Greater Cincinnati Energy Alliance

Strategic Plan

August 2011

BETTER BUILDINGS

Strategic Plan

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Executive Summary

The Energy Alliance's mission is to facilitate investments in energy efficiency for homeowners, non-profit organizations and commercial building owners through outreach and education, project management, and financing solutions.

The Greater Cincinnati Energy Alliance ('Energy Alliance', 'the Organization') is a nonprofit organization founded in April 2008 serving communities throughout Greater Cincinnati and Northern Kentucky. It has raised nearly $20 million in that time to create a robust energy efficiency market. Thanks to funding through the Department of Energy's Better Buildings Neighborhood Program, the Energy Alliance has two years to drive significant building owner investment in energy-related capital measures, build and train a contractor infrastructure to meet the resultant growing demand, and develop a financing infrastructure to serve homeowners, businesses and nonprofit agencies.

The Energy Alliance's staff of 12 dedicated professionals has expertise in the marketing, outreach, technical and financial aspects of energy efficiency investments. We have initiated a partnership with the Environmental Protection Agency, under which we launched the Home Performance with Energy Star Program (Home Performance Program). In the program's first year, the Energy Alliance pre-qualified and trained 15 local contractors, completed almost 800 home energy assessments and helped 240 homeowners make home energy improvements, cutting participant utility bills by at least 15 to 20 percent in each instance.

The Energy Alliance is now extending our focus to serving schools, nonprofit agencies and businesses. We are developing a more sophisticated operations through our Building Performance Program, aided by financial solutions and technical services, for owners not certain what to do or where to turn for consultation. The Energy Alliance program will provide technical support and incentives for customers who may have access to financing, but have yet to make energy improvements in their buildings. We will create specialized financing tools to assist commercial-sector owners that do not have access to capital to address growing energy-related capital needs.

As the Energy Alliance pursues both residential and commercial building owners with solutions not otherwise available from utilities, governments or the private sector, we maintain a focus on two goals:

1. Spend $18.6 million in Federal grant money, with leverage, by the May 27, 2013 deadline.
2. Execute a business plan for financial sustainability by June 2013 that does not rely on Federal grants and that builds on the Energy Alliance's current programs, services and staffing.

In order to meet these goals, the Energy Alliance will meet the following strategic objectivesby May 27, 2013:

1. The Energy Alliance will invest in more than 3,400 residential home energy assessments.
2. The Energy Alliance will provide financial and technical assistance for $9.2 million worth of commercial building improvements per quarter.
3. The Energy Alliance will expend 100 percent of its Better Buildings grant funding.
4. The Energy Alliance will accumulate $1.6 million of reserve capital by May 27, 2013, which will provide more than 18 months of operating expenses.
5. And by the end of 2016, the Energy Alliance will achieve operational cash flow break-even, with 180 days of reserve operating funds capital remaining.

We have engaged our staff, consultants and Board of Directors to investigate the potential market, revenue opportunities and costs, available resources, and constraints to establishing a permanent revenue foundation for our work once our grant money is spent. We cast a wide net, examining programs and organizations around the country that are doing what we seek to accomplish. With tested assumptions and cost and revenue models, we have developed a business plan that can sustain the Organization for the next half-decade and beyond.

A successful Energy Alliance will:

- Create a best-in-class program that will become the national model for community-based energy efficiency program management.
- Provide education and outreach to the Greater Cincinnati region about the benefits of energy efficiency, changing the minds of skeptics and giving supporters the tools they need to invest in efficiency measures.
- Use grant funds to support innovative financial solutions leveraged with private capital.
- Develop a high quality, accessible workforce development program to provide the training and quality assurance that is necessary for this type of work.
- Track, measure and verify data on the results of energy efficiency investments, providing proof of the 'triple bottom line' impact on profitability, people and the planet.

To support these goals, the Energy Alliance is actively seeking investors for both its residential and commercial loan programs. We have created a robust infrastructure to drive demand, ensure that projects meet investor requirements and provide the reporting and analysis of results that investors require. In addition, the Energy Alliance will be able to mitigate risk for initial investors by providing significant credit enhancements from our Department of Energy grant funds.

The Energy Alliance intends to make an impact on an unprecedented scale in the Greater Cincinnati region. Nurturing ongoing support from existing partners and significantly expanding our pool of new investors and customers is a challenging - but achievable - goal. The economic and social benefits of energy efficiency investment are profound, and this Strategic Plan sets out a roadmap to achieve great things.

Strategic Plan

Introduction and Organizational Background

The Greater Cincinnati Energy Alliance ('Energy Alliance,' 'the Organization') is a 501(c)3 not-for-profit organization founded in April 2008. Our mission is to facilitate investment in energy efficiency for homeowners, non-profit organizations and commercial building owners through outreach and education, project management, and financing solutions. We serve this mission throughout Hamilton County in Ohio and Boone, Kenton and Campbell counties in Kentucky.

The Energy Alliance was initiated through the support and funding of the Greater Cincinnati Foundation (GCF) and Duke Energy Foundation. Their collective investment allowed us to create a business model for delivering energy efficiency services to the private sector with the support of (and on behalf of) local governments. By June of 2009, the City of Cincinnati and Hamilton County in Ohio, along with the cities of Covington and Florence, Kentucky, and Boone, Kenton and Campbell counties in Kentucky, invested $1.6 million in energy efficiency and conservation block grants allocated to those respective governments through the American Reinvestment and Recovery Act of 2009. Thanks in part to that support, the Energy Alliance developed programs to serve market-rate residential customers and non-profit organizations. By April 2010, we earned an additional $17 million from the Department of Energy through a nationally competitive EECBG program called Better Buildings ("BB," formerly known as "Retrofit Ramp-up").

The Energy Alliance is one of only 35 organizations nationwide to earn a BB grant. We received this award in large part due to the multi-government/multi-state/multi-stakeholder support that the Energy Alliance fostered and the recognition of an opportunity to make a significant impact in a community where there previously was no organizational effort with a similar focus. As an ARRA funded program, the Energy Alliance BB aims to use energy efficiency investments to create good local jobs for residents of our region.

The BB program's goal is not to simply expend funds quickly; it challenges recipients to "create a self-sustaining building retrofit market." Consequently, the Energy Alliance and its Board of Directors sees this $17 million investment not only as seed capital to support the organization, but also as a catalyst investment to help launch a private market for these services: a market that includes all homeowners who don't qualify for low-income weatherization programs and the owners of any commercial building who don't have the size, skill or desire to participate in an energy savings performance contract on their own.

The BB grant has a three-year window in which all funds must be expended; that period ends on May 27, 2013. The Energy Alliance has developed this Strategic Plan as a framework to achieve two primary goals:

1. Expending the $17 million grant within the time period in a way that maximizes its impact and transparency.

2. Investing these funds in a way that ensures the Organization can achieve long-term financial sustainability.

To achieve these goals, the Energy Alliance needs to create value for the private sector by filling gaps that have prevented this work from happening in the past, rather than dictating the terms of transactions. As this is work that has little precedent, this plan will serve as a baseline management will use to evaluate operational results, and the Board of Directors will review the status of key metrics at each of its meetings.

Information presented on the Organization's current operations is for (un-audited) activity through June 30, 2011 (unless otherwise noted) and includes approximately $1 million of non-BB funds that have been expended to date. This plan identifies different market segments that the Energy Alliance can serve, and notes potential streams of revenue to assist in funding its mission.

The Strategic Plan presents pathways toward earning investment from the private sector that would transform the energy efficiency financing landscape. It outlines unprecedented investments being made in workforce development to ensure career pathways are created so that skilled workers can earn a good wage while performing trusted, high quality work. It changes the average person's understanding of energy efficiency, marketing it in a way that is simple and affordable, tangible and powerful.

The simple and fundamental question the Energy Alliance seeks to address is "why wouldn't every owner of a home or building make an investment that pays for itself through the energy savings it generates?" The answer is complex, and though we have made a significant impact to date we acknowledge that many challenges lie ahead. This Strategic Plan is a roadmap; coupled with hard work, it will help us ensure that the Energy Alliance meets its goals of completing our grant objectives and building toward sustainability.

