

Nobody's Perfect: Choosing (and Improving) Models for Program Administration

Philippe Dunsky and Jeff Lindberg, Dunsky Energy Consulting

ABSTRACT

Ratepayer-funded energy efficiency programs, once almost universally managed by utilities, are increasingly transferred to state agencies or dedicated “efficiency utilities”. Key factors driving this trend include the move towards multi-fuel objectives, and the need to integrate multiple funding sources. As more regions consider alternative administrative models, they will seek timely guidance on the relative merits of each approach.

This paper builds upon earlier work on the topic. It begins by identifying key ingredients for effective program administration, regardless of the model used. It then describes and evaluates three models: utility, state, and independent administration. Models are illustrated using five case studies, all energy efficiency leaders who chose different paths in response to the same trends described above. Finally, we present conclusions and recommendations designed to provide practical guidance for stakeholders and decision-makers.

This paper does not argue that one approach is uniquely well suited to delivering energy efficiency. Instead, it focuses on the situational factors that should guide the choice of model: the scope, stability and responsiveness of the existing administrator; the adequacy of current incentives and oversight; and the practical costs of transitioning to another model. The paper then outlines a four-step process for reviewing options, including guidance on how local factors can affect their value propositions. Recognizing that each option involves tradeoffs, the paper further presents strategies to mitigate each model’s inherent weaknesses. Crucially, this practical guidance should assist policy makers in ensuring effective administration regardless of the model chosen.

Introduction

Ratepayer-funded efficiency programs first became widespread in the 1970s and 1980s in response to the first energy crises. Throughout the 1980s and early 1990s, the vast majority of programs were designed and administered by utilities, overseen by public utilities commissions. The restructuring of electricity and gas markets in the 1990s led many regions to create standalone funds for energy efficiency (via ‘public benefits charges’) and/or assign responsibility for ratepayer-funded efficiency programs to state agencies or third-party administrators.

Energy market restructuring is now less of an issue, but states continue to consider alternative models for administering energy efficiency programs. Drivers for this vary by jurisdiction – two new drivers are a movement towards multi-fuel energy efficiency programs and the arrival of multiple new funding sources, such as carbon market revenues and forward capacity markets (new funding sources being particularly relevant in the Northeast). Regions that have recently reviewed their administrative model (or created one for new programs) include Connecticut, Delaware, Maine, North Carolina, and Nova Scotia.

This paper arose from work conducted on behalf of a utility in a Canadian jurisdiction which recently discussed alternative administrative options. We reviewed existing research on

administrative models and conducted case studies of five states generally recognized as leaders in energy efficiency, which together represent each primary model: Connecticut, Minnesota, New Jersey, New York and Vermont.¹ Based on this work, we developed general advice and a conceptual framework relevant to regions considering the question of program administration. Our conceptual framework adds to previous work on models by offering detailed criteria for effective administration, identifying strategies for minimizing the inherent problems of each principal model, and providing practical direction to states facing this choice.

In the sections below, we present our findings and framework while answering two questions:

1. Is any model inherently more effective?
2. What do states need to consider when choosing and designing an administrative model?

Is Any Model Inherently More Effective?

Administrative models can be categorized by the type of organization responsible for programs. We use three categories commonly used by other researchers: the utility model, the state agency model, and the third-party model. These can and have been subdivided: for example, vertically-integrated utilities versus distribution utilities. There can also be hybrids – for example, in some jurisdictions both utilities and state agencies pursue energy efficiency goals. We focus on the three basic categories here.

Debates around the question of relative effectiveness sparked a series of well researched, independent papers, mostly published between 1996 and 2004. These included:

- A 1996 paper from Lawrence Berkeley National Laboratory (LBNL) that looked at the implications of electricity market restructuring on energy efficiency programs. (Eto, Goldman and Kito 1996)
- A 1998 paper that updated this discussion. Its discussion of administrative models reviewed newly emerging approaches in New York, Rhode Island, the Pacific Northwest and California. (Eto, Goldman and Nadel 1998)
- A 2003 paper by LBNL researchers that reviewed four case studies and analyzed the advantages and disadvantages of each model. (Barbose, Blumstein and Goldman 2003)
- A 2003 paper sponsored by the Regulatory Assistance Project, which included an exhaustive review of administrative models with detailed profiles of 19 jurisdictions (Harrington and Murray 2003). They built on criteria from Eto, Goldman and Nadel's 1998 paper to develop detailed standards for evaluating administrative models and compared the three administrative models.

