3 Program Administrator Business Models

3.1 PROGRAM ADMINISTRATOR DESCRIPTION

Program administrators in the residential energy efficiency market come in many forms; however, DOE's business model analysis focuses on two influential program types:

- **Non-utility programs.** These programs include government-owned or non-governmental organization (NGO) programs. They are generally funded through grant awards (typically public funds), which are the largest individual source of their financing at the present time.
- **Utility programs.** These program administrators include government, NGO, or private contractor organizations that are primarily financed through utility ratepayer charges. However, they may supplement this funding with other types of income, such as the proceeds from regional carbon credit sales.

In both cases, program administrators can implement home energy upgrade programs themselves or hire a private third-party implementer to deliver the program on their behalf. This ownership structure, implementation strategy, and financing all influence how program administrators impact the residential energy efficiency market, as shown in Figure 3-1.

Description of Program Administrators

	Non-utility Program Administrator Model		Utility Program Administrator Model
Descriptor	**Government Entity**	**Private Company or NGO**	**Utility**
Ownership and Implementation	▪ Completely government-owned (federal, state, or local) ▪ Typically program funder and administrator; may be implementer as well	▪ For-profit or not-for-profit company hired by government and utilities to administer programs ▪ Typical a third-party implementer ▪ Privately-funded programs are future possibility	▪ Public or investor-owned utility ▪ Typically program funder and administrator ▪ May also hire a third-party implementer to run program on utility's behalf
Key Decision-Makers	Federal, state, or local government representatives	Owner, shareholders (if public), board of directors, executive management	Shareholders (if public), board of directors, executive management
Sources of Financing	Public funds and debt	Public funds, foundation funds, owner's equity, and debt	Investor capital, ratepayer funds, and public funds (if government owned)
Implications	▪ Products and services limited by government regulations and community needs ▪ Profit motive not as influential as with other market actors ▪ Extensive reporting requirements	▪ Set product and service mix based on funder/owner/ leadership requirements ▪ May be subject to performance-based metrics that will limit ability to offer lower-return and/or riskier service offerings that still may provide value (e.g., education and outreach)	▪ Service offerings limited by public utility commission requirements and Total Resource Cost test, which typically require program costs per kilowatt hour (kWh) saved to be below standard generation costs per kWh ▪ Extensive reporting and evaluation, measurement, and verification requirements

Source: Booz Allen research

Figure 3-1: Description of Program Administrators

3.1.1 Program Administrator Comparison

The business model analysis in this guide uses five business model elements to highlight critical components that influence each program administrator's delivery of home energy upgrade services. To better understand their opportunities for expansion, collaboration, and sustainability in the residential energy efficiency market, it is useful to understand the key similarities and differences between non-utility and utility program administrators. This section highlights key points of comparison in the categories of market, service delivery, and service offering.

