

Potential Impacts of Accounting Convergence and Regulatory Reform on Financing Industrial Efficiency

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ABSTRACT

Off-balance sheet approaches to financing energy efficiency investments are uniquely positioned to incentivize energy efficiency in commercial and industrial sectors. Operating leases or service agreements for installing efficient equipment can relieve companies from the burden of taking on additional debt. A key barrier to adoption, however, is uncertainty surrounding the legality of these types of financial services in light of financial regulatory reform and accounting convergence.

This paper will explore the impacts of specific provisions within Sarbanes-Oxley and the Dodd-Frank Act that could prohibit the success of off-balance sheet approaches to energy efficiency financing, and suggest opportunities to limit the unintended consequences to the pursuit of energy efficiency resulting from regulatory reform.

Off-balance Sheet Approaches to Energy Efficiency Financing

High upfront costs pose a significant barrier to investment in energy efficiency. Yet, the availability of low-cost financing is often not sufficient to raise the priority of efficiency investments in debt-constrained firms' capital planning processes. In recent years, off-balance sheet approaches to financing the replacement of old, inefficient equipment have been viewed as an innovative opportunity to accelerate and scale energy efficiency investment.

Off balance-sheet arrangements often take the form of leases or service agreements and account for approximately 5% of all energy efficiency projects (Lines & Supple 2010). There are various approaches to off-balance sheet financing available on the market including Commercial PACE (C-PACE), on-bill tariffs, Efficiency Service Agreements (ESAs) and Managed Energy Service Agreements (MESAs), and leasing agreements¹.

Commercial PACE (C-PACE)

Property Assessed Clean Energy (PACE) is an energy efficiency financing mechanism which provides building owners with upfront capital for energy efficiency investments that can be repaid through a property tax assessment. PACE zones must be standardized at the state level and require significant buy-in from multiple stakeholders (municipalities, utilities, bonding authorities, etc) to fund the program. There are currently 26 states with PACE-enabling legislation in place. Nine of these states have programs up and running.

Despite the issues that residential PACE programs have encountered as a result of the Federal Housing Finance Agency's (FHFA) action that effectively blocked Fannie Mae and

¹ These mechanisms are not universally considered off-balance sheet approaches. They can be structured in various ways, some of which may be considered debt.

Freddie Mac from purchasing mortgages with PACE assessments on them, there has been growing market activity for commercial PACE or C-PACE programs.

Energy efficiency program designers and advocates identify several advantages to the C-PACE financing approach. These include no upfront costs, immediate positive cash flow, transferability, the ability to share costs with tenants, low interest rates, and the ability to keep the obligation off of the owner's balance sheet (Managan and Klimovich 2012). Longer loan terms and transferability make it easier to achieve deeper retrofits than traditional ESCO financing. Furthermore, credit constrained owners may be attracted to the off-balance sheet properties of a PACE obligation.

There is a major debate surrounding commercial PACE regarding whether or not it is necessary for the mortgage lender to give consent to property owners prior to the owner taking on a PACE assessment. In a PACENow lender support study, surveyed lenders unanimously agreed that consent was essential citing that many loan documents require notification of alterations to property as well as reserves and guarantees for alterations, completion guarantees, and escrow of assessment payments. Lenders that have provided approvals for PACE assessments have verified that generally the projects have been small relative to the building value – about 1-2% of the property value, and were an “insignificant” risk to the mortgage (PACENow 2012).

On-bill Tariffs

On-bill financing allows utility customers to invest in energy efficiency improvements and repay the funds through an additional charge on their utility bill. If structured properly, an on-bill program can substantially reduce the cost of and improve access to financing. In many cases, energy savings are sufficient to cover the monthly payments for the financing so that the total monthly charge on utility bills is less than or equal to the pre-investment amount. Capital for on-bill programs comes from a variety of sources including, but not limited to, utility ratepayer funds, public benefit funds, and third-party financial institutions. Recently, programs capitalized through third-party financial institutions, often referred to as on-bill repayment programs, have started to emerge and are making efforts to grow in scale.

Some on-bill programs are overcoming split-incentives in multi-tenant spaces and driving deeper retrofits in owner-occupied buildings by structuring their products as tariffs. A tariff can refer to any number of rates or charges imposed by a utility. Tariff financing is a type of on-bill financing structure. On-bill tariffs are a mechanism for charging customers for energy efficiency investments or upgrades provided as a service by the utility. On-bill tariffs assign a financial obligation to a property (often by tying the service to the building's meter), allowing the receivables incurred from the investment or upgrade to transfer to subsequent owners or tenants. In many states tariffs are not considered loans and thus are subject to different laws and regulations. In addition, tariffs address gaps in energy finance for rental customers and also allow the flexibility to match financing terms to the extended payback period for some energy efficiency improvements (Fuller 2009).