Non-Profit Business Model

The Energy Alliance's non-profit mission is to lower the cost of retrofits for home and building owners and to gather and disseminate data on the benefits of energy efficiency throughout the region. To ensure that it has resources to serve this non-profit mission, the Energy Alliance has identified a number of potential revenue streams available to fund operations. In the following sections on the residential and commercial business models, we present the projections associated with the first two potential revenue streams: the Energy Alliance Residential Retrofit Fee and the Commercial Retrofit Fee. The following sections discuss these streams in detail.

We have not included other streams in the business model completed during the strategic plan. This is due to the potential size of the revenue streams, the uncertainty of the revenue streams and/or the mutual exclusivity of those revenue streams with other streams. The Energy Alliance will evaluate

each of these streams based on the potential cost and effort versus the potential revenue for each. While none of these potential sources by themselves are as significant as the revenue from the Energy Alliance Residential Retrofit Fee or Commercial Retrofit Fee, each may have a significant impact on future operations depending on policy changes, availability of funds and related opportunities. As we approach 2013, we will continue to evaluate these sources.

Financial Projections

Introduction

Financial projections are prospective financial reports that present the future financial standing of an organization to the best of management's current knowledge and belief. Energy Alliance management has prepared financial projections to evaluate both the ability of the organization to expend our Better Buildings grant in a responsible manner and to evaluate the ability of revenue-producing sources to produce income sufficient to cover the Organization's operating and mission-critical expenses in the post-grant period.

During a strategic planning retreat on April 29, 2011, management and the Board of Directors identified three revenue-producing activities that had the potential to produce earned income at a large enough volume to sustain the Organization's operations:

1) Residential retrofit fee
2) Commercial owner's agent fee
3) Utility contracts

For the purposes of building a financial projection model, these parties determined that entering into a utility contract might impact the Energy Alliance's ability to collect both the residential retrofit fee and the commercial owner's agent fee. Therefore, the projections will provide a mechanism to evaluate the cost/benefit of a utility contract, but no revenue will be projected for utility contracts.

As with any prediction of future events, financial projections are based on current assumptions that could be positively or negatively affected by internal and external factors. Additionally, both the short history of the Energy Alliance and the fact that the organization operates in an underdeveloped market affect the certainty of our predictions. To address these risks, management has done the following:

1) **Tracking:** The financial projections were based on the organization's limited operating experience, and will be closely tracked against actual results on a quarterly basis. This will provide both management and the Board with information to proactively address significant variances.

2) **Outside Expertise:** Program consultants Clean Energy Solutions, Inc. (CESI) have been engaged since before the organization's inception and provided vision and expertise throughout the Organization's development. CESI staff played a role throughout the strategic planning process, and

they provided direct consultation on data supporting the commercial owner's agent fees, where we continue to rely on their expertise and experience.

Key Factors

Key factors are the significant operational matters on which we expect the Energy Alliance's future results will depend. The financial projections model takes these operational matters and converts them to a numerical representation of results. As they are the factors that are expected to have the greatest effect on the Organization's operating results, they drive the most significant influence on the results reflected in the financial projection model.

The Energy Alliance Home Performance Program

The Energy Alliance Home Performance with Energy Star Program provides one-stop services for the single-family market. The Energy Alliance has assisted almost 200 homeowners' complete retrofits through Q2 of 2011. Over the course of the Better Buildings Grant (through May 27, 2013) the Energy Alliance will provide operational and financial support for more than 3,400 home energy improvements. To achieve this goal, we will commit to the following objectives:

- Reactive customers: Add 40 Home Performance Contractor (HPC) teams during the grant period, each of which is projected to complete 15 retrofits per quarter. This will drive 2,700 reactive retrofits.
- Proactive customers: Contact at least 40,000 homeowners in the Greater Cincinnati region through outreach; conduct home energy assessments on 5,600 of the contacted homes; perform home energy improvements on 655 of the assessed homes.

We anticipate an average investment of $8,000 per home.

Completing this goal will result in the Energy Alliance earning $1.3 million in program income during the grant period. This can be utilized by the Organization as part of the transitional reserve.

Home Energy Improvement Contractor Fee Overview

The Greater Cincinnati Energy Alliance has collected a five-percent contractor retrofit fee on retrofits completed in our program since its inception in May 2010. The fee is assessed on the gross amount of residential retrofit investments made by the homeowners. This fee supports our goal of creating a sustainable organization that is able to drive energy efficiency investments for many years into the future.

The Energy Alliance creates value for both home performance contractors and homeowners making investments in their homes. The retrofit contractor fee assessed on home energy improvement projects

ensures that the Energy Alliance is able to offer the following services to both the homeowner and contractor:

1) **Greater Cincinnati Home Energy Loan Program (GC-HELP):** Energy Alliance-approved contractors have access to the Organization's residential loan program for retrofit customers. Loan terms are a 6.99 percent interest rate for up to 10 years with a maximum loan amount of $20,000. The current market offering of this loan product has an interest that exceeds 15 percent, which would force contractors to pay a significant financing incentive to offer these terms to customers on their own.
2) **Contractor Pre-Qualification and Quality Assurance (QA) services:** Trust and confidence are essential if homeowners are to allow any contractor into their homes. Energy Alliance approval tells homeowners that they can trust an approved contractor to perform the initial home energy assessment. This trust will translate into increased conversion rates for home energy improvement projects.
3) **Program Marketing and Education:** We help contractors educate consumers to the potential savings from completing home energy improvements. We also drive leads to our contractors through significant community outreach events.
4) **IT Tools:** IT Tools, such as the *Green Energy Compass*, will provide a resource for homeowners to perform an initial home energy self-assessment; this will direct leads to Energy Alliance-approved contractors and will also help streamline home energy assessments and the home energy improvement process. The Energy Alliance investment will reduce the transactional cost of this tool for Energy Alliance-approved contractors.
5) **Financial Incentives:** Depending on the availability of funds, the Energy Alliance will work to provide non-repayable grants as incentives for homeowners to complete home energy improvement projects.
6) **Contractor Training:** Energy Alliance training on both technical issues and business skills will ensure that approved contractors are trained to deliver consistently excellent service to homeowners through our program.

Financing Program: GC-HELP

The Energy Alliance believes that a successful residential retrofit program needs to include a financing solution that offers consumers access to attractive terms in a manner that supports, rather than hinders, the consumer process.

Traditionally, consumers had the option of credit cards (a very simple funding process that comes with unattractive terms) or a home equity loan (which offers better terms but requires a multi-step application process). Additionally, the housing market remains soft: many consumers do not have equity in their homes for secured loan options. Many larger contractors have offered consumers dealer financing at teaser rates, but the underlying cost of offering these loans is significant for the contractor. This cost comes as either a reduction in the contractor’s margins, or more likely results in a higher rate for the consumer.

After a thorough review of the national market, the Energy Alliance determined that the model offered by Keystone HELP (Home Energy Loan Program) was the most effective model for our program. Keystone HELP offers consumers an unsecured, low-interest loan with simple underwriting standards that can be sold and facilitated by contractors. From a credit perspective, the loans have performed much better than traditional unsecured loans. The program is the basis for efforts to create a national secondary market and warehousing facility for residential unsecured loans.