3.1.1.1 Market

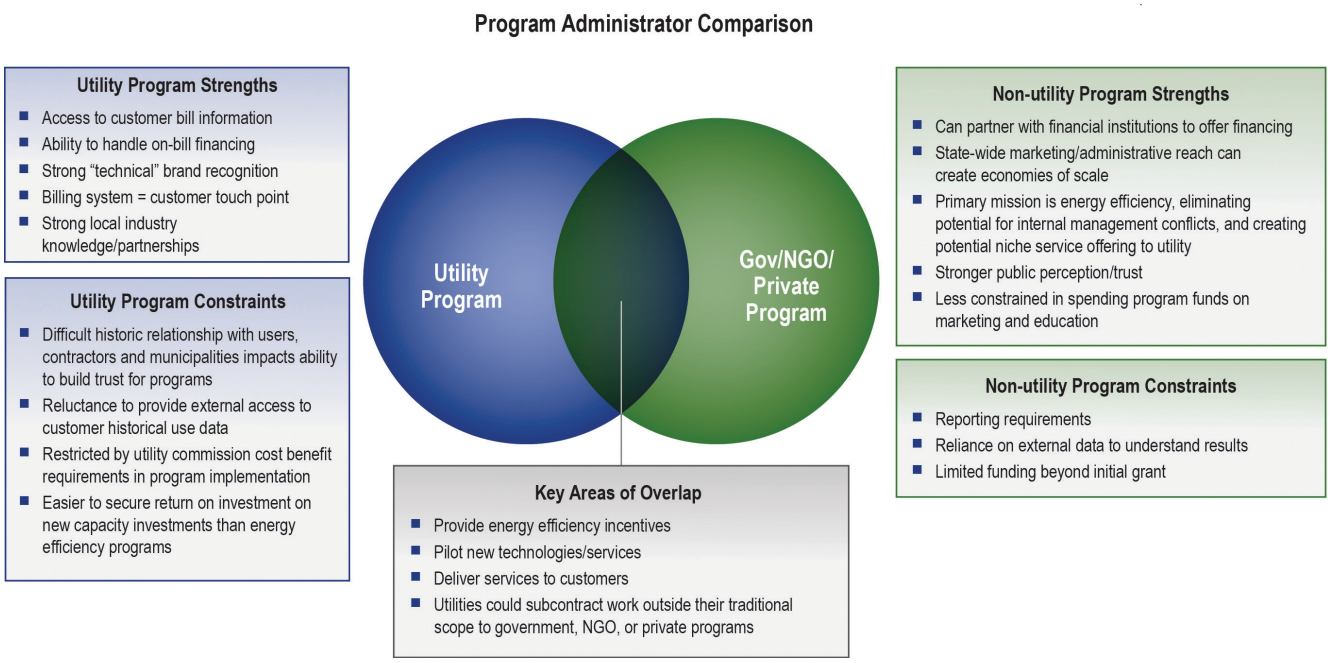
- **Size:** Funding influences the size of a program administrator's organization.
  - **Non-utility programs** are heavily reliant on grant funding. This gives them a wide range of potential sizes (from $500,000 to $100 million on average).
  - **Utility programs** are heavily reliant on ratepayer funding. Therefore, program size varies depending on the size of the utility's market as well as the efficiency goals of state and local regulators. Utility funds make up the majority of energy efficiency program funding, at about $3.5 billion overall.[32]
- **Operating environment:** The regulatory environment strongly influences how program administrators can behave in the residential energy efficiency market. External regulators place various restrictions on both non-utility and utility program administrators. These restrictions include:
  - Funder regulations on **non-utility program administrator** models (e.g., government and NGO program administrators), in exchange for grant funding. These regulations typically include reporting requirements that demonstrate a program's impact in terms of kWh savings.
  - **Utility program administrators** face regulatory goals and Benefit Cost Tests (e.g., Total Resource Cost, or TRC), among other requirements.

  While both program administrators provide and enable home energy upgrades, **non-utility program administrators** generally have greater program flexibility than **utility program administrators** due to utility Benefit Cost Test restrictions.
  - In addition to rebates and other standard program offerings, **non-utility program administrators** may also provide consumer education and outreach, low-cost financing for home energy upgrades, and contractor training.
  - Despite their restrictions on program design, **utilities** can leverage customer energy usage data and provide on-bill financing and outreach services that other programs cannot offer without a utility partner.
- **Competitive landscape:** Programs within or between states may compete for customers by providing a range of incentives. They may also compete with private-sector contractors to conduct installation work directly. This competition may cause confusion in the market as reporting requirements and incentives shift over time. In markets where programs provide subsidized installation services, the private market may be squeezed out altogether.
- **Collaborative landscape:** Program administrators can provide services directly, partner with others to deliver services jointly, or hire a third-party implementer to perform services on their behalf.

[32] American Council for an Energy Efficient Economy. *2010 State Energy Efficiency Scorecard.* (2010). http://www.aceee.org/research-report/e107.

- Both program administrator types typically partner with contractors (e.g., remodelers, HVAC contractors, home performance contractors) who meet their program standards, assuming the program does not offer installation work directly.
- Both program administrator types may partner with retailers to help improve program brand image and expand the number of physical locations at which program services are offered.
- **Non-utility programs** typically partner with or subcontract to other organizations to provide additional, specialized services such as contractor training or customer education.

Finally, non-utility and utility programs have different strengths and advantages in the residential energy efficiency market. Utility programs have access to real-time customer data and in-house technical expertise. However, they may have less program design flexibility than non-utility programs, due to restrictive public utility commission cost test methodologies (e.g., TRC). Conversely, homeowners generally acknowledge non-utility programs as neutral third parties, as they are typically not-for-profit, and presume them to be less likely to make money from home energy upgrade services than a utility program. Although non-utility program administrators benefit from being able to implement "soft" program services, such as customer education and outreach, they often lack the technical expertise and data of utility programs. The full list of advantages/constraints per program administrator is summarized in Figure 3-2.



