New Energy Cities Action Plan

City of Edmonds, Washington

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Introduction

The world stands on the cusp of a profound transition in how we produce, distribute, and utilize energy from an inefficient system dominated by a few centralized and polluting technologies to a much cleaner, smarter, diversified, and efficient system.

The drivers are many: from volatile costs for traditional fuels, to instability in the Middle East, to serious health and environmental threats on the "push" side; to the startling scale-up of capital flows into new energy companies, and the stampede of skilled entrepreneurs, engineers, and business strategists migrating to the sector on the "pull" side.

Energy is essential to our economy and our way of life, globally and at the community level. While fortunes will be made and lost in the global race to commercialize new energy technologies and businesses models, ***communities have much to gain by taking charge of their energy future and driving sustained investment into the local built environment and energy infrastructure.***

In communities across America, local residents, businesses, and public agencies spend millions of dollars each year to buy energy—often dirty energy—from outside the community. By using energy more efficiently and by producing more energy locally, communities can reduce the outflow of energy dollars, keeping more dollars circulating at all sorts of local businesses close to home. In addition, when communities harness millions of dollars for energy efficiency retrofit work and new energy infrastructure projects, they directly create good, family-wage local jobs in the trades.

Most communities will follow paths well-trodden; a handful will pioneer the new energy future and create the playbook for the rest to adopt. The City of Edmonds is stepping forward to become a pioneering community for the new energy future. But if this level of leadership were easy, hundreds of others would have done it already.

The purpose of this Action Plan is to guide the collaborative work of regional public, private, and civic leaders in the City of Edmonds to create a model for new energy leadership so successful that it inspires others to follow. It offers a sequence of prioritized actions for the 6-month, 18-month, and 36-month time horizons designed to put the pieces in place, build the capacity, and establish the trajectory to accomplish the ambitious, long-term goals of the community.

Background

Climate Solutions, a Northwest-based nonprofit organization whose mission is to accelerate practical and profitable solutions to global warming, launched the New Energy Cities program in 2009 to assist a diverse handful of pioneering small- and medium-sized communities to embrace a new energy future. The program focuses on a comprehensive systems approach that integrates energy efficiency; smart power grids; green intelligent buildings; plug-in electric vehicles; energy storage; and renewable power sources, such as wind, solar, geothermal, and biomass. Maximizing local investment and economic development is a key goal of the New Energy Cities program.

Climate Solutions asks the pioneering cities, counties, and the communities in the New Energy Cities Program to create a 20-year clean energy strategy with concrete steps to take in the first three years that can be financed with patient capital. Our goal is to work with a variety of cities to create different models that can be replicated with similar success elsewhere throughout the Northwest region and the country.

Ultimately, New Energy Cities aims to inspire hundreds of communities to replicate and adapt successful models of city-led energy transformation, and to remove the key policy barriers that stand in their way.

The New Energy Cities Program was first introduced in Edmonds in January 2010, when the Sustainable Edmonds volunteer civic group held a public meeting on new approaches to local clean, renewable energy systems, at which the manager of New Energy Cities program was a speaker. Soon after that meeting the City of Edmonds first approached Climate Solutions in early 2010 about the possibility of becoming a New Energy City. The City signed a contract to conduct a day and a half New Energy Cities Workshop with community stakeholders on January 27-28, 2011.

During the Workshop, the New Energy Cities team provided participants with a comprehensive view of community energy systems, and identified clean energy and energy efficiency opportunities to consider when creating a new energy future for the City of Edmonds. The team presented an Edmonds Energy Map (Appendix A) to illustrate the sources and uses of energy in the city and the corresponding carbon footprint profile. Participants also began the development of a Roadmap for the City based on input of Workshop participants, which Climate Solutions then fleshed out to draft this Action Plan and is attached in a separate document.

Framework

This Action Plan provides the City of Edmonds and its key stakeholders with suggested actions in a phased approach to allow the community to connect discrete initiatives to a larger vision and engagement strategy; leverage current assets; create a pathway to additional resources over time; and get started on a 20-year program to create a new energy system for the City of Edmonds.

To position Edmonds for early success, this Action Plan is organized into the following sections:

I. ***Putting the Pieces in Motion*** – the first six months – addressing key capacity needs, building alignment and support for actions, determining governance structure, and setting things in motion.

II. ***Catalytic Projects, Policies, and Programs*** – months six through 18 – rapid implementation of catalytic projects, linked to key strategies, substantial policy and resource development through extensive community engagement.

III. ***Setting the Strategy*** – months 18 through 36 – refined and focused long-term strategic plan for a new energy system, reflecting experience gained from the earlier catalytic projects and new policies created as a result of lessons learned in the first 18 months of the project.

