



CLEAN ENERGY WORKS

Strategic Plan 2010 - 2013

SCOPE <<

This strategic plan articulates Clean Energy Works' roadmap toward a fully constructed business platform that proves its worth in the Oregon energy efficiency sector so that it can be redeployed to other markets. The plan is three years in scope and is a living document that will be adjusted as market conditions evolve.

A complementary implementation plan will address details and timelines associated with how this strategic plan will be activated on the ground.



EXECUTIVE SUMMARY

Clean Energy Works was created to catalyze demand, investment and partnerships to produce triple bottom line outcomes, including:

- High-quality jobs and economic opportunities that advance social equity
- Measurable, deep reductions in consumption of finite natural resources
- Long-term financial returns for a variety of customers

Our seed capital is a \$20 million American Recovery and Reinvestment Act investment from the US Department of Energy delivered via the City of Portland. The terms of this grant include performing 6000 residential energy efficiency retrofits and attracting \$100 million in additional investment, primarily from private capital sources, while building a self-sustaining business model that incorporates social equity. This document is our roadmap to self-sufficiency.

Our three-year focus is on energy efficiency in Oregon. We are building a capital aggregation and service delivery platform with “plug-in” functionalities for local governments, utilities, contractors, financial institutions and end-user customers. Once we prove success during this initial grant-funded period, we can then deploy information technology, customer database and other assets to new sectors and geographic markets.

Leveraging our capabilities realized in a Portland residential energy efficiency retrofit pilot project, our market potential for single-family owned homes in need of energy efficiency retrofits is 536,972 units (or 89 times greater than our three-year 6000-unit target). We will reach at least 1000 units in year one, 2000 in year two and 3000 in year three.

To achieve rapid success in an industry that has long suffered lack of both consumer interest and investment capital, we must build steady, significant demand for a product delivered with quality assurance while demonstrating that lending for energy efficiency provides predictable returns. Key objectives follow, with supporting strategies detailed throughout this document.

Finance

1. Establish predictability of utility on-bill repayment
2. Achieve \$100 million in leverage
3. Achieve ongoing liquidity

Marketing

1. Generate targeted leads
2. Maximize lead-to-loan conversion
3. Inspire homeowners to make permanent energy efficiency behavior changes

Operations

1. Support local communities in building workforce, contractor and administration capacity
2. Ensure quality control and customer service through refinement of Energy Advisor role
3. Innovate to support market transformation

Information Technology

1. Centralize business processes
2. Ensure high quality information-sharing among partner organizations
3. Enable comprehensive reporting for consumers of job, energy and carbon data

Social Equity

1. Ensure workforce and business opportunities for underserved populations and underutilized firms
2. Expand access to credit



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WHO WE ARE

Overview

Clean Energy Works orchestrates comprehensive, market-based solutions to complex resource challenges. We assemble stakeholders, aggregate resources and deliver outcomes in the emerging clean economy. Our core competency is our ability to broker diverse relationships - from public to private, local to national, Wall Street to Main Street - and assemble triple bottom line value from a fragmented marketplace.

Our business is catalyzing demand and investment and assembling resources and partners to produce outcomes, including:

- High-quality jobs and economic opportunities that advance social equity
- Measurable, deep reductions in consumption of finite natural resources (expressed as energy savings, carbon emissions avoided and other)
- Long-term financial returns for a variety of customers

The first application of our aggregation platform is targeted at solving energy inefficiencies in homes throughout Oregon. As a one-stop-shop brand, we deliver a simple yet comprehensive solution for homeowners, one that removes barriers of high upfront costs; provides access to attractive financing, qualified contractors, and energy efficiency experts; aggregates incentives; and empowers people through education to control energy consumption and costs in their more comfortable and functional homes. The business platform is founded in social equity principles and success is measured through energy savings achieved and family supporting jobs created and accessible to everyone. The objective of Clean Energy Works is to transform the energy efficiency marketplace by creating a self-sustaining business that generates demand, attracts financial investment, enables broad uptake and delivers energy savings.

Our Origins

The City of Portland established Clean Energy Works as an independent organization to deliver, within a 3-year grant period, the following results required by the \$20 million BetterBuildings grant from the US Department of Energy:

- Create a scalable, replicable, self-sustaining model for delivering energy efficiency retrofits
- Transform the energy efficiency finance sector
- Leverage capital at the rate of 5:1 (activate \$100 million of investment above the Federal contribution)
- Achieve at least 6,000 residential retrofits and 3.5 million square feet of commercial building retrofits
- Activate or retain 1,300 quality jobs
- Energy savings of more than 300,000 MBTUs
- Measure-life carbon dioxide reductions of 200,000 metric tons



MISSION

Our purpose is broad yet clear.

Clean Energy Works makes it easy for everyone to invest in, benefit from and help create a clean economy through green upgrades in the built environment.

- Easy = Simple access
- Everyone = Historically undeserved communities are intentionally included
- Invest in = Contribute resources
- Benefit from = Triple bottom line returns
- Clean economy = Markets with neutral or positive environmental impacts

Our mission acknowledges that the major issues of our time – climate change and social inequity – are intertwined. An agent who can weave solutions that engage a variety of triple bottom line stakeholders is needed. That agent is us.

VALUES

Clean Energy Works conducts itself according to its values.

Inclusivity

We welcome new ideas and a range of perspectives. We operate with transparency. We offer equitable access to financing and economic opportunity.

Collaboration

We engage with others from a position of partnership. We listen and speak openly and with respect as we resolve complex issues.

Agility

We are nimble and open-minded as we innovate to achieve market transformation.

Integrity

Like the high-quality construction we finance, we do good work with solid ethics.

Accountability

We are performance-based. We get the job done.



Embracing Tradeoffs and Uncertainty

An expansive mission requires focus. Articulating that focus is the goal of this Strategic Plan.

Guided by our values, we diligently wrestle with the real conflicts inherent in what we're attempting. We accept that "doing everything at once" and "making everyone happy" is simply not possible all of the time. Likewise, we are keenly aware that engaging consumers and private capital at a pace equivalent to our climate goals is critical. And we know from history that, if social equity isn't considered smartly and carefully in design stages, and phased in appropriately, it may never get integrated.