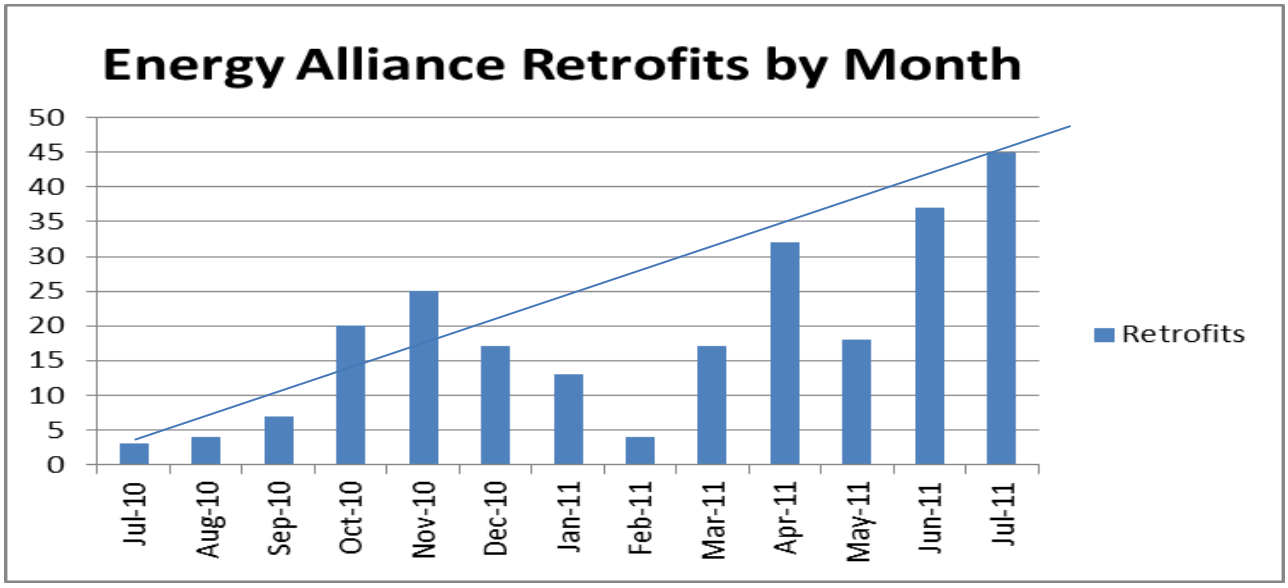
The Energy Alliance established an initial investment in a revolving loan fund to create the Greater Cincinnati Home Energy Loan Program (GC-HELP). The Energy Alliance's initial investment of $1 million is being lent to consumers through this program. The Energy Alliance needs to attract additional capital to the loan program, both in order to meet the projected uptake of loans over the next few years and to achieve our goal of creating a truly sustainable loan fund: one that does not require program dollars to provide interest rate buy downs, grant incentives or other forms of unsustainable incentives.

The Energy Alliance is working with a number of potential impact and traditional investors to secure investments in the GC-HELP program and other residential loan programs. The Energy Alliance can offer financial support through our Better Buildings grant funds, encourage demand creation through our marketing and contractor base, and track and monitor energy use and other operational metrics. In addition to increasing the amount of loans that we are able to originate, an investment from investors will also allow the Energy Alliance to expend funds under our DOE grants.

Through the financial projection model, the Energy Alliance estimated the number of customers who would utilize our loan program (based on the experience of similar programs) at 20 percent of our home energy improvement consumers. If the uptake is significantly higher than originally projected, the Energy Alliance will utilize other mechanisms up to and including buying down interest rates to facilitate offering the loans. Uptake above our expectations is not the worst result, as one of the primary obstacles encountered in discussions with financial institutions was their unwillingness to make investments before demonstrated uptake. The projection model will give management the ability to proactively manage the need to increase our loan pool's size.

Home Energy Improvement Production

The Energy Alliance residential program completed our first residential retrofit in May 2010; payment was made in the Q3 2010. Since then, the program has seen increased overall growth with monthly fluctuations. The following chart shows monthly retrofits since program inception:



The third quarter of 2011 also marks the launch of the Energy Alliance's largest marketing push to date: the deployment of nine AmeriCorps volunteers to canvass more than 15,000 homes throughout the region. As part of this effort we have generated a significant amount of earned and purchased media, community outreach, tabling events and other marketing efforts that will drive residential awareness and uptake of our program.

The Energy Alliance has also engaged a consultant to focus exclusively on residential contractor recruitment. This individual is tasked with drawing on additional resources and expanding the capacity of existing contractors in the program. Management believes that this increase in contractors, combined with the increased awareness of our program, should drive a significant continued upswing in residential program uptake.

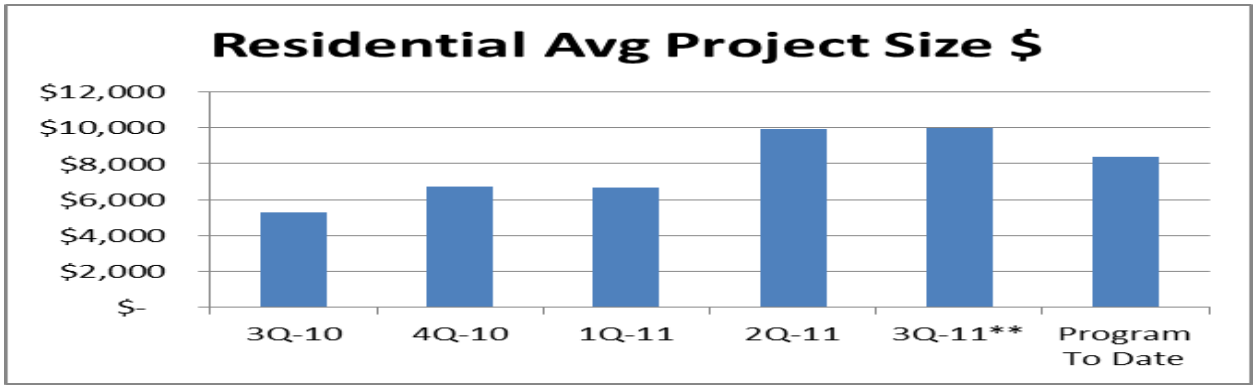
Retrofit Job Size

The Energy Alliance has seen an increase in the average cost of jobs completed under our program. Project costs grew from less than $6,000 for Q2 2011 to approximately $10,000 the first part of Q3 2011. The size of residential retrofit projects has been, and will continue to be, driven by the following factors:

1) Measures eligible under the program
2) Contractors participating in the program
3) Financing and incentives available to consumers

4) The transaction point[1] where the consumer enters the program

In evaluating our current program experience, the key factors that have changed the average project size are the contractors participating under the program, with the addition of HVAC contractors and contractors that offer geothermal products and installations to customers. We believe that the average project size will stay at the higher end of what we have experienced, as more contractors offer - and more customers use - the program to make large investments such as HVAC equipment and geothermal systems. To ensure that our results are not skewed, we will utilize an $8,000 average project size, which is less than our current average.



** Based on July activity (population of 2Q-11 through 3Q-11 is 144 retrofits, versus 100 retrofits prior to this)

Home Energy Improvement Projections

The key operational factors we identified as revenue drivers under the Energy Alliance Residential program are reflected in the model as variables that have the most direct impact on revenue from the residential model.

The Energy Alliance anticipates customers entering the program in two ways:

[1] *Transaction point* is defined as the activity of customers outside the program that leads them (directly or indirectly) to the program. There will be a difference in the purchasing ability and project size between a customer that was in the market for a new furnace, for example, and a customer that entered the Energy Alliance program as a result of a canvass. Other transaction points where the Energy Alliance will be working to reach customers include home purchase, mortgage loan refinancing, other home repairs (i.e. roof replacement) and renewables acquisition.

Proactive customers are customers that the Energy Alliance reaches through our outreach program. They are interested in making an investment in air sealing or insulation, or possibly advancing the replacement of equipment.

Reactive Customers are projected based on the number of contractors serving the program. These are customers who have heard about the Energy Alliance program, but find themselves in an equipment replacement or obsolescence situation. The home performance contractor is able to convert them into a whole home retrofit and into the Energy Alliance program.

The differentiation between these customer types will not always be clear from an operational standpoint, as the initial key to both of them is customer and contractor knowledge about the Energy Alliance program. In practice, we may find that a customer hears about our program and then calls the contractor he or she worked with ten years ago, who is now in our program. While it could be hard to define that customer, we will study uptake so that we can refine our knowledge about program drivers.