¹ Space considerations do not allow us to describe each case study in depth here. Our research included interviews with nearly two dozen program managers, regulators and stakeholders intimately involved in their operations and oversight. Their input is reflected in the framework and examples discussed here.

More recently, in 2008 the EPA published a general guide (EPA 2008) to establishing clean energy funds (supporting both efficiency and renewable energy) that compared and evaluated administrative models. Significant analysis has also been conducted by specific regions as part of debates over administrative models, for example in California, Connecticut and Nova Scotia. (Baston and Lipp 2008; EPA 2005; GDS 2008)

The literature that emerged pointed to a general consensus that **no one model is inherently preferable, and that value ultimately depends on local/regional context, as well as on the deployment of strategies to overcome any inherent weaknesses.** This was the conclusion of all of the above research, with the exception of Harrington and Murray 2003, which argued that the state model has somewhat greater weaknesses than either utility or third-party administration, and does not offer any significant advantage over the third-party option.

Our discussions with case study respondents supported the argument that all models *can* be used to deliver effective energy efficiency programs. However, from a conceptual standpoint, we agree with Harrington and Murray (2003) that the utility model and third-party model offer more net advantages than the state model, all other factors being equal.

What Should States Consider?

Given that all three models can be successful, and that effective administration depends principally on context and design, states need to understand three topics: criteria for successful administration, how each administrative model can be improved, and the importance of transition costs. We explore these topics below, and then discuss how individual states can put them together to make a decision on administrative models.

Criteria for Successful Administration

We have developed a set of criteria that builds on those developed by Harrington and Murray (2003) and also reflects insights from our case study respondents and our own program design experience. Our criteria for effective administrative structures are:

- **Clear, performance-based goals:** Clear, measurable and performance-based objectives need to be set out by governing bodies. Ideally, objectives will be as long-term as possible.
- **Well-aligned incentives:** the administrator needs to be free of conflicts of interest and have a strong incentive to achieve and exceed savings goals.
- **Flexibility and responsiveness:** Efficiency programs intervene in real markets. The administrator needs to have the capacity to adjust program designs “on the fly” to respond to shifting markets and feedback from program experience.
- **Appropriate geographic scope:** The administrator’s jurisdiction needs to fit the market and larger regulatory context. In practice, this means as close to state-wide as possible. Market transformation programs will likely require regional coordination.
- **Long term predictability:** the administrator needs to be able to make long term plans. This requires a multi-year mandate, predictable financing, and a stable policy environment. From the market’s perspective, the program’s brand and offerings need to be relatively stable, reliable and predictable in order for customers and market actors to buy in.

- **Appropriate integration of energy sources:** Energy efficiency markets often encompass multiple energy sources, particularly for heating. Whenever possible, electricity, gas, oil, propane and wood efficiency efforts should be co-delivered or closely coordinated. All other things being equal, a single program that can deal with all heating fuels will be more effective than multiple single-fuel programs.
- **Strong accountability:** The administrator must be clearly accountable for savings achievements. If responsibility is divided between multiple organizations, parties can spend too much time assigning blame for ineffectiveness rather than striving for savings goals.
- **Effective oversight:** A separate body must be responsible for oversight, with significant independent evaluation, monitoring and verification capacity. The overseeing body must have sufficient resources to evaluate and approve program plans in a timely fashion, and provide enough flexibility to program administrators to allow them to respond quickly to market changes. Overly constraining oversight has been cited by an issue in both New Jersey and Minnesota, while strong but flexible oversight is often credited for contributing to the success of jurisdictions such as Vermont and Oregon.
- **Stakeholder consensus:** Harrington and Murray (2003) point out the importance of having key stakeholder consensus on the model chosen. As they write, “The broader the consensus, the more successful programs and energy savings results will be.”

These criteria can be used by states to evaluate and improve an existing administrative model and/or to guide the design of new models. They also inform our suggestions for improving each approach.

The Models: Strengths, Weaknesses and Strategies for Improvement

We describe each of the three models below, focusing on typical advantages, disadvantages and strategies for overcoming disadvantages in each model.

Utility administration. The utility model is still the most common approach in North America, and is used in a majority of leading states, such as Connecticut and Minnesota.