Market transformation in three arenas - environmental attributes, economic benefits and social equity - is the ambitious agenda of Clean Energy Works. While the degree of ultimate success is heavily dependent on external parties and conditions, we are mitigating risk and paving the way for achievement by identifying stumbling blocks early, planning alternative delivery paths, transparently addressing partner concerns and applying best practices and the expertise of market leaders. Success will mean that we have created buzz in the residential sector, resulting in heavy, consistent demand that we are able to meet through highly efficient and top quality business processes, coupled with measurement and verification of results. The current Clean Energy Works business offering is aided by the availability of an on-utility bill repayment mechanism, a pool of qualified home performance contractors, private sector financial partner interest, local government engagement, and a degree of consumer confidence. We are supporting each of these features to fullest extent possible.

True Triple Bottom Line Integration: What Social Equity Means To Us

So-called triple bottom line efforts often overlook the third "E" of environment, economy and equity. Clean Energy Works explicitly concerns itself with advancing social equity as it embarks on shaping a new clean energy economy that would otherwise likely repeat historical patterns.

Advancing social equity means that historically underserved populations have access – and support in attaining that access – to resources and opportunities that enable economic and personal health and vitality. Social equity means addressing disparities for low-income households, women and people of color regarding their energy burdens and foreclosure rates, as well as their income levels and job opportunities, as highlighted in reports such as the Coalition for a Livable Future's Regional Equity Atlas, the Coalition of Communities of Color Unsettling Profile report and the Urban League's State of Black Oregon Report.

Clean Energy Works will identify avenues to support meaningful access, ensuring that the work done provides real economic opportunity for a diverse emerging workforce, as well as look to alleviate energy costs for struggling homeowners and renters. Achieving equity calls for steady progress through continuous improvement. It means engaging stakeholders in design processes, setting meaningful targets and establishing systems that ensure outcomes. Advancing social equity is essential to the success of Clean Energy Works.

Organizational Capacity

We are organized as a 501(c)3 to most effectively catalyze public-private collaborations that deliver triple bottom line results, yet we operate like a business. We value and recruit for diversity in our search for team members who are passionate about our mission. Our staff is lean. Our activities are intended to be duplication-free. Much of our work is leveraged through strategic partnerships with organizations aligned with key elements of our mission.



WHAT WE DO

Our Key Activities

We will achieve our desired outcomes by building a self-sustaining business model, one that systemically aggregates resources, delivers streamlined functionality focused on the end-users and continually drives demand. Energy efficiency is our proving ground and our sole focus during the three-year BetterBuildings grant period.

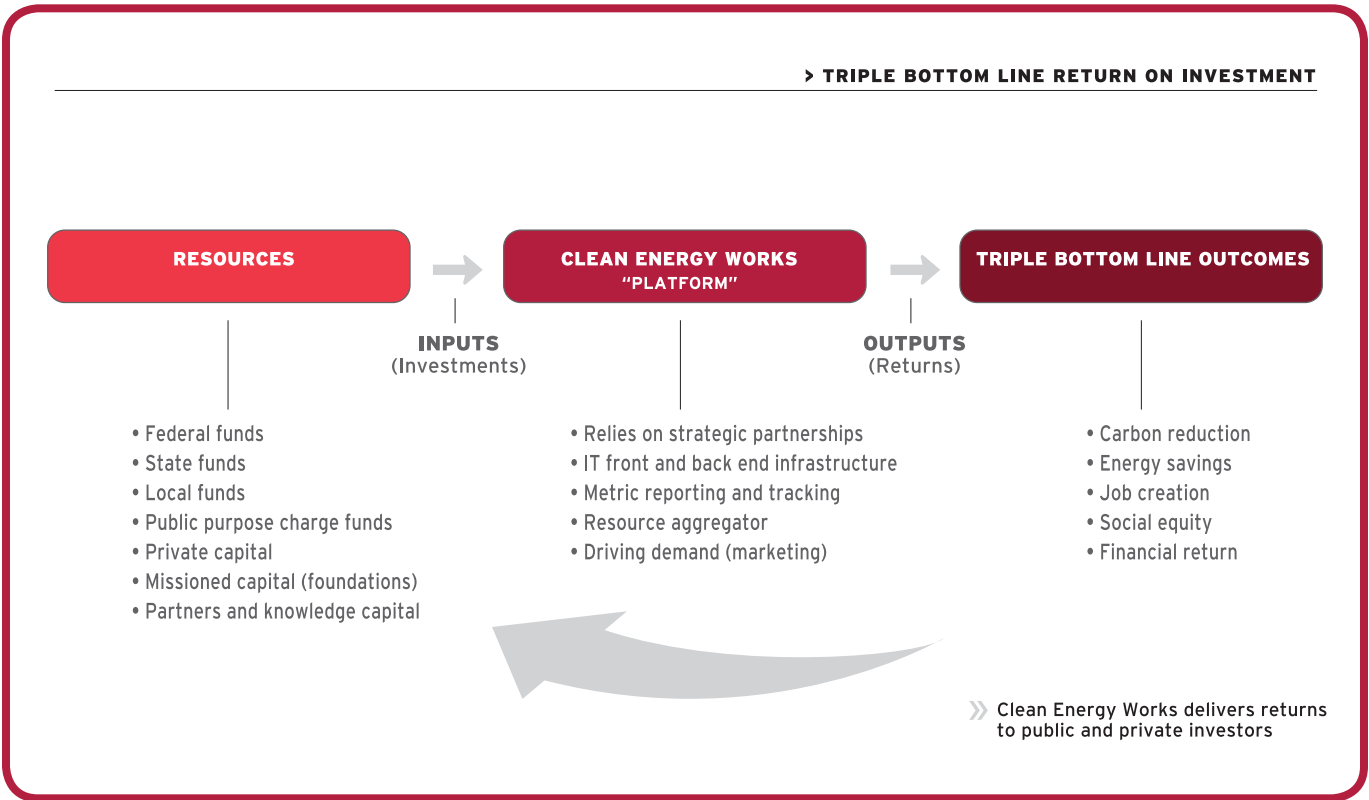
Products and Services

We offer streamlined access to high-quality, deep energy efficiency retrofits. This means:

- Comprehensive home energy assessment identifying biggest opportunities for energy savings
- Combinations of upgrades that typically achieve 20-40% energy savings including insulation, air sealing, duct sealing, high-efficiency space heat (furnace or heat pump) and high-efficiency hot water system
- Work done by Building Performance Institute-certified contractors with qualified competence, high levels of customer satisfaction and highly-trained workers
- Third-party quality assurance
- A one-stop shopping approach that supports customers throughout the process, including an Energy Advisor who facilitates knowledge-based decision-making and provides ongoing customer service
- Attractive financing with utility on-bill repayment convenience

We also offer economic development, energy savings and climate reduction benefits to a variety of stakeholders and partners, who are likewise considered customers. These include:

- Public and private capital partners
- Program partners such as Energy Trust of Oregon, utilities, contractors, community-based organizations and others





Business Objectives

Our overall goals center on selling our products and services at a rate that pushes market volume toward an expanded, mature energy efficiency retrofit industry.

Year 1 Objective

1. Achieve at least 1,000 single-family owned retrofits in targeted Oregon communities where there is readiness and we have capacity

Year 2 Objectives

1. Achieve at least 2,000 residential energy efficiency retrofits in Oregon
2. Explore expansion throughout Oregon with complementary offerings and with complementary building types and occupants

Targets will be set for:

- Single-family rentals
- Small commercial
- Solar, windows and other measures
- Oil, wood stove and other fuel source conversions
- Additional utilities beyond IOUs

Year 3 Objectives

1. Achieve at least 3,000 residential energy efficiency retrofits in Oregon
2. Achieve to-be-determined number of small commercial energy efficiency retrofits in Oregon
3. Explore Washington expansion
4. Perform business planning for new market sectors

Revenue Model Refinement

As we gain experience in the energy efficiency sector during a period of grant-funded financial stability, we will continually evaluate and fine-tune business systems, program offerings, and outcomes achieved in order to drive down costs, eliminate barriers, improve performance and create a self-sustaining, fee-based business.

Our Key Assets

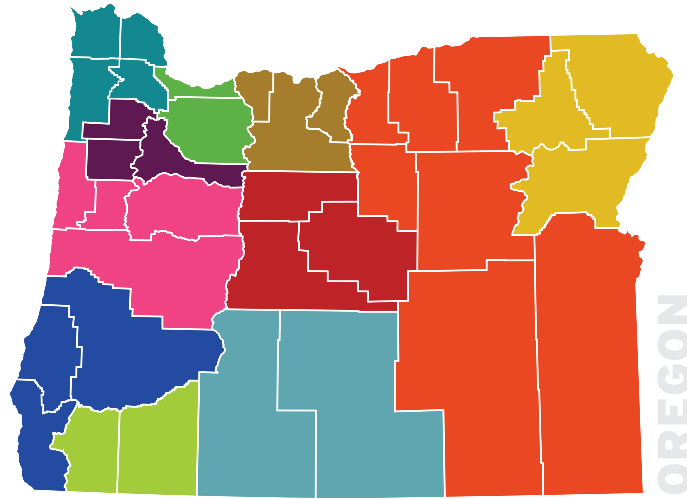
We will build key assets during our initial three-year energy efficiency-focused period and then redirect them toward other triple bottom line market development. These key assets will be:

- A centralized IT platform that attracts and accounts for financial resources that can be transformed into triple bottom line outcomes reported to a variety of stakeholders.
- A loyal following of qualified customers who are motivated to make investments in green upgrades.
- A portfolio of originated loans that performs at levels attractive to a variety of capital partners interested in a range of risks and outcomes.
- A unique set of business relationships ready to align toward resolving complex resource challenges.

Geographic Areas We Serve

Initially, Clean Energy Works will focus on owner occupied housing, which comprises between 60 and 70 percent of Oregon's housing stock, depending on the region. As we prepare to enter specific geographic markets, we will perform in-depth research and build implementation plans that will guide our entry.

> OREGON SINGLE FAMILY RESIDENTIAL MARKET OPPORTUNITY



ECONOMIC DEVELOPMENT DISTRICT	NUMBER OF HOMES	DIRECT JOBS	CARBON SAVINGS (METRIC TONNES)
METRO	221,884	15,020	429,269
COLUMBIA PACIFIC	18,414	1,247	35,625
MID WILLAMETTE	60,327	4,084	116,712
CASCADES WEST	88,022	5,958	170,291
MID COLUMBIA	7,798	528	15,087
CENTRAL	20,717	1,402	40,080
GREATER EASTERN	20,842	1,411	40,323
NORTHEAST	9,212	624	17,822
CCD BUSINESS	35,190	2,382	68,080
SOUTHERN	41,726	2,825	80,725
SOUTH CENTRAL	12,840	869	24,841
TOTAL	536,972	36,349	1,038,855

Figures based on an estimate that 80% of Oregon owner-occupied housing stock built prior to 1990 has not undergone an energy efficiency retrofit. This is conservative according to estimates provided by the Energy Trust of Oregon. Impact models for carbon and direct jobs based on average annual energy savings per job of 362 therms and employment calculations per job for labor, overhead, and Energy Advisor service delivery.



Our overall estimate of market opportunity for energy efficiency retrofits to owner occupied housing in Oregon is based on the number of owner occupied homes in Oregon built prior to 1990, less the number estimated to have already undergone an energy efficiency retrofit. The diagram Oregon Single Family Residential Market Opportunity breaks down this opportunity by economic development district, with a total Oregon market opportunity of 563,972 homes.

The potential market is very large relative to Clean Energy Works' three-year goal of retrofitting 6,000 homes. This fact underscores the importance of creating a platform that is self-sustaining and viable as a vehicle for private capital investment. This platform will provide the business processes to reach an even greater portion of this overall market opportunity.