Source: Booz Allen research

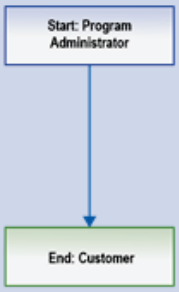
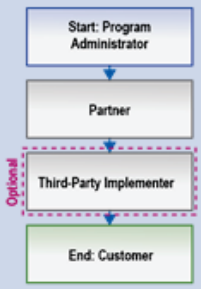
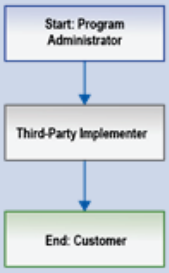
Figure 3-2: Program Administrator Comparison

As the diagram illustrates, different program structures have many different restrictions and advantages. However, there is also a significant overlap between the two main types of programs. For the most part, this overlap relates to what services these programs deliver to their customers, and how they choose to deliver them. These common elements are outlined in the following section.

3.1.1.2 Service Delivery

Non-utility and utility program administrators share a range of services that they deliver to the residential energy efficiency market. As Figure 3-3 shows, program administrators can provide services directly to consumers, partner with other organizations to deliver them jointly, or hire a third-party implementer to perform services on their behalf.

Program Administrator Service Delivery

	Self-Administrator	Partnership	Third-Party Implementer
Method			
Definition	▪ Provides all services and financial incentives directly to the customer ▪ Administers and implements the program in its entirety	▪ Works with a partner organization that has existing relationships (with customers, contractors, or financial institutions) to deliver services to the customer ▪ Can delegate implementation of some aspects of their program to a third-party implementer (optional) who also delivers services to the customer	▪ Works with a third-party implementer to deliver services to the customer (i.e., financial services, incentives, etc.) ▪ Program administrator provides oversight and management to the efficiency program but a third-party implementer executes program initiatives
Examples	▪ State and local organizations (i.e., local efficiency programs) ▪ Non-profit organizations (i.e. community development organizations)	▪ Non-profit organizations ▪ For-profit third party implementers ▪ Financial institutions (banks, credit unions, etc.) ▪ Utility	▪ For-profit third-party implementers
Risks	▪ Lack of relationship with market participants (e.g., need to hire all expertise in-house) ▪ All costs incurred by program administrator	▪ No direct relationship with the customer ▪ Can be difficult to find partners with aligned goals and abilities	▪ No direct relationship with customer ▪ Fee associated with relationship can be high
Benefits	▪ Better understanding of customer needs through direct relationship with customer ▪ Allows program administrator direct control over all services ▪ Cost savings through no third-party fees	▪ Leverages partner organization's existing relationships ▪ Costs of program marketing and operations shared with partner/third party (may represent lower cost option to program)	▪ Allows contracting of work to subject matter experts ▪ Establish funds with financial institutions to increase private-sector leverage ▪ Some costs borne by third party

Source: Booz Allen research

Figure 3-3: Program Administrator Service Delivery

When a program administrator provides services directly to homeowners, it develops a deep understanding of their needs (as well as directly controlling all those services). This can facilitate quality control and flexibility to respond to market conditions. However, it can also limit the program administrator's relationship with key market participants, such as home performance contractors and financial institutions, because they

can see the program as a competitor. Additionally, the program administrator needs to hire all experts in-house and will incur a higher cost of goods sold.

At the other end of the spectrum, a program administrator can leverage third-party implementers to deliver home energy upgrades to homeowners. This approach allows the program administrator to use subject matter experts and transfer some costs to the third party. Additionally, establishing loans and partnering with financial institutions will increase private-sector financial contributions to the market. The downside to this approach is that it keeps program management generally removed from the day-to-day operations, and it can limit their ability to make effective and timely strategic decisions that impact program customer approaches and service offerings.

3.1.1.3 Service Offering

A program's range of service offerings depends on whether it chooses to take a direct role in the market or serve as an enabler of private-sector efficiency service providers (Figure 3-4). Either approach offers advantages and disadvantages.

Program Administrator Service Offering

Market Sustainability →

	Direct Install (Program does work directly)	**Controlled Market** (Program intervenes in targeted areas)	**Open Market** (Program enables private sector to do all work)
Generate Leads for Program Use	✔		
Generate Leads—Assign Them to Contractors		✔	
Generate Leads—Let Consumers Choose			✔
Customer Education and Outreach	✔	✔	✔
Workforce Training		✔	✔
Contractor Training/Qualification		✔	✔
Financing/Incentives	✔	✔	✔
Technical Assistance (Concierge Model)		✔	✔
Provide Retrofit Directly	✔		
Quality Assurance/Quality Control	✔	✔	✔