Advantages of the Utility Model

- **Existing capacity:** Where strong utility efficiency programs exist, the utility will have substantial existing in-house expertise and infrastructure (analytical tools, marketing materials, contractor relationships, etc.). This existing capacity is a tremendous advantage.
- **Customer relationships and data:** Utilities have established relationships with their customers and unique access to information such as billing data.
- **Customer relationship incentive:** Utilities support efficiency for customer relations reasons.
- **Long range planning:** Utilities can integrate efficiency into supply planning more easily.
- **Accountability:** Utilities commission oversight provides high levels of accountability.

Disadvantages of the Utility Model

- **Conflict of interest:** A major issue has been the conflict between an investor-owned utility's prime mandate – to increase profits – and the goal of efficiency programs – reduced use.
- **Utility business culture:** Efficiency can be marginalized within utility corporate culture.
- **Redundancy between utilities:** Multiple utilities running separate programs can face:
 - **Administrative redundancy** leading to higher costs
 - **Confusion in the market place**, among customers and market actors.
 - **Difficulty effectively targeting markets** larger in scale than utility territories.
- **Burden of litigated ratemaking:** Although regulatory oversight has many advantages (stakeholder involvement, high EM&V standards), it is time-consuming and costly.
- **Single-fuel programs:** Single-fuel utilities generally run single-fuel programs.

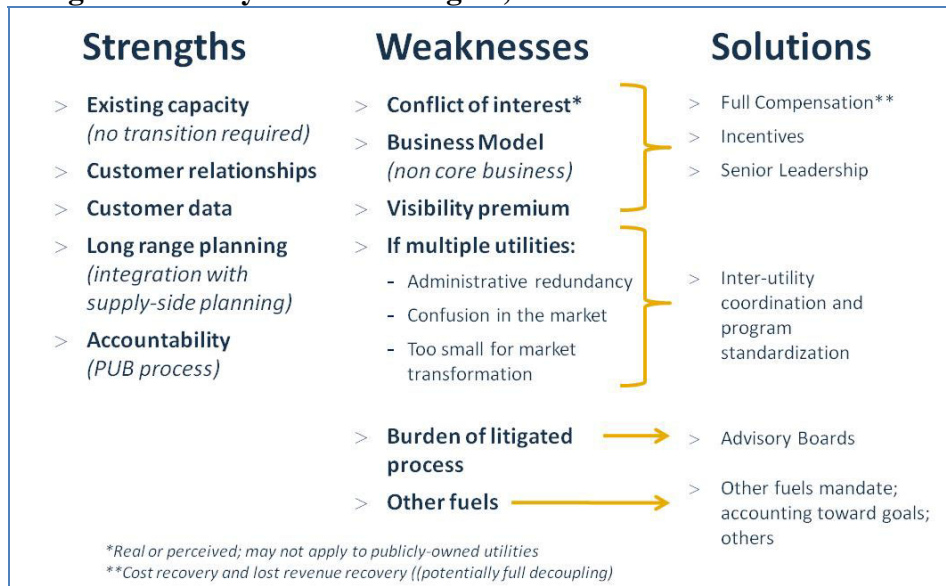
Overcoming Utility Model Disadvantages

- **Compensation and incentives (performance incentives, lost revenue recovery, and decoupling):** Many regions have adopted one or more of these strategies to overcome the conflict of interest between a utility's primary driver (profit via sales) and efficiency.²
- **Senior leadership:** Senior-level “champions” can overcome corporate culture barriers by prioritizing energy efficiency within strategic plans, etc.
- **Inter-utility coordination:** Coordination can reduce redundancy and market confusion.
- **Stakeholder advisory boards:** Effective stakeholder advisory boards operate ‘upstream’ of the regulatory process to allow stakeholders and utilities to develop an informal consensus that streamlines ratemaking. To be successful, a stakeholder board must have broad representation, sufficient funding and in particular access to expert council. This model has been used very effectively in Connecticut – its Energy Conservation and Management Board has plan approval power and is appropriately resourced.
- **Other fuels mandates:** States can mandate and fund all-fuels efforts by utilities.

Figure 1 summarizes the utility model and how to address its weaknesses.

² Designing a regulatory structure that effectively aligns utility incentives with energy efficiency goals is, however, a difficult task, and some efforts have led to high administrative costs, utility ‘gaming’ and unintended negative consequences (Kushler, York and Witte, 2006)

Figure 1. Utility Model: Strengths, Weaknesses and Solutions



State administration. A few states and provinces have given partial or all responsibility for efficiency programs to a state agency. Regions include Illinois, Ohio, Wisconsin, New Jersey, New York, Maine, Quebec, Ontario and New Brunswick. The difference between state administration and third-party administration can be a grey area, depending on the level of independence of the agency and its use of third-party implementation contractors. Many of the jurisdictions above, such as Illinois, Ohio, New York, Quebec and Ontario, have utility-managed programs running in parallel with state-managed programs.

