, heating systems, hot water systems and windows in tier II and III. Would need to be coordinated with gas utility. It is anticipated that in the future this program will expand through targeted outreach to residents of homes that indicate poor performance through data gathered from AMI or smart thermostats	Air sealing, duct sealing and insulation in tier I and replacement high energy efficiency rated air conditioners, heating systems, hot water systems and potentially windows in tier II and III	Comprehensive assessment of a building to determine most beneficial and cost effective measures to implement, Savings per home can be significant. (10% - 25% on gas and electric bills). Often includes workforce development activities to ensure contractors are available and properly trained to support this program.	Best for larger utilities that have consistent annual budgets for incentives. Projects have longer sell cycles and installation timeframes. Very difficult to end a program like this without affecting customer satisfaction.	<ul style="list-style-type: none"> Lead with comprehensive energy usage assessment and savings recommendations Provide a package of energy efficiency measures to significantly reduce home energy use, including multiple add-on measures such as duct sealing, duct insulation, smart thermostats, water heater replacement, HVAC upgrades, and HVAC tune-ups Primary focus on air sealing and insulation, and the necessary health and safety improvements to install those measures Develop and utilizes a highly trained contractor base Coordinate with gas utility Provide increasing incentive amounts for installation of more measures Offer low to zero interest loans to remove financial barriers of installing more measures Incorporate rigorous QA/QC processes Integrate with other residential portfolio offerings 	Not recommended at this time but would revisit this if other Kentucky utilities start to offer this program. An audit program could be an option if FPB could piggyback on Columbia Gas' lower audit and incentive program to share costs and promote electric savings during the audit. Would recommend education around benefits of air sealing, duct sealing and installation. Promote the Kentucky training programs offered through Kentucky Housing Corporation. It would be beneficial for qualified contractors that hold BPI or RESNET certification to be promoted by FPB to help promote energy efficiency measures that are not part of an incentive program.	Future		<p>EKPC's owner member cooperatives have a weatherization program that offer energy audits, oversees the energy efficiency work being performed and includes on bill repayments for the upgrades. Customers can get up to \$1370 for insulation, airsealing and window improvements. They also have separate incentive programs for duct sealing.</p> <p>Columbia Gas offers a lower level of audit and incentives on gas appliances.</p> <p>Columbia Water and Light offers a Home Performance with Energy Star program and they send the resident an efficiency score certificate once the upgrades are made.</p> <p>SMUD has a Home Performance Program which includes an audit and rebates for air sealing and insulation, Heating/Cooling Systems, Gas to Electric Conversion, pool pumps and whole house fans.</p> <p>River Falls Municipal Utilities (RFMU) offers a local Home Energy Assessment Incentive that includes paying for all but \$50 of the initial assessment cost, as well as matching the state's Home Performance with ENERGY STAR Program incentive by funding an additional 33% of improvement costs up to \$1,500.</p>	<p>Columbia Gas: https://www.columbiagasky.com/en/ways-to-save/warmwise-energy-saving-solutions/natural-gas-appliance-rebate-program</p> <p>Columbia Power: http://www.columbiapowerpartners.com/residential/energy-efficiency-scores/</p> <p>SMUD: https://www.smud.org/en/Rebates-and-Savings-Tips/Improve-Home-Efficiency</p> <p>RFMU: http://www.rfmu.org/928/RFMU-Efficiency-Programs---Residential</p>
Homeowners or SMB	Financing	Low interest Financing (Either On-bill or Separate)	While not a program, many utilities or state entities are offering low interest financing through local banks and credit unions to help their residential and SMB customers finance the energy efficiency projects. There are also options of on-bill financing in which the utility pays for the project and allows the customer to pay it back over time as part of their monthly bill payment.	No savings as the measures would come from the program the financing supports	Helps customers afford an energy efficiency project. Ensures that customers are evaluating projects that include multiple energy efficiency measures.	Setup can take time. Best when there is a performance-based whole-house incentive program like the DOE Home Performance with Energy Star program. Utility subsidy to lower interest rate or backing with loan loss reserve may be needed to reduce customer cost and/or lender risk.	<ul style="list-style-type: none"> Partner with banks or credit unions to provide capital. Utilize smaller, community based lending provider with deep ties to the community. 	Not recommended at this time as residential financing is often tied to the Home Performance with Energy Star or full audit program.	