Centralized Platform, Localized Delivery

As a lean organization, Clean Energy Works relies on a sophisticated distribution model that engages:

- Contractors as installers of energy efficiency measures, as well as key members of the sales force
- Local governments as program managers who coordinate marketing and workforce integration, as well as contributors of public capital
- Banks and other lending institutions as providers of private capital, as well as marketing partners
- Energy Trust as a capital partner providing incentive dollars, as well as an important technical and marketing ally
- Utilities, community-based organizations and others as members of an integrated sales force

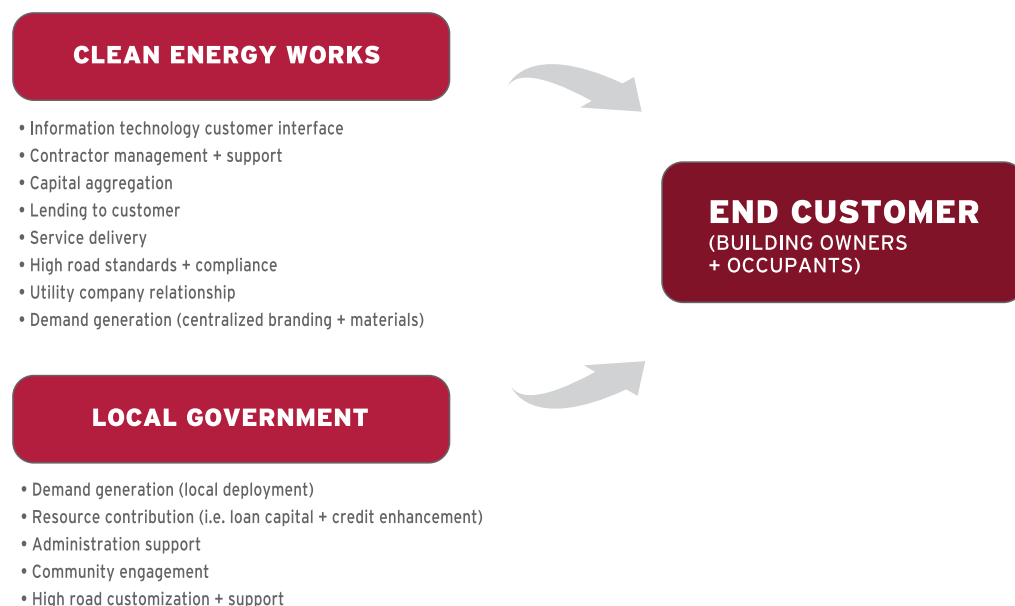
The diagram Clean Energy Works Partners and Transactions, which follows the Finance Plan in this document, illustrates relationships and transactions between these organizations and Clean Energy works.

Clean Energy Works will support local communities with a centralized platform that address local conditions and needs. We will help develop outreach plans designed to achieve local goals for number of projects, jobs and other outcomes. We will create meaningful support mechanisms that promote the development of local businesses in line with our social equity goals.

After an initial assessment and collaborative planning process with a local government, Clean Energy Works will support customization of program delivery with:

- IT infrastructure for program management and systems integration
- Automated tracking and reporting of job, energy and carbon returns
- Training, technical and business support for local contractors
- Support for developing and maintaining High Road goals and metrics
- Branding and web-enabled customer application portals
- Marketing guidelines and templates

In the tri-county metropolitan area (Washington, Multnomah and Clackamas counties), a successful model is already in place with 16 contractors who have been through multiple phases of the Portland pilot. Rural areas will likely require more assistance. We will therefore provide capacity building assistance by helping to develop resources for local demand, contractor and workforce activation. The diagram Clean Energy Works roles and Responsibilities identifies the unique contributions of Clean Energy Works and Local Governments that together will catalyze energy efficiency markets in local communities.



Potential Geographic Expansion

If appropriately capitalized, Clean Energy Works could become a regional or national institution. An early discussion is underway with City of Seattle regarding alignment of IT investments, loan portfolio management, quality standardization and more. Initial expansion throughout the Pacific Northwest within our three-year energy efficiency focused period warrants serious exploration.

Additional Market Exploration

As we build competency in energy efficiency, we will undertake research to determine where our business assets can be redeployed most effectively. Other markets will likely include early-stage sectors facing natural resource scarcity and financial resource fragmentation while gaining capital market attention, such as:

- Water efficiency
- Distributed and renewable energy generation
- Smart grid commercialization and deployment
- Stormwater management
- Eco roofs
- Electric vehicle infrastructure

The diagram Clean Energy Works Evolution illustrates the planned and potential scope of Clean Energy Works over the three-year BetterBuildings grant period, including when distinct implementation plans for distinct sectors will be designed and executed.

YEAR 0-1

Product Offering / Implementation



Single family residential
(Owner occupied)

Product Design



Single family residential
(Rental)



Small multi-family



Small commercial

YEAR 1-2

Product Offering / Implementation



Single family residential
(Owner occupied)



Single family residential
(Rental)

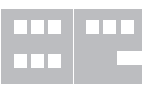


Small multi-family



Small commercial

Product Design



Large commercial



Large multi-family
Affordable + market (Rental)

YEAR 2-3

Product Offering / Implementation



Single family residential
(Owner occupied)



Single family residential
(Rental)



Small multi-family



Small commercial



Large commercial



Large multi-family
Affordable + market (Rental)

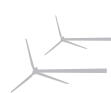
Product Design



Electric vehicle
infrastructure



Water conservation



Community wind



Solar generation

<< POSSIBLE NEW CLEAN ECONOMY PRODUCTS >>

<< FULL BUILDING STOCK REACHED >>



FINANCE PLAN

To deliver its mission, Clean Energy Works must incorporate into its offering a financial product that continually attracts liquidity and leverage from a variety of sources, including most notably private capital markets. To attract institutional investor participation we must design a standardized financial product that delivers a critical mass of volume (number of transactions) and results in demonstrated credit risk predictability.