The underlying premise of this Action Plan is that the City of Edmonds is in a position to offer cutting-edge leadership on energy systems because its political leaders are focused and motivated; its citizens and business community are engaged and supportive; and its two utilities, Snohomish County Public Utility (SnoPUD) and Puget Sound Energy (PSE), are willing to collaborate on new energy solutions.

This Action Plan is designed to build upon the excellent work that is already in place and foster decisions for and accelerate implementation of an aggressive and comprehensive strategy that will move the City of Edmonds into the forefront in the Northwest in clean energy leadership.

Phase I: Getting Started–First Six Months

For the first six months—April through September, 2011—we recommend that the City of Edmonds focus on narrowing the choices among the action areas listed below. In each

action area, the city could proceed by developing a workplan, determining responsibility, assigning tasks, and determining funding for successful implementation.

The New Energy Cities team strongly recommends establishing a governance structure for the effort. Consistent leadership focusing on meeting performance metrics is paramount for a successful New Energy Cities action plan.

Action Areas

1. Community and Public Engagement
2. Project Development
    a. Energy Efficiency in Buildings
    b. Distributed Generation
    c. Main Street Project
3. Financing Options
4. Policy Initiatives

Community and Public Engagement

New Energy Cities must engage the people and businesses in their communities. An informed and active community is vital to creating catalytic projects, and to embracing the policy and program decisions necessary for success. A robust, sustained outreach and education effort has to receive priority attention for any city aspiring to become a New Energy City.

A consistent theme of the Edmonds New Energy Cities Workshop was the need for broad community engagement and mobilization. Workshop participants emphasized the importance of developing a "brand" for the Edmonds New Energy efforts, one that reflected the values of the community and could be utilized to inspire individual action. There was quite a robust discussion about how to "game-i-fy" carbon reduction and energy efficiency projects.

In addition, workshop participants talked about the value of using known networks and communities as hubs of communication that could be used to expand knowledge and community buy-in about widespread transformation in the way energy is used in Edmonds.

Community and Public Engagement (CPE) Action 1—Education and Networking
These four ideas for networking and marketing emerged as the ones with strong potential for success:

- Create Energy Block captains and throw Energy Block Parties to raise awareness and help neighbors educate neighbors about energy efficiency (people who know each other). Use the voices of successful users of energy retrofits to recruit others. Appeal to people's values.

- Create a program that organizes the influencers in Edmonds who will go out into the community and be spokespeople to build a grassroots movement of support that will bolster the Council's actions. Look at the Imagine Chicago program as a model.
- Advertise at the Taste of Edmonds; high school sporting events; Shoreline Community College Solar Fair in July.
- At the "Welcome to Edmonds" sign, indicate goals for reducing the City's carbon footprint and energy savings and update. Market Edmonds' Energy Awareness as a community value and asset.

Community and Public Engagement (CPE) Action 2—Better Building Challenge

An essential element in Edmonds 20-year energy plan is to reduce the energy usage in its built environment. While the tools available in each building sector may vary, there is a community-wide imperative for action. On February 3, 2011, President Obama announced a nationwide "Better Building Challenge" to reach 20% energy efficiency improvement in the commercial and university sectors by 2020. This may be a constructive framework for Edmonds to use. The City of Edmonds is poised to become a pioneer city in implementing this challenge, given the work it has already done and the focus that committing to the New Energy Cities program has brought to its community leaders around energy efficiency.

New Energy Cities Team Recommendation after the Workshop

2A. Establish Edmonds' Better Building Challenge by Council Resolution. President Obama's Better Building Challenge to achieve 20% energy efficiency by 2020 can provide a framework for community mobilization, education, and engagement. A Council Resolution could establish a work plan for energy efficiency initiatives by building sector.

2B. Game-i-fy Edmonds' Better Building Challenge. The Better Building Challenge can be organized according to specific geographic units as a way to create an energy efficiency challenge between neighborhoods. Elementary schools are one potential for local districts. There are six elementary schools, two K-8 schools, and one high school within the City of Edmonds. The City and SnoPUD could offer a solar installation as a prize.

- Develop the business case for utility involvement and funding based on SnoPUD's 10% Energy Challenge results.
- Partner with SnoPUD and PSE to aggregate energy usage by district and create 2010 baseline. Create baseline report for each geographic district.
- Partner with SnoPUD's Planet Power program to identify resources for a solar demonstration project as a reward for the neighborhood that wins the Better Building Challenge.
- Partner with community businesses to solicit other prizes.

Community and Public Engagement (CPE) Action 3—Electric Vehicles
Another essential element in Edmonds' 20-year energy plan is to electrify the transportation system, most notably focused on light-duty vehicles that people use on a daily basis. With automakers moving quickly to introduce commercially available vehicles, some early steps to facilitate their entry into the local market would be an important step in signaling the promise of electric vehicles. These early steps should include high-visibility actions such as:

- Create an electric vehicle parade down Main Street.
- Create the Mayor's Electric Vehicle Consortium to provide a forum for promoting electrical vehicle use and policy suggestions.