Future		<p>Six of EKPC's owner-member cooperatives offer an on-bill, energy-efficiency financing program called "HowSmartKY" available to members. It is NOT a loan or an incentive. It is a line item on your electric bill. This set fee pays back the amount of the energy efficiency upgrade, right on your bill, over time. It also lets you use the energy savings to help pay for the upgrades by reducing the monthly amount.</p> <p>SMUD offers a 6.99% APR financing on HPP energy upgrade projects. The maximum amount for an unsecured loan is \$30,000 with a maximum term of 180 months.</p> <p>Austin Energy offers a Home Performance with Energy Star and Loan program which offers through a local credit union a loan of up to \$15,000 and rates from 1.99% to 3.99% depending on amount of energy efficiency upgrades and having a 600 credit score or higher.</p>	<p>SMUD: https://www.smud.org/en/Rebates-and-Savings-Tips/Improve-Home-Efficiency</p> <p>Austin Energy: https://savings.austinenergy.com/rebates/residential/offerings/home-improvements/hpwes-rebate-loan</p>
Low Income, Renters, Homeowners	Education / Prescriptive	Energy Efficiency Education for Students	Raises awareness and adoption of energy efficiency measures and behaviors through students. Each participating teacher and student receives a kit filled with energy efficient technologies and a guide with information on energy resources and energy saving tips. Students are instructed to install all products with adult supervision in their residence. The Kentucky energy office has a program for schools (NEED) which could be coordinated with this program. Students can also organize LED fundraisers for their schools, where LEDs are sold by the students to raise money for their schools.	None for education, ENERGY STAR LED for fundraisers, and energy efficiency kits if that option is selected.	Builds on an existing program offering (NEED) offered by the state. Builds interest in STEM curriculum.	Energy savings for the LED fundraiser and energy efficiency kits may be difficult to capture as the installation rate of these measures cannot be verified.		Recommend for a Phase II, as savings are more difficult to capture and demonstrate.	Phase II		<p>The Kentucky National Energy Education Development (NEED) Project is the state program of the National Energy Education Development Project. NEED provides workshops for teachers, grade-appropriate curriculum materials and kits for energy activities in the classroom. NEED also assists schools in forming student energy teams that study how energy is used in the schools and implements programs to help reduce energy consumption. The Franklin county schools currently compete to see who saves the most. Other utilities in KY provide sponsorships for NEED programs, e.g. Duke, LG&E/KU, Bluegrass Energy. Columbia Power offers educational programs for schools, including energy and water conservation programs.</p>	<p>NEED: http://www.need.org/kentucky</p> <p>Columbia Power: http://www.columbiapowerpartners.com/wp-content/uploads/2018/05/PPP_Educational_Programs_list.pdf</p>
Homeowners and Renters	Education / Behavior / Demand Response	Smart Thermostats for Energy Conservation and Demand Response	Customers can purchase their own smart thermostat and the utility can offer rewards to customers who participate in a demand response program. The smart thermostat can also help the customer save energy through behavior change and education. Program should be coordinated with gas utility.	Smart Thermostat	Smart thermostats provide 10-15% energy savings, and allow for future enrollment in demand response program. Smart thermostats have high rates of customer satisfaction.	Requires WIFI for accessibility to all the functions of the thermostat (e.g. turn-down when occupant leaves), and for demand response.	<ul style="list-style-type: none"> Combine delivery of energy efficiency programs and demand response programs. 	Recommend to review again for Phase II or Future if additional incentive funding is available for the market rate residential sector. Consider partnering with the gas utility.	Phase II		<p>EKPC and its owner-member cooperatives, including Blue Grass Energy have offered both smart thermostats and demand response programs to manage peak usage. The demand response program offers incentives to members who enroll central air-conditioners and electric water heaters. Switches are installed and, during periods of high demand, the utility briefly cycles the appliance off in order to reduce system peaks and save on costs for peak power. Austin Energy utilizes this program by offering a \$25 incentive to purchase a smart thermostat from an approved list and another \$85 to enroll in the Demand Response program. Falls River Municipal Utility offers a \$75 incentive to residential customers that purchase a smart thermostat from an approved list.</p>	<p>EKPC: https://savings.austinenergy.com/rebates/residential/learn/monitor-your-usage/pp-thermostats</p> <p>Falls River Municipal Utility: http://www.rfmu.org/928/RFMU-Efficiency-Programs---Residential</p>