Figure 3-4: Program Administrator Service Offering

Programs that choose to provide retrofits and other services, regardless of whether they handle the services themselves or hire a third-party implementer, may limit or eliminate the opportunities for private-sector market players. For example, a program that chooses to conduct installation work itself may have a significant advantage over private firms in the market because it can offer a package of incentives to subsidize the project cost to the consumer. This has the effect of running down the program budget for the year, but makes program administrators difficult to compete with for firms bidding at full cost. Program administrators often provide these incentives to meet mandated home energy upgrade goals, even if it hurts

program profitability. On the other hand, a program may choose to qualify and validate home performance contractors and offer its incentives through these contractors. These programs assume an "enabler" role in the market, building up the private sector's capacity to conduct home energy upgrade services even if the program eventually phases out. This enabler role increases the sustainability of the residential energy efficiency market, but requires additional attention to sales training, skill development, and quality assurance.

3.1.2 Conclusion: Summary of Program Administrator Insights

Program administrators have many advantages in designing and structuring their services to best reach local contractors and customers. These programs can form critical partnerships to help local businesses generate new revenue streams and increase demand for home energy upgrades. The summary below details important observations on program administrators and those observations' impact on potential expansion into the residential energy efficiency market. Understanding these impacts can help program administrators create and/or sustain a business model that promotes energy efficiency.

Summary of Program Administrator Insights		
	Observations	**Impact on Potential Expansion into Residential Energy Efficiency**
Market	■ There are two broad types of program administrators, utility and non-utility. ■ Each program type has various strengths and weaknesses that shape how it views its role in the market. Non-utility programs generally have more flexibility in designing their program than utility programs, while utility programs have better access to technical staff and energy data. ■ Several programs may offer similar services in any given market. These programs may collaborate, or even compete with one another to deliver services to the consumer.	■ Organizations looking to work with programs that offer a wider array of services should determine if there is a non-utility program in their area. Organizations looking for rebates or specific technical expertise may wish to seek out their local utility program for assistance. ■ The landscape for efficiency program services can be very confusing to an external observer. Ideally, all local programs will collaborate, but often this is not the case.
Governance	■ There are two basic types of non-utility program administrators: government and private/not-for-profit programs. ■ Non-utility programs are generally regulated by their funding provider; utility programs are generally regulated by their state or local utility commission. ■ Unlike the other program types, investor-owned utilities (IOUs) also have profit-seeking shareholders who drive the majority of the utility's investment decisions.	■ Government programs may hire private or not-for-profit programs to run their programs for them as third-party implementers, as they often do not have the specialized staff on hand to conduct program operations. ■ Non-utility programs must meet reporting requirements as a requisite for receiving program funding. ■ Utility programs are highly limited by Benefit Cost Test regulations placed on them by their utility commissions. ■ To appease their shareholders, IOUs require a monetary profit in addition to the basic energy savings targets of their programs.
Financial Model or Structure	■ Non-utility programs are often grant-funded initially, but are currently evaluating other methods of generating program revenues. ■ Utility programs are typically funded through ratepayer surcharges.	■ Grant funding is short-term funding and needs to be supplemented regularly to keep a program operational. ■ Ratepayer funding levels are set by state and local regulators and can change over time.
Assets and Infrastructure	■ Each program type has different assets that give it a competitive advantage in delivering services to the customer.	■ Non-utility programs have flexibility in how to invest their funds in strategic assets (e.g., CRM software). ■ Utilities typically have access to ratepayer energy-use data, which is a critical asset for their programs.

Summary of Program Administrator Insights		
	Observations	**Impact on Potential Expansion into Residential Energy Efficiency**
Service Offering	■ Both non-utility and utility programs can choose to deliver their services directly or hire/partner with a third-party implementer to deliver them. ■ The types of services available range from direct installation to an open market/market enabling strategy.	■ Hiring or partnering with a third-party implementer allows the program to deliver specific expertise without hiring in-house experts, but it also may detach program management from direct customer interaction. ■ A direct installation strategy may squeeze out private competition in the market, while an open market strategy is designed to build up private sector capacity for delivering home energy upgrades.
Customers and Customer Acquisition	■ Both program types are ultimately trying to reach the same group of consumers, but have different advantages in doing so.	■ The greater program design flexibility of non-utility administrators may allow them to use their funding do to more education, outreach, and non-traditional marketing than utility programs. ■ The ability to access energy usage data may allow utility program administrators to target their outreach efforts specifically at energy users who would benefit most from improved efficiency.