On-bill tariff programs can be attractive to utilities since they often do not have to stray too far from their business model in order to implement them. The process for imposing a voluntary tariff is one that may be familiar to utilities, and the product does not necessarily have to offer debt to consumers. Such a distinction can be necessary for a municipal utility that is statutorily prohibited from lending to its ratepayers (Bell 2011).

ESAs/MESAs

Efficiency Services Agreements (ESAs) and Managed Energy Services Agreements (MESAs) are contracts which enable a third-party project developer and financier to provide upfront costs for the installation of energy efficiency measures. Repayment terms are predetermined and can be based on cost-per-avoided-unit of energy (in the case of ESAs), historical energy usage, or a proportion of the monthly utility bill.

An ESA or MESA provider pays for the installation of the energy efficiency upgrades. Such an entity is inclusive of an investment fund and acts as a “one stop shop.” It signs an ESA with the building owner, which secures capital from the investment fund for the energy efficiency upgrades, as well as determined periodic service fees to pay back the cost of upgrades. An Efficiency Services Performance Contract (ESPC) is then signed between the investment fund and energy service provider, which covers the engineering, procurement, and construction of the project. The investment fund also negotiates performance guarantees with the service providers.

This method mitigates financial risks that arise with high upfront capital costs. Typically upgrade costs are passed through to tenants, who pay them over the useful life of the equipment, which increases the risk since the payback period is long. This risk is mitigated as energy savings now cover the cost of the equipment, making the payback period much shorter. Like PACE and on-bill tariffs, ESAs are off balance sheet.

A Managed Energy Service Agreement (MESA) is different from an ESA because the investment fund pays the owner’s on-going utility bill directly and charges the building owner a monthly rate based on historical energy usage, acting as an intermediary and is compensated by capturing the energy savings differential. The end result is similar to an ESA, but works well for multi-tenant commercial buildings, because the owners can pass through the MESA charges to tenants in their standard energy bills.

Metrus Energy an example of a capital provider, project developer, and asset management company for energy efficiency projects. Metrus has standardized the facilitation of efficiency service agreements, and typically works with large commercial, industrial, and institutional facilities. Its process is to first sign an ESA with the owner, and pay a third party contractor such as an ESCO to implement and maintain the energy efficiency project. Metrus funds projects in part using its own equity and in part with outside debt. Metrus retains ownership of the assets during the payback period and pays for ongoing maintenance work on the assets. The building owner makes periodic service payments to Metrus based on realized energy savings. After the ESA term expires, the owner has the option to purchase the energy efficiency equipment from Metrus at fair market value.

SciEnergy is another example who provides MESAs. The company agrees to pay for a building’s utility expenses for up to ten years, receiving payment from building owners for historic energy usage. They then invest third-party capital into energy efficiency improvement before turning over the responsibility of the lowered utility expenses to the owner.

Lease Financing

There are a variety of approaches to financing equipment via lease agreement. Leasing is similar to lending, except that the lender owns the property or equipment. The most common

approaches used in the commercial and industrial market are capital leases and operating leases (EnergyStar 2013).

A capital lease is similar to a rent-to own agreement. At the end of the term, the lessee acquires the asset sheet. The advantage to capital leasing is that terms are often more favorable than bank loans, however the obligation is not technically “off-balance sheet” (EnergyStar 2013).

An operating lease remains off-balance sheet, and at the end of the lease the lessee may return the equipment, negotiate a new lease, extend the existing lease, or purchase the equipment at fair market value. This is currently the most popular mechanism for financing building retrofits today (Lines & Supple 2010). As a result of convergence, both capital and operating leases will be considered on balance sheet in the future.

FASB Convergence and Regulatory Reform

By far, the greatest threat to the future use of off-balance sheet approaches to financing is accounting convergence. Financial reporting requirements in the United States require adherence to the U.S. Generally Accepted Accounting Principles (GAAP), which are established by the Financial Accounting Standards Board (FASB). These requirements differ from the International Financial Reporting Standards (IFRS), which are established by the International Accounting Standards Board (IASB). Over the course of several decades, there have been a number of efforts made to establish a single international accounting standard, as well as reduce some of the differences between GAAP and IFRS.