Low Income Renters, Homeowners	Education/Behavior/Prescriptive/Demand Response	Smart Thermostats for Energy Conservation and Demand Response for Low-Income Residents	Program provides smart thermostat free to low income customers and the utility can offer rewards to those customers who participate in a demand response program. The smart thermostat can also help the customer save energy through behavior change and education. Program should be coordinated with gas utility.	Smart Thermostat	Smart thermostats provide 10-15% energy savings, and allow for future enrollment in demand response program. Smart thermostats have high rates of customer satisfaction. Nest has a low income program in which Nest is partnering with Habit for Humanity to offer smart thermostats for free.	Require WIFI for accessibility to all the functions of the thermostat (e.g. turn-down when occupant leaves), and for demand response.	<ul style="list-style-type: none"> Combine delivery of energy efficiency programs and demand response programs. 	Recommended for a Phase II taking advantage of any manufacturer program (e.g. Nest low-income program). Consider partnering with the gas utility. Could be combined with a low-income DI program.	Consider in Phase II partnering with the gas utility.		None found as the Nest thermostat at the lower price point was recently just announced. The Nest low income program was also just announced.	NEST Smart Thermostat Presentation Slides: http://annualmeeting.naseo.org/Data/Sites/1/events/Annual-Meeting/2017/presentations/Counihan.pdf
Low Income, Renters, Homeowners	Education / Behavior	Home Energy Reports	Encourage customers to be more energy efficient by means of social competition and social norming. Printed Home Energy Reports that display the customer's energy usage in comparison with average energy usage of nearby similar homes. Also included ideas to save energy.	Savings are calculated based on a post-report, weather-normalized comparison of participant and non-participant (i.e., not receiving a home energy report) energy consumption	Turn-key program implemented by a third party. May drive participation toward other efficiency programs offered by the utility. Often demonstrates positive customer service by the utility.	Savings may not persist after residents stop receiving their home energy reports (measure life for these programs is typically one year). Given the need for comparison between participants and non-participants, the sample size in Frankfort may be too small for statistically valid savings calculations.	<ul style="list-style-type: none"> Personalize content to mirror the customer's own experiences and preferences Reach the customer at the most appropriate times for them to make energy efficiency improvements or behavior changes Use clear messaging to boost uptake for existing programs in the portfolio Leverage technology by using customer data to segment customers based on usage patterns Include rigorous measurements and clear strategies to validate results 	Not recommended until utility customer records include email addresses and website content promotes energy efficiency. As lighting standards increase utilities will increasingly rely on behavior programs to obtain savings.	Future	May increase awareness and participation in other efficiency programs.	Fort Collins: https://www.fcgov.com/utilities/residential/conserve/home-energy-reports/ SMUD: https://www.smud.org/en/Corporate/Landing-Pages/Home-Electricity-Reports	
Low Income, Renters, Homeowners and SMB	Education / Behavior	Conservation / Behavior Program	Encourage customers to be more energy efficient through operational changes and behavior modifications using behavioral interventions rooted in social science. Can use advanced metering infrastructure (AMI) and participation data to better target and engage customers. Use a blend of behavioral and data science, to develop propensity models, market segmentation, and engagement to unlock cost-effective approaches to savings.	Savings are calculated based on a post-analysis weather-normalized comparison of participant and non-participant (i.e., not participating in program) energy consumption	May drive participation toward other efficiency programs offered by the utility. Often demonstrates positive customer service by the utility.	Savings may not persist after program ends.	<ul style="list-style-type: none"> Personalize interventions to mirror the customer's own experiences and preferences Reach the customer at the most appropriate times for them to make energy efficiency improvements or behavior changes Use clear messaging to boost uptake for existing programs in the portfolio Leverage technology by using customer data to segment customers based on usage patterns Include rigorous measurements and clear strategies to validate results 	Not recommended until utility has established proactive outreach strategies with customers. As lighting standards increase utilities will increasingly rely on behavior programs to obtain savings.	Future	May increase awareness and participation in other efficiency programs.	Burlington Electric Department piloted a behavior program focused on saving renters energy through commitments and feedback. Using a randomized encouragement design (RED) to quantify savings, this program incorporates a carefully layered approach that combines commitments and feedback to influence energy use for renters living in affordable housing. Initial results from the pilot are promising, with residents who made commitments saving 8% more than the non-committed group.	Additional information is not available yet as this is still being tested