Advantages of the State Model

- **Reduced conflict of interest:** State agencies do not face the profit-vs.-efficiency conflict.
- **Economies of scale:** State agencies can avoid administrative redundancies.
- **Consistent programming:** Single, jurisdiction-wide programs reduce confusion in the market, making it easier for consumers and market actors to take part.
- **Market transformation:** State-wide programs can tackle market transformation more easily.
- **Integration with related programs:** a government agency can integrate additional government objectives more easily into its programs than a regulated utility.

Disadvantages of the State Model

- **Transition costs and disruptions:** Where existing utility programs are transferred to a state administrator, the transition process, even when well planned, is disruptive and costly.
- **Lack of access to utility data and customer relations:** Utilities can be reluctant to share customer data, and non-utility administrators lack utility customer relationships.

- **Difficulty integrating efficiency into long range planning:** Integrated resource planning is more difficult when efficiency and generation planning responsibility is split.
- **Vulnerability to state appropriation of funds:** This is a potentially very serious issue whenever the state handles or has access to efficiency funds directly. It has been faced recently by New Jersey and Connecticut and historically by many regions.
- **Vulnerability to political pressure:** State agencies may be more directly vulnerable to political pressure than utilities or third parties under contract.
- **Lack of flexibility:** State agencies can be less flexible than utilities or third-party contractors, either because of hiring and procurement policies or a bureaucratic culture.³
- **Lack of performance incentives:** State agencies cannot be given financial incentives.
- **Visibility premium:** State agencies being political bodies more often than not may place an implicit premium on initiatives with high public (voter) visibility, potentially crowding out more effective -- but less visible -- approaches.
- **State competition in market:** It can be problematic in some regions to have a state agency competing with other providers (i.e. utilities) in the open market.
- **Reduced oversight:** Where responsibility for program oversight and program delivery is shared, there can be possible conflict of interest or simply reduced evaluation efforts.
- **Conflicting objectives:** Where a state agency has multiple objectives beyond energy efficiency, there is potential for a conflict of interest or a lack of focus on efficiency.