Finance Objectives

1. Establish predictability of utility on-bill repayment
2. Achieve \$100 million in leverage
3. Achieve ongoing liquidity

On-Bill Re-payment: Establishing A New Risk Assessment Measure

Clean Energy Works is highlighting a new measure for repayment predictability. By underwriting loans primarily based on timely utility bill payment to finance improvements that result in annual energy savings, a lender can create a portfolio of loans with nominal credit risk because in each case the financed improvements create cash flow on the monthly utility bill that is servicing the loan.

Utility bills have historically low default rates in the 1-2% range. By carrying the repayment of the energy efficiency financing on the utility bill we can establish that on-bill, energy efficiency loan default rates mirror utility bill default rates. To establish “predictability,” Clean Energy Works must create effective strategies for originating, warehousing and tracking a steady, significant volume of a standardized on-bill repayment financial product.

Critical Components of the Financial Product

The financial product advanced by Clean Energy Works includes a number of fundamental aspects, including:

- **One-stop shop:** Improvements will only be financed when the work is performed by a BPI-certified contractor with a mechanism to ensure quality control at completion of the work resulting in estimated annual energy savings of a certain threshold.
- **Inclusivity:** The product must be available to customers of diverse credit and income levels. The goal is to open the energy efficiency upgrade industry to more, not fewer, customers and to tolerate slightly higher credit risk on a portfolio basis (when combined with disproportionately lower risk borrowers).
- **Utility partnership:** The product portfolio should be collected efficiently via utility billing systems and have very current data on each customer in order to identify and manage portfolio performance of all loans originated. This “information” aspect is what substantiates and proves “predictability” over time.
- **Opportunity:** Delivery of the product must be linked to the aligned job training and entrepreneurial support functions supported by Clean Energy Works’ partners so that growth in the industry translates to measurable economic opportunity (e.g., wages, benefits, asset building).
- **Replicability:** Clean Energy Works will work with other leading energy efficiency finance programs across the country, including other BetterBuildings awardees, to ensure alignment with a growing national market for energy efficiency investment.
- **Regional:** Our financial product will be designed to consider regional energy and building stock economics in a way that supports both rural access and urban density.



Finance Strategies

Finance Strategy 1: Offer an attractive financial product

It is imperative that we attain a critical volume of loans over time to establish “predictability” of on-bill repayment energy efficiency loans. To do that, we must offer an attractive financial product that is appropriately conveyed within our overall product and service value proposition.

Finance Strategy 2: Primary market engagement

Clean Energy Works intends to originate loans on behalf of local banks and credit unions, internalizing the administrative burden of processing applications and applying underwriting criteria, while serving existing customers and attracting new business for such local financial institutions. Clean Energy Works plans to attract such local financial partner participation by demonstrating an efficient, reliable and inexpensive business process housed at Clean Energy Works while credit enhancing the loans originated with a loan loss reserve. Initially, the loan loss reserve supporting a portfolio of loans with each financial institution is anticipated at 10% of such committed loan capital pool. Another mutual benefit of this primary market strategy is the opportunity for co-branding. The financial partner can communicate to a broad potential customer base that it is actively engaged in job creation through energy efficiency upgrade financing and Clean Energy Works benefits from the visibility and transferred credibility among the financial partner’s existing customer base.

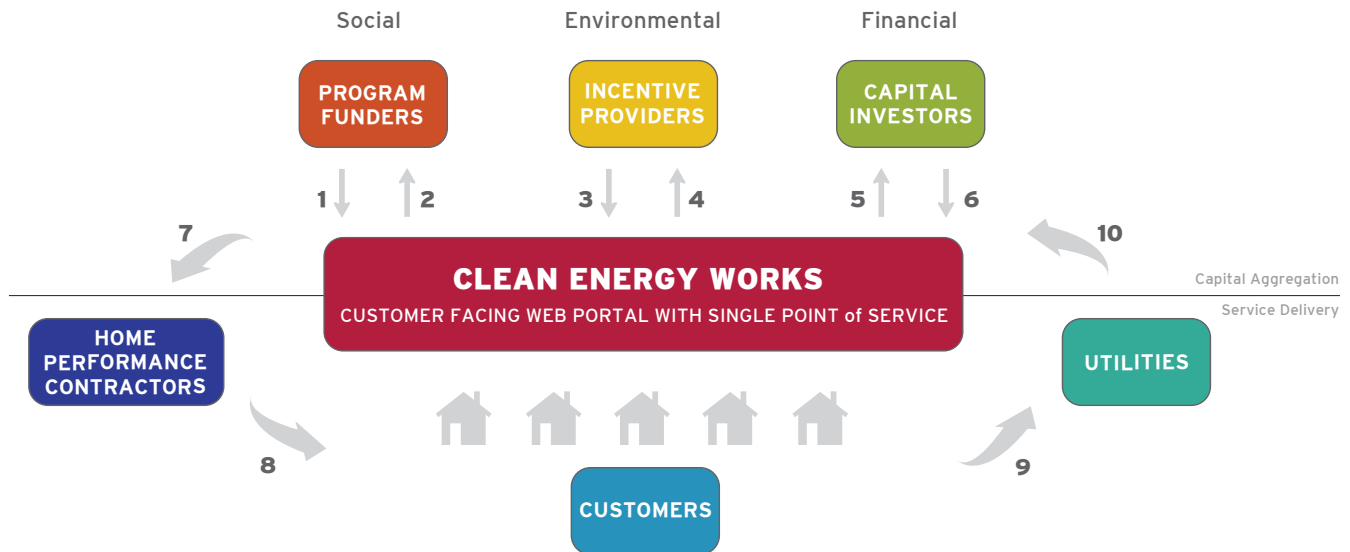
Finance Strategy 3: Secondary market strategy engagement

Clean Energy Works and Enterprise Cascadia intend to partner to securitize and sell an initial \$9-10 million portfolio of loans with the possible support of foundations and a security brokerage. If successful, this liquidity event will return cash available for subsequent lending of Clean Energy Works products. This strategy is critical to achieving mass volume of transactions over a period of time (likely 3-5 years) that is necessary to substantiate “predictability” of these products to the capital markets. We will continue to originate and sell loan assets until the primary capital markets are fully transformed and functioning with minimal credit enhancement subsidy for financing energy efficiency upgrades.