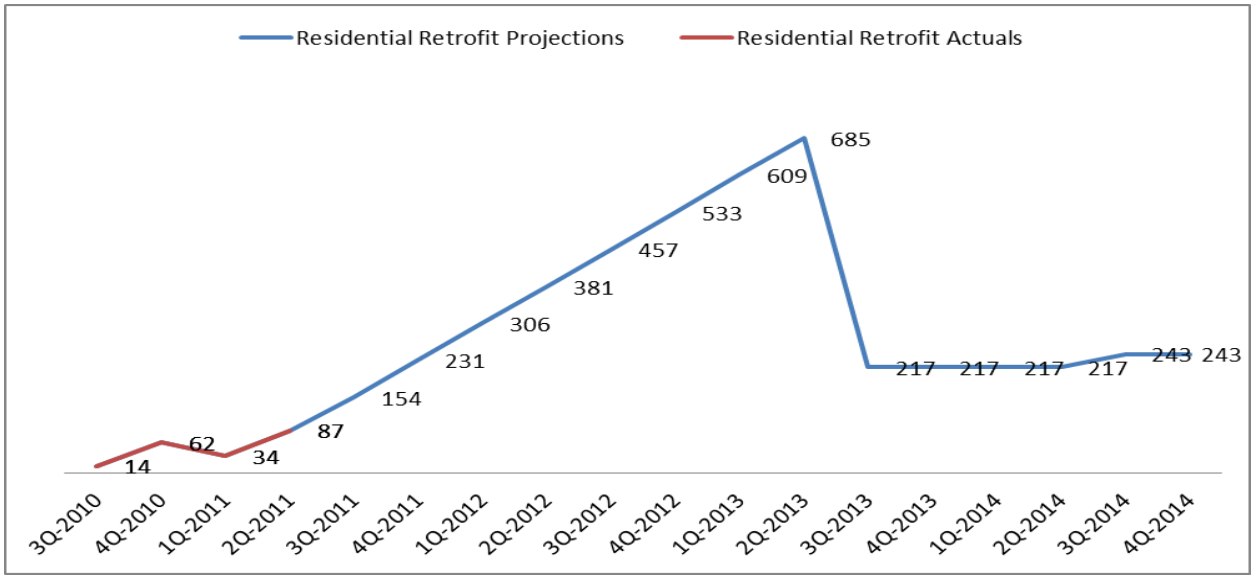
Retrofit Uptake - Proactive Customers

Energy Alliance direct marketing efforts will continue to grow, with the goal of reaching 40,000 residents during the Better Buildings grant period. For the Organization's financial projections, we only included an increase of one percent per quarter related to proactive customers. The success of the marketing and outreach efforts will more directly appear in the increase in reactive customers, as the Energy Alliance ensures that homeowners do not make investments in HVAC or other related equipment without working with an Energy Alliance-approved contractor.

Retrofit Uptake - Reactive Home Performance Contractors

The Organization believes that one of our program's key drivers will be the ability to engage the Heating, Ventilation, and Air Conditioning (HVAC) and other potential HPCs who have large existing infrastructures and are currently residents' first contact when they have equipment failure or other needs. The projections are based on the Energy Alliance adding 5 HPC teams per quarter, for a total of 40 at the end of the Q2 2013 with each HPC team completing 15 retrofits per quarter.

For the purpose of the model, the number of customers reached is based on the number of customers reached on a quarterly basis, with a conversion factor for the number of customers who complete a self-assessment, a home energy assessment and a home energy retrofit. Based on current experience these factors have been set at 25 percent, with the number of households reached set at 5,000 per quarter.



Retrofit Job Size

As previously mentioned, the Energy Alliance has seen an increase in retrofit job size. We believe that the average program size will stay at the higher end of what we have experienced. However, to ensure that our results are not skewed, we will utilize an $8,000 average project size, which is less than our current average.

Retrofit Fee Percentage

The Energy Alliance has charged a five-percent retrofit fee since project inception. The fee is a significant variable on the potential income earned by the Organization. As we offer more services to contractors (better financing, staffing resources), there may be the potential to look at a higher retrofit fee. Alternatively, if the Energy Alliance does not provide resources that are deemed to be worth the five percent in fees, contractors may complete work outside of our program.

Post-Grant Period

While the Energy Alliance will continue to market and deliver our program after the BB grant period, we have not provided for residential retrofit incentives beyond the grant period. Therefore, until the organization has evidence to the contrary, we have projected a significant decrease (68 percent) in the number of retrofits performed after the grant period. It is possible that incentives from other sources will become available in the future, which would have a significant impact on the number of retrofits performed.

The average retrofit project size also decreases, but much more slightly than the number of retrofits after the grant period. After the grant period, management expects that the average project size may actually increase, if consumers are primarily utilizing the Energy Alliance program for equipment upgrades.

Retrofit Program Cost Assumptions

Residential Retrofit Incentives

The most significant direct cost of the Residential Program will be residential retrofit incentives. We will not provide for incentives that will not be reimbursed by grant funding, and our goal is to minimize the amount of residential incentives versus credit enhancements and other sustainable uses of grant funding. However, the Organization must balance the desire to minimize incentives against our aggressive uptake goals. Therefore, we will assume that heavy incentives are required throughout the grant period.

We project home energy improvement incentives of 30 percent during the entire grant period on the gross amount of residential retrofit projects. The Energy Alliance will plan to reduce incentives well below this level during the grant period, while monitoring demand uptake. Projecting a home energy improvement incentive at a higher rate than our goal ensures that we make a conservative projection as to the number of retrofits we will be able to produce. Additionally, as dollars that are spent on incentives are not available to support residential loan programs, setting higher projected incentives helps to stress-test our assumptions about loan portfolios.

Home energy assessment incentives are not the most significant driver of costs, but it is important to note that assuming the biggest increases in residential home energy improvements will come from reactive customers potentially understates the amount of costs allocated to residential audit incentives. These customers are not expected to undergo an assessment if they do not complete a retrofit, so they have a higher assessment-to-retrofit conversion ratio than other customers. If the uptake from these customers is not as high as expected, the Energy Alliance will have to monitor and reevaluate our residential assessment reimbursement amounts.

Residential Retrofit Credit Enhancements

The GC-HELP loan program was introduced to Energy Alliance home performance contractors in May 2011. In that time there have been more than $180,000 in loan applications, but this is nowhere near the data needed to project what percentage of our residential customers will elect to take part in the loan program. Additionally, there will be interplay between customers electing the loan option and customers taking the incentives. (Currently, customers can elect the loan option and a 15 percent incentive or a 35 percent incentive). The Energy Alliance surveyed national programs and determined

that 20 percent of customers will take the loan program. If the customer loan uptake fluctuates significantly from our current projections, the financial projection model provides basic tools to evaluate the need to reallocate capital for loan support. Additionally, as the more complex loan models we will use to evaluate the return for investors are completed, they will provide more precise forecasts of capital requirements.

Revenue Sensitivity Analysis

The key operational factors the Organization identified as drivers of revenue under the Energy Alliance Residential program are reflected in the model as the variables that have the most direct impact on revenue from the residential model. With the current assumption of $8,000 per retrofit, each additional retrofit completed under the program will drive $400 in revenue. Additionally, with more than 3,400 retrofits projected during the grant period, every $100 in the average size of retrofits will drive $34,000 in incremental revenue.

Key model variables include:

1) HVAC installers offering the program and jobs per quarter: the most significant drivers of additional retrofits.
    a. Current increase in HVAC installers per quarter: five per quarter (plus/minus one per quarter) drives $215,000 in incremental revenue during grant period
    b. Current jobs per contractor per quarter:15 per quarter (plus/minus 1 per quarter) drives more than $71,000 in incremental revenue during grant period
2) Retrofit job size
    a. Currently modeled at $8,000. An increase/decrease in average project size of $2,500 would yield an increase/decrease in revenue of approximately $270,000 during grant period.
3) Retrofit fee
    a. Currently modeled at 5 percent, based on what Energy Alliance charges. Each one-percent change in the retrofit fee changes revenue by $263,000 during grant period.