Homeowners	New Construction	Residential New Construction Program	Although new construction energy efficiency codes continue to increase in stringency, there is untapped savings potential in the residential new construction market for single and multifamily homes. A fuel-blind residential new construction program with tiers provides multiple paths for builders, generates savings for utilities and offers consumers green and healthy homes. The tiers can be structured using nationally recognized brands such as ENERGY STAR, Department of Energy Zero Energy Ready Homes, and includes a zero energy tier that matches ultra efficient construction with renewable energy. This would need to be coordinated with the gas utility.	Based on a percentage above the energy code and blower-door test results	Ensures the residential building stock improves over time.	Residential new construction programs require a lot of coordination of auditors and contractors and generally provide a small percentage of the total savings over an the entire portfolio of programs.	<ul style="list-style-type: none"> Seeks to maximize efficiency of new buildings across all fuels and end-users+K20 	Not recommended at this point, as there is little new construction currently in Frankfort. If housing developments pick up again, this program could be considered.	None		None found	
Small and Medium Business	Audit/Education/Prescriptive	Small Business Direct Install (DI)	Free energy assessment (similar to a walk through audit) to identify eligible equipment replacements. The assessor helps the customer complete the application/agreement, then replaces the equipment the customer decides to replace. Typically the program pays up to 70% of eligible retrofit costs. Aa list of eligible measures and incentives is compiled.	High performance T5/T8 systems, LED exit signs, Wall-and ceiling-mounted occupancy sensors, Door Gaskets, Auto-Closers, Strip Curtains, Night Covers, Energy Star Ice Machines, ECM Motors, etc.	Provides for large replicable and scalable cost-effective energy savings, Provides the ability for SMB to actively participate in energy efficiency, educates customer on energy efficiency and conservation. Audit identifies additional measures that customer can install using program incentives	Best for larger regulated utility since scalability is important to the cost effectiveness and primary goal of programs is energy savings. Best for utilities that have definite annual budgets large enough to ensure consistency for a direct install program. Very difficult to end a program like this without hurting customer satisfaction.	<ul style="list-style-type: none"> Provide free energy audit walkthrough and some direct install measures to demonstrate initial value Provide a roadmap to the customer for large potentials savings Create partnerships or infrastructure that can be further developed as needs, goals, and program budgets grow Integrate with low or no interest loan offerings and on-bill repayment Provide customer value and generate MWh savings with affordable acquisition costs Segment the market to provide targeted outreach and bundled measures appropriate for that segment Ensure comprehensiveness by identifying HVAC, process, and gas measures. This requires contractor cross training to go beyond lighting Provide open enrollment for contractors (e.g., Consumers Energy fosters competition by allowing any contractor in the state who undergoes training to participate in the program) Use a "Main Street" approach to target a defined area, and then visit every business in that area 	Do not recommend including at this time. SMB should participate in the C&I products program.	None		JEA offers a Direct Install program to commercial customers who make qualifying efficiency upgrades and have a cumulative 12-month energy consumption less than or equal to 200,000 kWh. JEA offers a free audit by a small business contractor and JEA provides incentives for the small businesses to make qualifying energy efficient installations and upgrades. Following the energy audit, the Small Business Contractor schedules the installation work and the customer pays the contractor the original amount, less the rebate shown on invoice.	JEA: https://www.jea.com/Business_Resources/rebates_for_businesses/Small_Business_Efficiency_Rebates/