The diagram Clean Energy Works Partners and Transactions illustrates how Clean Energy Works achieves social, environmental and financial returns through capital aggregation and service delivery and the transactions between Clean Energy Works and its partner organizations.



> CLEAN ENERGY WORKS PARTNERS + TRANSACTIONS



Partners	Clean Energy Works	Provides IT platform that streamlines workflow between customer & contractor, automates data tracking, loan underwriting & servicing
	Program Funders	Organizations providing operating funds, credit enhancements, and other financial support beyond lending capital Includes governments and government agencies such as USDOE, state government, and local governments Also includes foundations over time
	Incentive Providers	Organizations providing financial incentives for reduced kwh or btu usage Includes utility funds and utility companies such as Energy Trust of Oregon and consumer owned utilities
	Capital Investors	Institutions interested in long-term capitalization of energy efficiency upgrade loans Includes banks, credit unions, pension funds, and secondary market investors \$4 Million from USDOE available for seed loan origination capital
	Home Performance Contractors	Companies installing energy efficiency retrofits to customer buildings
	Utilities	Utilities serving as a pass-through for loan repayment

Transactions	1	USDOE initially capitalizes Clean Energy Works operations, credit enhancements, and program implementation. Co-funders are State of Oregon, City of Portland and PDC.
	2	Clean Energy Works creates employment and social outcomes by equitably and efficiently growing the clean energy industry. Offers full triple bottom line accounting reports.
	3	Incentive providers offer transactionally based funds associated with actual customer retrofits.
	4	Clean Energy Works creates energy savings for incentive providers through energy efficient retrofits. Delivers environmental accounting.
	5	Clean Energy Works originates loans (products) that finance energy efficiency upgrades.
	6	Capital investors purchase these loans on an individual basis (banks) or aggregate basis (pensions or other portfolio level buyers). Clean Energy Works provides real time portfolio/loan accounting and monitoring.
	7	Clean Energy Works pays home performance contractors for retrofits to customer properties.
	8	Customers receive these retrofits by borrowing an amount equal to the cost of the retrofit work less any incentives.
	9	Customers repay their loans via monthly utility bills.
	10	Utilities remit loan payments to Clean Energy Works.

MARKETING PLAN



Generating demand for home energy efficiency upgrades is vital to driving capital acquisition and achieving our mission. While many have tried marketing home energy improvements to American homeowners – retailers, utilities, contractors, manufacturers, governments and non-profits – there has been limited success in galvanizing homeowners. Some of these organizations have espoused the potential for lower energy bills, others have tried appealing to environmental concerns, greater comfort or even the patriotism of energy independence.

Yet, according to a recent report by the Lawrence-Berkeley National Labs, the only programs that have achieved significant adoption rates are those that deeply subsidized the cost of the upgrades – an approach that is neither financially sustainable, nor politically practical. In contrast, Clean Energy Works will ask homeowners to take on the majority of improvement costs. This lack of subsidies presents one demand creation challenge, others include:

- The decision process on this \$12,000 purchase is complex and lengthy
- The purchase process involves technical jargon and concepts unfamiliar and intimidating to most homeowners
- Unlike solar panels or hybrid vehicles, insulation and new furnaces are inconspicuous and so are less effective social “badges”
- The impact (the absence of wasted energy) is largely intangible and may be undermined by changes in behavior

Lessons from Past Programs

The authors of the Lawrence-Berkeley National Labs report have also been able to draw lessons learned from 14 past residential programs, an extensive literature review, interviews with industry experts and surveys of residential contractors. The authors recommend the following principles to guide the marketing efforts of programs like Clean Energy Works:

- It is not enough to provide information; programs must sell a more appealing benefit such as health or comfort
- Find and target early adopters
- Partner with trusted messengers
- Language is powerful: use language consumers understand, frame statements in terms of loss rather than gain and induce public commitment from homeowners.
- Contractors are program ambassadors
- One touch is not enough

Lessons from the Portland Pilot

There are also lessons to be learned from the marketing channels tested during the Portland pilot. These included traditional media, earned media, community outreach and targeted direct mail.

- Word of Mouth (24%) accounted for the highest share of referrals (11/09 – 05/10)
- Direct mail (17%) and email (22%) were also large sources of referrals, driven by a mailer from PGE and Pacific Power, and emails from the Energy Trust, City of Portland and DHX Marketing (purchased distribution list) (02/10 – 05/10)
- A strong advertising and media presence drove a significant increase in leads



Marketing Objectives

The following marketing objectives have been established:

1. Generate 18,000 qualified leads during the 3 year grant period
Based on the 2.5:1 lead-to-loan ratio from the pilot, it seems reasonable to expect a 3:1 ratio of leads-to-loans as the program scales. Generating these leads is our first marketing objective.
2. Maximize the lead-to-loan conversion rate
Our ability to turn customer interest into action, measured by our lead-to-loan conversion rate, is crucial to achieving our business objectives.
3. Inspire homeowners to make permanent energy efficient behavior changes
Clean Energy Works seeks to inspire responsible energy use among program participants to avoid post-upgrade increases in energy use and energy costs that threaten to undermine our carbon goals and our customers' satisfaction.

Marketing Strategies

The following strategies correspond to the numbered objectives above:

Marketing Strategy 1.1 Target early adopters and influencers in each market

While early adopters may vary by market in their demographics and lifestyle, they are likely to share some the following:

- They feel a sense of urgency about an energy efficiency pain point in their home
- They have already tried something that has not sufficiently addressed this pain point
- They have already invested some time to explore other options
- They are active in their community and in a position to influence others

Marketing Strategy 1.2 Differentiate Clean Energy Works in a way that wins the head, heart and wallets of early adopter homeowners

Rational benefits alone have proven insufficient to generate widespread adoption of home energy improvements. We must identify underlying emotional levers such as comfort, control, confidence and pride. In this way, we will win both the head and heart of a homeowner.

Marketing Strategy 1.3 Build targeted awareness through partners and local campaigns that create a sense that Clean Energy Works is “everywhere”

Through a combination of micro-targeting and grassroots neighborhood marketing, the Clean Energy Works brand will appear “everywhere” from a homeowner’s mailbox to their local coffee shop and will drive them to learn more at our website.