In the early 2000s, a series of high-profile corporate scandals, including the infamous Enron scandal, brought corporate financial reporting practices into the spotlight. These scandals catalyzed a period of regulatory reform, which was intended to tighten rules around corporate accounting standards to close loopholes and force greater transparency.

The 2007-2008 financial crisis, which is thought to have been caused by "high risk, complex financial products; undisclosed conflicts of interest; the failure of regulators, the credit rating agencies, and the market itself to rein in the excesses of Wall Street," catalyzed a new wave of regulatory form (Levin & Coburn 2011). The implications of two landmark regulatory reform bills, Sarbanes-Oxley and Dodd-Frank, are discussed below.

As a policy tool, regulation can play an important role in combatting the market failures that lead to corporate scandals and financial crises. However, regulation can also have unintended consequences. The financial regulatory landscape is complex, and it can be difficult for well-intentioned innovative financial products to navigate myriads of regulations. One example of an energy efficiency financing strategy bumping up against federal financial regulation is residential PACE. In 2010, the Federal Housing Finance Agency (FHFA) forbid Fannie Mae and Freddie Mac from purchasing mortgages with PACE assessments on them, effectively blocking the establishment and implementation of residential PACE programs. This move was made due to concerns that the PACE liens may materially increase risk to Fannie Mae and Freddie Mac’s portfolios. Yet, the impact of PACE on home value and homeowners’ cash flow remains unproven. Furthermore, hard evidence suggests that energy efficiency upgrades improve the value of the home, and energy savings make enhance homeowners’ ability to repay debt obligations (NRDC et al. 2012). Nevertheless, in the final rule the FHFA maintained its position, and the potential positive impacts of residential PACE have been reduced to near-obscurity as the program design can no longer be used.

Given the example of residential PACE, it is important to understand and proactively anticipate the impacts of regulatory reform on the current and future energy efficiency financing landscape.

Sarbanes-Oxley

The “American Competitiveness and Corporate Accounting Act of 2002,” also known as the Sarbanes-Oxley Act, tightened standards around and required certification of financial reporting. Sarbanes-Oxley sought to achieve its aims by having the Financial Accounting Standards Board (FASB) mandate that corporations use Generally Accepted Accounting Principles (GAAP) in reporting their balance sheets to shareholders. Sarbanes-Oxley also compelled FASB to weigh the strength and weaknesses of accounting convergence.

In February 2006, the FASB and IASB issued a Memorandum of Understanding (MoU) outlining objectives for convergence including the development of a new common standard which would replace weaker standards with stronger standards (FASB & IASB 2006).

In August 2010, the FASB and IASB released an “exposure draft” of potential proposals for improving reporting on lease contracts. This exposure draft essentially proposed the elimination of the operating lease structure, citing \$640 billion in unreported liabilities that do not appear on companies’ balance sheets (FASB 2010).

Definition of a “Lease”

The decision on operating leases could potentially eliminate the most commonly used approach to financing efficiency investments, potentially slowing the growth of the building retrofit market, particularly for deeper retrofits. Depending on the legal interpretation of what constitutes a “lease” it could also threaten performance contract structures such as ESAs.

A service agreement is viewed as an agreement to sell output, whereas a lease is viewed as a payment for the right to use an asset. There is a two-question test (both must be answered in the affirmative) to determine whether an arrangement constitutes a lease: 1) does the arrangement involve specifically identified property, plant and equipment? and 2) Does the arrangement convey the right to control the use of the property, plant, and equipment? (Lines & Supple 2010)

Some ESA providers believe that ESA qualifies as a service agreement and therefore an off balance sheet operating expense, so it would not be covered by the clarified treatment of leases in the accounting convergence (Rockefeller & Deutsche Bank 2012).

The uncertainty surrounding the treatment of ESAs and MESAs may have a hard-to-quantify impact on the market. It is challenging to specify instances of “program paralysis” due to uncertainty, and there are many reasons including a need for owner education on the structure and availability of capital that contribute to demand for these types of products. To date ESA companies have done approximately \$500 million in deals. The potential investment opportunity for the commercial buildings sector is approximately \$72 billion (Rockefeller & Deutsche Bank, 2012).

As of February 2012, the FASB and IASB were committed to reissuing a revised exposure draft that maintains its position on operating lease treatment. Further clarification on the status of efficiency financing mechanisms is needed².