All Commercial, Industrial and Institutional, C,I & I) Largest Energy Users	Audit / Technical Support / Education	Energy Advising/ Technical Assistance	Provide energy management and technical assistance for large energy users. Energy Managers assess facility's energy costs and efficiency through bill analysis and facility survey. Energy Managers identify low cost/no cost measures, ways to reduce peak demand charges and list of potential capital improvements that merit further consideration along with their potential costs and savings. Energy Advisors also help large energy users with strategic energy management strategies.	None	Addresses education which is one of two primary barriers for energy efficiency (cost is the other major barrier), helps customer prioritize projects, examines impacts on peak and rates, can help customer understand vendor quotes for equipment, helps facility manager sell projects throughout organization. Behavior change techniques will be utilized. General education will be provided. Available to all C,I&I including the largest users	Labor intensive, there are implementation costs as well. It can be difficult to hire skilled labor.	<ul style="list-style-type: none"> Advisor has prior energy efficiency project knowledge and expertise. Advisor partners with customer to understand business more comprehensively including client objectives and long-term capital plans. Advisor builds trust by sharing some easy no cost or low cost projects to quickly demonstrate value. 	Recommend to include. This fits well in a start-up energy efficiency program with limited funding. Can focus on largest users and tie to a custom incentive program.	Phase I	Interacts well with a custom incentive program	Efficiency Smart offer consultative services and financial incentives (through the custom incentive program for large businesses that use more than 500,000 kWh (this is approximately \$50,000 in annual electric costs) across all locations. Energy engineers offer technical assistance to help determine the most cost-effective upgrades while ensuring optimal savings. A dedicated program liaison helps business complete the custom incentive application. Key services include: energy savings and cost-benefit analysis, project opportunity identification and prioritization, product and control strategy recommendations, site energy usage evaluations, equipment electrical usage metering, financial incentives for qualifying products and project savings and scope verification. Platte River Power Authority (PRPA) provides free energy advising to customers of the 4 municipal utilities it supports with	Efficiency Smart: http://www.efficiencysmart.org/custom?community=bowling-green-ohio PRPA: https://efficiencyworks.org/business/advising-and-assessments/

Large Energy Users	Audit / Technical Support	Facility Assessments - ASHRAE Level 1 Facility Audit	Facility Assessment that follows the guidelines established by ASHRAE for a Level 1 audit. Program can provide audit for a fee or as a free services to larger customers.	None.	Helpful written report provides details including energy use intensity of building, benchmarking and ideas for energy projects. Report can be used to help justify projects with management, ASHRAE Facility audit uses more concrete verified values to analyze savings. Standardized reports from ASHRAE are used throughout the industry so helpful for facilities with multiple locations in different geographic areas.	Program is costly and often the increased costs of this service over the energy advising/technical support does not yield incremental savings that justify costs.	<ul style="list-style-type: none"> Contractors are properly trained to perform an ASHRAE Level 1 audit and follow the ASHRAE "Green Book" "Procedures for commercial energy audits 	Do not recommend including this as a distinct service. Can use elements of this service within the Energy Advising/Technical Assistance program.	Future		PRPA offers facility assessments under Efficiency Works program umbrella. Two contractors contracted by PRPA provide the audits free of charge and the customer receives a report of the facility's energy and water efficiency opportunities and rebates available for installing the recommended measures.	PRPA: https://efficiencyworks.org/business/advising-and-assessments/
All C, I & I including SMB	Prescriptive	Prescriptive Rebate	Offer a rebate on energy efficient products on a prescriptive list. The rebate per product is defined on the list. Product list can grow at each Phase but can include measures such as: lighting and controls including LED street lighting, smart thermostats, HVAC systems, motors, refrigeration, pumps, and compressed air, etc.	Lighting and lighting controls, Refrigeration, Heating, ventilation, and air conditioning (HVAC), Compressed air systems, Variable frequency drives (VFDs)	Rebate amounts are transparent and upfront. Having a prescriptive list of energy efficiency products can help provide guidance to businesses on most efficient products. Requires minimal interactions directly with the utility which is often important for vendors and busy C & I customers. Available to all C,I&I including the largest users such as state and municipal buildings, as well as industrial. Can provide incentives directly to energy efficiency contractors to get	Can be more labor intensive since applications are processes and checks cut for small amounts. Application can be perceived as difficult to navigate since each participant has different levels of understanding. Can create large incentive payments unless governance is implemented.	