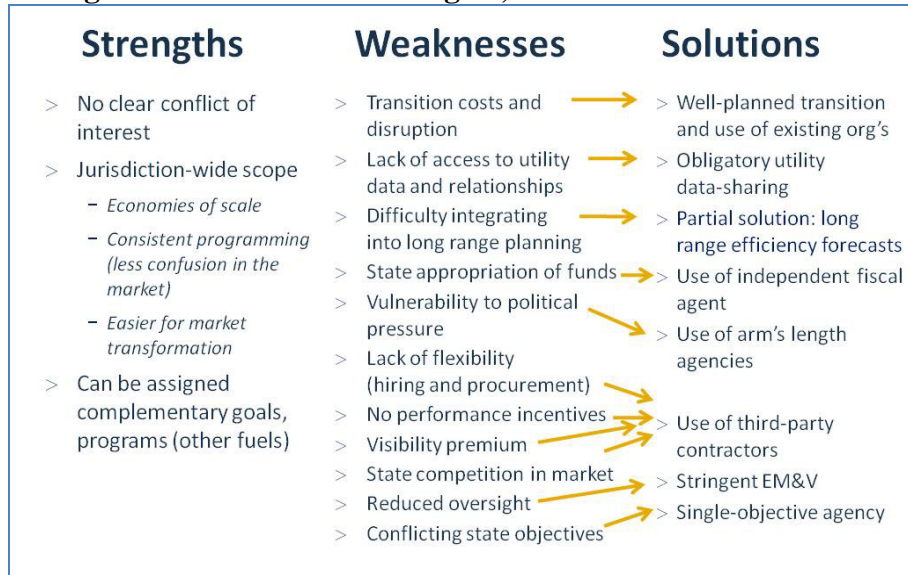
Overcoming State Model Disadvantages

- **Well-planned transition:** A well-planned transition that anticipates a 2-3 year period of overlap between utility and state managed programs can minimize disruption.
- **Obligatory utility data-sharing:** This can be useful where utilities resist data sharing.
- **Long-range efficiency forecasts (partial solution):** A long-range forecast allows utilities to integrate efficiency projections into their supply side planning to some extent.
- **Use of independent fiscal agents:** The use of an independent fiscal agent to collect, manage and disburse efficiency funds can protect funds from state appropriation. This arrangement has been used successfully by Vermont and recently put into place by Wisconsin.
- **Use of arm's length agencies:** A relatively independent agency is insulated from political pressure and can have more flexible hiring and procurement practices. NYSERDA is a good example of this.
- **Use of third-party contractors:** Some state agencies, such as NYSERDA, rely heavily on third-party contractors to assist in program administration.
- **Stringent EM&V:** Rigorous independent evaluation requirements can ensure appropriate oversight levels.
- **Single-objective agency:** Conflicting objectives can be avoided simply by creating a dedicated, single-purpose agency.

Figure 2, below, summarizes the state agency model.

³However, the actual level of flexibility of a given program administrator will depend on organizational practices as much as the type of administrator (utility or state agency).

Figure 2. State Model: Strengths, Weaknesses and Solutions



Third-party administration. Vermont, the current US leader in energy efficiency, was the first jurisdiction to adopt the third-party administration model for efficiency programs. Oregon has also had a long-standing independent administrator. Other jurisdictions have recently begun to innovate on this model, including Maine, Nova Scotia and Delaware.

Advantages of the Third-Party Model

- **Focus on efficiency:** A dedicated third-party organization will not have the conflicts of interest faced by utilities or the multiple objectives faced by some state agencies.
- **Jurisdiction-wide scope:** A single organization can achieve administrative economies of scale, provide consistent programming and more easily target market transformation.
- **Flexibility:** A third-party organization can respond quickly to the market by hiring, procurement and program design changes, if given sufficient flexibility.⁴
- **Performance incentives:** Third-party entities can be given performance incentives.
- **Protected funds:** Third-party agency financing mechanisms can avoid state appropriation.
- **Competitive bidding:** This is especially effective when an agency is first created.
- **Multiple fuels:** A 3rd party organization can be assigned responsibility for multiple fuels.

Disadvantages of the Third-Party Model

The third-party model shares three of the same disadvantages as the state model: transition costs, lack of access to utility data, and difficulty integrating into long range planning. It also faces two more unique challenges:

⁴ The use of third-party contractors does not guarantee flexibility. For example, in New Jersey, implementation contractors have had very limited flexibility to make changes without BPU approval.

- **Short term contracts:** To preserve the advantages of competitive bidding, contracts for third-party administration are often short. This makes long term planning difficult for the administrator, and the selection process can be costly and time consuming.
- **Incumbent competitive advantage:** Once an incumbent organization has gained experience they have a strong competitive advantage in future bidding processes.

Overcoming third-party model disadvantages. Some of the same strategies used for overcoming disadvantages at the state level can be used for the third-party model: a well-planned transition, obligatory utility data sharing, and long-range efficiency forecasts. Two strategies tailored to third-party administrators are:

- **Longer term contracts:** longer terms (5 to 10 years or more) can facilitate long term planning and has the added benefit of reducing selection costs.⁵
- **Franchise/“efficiency utility” model:** A franchise model, such as that used by traditional IOUs and other industries such as the cable television industry, also allows longer-term planning and reduces selection costs. It has recently been adopted in Vermont. Under this type of approach, a public utilities board controls the franchise and can choose to review the franchisee’s performance against targets after a 12-year period if necessary.

Figure 3 summarizes the third-party model.

Figure 3. Third-Party Model: Strengths, Weaknesses and Solutions

Strengths	Weaknesses	Solutions
> Exclusive focus on efficiency	> Transition costs and disruption	→ > Well-planned transition, use of existing organizations
> Jurisdiction-wide scope – Economies of scale – Consistent programming (less market confusion) – Facilitates market transformation	> Lack of access to utility data and relationships	→ > Obligatory utility data-sharing
> Flexibility	> Difficulty integrating into long range planning	→ > Partial solutions: Long range EE forecasts, contract scope changes
> Goal oriented (with performance incentives)	> Short term contracts	} > Longer term contracts
> Protected funds	> Incumbent develops competitive advantage	
> Competitive bidding		
> Can address other fuels consistently		

⁵ On the other hand, relatively regular competition arguably creates a strong incentive for the incumbent to remain effective and high performing.