Dodd-Frank

The Dodd–Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank), passed in July 2010, brought significant changes to the financial regulatory landscape. A key focus of the Act is to close loopholes in areas of financial supervision, including regulation of the shadow financial services industry. This particular set of provisions has called attention to the usage of off-balance sheet accounting practices and could impose significant restrictions on companies that are eligible to leverage them as well as additional reporting requirements.

Given the scrutiny of credit rating agencies for their evaluation of the performance of mortgage-backed securities, the Dodd-Frank Act also includes a range of provisions intended to improve rating agency incentives and performance. These provisions include increased oversight by the Securities and Exchange Commission, including the ability to revoke a rating agency's registration, and to penalize individual employees for misconduct. In addition, Dodd-Frank requires public disclosure of the assumptions, data, and methodologies used to determine a credit rating.

Furthermore, Dodd-Frank mandated the establishment of regulatory requirements for non-bank financial services companies, or non-banks.

Credit Rating Provisions

The enhanced scrutiny of credit rating agencies could potentially inhibit the scalability of commercial PACE and on-bill tariffs, by inhibiting sales to secondary markets. NYSEERDA's residential on-bill recovery program recently sought a credit rating from Fitch Ratings in early 2013 for its secured loan product. This loan product is similar to a tariff in that it transfers with the residential property. The program is finding it difficult to secure a desirable credit rating due to the short repayment history of existing loans.

The issues that programs are having in securing a credit rating are not directly attributable to Dodd-Frank, and the mention of them should not be read to imply that credit rating agencies should be assigning favorable credit ratings to risky investments. There is a belief that on-bill programs should be able to leverage the potential for utility shutoff in the event of non-payment as an alternative form of securitization, and that their typical default rates to date are less than 2% (Bell et. al. 2012). However, the short financial performance history makes them difficult to securitize, especially since there are so few case studies on how the transfer of the obligation works.

It is important for energy efficiency program administrators and service providers to be wary of the level of scrutiny placed on rating agencies. Service providers may be able to increase their creditworthiness through the establishment of loan-loss reserves, and by collecting meaningful data and information on not just energy savings and project performance, but on financial performance. More importantly, it is incumbent upon the energy services industry to

² A new exposure draft was released in May 2013. The authors' 2013 Summer Study presentation will contain updates.

synthesize and provide data and information to the financial services industry in a mutually understandable context.

Non-bank Regulatory Authority

Perhaps one of the most nebulous provisions of the Dodd-Frank Act is the establishment of non-bank regulatory authority. Banks, thrifts, and credit unions have been regulated by federal regulatory authorities since the early 20th century. However, in recent years other institutions have begun to provide consumer financial products, and due to predatory practices, are now subject to regulation by the Consumer Financial Protection Bureau.

Currently, “non-banks” are understood to include companies in the mortgage, payday lending, and private student lending industries. For debt-collection and other industries, the CFPB has the authority to supervise “larger participants.” A final rule issued in June 2012 defines “larger participants” as entities with more than \$7 million in annual receipts resulting from relevant consumer reporting activities.

While financing for commercial and industrial projects will not receive the same level of scrutiny as a consumer lending product, there is a potential for scrutiny of non-bank administered on-bill and PACE programs more broadly. This scrutiny from financial regulators could saddle these types of products with costly additional reporting requirements, or hinder their progress and adoption.

Conclusions and Recommendations

Sarbanes-Oxley, accounting convergence, and the Dodd-Frank Act are making strides toward improving the safety and soundness of the economy. However, with all regulation there is an opportunity for unintended consequences that suppress desirable economic activity.

Off-balance sheet lending for energy efficiency is important because energy efficiency could be an important driver to a more robust economy. ACEEE has shown that energy efficiency saves businesses money, reduces waste, improves our energy security, and creates jobs (Laitner, et al. 2012).

In order for the economy to simultaneously benefit from tighter financial regulation and higher efficiency, it is necessary for regulators and the energy efficiency industry to collaborate to minimize the unintended consequences of regulation, and to develop products that do not pose a material threat to the safety and soundness of the economy.

In the near term, it is important for the energy efficiency community to weigh-in on the next exposure draft from FASB, and to keep an eye out for financial regulatory rulemakings that may have an impact on energy efficiency financial products and services. Pro-active engagement could be critical to sustaining current practices for encouraging energy efficiency and scaling the market in the future. However, the impact of the energy industry alone is unlikely to have an impact without engagement of the larger leasing community. A special provision exempting energy efficiency investments alone is unlikely, but collaboration and attention to this important issue might promote a better outcome.

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