Program Monitoring

The Energy Alliance utilized historical performance data from our Residential Retrofit program in the financial projections. We have already created the mechanisms for gathering and analyzing the data that will provide management real time information on the performance of the residential program as compared to the financial projections. Management will utilize, and the Board of Directors will receive, quarterly data on program performance, providing a clear link between actual and projected results. This will allow the plan to be adjusted based on actual results compared to plan assumptions.

The Energy Alliance Non-profit and Commercial Buildings Program

The Energy Alliance Commercial Program staff will work closely with building owners to facilitate energy efficient investments in their buildings. Over the course of the Better Buildings Grant (through May 27, 2013) the Energy Alliance Building Performance Program will:

- Provide technical and financial assistance on an average of $9.2 million of commercial building retrofit investments per quarter.
- Perform improvements in over 2.2 million square feet of non-profit organization (NPO) and commercial buildings; the average energy intensity and project size of these jobs will be based on national benchmarks.
- Earn revenue equal to an average of 3.5 percent of the total project cost for the investments in design/build and energy performance contracts that the organization facilitates.
- Earn revenue on continuous commissioning projects equal to 50 percent of the projected quarterly energy savings.

NPO and Commercial Buildings Revenue Model

The Greater Cincinnati Energy Alliance will collect fees from customers and contractors for the non-profit and commercial projects undertaken through the program. Customers can pay the fees to the Energy Alliance in the following ways:

- Percentage of the total project costs (which will be capitalized in the costs)
- Hourly rate
- Percentage sharing of energy savings compared to a baseline

Value Proposition

Energy Alliance's collection of a fee is based on the principle of fair cost recovery for value added. The history of energy services includes abuses and misinformation as well as successes, and facility decision-makers often admit they "don't know where to start or who to trust." Evidence has shown that even the most sophisticated facility owners and operators need help determining what energy

services they need, what impact those services could deliver and how much the services might cost and save.

The Energy Alliance is a trusted and knowledgeable partner acting in the building owner's best interests. Our services take advantage of a unique combination of outreach, trust and technical aptitudes. They deliver essential benefits to building owners/managers, community-based contractors, the local workforce and the environment. Our services reduce the transaction costs for both customers and contractors.

The Energy Alliance fee for these services is paid out of customer savings. When projects are financed, the fee is built into the principal and collected out of debt service payments, which - in most cases - are less than savings (those payments are collected either by an ESCO or a financing agency). When no financing is used, the Energy Alliance's fee can be invoiced over two or more years out of customer savings that are verified by an independent engineer. Alternatively, our staff can charge for their time at a competitive hourly rate that earns the Organization margin over its costs.

Services Provided

The Energy Alliance's provides a range of services directly to the project and to the community:

1) The Energy Alliance will describe the potential benefits and costs of energy services to NPO, commercial and institutional customers, and will guide them through a low-risk and understandable process. We help clients determine which contractors and claims can be trusted, what improvements might be paid for out of savings the energy improvements generate, and offer guidance for the many decisions clients must make when completing energy retrofits.
2) The Energy Alliance has the ability to explain the potential of "free fixes:" energy efficiency improvements that largely or fully pay for themselves out of savings. Saving energy is rarely among the highest priorities of facility owners and managers, but many energy improvements address problems of comfort, high expense, reliability of energy supply, safety and facility value. While we do not offer design services or guarantees, we can interview customer staff, describe successes elsewhere, and support client assessment of the potential for paying for desired capital improvements through energy savings.
3) The Energy Alliance will assess and assist in the identifying of financing options, including utility and other incentives and grants, to make such improvements possible while minimizing cash outlay for customers. Access to proprietary Energy Alliance loan programs while also working with customers' financing sources to provide credit enhancements generates measurable economic value in a project.
4) The Energy Alliance will be able to help determine customer qualification for the energy efficiency improvement incentives, including carbon offsets, forward capacity markets and renewable-energy credits. While these may never be significant at the

individual project size, it is much more likely that as a potential aggregator, the Energy Alliance will be able to derive value from this type of consultation.

5) The Energy Alliance will pre-qualify Energy Service Companies (ESCOs), design-build and general contractors, help match their capabilities to customer needs, act as an independent resource for customers and contractors, and guide the customer through the scope definition and contractor selection process.
6) The Energy Alliance will assist the customer in negotiating fair and transparent contract terms.
7) The Energy Alliance will support the customer's choice of options for making energy efficiency investments; from low-cost "continuous commissioning" services through major capital improvements, including renewable-energy installations where appropriate.
8) The Energy Alliance will provide quality assurance support, including review of proposed work, commissioning of completed work, assurance of "as-built" documentation and training, and measurement and verification of savings.
9) The Energy Alliance will supplement the customer's facilities staff to ensure appropriate project management. Often, non-profit organizations and other commercial customers are reluctant to consider energy services because they lack appropriately trained staff.
10) The Energy Alliance will integrate the project's costs, savings, and results into our IT system. This will allow us to provide documentation of achievements and cost-effectiveness to decision-makers. The Energy Alliance will assist with publicity, media relations and reports to funding sources and other stakeholders.
11) The Energy Alliance will continue public education, provide website resources, and continue general outreach to the NPO and commercial building community, raising awareness of facility improvement, return on investment and economic development potential.

Commercial Customer Project Lifecycle

The process of guiding a customer through the sales process includes lead generation and prequalification:

Lead Generation

The generation of qualified leads relies primarily on:

- Peer-to-peer referrals
- Working with "umbrella" organizations
- Participation in professional and service organizations
- Earned media coverage
- Offers of incentives and enhancements in financing

While we will consider responding to requests for proposals (RFPs), pro-active outreach will better leverage the Energy Alliance's competitive advantages.

Pre-qualification

Energy Alliance staff work with building owners to pre-qualify them as eligible for the program, based on a number of characteristics:

- A review of utility bills and square footage count for each property under consideration **.**
- A preliminary list of equipment nearing the end of useful life or known to be inefficient.
- A letter of interest from the Board or CEO indicating a commitment to seek financing or provide cash for the owner's share of the project cost.
- The potential customer's creditworthiness and financial resources.

We will use this information to determine if a cost-effective retrofit package can be assembled. Once the customer and Energy Alliance agree that a potential project can be paid for with existing financial resources and/or debt, we will move the project forward.

Commercial Financing

Loan programs for customers under the Energy Alliance commercial program are much more disaggregated than the residential loan program. Commercial buildings have vastly different capital needs, even between similar commercial buildings in the same sector (i.e. religious institutions). Some religious institutions, for example, can pay cash or obtain bank financing at attractive rates, while others have no ability to do so. The Energy Alliance learned through our non-profit pilot program that even with generous cash incentives, many of the building owners with whom we invested significant time were not able to move forward due to a lack of cash on hand.

The Energy Alliance has been working with a local community development financial institution to create a loan fund specifically targeted to NPOs that have difficulty obtaining traditional bank financing. Additionally, the Energy Alliance has been working with outside investors to evaluate the potential to expand these loan funds: we would leverage funds for a loan fund dedicated to serving energy efficiency investments across the region. While any investment is not guaranteed, the Energy Alliance believes that creation of a $10 million loan fund is a reasonable goal. Loan funds in this range will greatly enhance the Energy Alliance's ability to drive investments in the commercial sector.

Commercial Program Projections

The Energy Alliance Commercial Program has less historical data on which to base projections than our residential program. From an operational perspective, the Energy Alliance will rely heavily on the assistance and expertise of Clean Energy Solutions, our program consultant.

While the basic premise of the revenue potential is similar to the residential program, the Energy Alliance derives revenues by providing value to customers and contractors to complete projects. Due to the nature of this cause-and-effect relationship, the projections for the commercial programs are somewhat simpler than residential projections.

The commercial programs projects revenue from three different revenue streams in the commercial sector. While the revenue from each stream is projected to be earned in a different manner, they are all based on driving commercial investments.