The Importance of Transition Costs

As mentioned above, transitioning from one administrator to another creates significant disruption. Firstly, debates about the merits of transition can go on for some time, creating uncertainty among administrator staff and market actors about the future of current programs, and thus creating a loss of program momentum. Once a decision is reached, this uncertainty continues until the new administrator is actually in place, and even once in place, the new body will need time to develop capacity, master existing programs, and develop relationships with market actors and stakeholders. During the debate and transition process, programs can be suspended, reduced in scope or kept in a ‘holding pattern’ while the new administrator develops capacity. The length and uncertainty of the transition period can also make hiring and retaining staff a challenge. All together, the transition period is typically two to three years or more and can have important negative impacts, a point underscored by the Regulatory Assistance Project in their analysis of nineteen case studies.⁶ (Harrington and Murray 2003) Furthermore, the level of disruption and the effort needed to overcome it can easily be underestimated.

Vermont, frequently cited as an example of a well-managed transition, nonetheless required three years to complete its change in models. New Jersey, on the other hand, is an example of a region harmed by too-frequent transitions – it has moved from utility administration, to state administration (direct Board of Public Utilities control) to semi-third-party administration (turnkey contractors reporting to the BPU). It is now considering a move back to the utility model, and recently saw a substantial percentage of its funding appropriated by the state to meet budget shortfalls. These frequent changes have caused significant loss of momentum according to stakeholders. (Bryk, D. 2010)

This significant effort can clearly be worthwhile, as the experience of Vermont and others demonstrates. However, it is evident that states considering a transfer of responsibility need to carefully weigh these costs and develop a transition plan that allows the new administrator to take control swiftly and efficiently. Such a plan needs to provide authority, start-up funds and an appropriate timeline to the new administrator. It also requires sufficient oversight to ensure that transfers are smooth and avoid delays on the part of the former administrator.

Putting It Together: A Decision-Making Process for States

The most important variable for any jurisdiction reviewing its administrative options is whether or not significant ratepayer-funded programs already exist. We discuss a decision-making approach for each situation.

⁶ If well-managed, a long transition period may not be inherently negative – for example a phased-in transition period could provide more time for capacity building. The key point here is to assume and plan for significant costs and effort.

States with significant existing programs. As discussed, states in this situation will need to carefully consider transition costs if contemplating a switch in model. Although transition can be planned for and managed, this inevitable cost means that states with existing administrators should first give serious thought to whether or not improving existing models could be equally effective at less cost. This is where the framework we have outlined can be useful. Which criteria for successful administration are missing? How can the strategies associated with the existing model be used to overcome weaknesses and fulfill these success criteria?

In general, we suggest that states with existing administrators create and compare two detailed scenarios: an improved existing administrator, and a new, alternative administrator. Our framework can serve to compare the two scenarios, although clearly states will need to go beyond it in creating some form of qualitative cost-benefit analysis. Particularly difficult to quantify is the political feasibility of each option. Can an imperfect existing administrator be reformed, or are political interests such that only a clean break will allow change?

States without significant existing programs: For states without significant existing programs, the choice is somewhat simpler. The key questions become: who is interested in administering programs, and what is the easiest framework to put into place? Practically speaking, states should first look to utilities. Utilities are relatively more promising if a) they are interested in administering programs b) they have relatively large territories (i.e. appropriate geographic scope) c) they have aligned incentives (i.e. incentives/decoupling in place, or there is the political/regulatory will to put appropriate mechanisms in place) and/or d) they are integrated gas and electric utilities. If a utility meets all or most of these criteria, then they should be seriously considered as administrators.

If utilities are not already well-placed to take on program administration, we would suggest looking next to third-party administration. As has been discussed, this approach has most of the advantages of a state agency, but fewer disadvantages. Again, if states feel the need, two or more scenarios can be fleshed out and compared using some form of qualitative cost-benefit analysis that includes political feasibility.

Conclusion

States face many challenges in setting up effective administration for ratepayer-funded energy efficiency programs. Focusing on the administrative model is in many ways less important than ensuring that the ingredients of effective management are present. Administrators need ambitious goals, aligned incentives, and strict accountability; they also need the appropriate scope, flexibility and long-term presence to be able to seriously intervene in markets. Practically speaking, given the high costs of administrative transition, states need to evaluate what assets they already have in place, and consider improvement before a change in models. Where states have a clean slate or improvement is as costly as transition, we recommend a utility-driven or third-party approach, and recommend caution to any jurisdictions considering a state administration approach. Regardless of the model chosen, however, a focus on the criteria for effective management and strategies for overcoming model weaknesses presented in this paper should allow the creation of a strong administrator and correspondingly strong programs.

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