Marketing Strategy 1.4 Engage community organizations and contractors as a virtual sales force

We will provide a suite of sales materials to this virtual sales force and create a sales incentive program that encourages organizations and contractors to distribute marketing materials to targeted homeowners.



Marketing Strategy 1.5 Develop a Community-Based Social Marketing program for local governments and their community outreach partners

Community-based organizations will be enlisted to conduct neighborhood outreach campaigns, while homeowners that have completed retrofits will be encouraged to share their positive experience with neighbors, family members, friends and co-workers.

Marketing Strategy 2.1 Engage applicants with vivid presentations of Clean Energy Works' features and benefits

Clean Energy Works will foster greater confidence among homeowners that have had an energy audit using a suite of visual tools for online and personal sales interactions, including educational videos, infographics and online animations.

Marketing Strategy 2.2 Employ a lifecycle customer contact strategy that nudges applicants through the conversion funnel

A rules-based lifecycle campaign that “nudges” homeowners along with reminders and incentives will be delivered to homeowners through multiple channels such as email, direct mail and text message.

Marketing Strategy 3.1 Increase energy use transparency once a homeowner's upgrade is complete

Explore partnerships with utilities and hardware/software solutions providers that allow homeowners to better monitor their own energy use.

Marketing Strategy 3.2 Create energy-use social norms to which homeowners can compare themselves

Allowing homeowners to see how their energy use compares with that of relevant peer groups (e.g. other families, neighbors and community-wide averages for their demographic) will create a social norm for them to follow.



OPERATIONS PLAN

Demand can only be sustained through effective delivery of service. Our operations approach is focused on ensuring a positive customer experience and quality control to provide homeowner and capital partner confidence, supporting healthy businesses that employ a highly qualified workforce, reinforcing our achievement of High Road objectives and supporting market transformation.

Operations Objectives

1. Support local communities in building workforce, contractor and administration capacity
2. Ensure quality control and customer service through refinement of Energy Advisor role
3. Innovate to support market transformation

Operations Strategies

Operations Strategy 1: Deploy energy advisors to expedite quality projects

The Portland pilot created a highly effective service function embodied in Energy Advisors (termed “Energy Advocates” in the pilot), providing:

- Objective expertise to customers, giving them confidence that they are making prudent investments in their homes
- Support to contractors on scoping and bidding work that meets cost-effectiveness criteria and provides the best value

We recognize the high value both customers (92% reported satisfaction) and contractors placed on Advisor support in the pilot. However, the role of the Advisor needs to be streamlined to encourage efficiencies while preserving the demonstrated value.

Operations Strategy 2: Consistently evaluate quality throughout entire workflow

Quality control is a crucial element in the Clean Energy Works offering. It ensures that contractors are performing top-notch work. It also lends confidence to capital partners that the loans they are making are good investments in durable, high performing retrofits that will provide ongoing value through the loan term. Initially, Clean Energy Works will support technical inspections for 100% of projects completed through the program and may later reduce the inspection ratio if we can confidently do so without negative market impacts.

We will also monitor and measure quality in other aspects of service delivery, including:

- Processing time from application to test-out
- Ease of loan application and approval process
- Customer service provided by contractors, Energy Advisors and loan processors

Operations Strategy 3: Develop a highly-trained, diverse contractor pool

The Portland pilot recruited contractors based on an application that evaluated them on customer service, quality control, and community workforce goals. In the competitive application process, pilot projects were allocated, without significant customer input, on the basis of a ranking of contractors’ applications – the higher the contractor’s ranking, the more projects were assigned to that company. This was an extremely effective tool for creating broad capacity in preparation for a scale-up.



Clean Energy Works will use principles from the pilot, while making modifications to:

- Promote significant demand generation
- Enable more customer choice
- Streamline the selection and monitoring of contractors
- Open opportunities to all contractors who meet the program requirements (High Road goals; quality control results; reporting on audits, projects, and jobs)
- Encourage new businesses, particularly in rural areas where there are few, if any, qualified contractors

We will intentionally recruit historically underrepresented contractors to ensure a diverse contractor base. In communities where few contractors are operating, the goal is to facilitate alliances between experienced contractors and new local contractors. We will also work with local governments to establish an outreach plan to attract local contractors.

Operations Strategy 4: Provide ongoing business support services

In consultation with our allies and stakeholders, we will develop support services for contractors to help their businesses develop into thriving ventures with capacity for growth as the market expands and becomes increasingly competitive.

Clean Energy Works support for contractors will include:

- Sponsorship of local technical training to achieve Building Performance Institute certification
- Business coaching, particularly for accounting, bidding and closing deals
- Marketing plan training and cooperative marketing support
- Mentoring through a network of Clean Energy Works contractors
- Scholarships and other assistance in meeting High Road goals

Operations Strategy 5: Ensure a highly-skilled and diverse workforce

The Portland pilot's Community Workforce Agreement established high-quality work standards while ensuring recruitment and support for underserved populations. To date, pilot results show nearly half of the hours worked being done by people of color, nearly three quarters of employees being provided health insurance and 23 new hires. Over 20% of the pilot construction dollars were paid to historically underrepresented firms.

Our workforce approach will be largely defined by a statewide High Road Agreement, which will build on the efforts of the Portland pilot.



CLEAN ENERGY WORKS STATEWIDE HIGH ROAD GUIDING PRINCIPLES (DRAFT)

The Clean Energy Works High Road guiding principles will ensure that all contractors are abiding by rigorous standards and that high-quality, family-supporting jobs are created. These principles will be broad enough to encompass each community's particular social and economic equity concerns, but clear enough to be measurable and meaningful.