Project Size

The financial projections rely on assumptions about building energy intensity, energy costs and potential energy savings from national and local resources. While these factors can vary widely based on different building types, Clean Energy Solutions was able to utilize years of experience and familiarity with national trends to develop realistic assumptions for energy modeling. The Energy Alliance will compare these assumptions to actual results to further refine future assumptions.

From these key initial assumptions, we were able to create further assumptions about the dollar amount of project sizes tied to the assumed building square footage.

Earned Revenue Potential

- **Continuous Commissioning (CC):** This revenue stream assumes revenue projected based on shared energy savings, rather than upfront payments. This arrangement will be beneficial to customers who would like to minimize upfront capital expenditures, and would like to tie payment to savings. The Energy Alliance believes this arrangement could lead to a deeper involvement than the traditional engineering definition of CC: our staff would serve somewhat like an outsourced energy manager supplementing the building's existing operations staff. We project a 50 percent energy savings model with CC customers, based on similar arrangements. Under the model, CC revenue is earned on a quarterly basis over three years after signing a new client. To ensure conservative estimates in the modeling, clients are assumed to only pay the fee to for three years, even though the energy savings potential will be much longer.

- **Owner's Agent Fees:** Through the owner's agent stream, the Energy Alliance will charge the customer a fee at the time the project is completed. This is optimal for projects that have attractive financing sources, as it will lower the building owner's initial cash outflow. We project the owner's agent fee at 3.5 percent of the total project cost. This is a standard cost within the industry, and is similar to the experience of Clean Energy Solutions. Under the model, owner's agent revenue is earned at the time that the project is

completed. As the Energy Alliance moves forward with these agreements, we will evaluate the cash flow requirements.

- **Direct Costs**: The Energy Alliance has projected direct costs for customer and financing incentives based on our Better Buildings budget. Increased uptake in the commercial program will also drive costs related to additional marketing, lead pursuit and project management support. To ensure that revenues were fully loaded with incurred costs, the projections include additional staffing requirements and consulting expenses to cover these costs.

Commercial Revenue Sensitivity Analysis

The key factors that will drive operating results are also the key factors that will drive the projection model. The key operational factors are uptake under the commercial program, represented by square footage retrofitted, and the Energy Alliance's ability to provide value to building owners and contractors, represented by the owner's agent fee and CC energy savings percentage.

1) Square footage retrofitted by quarter
    a. Continuous Commissioning – every 10,000 sq. ft. of building commissioned creates $16,000 in revenue during the grant period at 50 percent shared savings.
    b. Energy Performance Contracting and Design Build – every 10,000 sq. ft. of building retrofitted per quarter drives $11,500 for each sector.
2) Energy Alliance Earned Income
    a. Continuous Commissioning – every 10 percent change in the shared savings percentage changes revenue by over $23,000 during the grant period.
    b. Energy Performance Contracting and Design Build – every 0.5 percent change in the owner's agent fee percentage results in total change of $35,000 in revenue during the grant period.

Post-Grant Period

The investments in financial resources, technical capability and intangible assets (brand recognition, trust) that will come from completing a number of projects will help the Energy Alliance increase the number of commercial buildings that participate in our program after the grant period. The success of projects that occur during the grant period, creation of successful financing programs, and in-house technical expertise are integral to driving these projects forward. While we are very confident that the Energy Alliance will be able to build a transitional reserve through the Residential Retrofit Fee, it is not reasonable to assume that the Organization will be able to sustain operations without providing services to larger buildings and larger projects. The post-grant projections are very aggressive, at 1.4 million square feet of projects per quarter. The ability of the Energy Alliance to drive commercial

revenue at that level in the post grant period is the most critical factor to ensuring that the Organization is cash flow neutral by 2016.

Commercial Program Monitoring

The Energy Alliance's revenue strategy after June 2013 relies to a considerable degree on owner's agent income, post-retrofit commissioning, and other contractor/customer fees from large buildings. But the Energy Alliance is just now (August 2011) launching a large buildings program after completing several pilot projects, and does not yet have enough experience with owners and energy services companies to evaluate the likely success or accuracy of the preliminary projections.

The Energy Alliance's basic premise is that program management, owner's agent, aggregated marketing and building commissioning services can generate revenues in the three- to five-percent range of total investment costs for commercial building retrofits. These numbers are based on similar metrics achieved by owner's agents and ESCOs for these services in the ESCO market. The Energy Alliance would begin work on the outskirts of the Municipality, University, School, and Hospital (MUSH) market: smaller municipalities, schools, etc where an existing market exists, but smaller buildings are generally ignored. Our willingness to carry out a strong marketing effort, utilizing our nonprofit credibility, and aggregate smaller buildings highlights the key elements of this strategy.

To assist the Board and management in tracking the success of the Commercial Program, Clean Energy Solutions has provided an overview of the current Energy Alliance commercial program, including expectations from industry experts in how the projects will resolve themselves. The document has been provided to the Board of Directors and will be updated at future meetings.

Other Revenue Sources

The Energy Alliance has identified a number of potential revenue streams that will be available to fund operations in addition to those included in the Pro Forma Financial Statements (Appendix A) attached to this Plan. The exclusion from the appendix is due to the potential size of the revenue streams, the uncertainty of them and/or the mutual exclusivity of the revenue streams with other streams.

The Energy Alliance will evaluate each of these streams based on potential cost and effort versus potential revenue. While each of these potential sources by itself is currently not as significant as the management fees earned on residential and commercial retrofits, each may have a significant impact on future operations depending on policy changes, availability of funds and related market opportunities. Every $1 in net revenue that the Organization earns through these sources reduces the amount of projects required to fund operations by $20, assuming a five-percent fee. In aggregate, these sources are potentially significant, especially in later years. By not modeling any potential net

income from the opportunities, the Energy Alliance is understating the potential for program income and increasing conservatism in the Organization's projections.

Utility Contracts

Electric distribution utilities in Ohio are under the "portfolio standard" directive contained in Senate Bill 221 to achieve a defined percentage energy savings each year, starting in 2009 at 0.3 percent and increasing to 1 percent in 2014 and up to 2 percent in 2019 and thereafter (the baseline is the previous 3-year average consumption). Utilities must also reduce peak demand, using the same baseline standard, by 1 percent in 2009 and by an additional 0.75 percent per year through 2018. Cumulatively, these are challenging orders, and the cost of non-compliance is high. That presents a substantial opportunity for the Energy Alliance.

Utilities are very good at delivering and billing for energy, but historically not good at driving demand for efficiency investment beyond their meters. That is one the Energy Alliance's key strengths. We anticipate contracts with Duke Energy for several reasons:

- To market energy efficiency services, especially to underserved market sectors, that are financed through ratepayer-funded subsidies and proprietary financing programs
- To manage the recruitment, training, and quality assurance of audit and installation contractors
- To conduct impact evaluations for filing with the Public Utilities Commission
- To testify in support of future program design proposals at regulatory hearings
- To sponsor smart grid and demand-response pilot projects

Revenue estimates, based on comparable utility contracts in other territories, could be as much as $100,000 to $500,000 per year. These revenues would most likely preclude the Energy Alliance from charging customers additional fees, so the potential to earn funds from a utility contract would have to weigh against the income that could be earned from other sources.

Grant Revenue

If considered purely from a near-term revenue viewpoint, grant revenue has high potential for the Energy Alliance. Grant revenue, however, has to be spent on the work proposed, whereas fee income is unrestricted. Therefore, the Energy Alliance strategy is to devote resources only to grant opportunities that can be fulfilled by existing staff in a way that makes a net contribution to the organization's mission and growth. Such opportunities do exist and can be identified by staying in touch with local and national foundations, Federal and state energy offices, and local governments.