<ul style="list-style-type: none"> Initial programs start with including measures that are often selected by many customers, including SMB market. Stay current with changing costs, codes and market trends to adjust eligibility and rebate amounts. Move measures upstream as appropriate in order to increase market share and reduce costs. Create bundles of measures for specific market segments Consider providing a bonus for comprehensiveness in order to increase the depth of savings and promote less popular measures. 	Recommend to include. This is a standard program offered by utilities and is expected by C & I customers and energy efficiency contractors.	Phase I		KU and LGE have a single Commercial Rebate Program that helps commercial customers earn cash rebates for making energy-saving improvements to their existing facilities or building new facilities above state building code. They include a list of measures that have a specific rebate amount as well as a custom option, similar to a custom incentive program, for project based energy efficiency incentives. PRPA , under the Efficiency Works for Business program offers this type program and takes a similar approach to KU and LGE. Efficiency Smart offers incentives for common energy efficiency projects to businesses that use less than 500,000 kWh (or have less than approximately \$50,000 in annual electric costs) across all locations.	KU: https://lge-ku.com/commercial-rebates/how-it-works PRPA https://efficiencyworks.org/business/rebates/ Efficiency Smart http://www.efficiencysmart.org/business-energy-rebates?community=bowling-green-ohio
Large C, I & I	Custom	Custom Incentive	Provides incentives to customers for measures installed in qualified projects that are less common or more complex than the Prescriptive measures. As with Prescriptive incentives, custom incentive payment occurs after the equipment is installed and operational at the customer's location. The objective of the Custom Incentive Program is to provide customized incentives to C&I customers for the installation of innovative and unique energy efficiency equipment and controls that decrease the consumption of electricity or gas.	Multiple measures, depending on what each customer includes in their custom project.	Focuses incentives based upon the energy efficient product and services needs of the client. Provides more flexibility for clients to receive incentives and utilities to claim savings. Custom C & I programs are the largest contributor to savings as compared to any other program. Available to all C,I&I including the largest users such as state and municipal buildings, as well as industrial. Allows for a greater level of eligible measures than prescriptive programs. Allows program administrators to control incentive amounts and	This type of program often requires a large program incentive budget, due to the focus on the large energy users and the large savings opportunities for the projects.	<ul style="list-style-type: none"> Programs inspire the customer to deeply engage in energy efficiency by offering account management and technical assistance services in close coordination with this program Customers achieve deeper savings through customized assistance and industry segmentation Behavior and energy management approaches are offered such as Strategic Energy Management (SEM) Provide peer-to-peer exchange opportunities Motivate supplier base by providing clear and repeatable incentive structures 	Recommend to include. This type of energy efficiency program is important to help the utility's largest users reduce energy and for the utility to meet savings goals.	Phase I	Custom Incentive program interacts with the energy advising/technical support program	Efficiency Smart's Custom Incentive program offers a consultative and tailored approach to providing expert technical assistance and financial incentives for a variety of energy efficiency projects. Whether your business is installing new equipment, upgrading current systems, constructing a new facility, or expanding a current one, we provide a dedicated program liaison that serves as your point of contact and works hand-in-hand with you through the process. Columbia Water & Light's custom incentive program looks at the overall load reduction of a total project and requires a minimum of 30% increase in total energy efficiency. The amount of the rebate is \$300 per kW reduced, up to 50% of the project cost. Projects must have a minimum reduction of 1 kW and rebates will be offered up to a maximum of 75 kW of load reduction for a maximum rebate of \$22,500.	Efficiency Smart: http://www.efficiencysmart.org/custom?community=bowling-green-ohio