1. **Hire Local:** Work performed by workers residing in or near local communities.
2. **Family-Supporting Jobs:** Wages will not be less than 180% of state minimum wage.
3. **Health Insurance:** Workers will have access to adequate and affordable health insurance.
4. **Economic Opportunity:** The workforce and businesses will be comprised of a percentage of historically underrepresented people, which could be defined by, but not limited to: women, people of color, veterans, low-income residents or people who have been unemployed for the last six months.
5. **High-Quality Work:** Entry-level new-hires will be graduates of qualified training programs. Contractors will be Building Performance Institute-certified Energy Trust Trade Allies who have excellent customer service histories.
6. **Accountability:** Contractors and local governments will be held accountable to High Road principles through effective compliance mechanisms.

Operations Strategy 6: Coordinate with supply chain development efforts

We will coordinate with partners, including the Portland Development Commission, Business Oregon and other public and private parties, to promote a supply chain that leverages job multipliers by driving demand for locally sourced products. An example of the kind of initiative we will support is the developing arrangement between Parr Lumber and the Home Performance Contractors Guild for discount purchasing of materials used in local projects. When contractors can pass along bulk purchase savings to their customers, they are breaking down a key market barrier and creating growth opportunities for their businesses. It has been demonstrated clearly through initiatives like Solarize Portland that bulk savings delivered locally drive customers to follow through on a significant purchasing decision. The more demand we grow over time, the more Oregon's economic development organizations will be able to attract manufacturers of materials and equipment used in residential efficiency projects.

Operations Strategy 7: Establish technology innovation partnerships

We will pursue alliances with manufacturers, USDOE, the Home Performance Guild and other participants in the value chain to:

- Decrease project costs through bulk purchases that can be passed through to customers
- Support market transformation by helping to commercialize promising new technologies, such as high-R windows or residential power monitors, and
- Test new approaches in the clean energy marketplace through research and development pilots and other initiatives supported by market-leveraging grants



INFORMATION TECHNOLOGY PLAN

Use of information technology (IT) and effective systems design are core practices for Clean Energy Works. Much of what we provide will be delivered through online web applications, and our information systems will largely determine our ability to provide excellent service and adequately capture triple bottom line measurements across diverse geographies and numerous organizations.

Currently, an ongoing, intensive review of business processes performed by pilot partners is informing where process and IT improvements can be made and existing systems leveraged.

Required features of an integrated IT platform include:

- An appealing, intuitive web interface that provides users with a range of product and service options along with real-time information and interaction with contractors.
- Tracked and reported metrics that enable assessment of impacts like job creation, energy savings and loan portfolio performance. This component might best be characterized as an integrated “triple-bottom-line accounting” system.
- A secure but transparent and fully auditable back-office server environment that can interact with multiple organizations such as utilities, contractors, governments, workforce compliance agencies and capital partners.
- A composite system design that reuses components but allows quick reconfiguration of business process workflows.

Information Technology Objectives

1. Centralize business processes
2. Ensure high quality information-sharing among partner organizations
3. Enable comprehensive reporting for consumers of job, energy and carbon data

Information Technology Strategies

Information Technology Strategy 1: Deploy open system design

We will build our an enterprise system by integrating publicly available web services and managed services with web services implemented by or on behalf of our partner organizations. Using open standards for transmitting and sharing data, our IT solution will orchestrate business workflows and aggregate information to create a comprehensive platform for program management and reporting.

Information Technology Strategy 2: Sequence release activities to ensure quick time to market

The platform will be developed and delivered in a number of major releases, based on business priorities, so that portions of the overall platform with high value and impact are delivered first.

Information Technology Strategy 3: Continuously improve through development of a user feedback loop

Clean Energy Works will obtain feedback from users about the production system as it develops and incorporate needed changes into the on-going release plan, thereby refining and improving our service mechanisms over time.

Industry standards and best practices for IT infrastructure and operations are evolving to provide new degrees of cost efficiency and scalability. To the greatest degree possible, the platform will be hosted on proven managed services infrastructure that provides superior reliability and scalability and keeps IT infrastructure and operating costs low.



SOCIAL EQUITY PLAN

As evidenced throughout this Strategic Plan, there are two main avenues by which Clean Energy Works can utilize its business activities to advance social equity: expanding workforce/contractor diversity and equitable access to credit.

Social Equity Objectives

1. Ensure workforce and business opportunities for underserved populations and underutilized firms
2. Expand access to credit

Social Equity Strategies

Social Equity Strategy 1: Set standards for, and ensure compliance with, High Road goals

Through approaches articulated in our Operations Plan, this is the most implementable social equity strategy in the near term.

Social Equity Strategy 2: Assess performance data and align resource development

Through approaches articulated in our Finance Plan, Clean Energy Works is focused on expanding extension of credit to moderate-income households by seeking to prove that on-bill repayment mitigates credit risk. We will also evaluate and improve energy savings estimates over time so that we can seek public and philanthropic resources to buy down principle amounts, as well as generate reliable data to back up the assertion that loans will not overwhelmingly increase debt burdens on already struggling individuals.

At the present moment, there is an acknowledged tension between workforce equity and credit access equity. It is important to note that energy efficiency retrofits currently involve high program delivery costs, low predictability of performance and high contractor pricing due to early-stage business models for home performance work. With increased transaction volume, Clean Energy Works expects to drive down the cost of both program delivery and contractor services and increase the predictability of home retrofit energy performance. As these trends materialize, Clean Energy Works will continually advance strategies for achieving social equity through lending practices.

The diagram Transaction Volume and Resulting Economics illustrates the impact of transaction volume on jobs, costs, and the predictability of energy performance and loan repayment.

> TRANSACTION VOLUME and RESULTING ECONOMICS

DRIVER

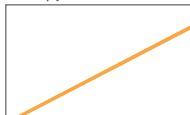
Transaction volume



time >>

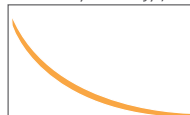
RESULTING CHANGES OVER TIME

Quality jobs created



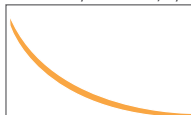
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Uncertainty of energy performance



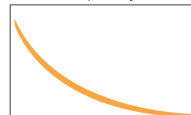
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Uncertainty of loan repayment



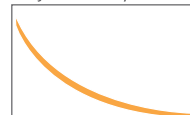
time >>

Contractor pricing



time >>

Program delivery cost



time >>