For example, the Energy Alliance is considering collaboration with the Ohio Department of Development on a grant to fund technical assistance aimed at lowering the cost of rooftop solar installations. While solar would expand the focus of the Energy Alliance, partnering with the state agency allows us to maintain our focus on current initiatives, while potentially expanding our reputation as a local leader on energy issues. We are also aware of proposals for competitive State Energy Program (SEP) funding from the DOE, and inter-Energy-Alliance development of

qualifications and Measurement and Verification (M&V) standards for carbon trading and demand-response bidding. We anticipate annual opportunities around other innovations, replication of Energy Alliance successes and technical assistance.

Demand Resources and Energy Efficiency Resources sold in PJM2 Capacity Markets

"Demand-side" resources (verified energy efficiency savings), under PJM rules, qualify for capacity payments on an equal footing with generating supply. While qualification and M&V processes are somewhat complex, the Energy Alliance can participate at a low enough cost to earn good net revenues, as did the Cambridge Energy Alliance with ISO-NE (Independent System Operator – New England). The most recent auction price (May 2011) was about $3.75 per kW per month for all qualifying resources in Ohio. Although these annual auctions are for delivery three years in the future, Energy Alliance can make bilateral deals to sell peak-hour reductions to past bidders who are oversubscribed.

Revenue estimates would be based on the Energy Alliance's ability to reduce its customers' peak electric demand. There are many opportunities for shifting electric demand off-peak in institutional, commercial, and industrial facilities.

Carbon Credits

In a well-publicized deal involving a nonprofit agency, the Maine State Housing Authority (MSHA) sold verified carbon units to Chevrolet.[3] With outside technical assistance, MSHA developed a methodology to validate additionality and other criteria sufficient to win international accreditation and registration, along with Chevrolet's satisfaction that they were supporting legitimate new emissions reductions. The Energy Alliance can develop a similar methodology for its commercial and residential conservation achievements. It is important to note that the same savings cannot be sold both to a utility under its efficiency portfolio standard and to a buyer of carbon credits.

Revenue estimates, based on recent market prices and emission equivalents, suggest a value of around $5 per MW saved, once a methodology is approved and the Energy Alliance program is registered. The front-end costs of qualification and listing are high (more than $50,000) but the incremental costs per MWh will be a small fraction of the revenue. Carbon credits have recently been sold for around $10 per ton of CO2, and emissions from Hamilton County's mix of power sources are around ½ ton per MWh.

Consulting Fees

[2] PJM Interconnection is a regional transmission organization (RTO) that coordinates the movement of wholesale electricity in all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia.

[3] http://www.mainehousing.org/news/news-details?PageCMD=NewsByID&NewsID=502

Other Energy Alliances, start-up NPOs, State Energy Offices and foundations need help from experienced service providers in program design, marketing, management and revenue sustainability. The Energy Alliance is as experienced and insightful as other nonprofit consultants that have built their business on advising others. Two members of the Greater Cincinnati Energy Alliance management team have already provided small levels of assistance to startup organizations.

Under this stream, the Energy Alliance would monitor the potential for income from these opportunities versus staff effort and capacity. As the Energy Alliance expands its reputation, these opportunities will arise. Energy Alliance's long-term viability also improves if other communities throughout Ohio and Kentucky are able to stand-up market rate efficiency programs. Doing so creates greater economies of scale for contractors to expand their capacity, for statewide financing tools to be initiated and for policy and regulation in support of energy efficiency to have a strong economic basis.

Sponsorships and Memberships

The mission of the Greater Cincinnati Energy Alliance is naturally attractive to business sponsorships and individual memberships in the community. Any sponsorship or membership program would be weighed against potential reputation or other strategic risk. There are precedents for fee-based membership programs in other parts of the country, and the Energy Alliance's decision to move in that direction would only come after ensuring that such fees are only a fraction of measurable economic value derived by participating contractors.

Miscellaneous

Through work under the Better Buildings program, the Energy Alliance has and will continue to earn program income from a variety of different sources, including equipment leases to our contractors and miscellaneous donations. While these sources of revenue are beneficial to both the organization and our contractor base, they are infrequent and difficult to project. Not projecting revenue for these initiatives will introduce an additional source of conservatism in the Energy Alliance's total revenue projection.

Workforce Development

Part of the Energy Alliance's strategic plan is to develop a centralized Workforce Development Training Center through which the building performance contracting community can obtain initial and continuing education without leaving the Cincinnati area. A well-trained workforce of local residents is integral to the creation of a sustainable energy efficiency market that provides customers with good work and local professional with a career ladder. The Building Performance Training Center will be located at Cincinnati State Technical & Community College (Cincinnati State). It will leverage local community resources including Gateway Technical and Community College, LIUNA Weatherization Training Centers and local chambers to provide resources for local businesses. The Training Center, which will hold its first class in September 2011, will have a Program Manager (PM) for oversight. In addition, a full time Quality Assurance Manager (QA Manager) and Assistant to the Project Manager

(PM Assistant) will play integral roles at the Training Center. The infrastructure for the Training Center is being funded through a $500,000 Energy Alliance sub-grant to Cincinnati State, with the intent to develop a business model so that the Training Center funds itself beyond the grant period.

One of the Energy Alliance's goals is to ensure high quality work is performed by contractors, maximizing homeowner satisfaction. The PM will work in an interdisciplinary, mutually supportive manner to maximize effective delivery of residential energy assessments and upgrades within the Energy Alliance's service territory

Industry Characterization

The Greater Cincinnati region does not have a mature home performance contracting base. In the spring of 2010 when the Energy Alliance completed its first residential retrofit, there were less than 5 fully functional Home Performance Contractors (HPCs) in the area. In the spring of 2011, there were approximately 10 functioning HPCs. In August 2011, there are approximately 15 HPCs. The majority of the Energy Alliance's approved HPCs are relatively new to the HPC industry and, although the assessment and upgrade results vary by company, the operational and technical challenges are similar, irrespective of company size and experience.

Training Needs

As the HPC contracting base continues to grow, each company will have different classroom and "real world" knowledge needs. Some companies, such as larger HVAC companies, have the mechanical knowledge, installation experience, and infrastructure and business processes to support growth, but don't have the field auditing and air sealing/insulation experience that is essential to a successful company in the HPC market. Some companies whose experienced building contractors have recently been certified as BPI Building Analysts may be more nimble at air sealing and insulation installations, but will face challenges in scaling their operations.

An appropriate training curriculum will need to encompass every aspect of supporting a successful HPC, beginning with back office and information technology factors and ending with the tracking of energy savings for the homeowner.

Additionally, contractors that have current certifications and/or licenses will need training to satisfy the Continuing Education (CE) credits required by the industry. Contractors will also face increased initial training requirements: in Q1 2012, the DOE will require contractors to be certified in one of the four newly formed certifications within the Weatherization and Home Energy Upgrade fields. There will be four national certifications: Auditor, Upgrade Crew Leader, Upgrade Installer and QA Inspector. Each certification will require specific pre-requisites before an individual can qualify to sit for the exam. In addition, there will be CE credits needed to maintain the certifications; this will require additional training.

Investing in a Contractor Training Center

Nationwide, there are only a few well-known HPC training centers, including the Green Energy Training Center by AFC First Financial in Pennsylvania and the Workforce Development Institute by NYSERDA (New York State Energy Research and Development Authority). The Energy Alliance has performed initial reviews of both of these centers and will soon meet with representatives from them to better understand the key elements for success. Those key elements will then be incorporated into the Building Performance Training Center at Cincinnati State.

Building and Attracting Workforce

The Energy Alliance has invested staff resources into identifying and recruiting skilled, motivated contractors for our program. As part of that effort, we recently conducted a Contractor Assessment Study to understand the potential contractor volume present to serve the four-county Energy Alliance service territory. Based on that study, there are 200 to 300 potential HPCs currently performing other services (HVAC, remodeling, insulation etc). In addition, there are more than 500 subcontracting companies that offer services such as HVAC, insulation, windows and doors, appliances, and renewable energy. With the upcoming National DOE Certifications, all individuals working in weatherization and home energy upgrade programs must have the type of training that will be available at the Training Center at Cincinnati State. This includes unions, HVAC and even weatherization programs outside the Energy Alliance's service territory.