Building owners	Education / Prescriptive	Common Areas Multifamily	Provides incentives to a building owner based upon variables such as: measure type and cost, installation method and cost, measure hours of operation and measure size and efficiency.	Lighting - exit signs, sensors, hallway and stairwell lighting, exterior and parking lot light fixtures. HVAC - boiler upgrades and controls. Motors and drives.	Very targeted to multifamily building owners addressing their specific needs. Includes measures that are common to multifamily housing; provides energy savings for a hard to reach market	Reaches very small number of customers with the program. Best for service territories that have large, older multifamily buildings.	<ul style="list-style-type: none"> Utility programs are comprehensive to address barriers across all MF building types (e.g., low-income, market rate, new construction, renters) Outreach strategies focus on single buildings to reap savings from supporting multiple housing units Educate building owners on benefits of EE and water conservation (e.g., lower utility bills, new or upgraded equipment fails less, comfortable affordable buildings reduce tenant turn over). Provide technical support to building owners to help them understand the existing building energy use baseline vs appropriate baseline. Educate residents on benefits of EE (e.g., lower utility bills, increased comfort from weatherized buildings, improve indoor air quality from ventilation). Engage stakeholders serving MF market including contractors, affordable housing lenders, and affordable housing advocates. Reduce administrative burden for MF building owners and developers to participate in EE programs. 	Not recommending this at this time. Would encourage multifamily building owners to participate in other Phase I programs.	None		None found, more common for utilities with large service area and large number of multifamily buildings	
C, I & I	New Construction	Commercial New Construction Program	Although new construction energy efficiency codes continue to increase in stringency, there is untapped savings potential. A fuel-blind commercial new construction program with tiers provides multiple paths for builders, generates savings for utilities and offers consumers green and healthy homes. The tiers can be structured using nationally recognized brands such as ENERGY STAR, Department of Energy Zero Energy Ready Homes, and includes a zero energy tier that matches ultra efficient construction with renewable energy. This would need to be coordinated with the gas utility .	Multiple measures	Best for cities/states that are experiencing high growth as it ensures developers consider high performance new construction. Often includes solar and other distributed energy resources to help make the building close to zero energy.	This type of program can need large incentive budget to motivate project teams and often is utilized for very few projects.	<ul style="list-style-type: none"> Seek to maximize efficiency of new buildings across all fuels and end-uses Include water saving design strategies and targets Incentive structure rewards energy efficiency and renewable energy Include requirements to document best practices in design, such as properly sized HVAC equipment, building envelope efficiency, water management, and indoor air quality ventilation systems Utilize building contractors and energy raters certified to industry recognized standards 	Not recommended at this time. Would encourage commercial new construction to include high energy efficiency through education and publicity for the building, owners, and project development team.	None		SMUD participates in Savings by Design a statewide program encouraging high-performance design and construction for the commercial and industrial sector. This program provides building owners and design teams design assistance, energy design resources, and offers owner and design team incentives - Up to \$150,000- for projects estimated to exceed a Title 24 or standard practice baseline by at least 10 percent whole building performance and up to \$50,000 additional design team incentives	SMUD: https://www.smud.org/en/Business-Solutions-and-Rebates/Business-Rebates/Savings-by-Design

C, I & I	Financing	Energy Project Assessment District-EPAD (often called PACE or Property Assessed Clean Energy)	EPAD funding is arranged for 100% of a project's costs, and is repaid by participating property owners with a voluntary assessment on the property tax bill over a term of up to 20 years. EPAD can be used for energy efficiency upgrades, on-site renewable energy projects, and water conservation measures.	None. Measures would be incentivized and tracked through the custom or prescriptive programs	Provides another venue to access capital for commercial, institutional, and industrial customers.	The city of Frankfort is included in the Kentucky state EPAD program but the rest of Franklin county, where many of the potential participants in this program are located (e.g. industrial park), are not eligible to participate at this time.	EPAD/PACE programs are most effective when there is a streamlined sales process for contractors and a streamlined financial approval process for customers.	Recommend discussions with the state and other municipalities participating in this program to determine value and participation.	Phase II or Future, if research yields positive feedback		Lexington/Fayette County recently approved special assessment; Louisville also has been using this program for about a year but seem to be off to a slow start.	Lexington: https://www.lanereport.com/89357/2018/04/lexington-fayette-county-approves-special-assessment-district-to-finance-energy-efficiency-improvements-for-commercial-properties/ Louisville: http://wfpl.org/louisvilles-efforts-finance-energy-efficiency-off-slow-start/
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