Based on both the AFC First and NYSERDA models, we believe having a qualified and competent workforce is a key to success. To make that a reality, a system must be in place to process and maintain a large volume of contractors. In partnership with the Training Center at Cincinnati State, the Energy Alliance is well positioned to become the primary agent to make this a reality.

Next Steps

With a fully functional contractor base in place, the Energy Alliance will be able to offer ongoing Demand Side Management (DSM) programs to a larger multi-state territory. Likewise, we will be able to offer services to potential clients such as Duke Energy and municipal-owned utilities. This is just the beginning of the HPC industry in the greater Cincinnati region and it will take decades to address the energy reduction needs of the residential sector. Therefore, the Energy Alliance is perfectly positioned to be the central resource for homeowners, contractors and utility programs into the foreseeable future. The Energy Alliance recognizes that its ability to achieve its goals and impact directly correlates to the contractors supporting the program and performing the work. Consequently, we expect our investment in developing the workforce will continue to have a measurable return on investment.

Commercial Contracting Overview

The commercial contracting base that currently exists in the Cincinnati area's Energy Efficiency market is fragmented, especially in the small-to-mid market sector. For example, there are companies that perform energy audits but do not perform the contracting work. Conversely, there are sub-contractors who install HVAC and building controls but don't understand the need for a whole-building energy audit. To maximize the investment of the small-to-midsize building owner, there need to be building performance contractors available who oversee the entire process, from energy audit to installation of improvements and post-installation evaluation. Because an energy efficiency curriculum for commercial contractors does not currently exist, there is a huge opportunity to provide the necessary training needed to bridge the gaps between steps in this process.

Policy

Current Policy Landscape

Legislative and regulatory policies at the state and Federal levels have a significant impact on the energy efficiency market. It is imperative that the Energy Alliance monitors legislative and regulatory issues to both identify opportunities and manage threats to our sustainability. Some of the most advanced EE markets in the United States, in areas such as the West Coast, New York and other Northeastern states, can largely be attributed to regulation that allows utilities to stay profitable while the private sector reduces its energy spend. Given this regulatory risk, the Energy Alliance staff will be subject matter experts for supportive policies, and will operate under a business model that facilitates private sector implementation of energy efficiency investment.

Federal Policy

In February 2011, the Obama Administration launched the Better Buildings Initiative to reduce the use of energy by buildings by 20 percent by the year 2020. This program contains initiatives related to financing, incentives, data, workforce development and policy improvements to increase the uptake of energy efficiency.

Policy that would lead to a market-based approach that caps carbon emissions and allows them to be traded in an open market could have the most significant impact on the Energy Alliance's operations. While such legislation is not currently being acted upon, there are a number of policies that may support additional investments in energy efficiency. One key and recent example is a bipartisan bill was introduced in the House on July 2011, seeking to revitalize the residential Property Assessed Clean Energy (PACE) program. It would enable residential property owners to debt-finance home efficiency upgrades and then service that debt through the home's property tax assessments. Experts expect that a policy such as PACE would make additional capital available through extended loan terms and better rates, by simplifying the payback mechanism and increasing investor security.

Beyond PACE, there are possibilities for other key legislation, but Congress has historically been divided about energy policy; the more likely movement will be in defense of existing programs within the Environmental Protection Agency and the Department of Energy, not the least of which would be appropriations through the Energy Efficiency and Conservation Block Grant, the Energy Alliance's primary funding source to date.

State Policy

At the state level, more opportunities are available for improving energy efficiency and renewable energy investment. Potential changes to programming and rate structures, decoupling the rate structure of utilities, and policies encouraging advanced combined heat and power and other energy saving investments all present opportunities. In Ohio, a variety of policies including but not limited to gas demand side management, energy efficiency and renewable energy rulemaking, smart grid development, alternative energy compliance, and renewable riders could impact the Energy Alliance's effectiveness in the community if enacted. Kentucky does not have an energy efficiency portfolio in place, nor is one proposed for electric utilities. There are, however, some demand-side management programs for consumers approved on a utility-by-utility basis, including a residential program offered by Duke in the Energy Alliance territory. In addition, Kentucky does not have an energy efficiency portfolio in place - nor has one been proposed - for natural gas utilities.

Policies that enhance energy efficiency and renewable energy investment can help the Energy Alliance increase its regional impact through additional incentives and investment requirements. In addition, the Energy Alliance can serve as a model program to demonstrate the benefits of energy efficient investments for consumers, ratepayers and the regional workforce. The Energy Alliance anticipates the following state policies and issues affecting the organization in the immediate and longer-term future:

- **Senate Bill 221 (Ohio):** Ohio Senate Bill 221 was enacted in 2008 with the aim of encouraging Ohio businesses and utilities to adopt renewable and advanced energy technologies. The bill also includes new energy efficiency and peak demand standards that utilities must meet through energy efficiency programs. SB221 outlines that a total of 25 percent of generated electricity must come from alternative energy sources by 2025. Of the '25 by 2025' requirement, at least half (12.5 percent or more) must be generated from renewable energy resources; the rest can come from advanced energy resources including energy efficiency, demand-side management and cogeneration. The pace at which utilities adopt this legislation, and/or the possibility of repealing its standards, could have a significant impact on the Energy Alliance's operations.

- **Decoupling:** Allowing recovery of lost revenues will incentivize utilities to invest in, and actively implement, energy efficiency programs. Experience throughout the United States suggests that substantial investment in cost-effective energy efficiency

depends not only on elimination of the throughput incentive (the incentive for utilities to increase sales as a means of increasing revenue and profits), but also includes:

1) Incentives for effective efficiency programs
2) Requirements for timely and complete cost-recovery
3) Strong oversight ensuring good program design and utilities' fiscal prudence
4) Consistent regulatory attention to the evolution of these activities over time

Decoupling is one of the most aggressive options for incentivizing utilities to invest in energy efficiency. Consumer protections must be included with a decoupling rate design in order to ensure broad support. As the Energy Alliance continues to implement its Better Buildings program, it is developing a more robust infrastructure to support implementation of utility-funded investments.

- Utility and Building Codes: The least-cost efficient investment occurs during the construction phase; consequently, most homes are not built to the latest energy codes. In both Ohio and Kentucky, the International Energy Conservation Code (IECC) 2006 model code is being used. The 2009 code is up to 15 percent more efficient than the 2006 code, and the 2012 code builds further upon that. In addition, there are a number of building codes that can improve the efficiency of existing buildings, such as the stretch code and point-of-sale requirements. Compliance enforcement is an important tool in helping to bring buildings up to existing standards. The Energy Alliance recognizes that the later adoption of building codes in its service territory makes it more likely that the existing building stock is in need of cost-effective efficiency improvements. If stretch codes were to mandate that the existing building stock achieve a certain level of efficiency, the Energy Alliance would be well positioned to provide needed services to the private sector.

Conclusion

The Energy Alliance is proud to be a member of the Department of Energy's Better Buildings program. The impact in the community that we can generate as a result of the $17 million grant is significant - we stand poised to change the face of energy efficiency in the region. The bottom-line success of the program lies in saving consumers money and creating jobs. Our path to that goal involves collaboration of public and private organizations, governments and non-profits, utilities and banks, residential and commercial contractors, and many other key parties. The Greater Cincinnati Energy Alliance is dedicated to this effort, and we are committed to working with all parties involved until we have helped meet the energy efficiency needs of every home and building in the region.

Defined Terms

Greater Cincinnati Energy Alliance: 'Organization,''the Energy Alliance'
Home Performance Contractor (HPC): residential contractor under Energy Alliance program
Home Performance with Energy Star Program: Energy Alliance Residential program
Financial Projection: Excel model of financial projection attached to report as exhibit A
Home Energy Investment: FKA – retrofit
Home Energy Assessment: FKA – audit
Home Performance with Energy Star: FKA – Residential Program
Building Performance Program: FKA – Commercial Program
Non-Profit Building Performance Program: FKA – NPO Program