Given the high profile attention being given to electric vehicles, these relatively simple steps are a way to further engage the community around the New Energy Cities Action Plan and Edmonds' commitment to a different energy future.

Community and Public Engagement (CPE) Action 4—Branding
The process of building a highly informed and engaged community will take several years, and should be based on the establishment of an easily-recognized program brand that reflects community values. Workshop participants called for a focused effort on branding to create a coherent theme for the new energy work that the community will undertake.

- Create a committee to engage community leaders and experts in communications to develop a brand for the Edmonds new energy plan and program.

The work that the New Energy Cities team has done to date in other communities serves to emphasize just how important focused community engagement is to building support for the changes that would help communities to truly change their energy usage. We urge the City of Edmonds to give equal attention and resources to developing the communications strategy as it does to the projects, financing, and policy.

Catalytic Project Development

The New Energy Cities approach emphasizes using aggressive pilot projects to test initiatives and encourage innovation. These pilot projects are designed to address existing barriers to transforming the energy system of a community and their success is measured by how effectively they accomplish this. Such pilot projects are catalysts for action, and serve to inform longer-term strategies, build an understanding of economic benefits and attract additional investment capital.

Early pilot projects should be designed with the following characteristics:

- **Quick implementation timeline** – First pilot projects could get started quickly, which means any required construction work could begin in 2011.
- **Applicable** – Pilot project results and experiences transfer to and inform subsequent projects.
- **Financially viable** – Because longer term financing tools will take time to build, the early projects may need to need to test a variety of tools so can learn which will be the most successful
- **Engaging** – Provide opportunities to engage the community and stakeholders actively and visibly to enhance their understanding of project development, its link to the vision and its potential for broad benefits.
- **Measurable** – Early actions should be relatively simple to measure, at least to some degree, so that the results can be reported and used to inform subsequent actions.

During the Workshop, participants identified several catalytic projects for Edmonds' transition to a clean energy future, listed below under the following categories: Building Energy Efficiency, Distributed Generation, and the Main Street Project.

Building Energy Efficiency

Research for the New Energy Cities Workshop indicated that opportunities exist in both the residential and commercial sectors for substantial improvements in energy efficiency. In the residential sector, over 9,000 housing units built before 1980 provide a large target for home retrofits. The New Energy Cities team estimates that a pace of 500 retrofits per year would be required to reach the City's 2035 goal for energy savings.

This section considers a range of actions that encompass the various building sectors. As part of this effort, the City should begin engaging building contractors around the opportunities that will emerge from a greatly expanded energy efficiency initiative. Contractors stand to see substantial business growth, and should be considered early partners. This engagement should

build support for the use of specific tools, such as energy performance scores, concierge service packages and neighborhood targeting. Real estate professionals, including appraisers, should also be engaged early in the process of developing and implementing new projects.

Once this level of engagement has been established, opportunities exist to begin enhancing the economic motivations that can increase participation. One idea brought up in the workshop would involve creating a fee-bate structure that would reward building owners who discloser energy performance and achieve energy performance standards.

Building Energy Efficiency (BEE) Action 1—Municipal Retrofits

Municipal operations comprise the largest component of the community's electricity usage, with over 14,000,000 kWhs per year. As such, an overall strategy by Edmonds should focus on municipal operations at all levels, to identify and prioritize to reduce energy use among City buildings, facilities, or other operations beyond the significant investments the City of Edmonds has already made in its building operations and its wastewater treatment facility. With the potential access to Qualified Energy Conservation Bonds (QECBs), however, additional retrofit opportunities should be explored.

1A. Determine a municipal efficiency target that would lead to substantial energy savings and serve as a leadership step for the rest of the community.

- Solicit and engage and energy efficiency services organization to conduct municipal retrofit review.
- Analyze energy efficiency opportunities at Edmonds Wastewater Treatment Plant.
- Conduct review of Francis Anderson Center energy audit.

1B. Work with Snohomish PUD to implement streetlight efficiency pilot project.

1C. Identify energy efficiency opportunities with the Edmonds School District.

Building Energy Efficiency (BEE) Action 2—Single Family Retrofits

Sustainable Works and Sustainable Edmonds have partnered to launch a 120-160 home retrofit pilot project. A large percentage of these retrofits will be completed by May 2011. The key financial components for this pilot include SnoPUD incentives, PSE incentives, and American Recovery and Reinvestment Act (ARRA) funding through Snohomish County and the State of Washington. In addition, Snohomish County is launching a residential loan program for energy efficiency retrofits. This program will offer loans up to $20,000 for 10- to 15-year terms at a discounted interest rate.

In this instance, Edmonds is already moving forward on a pilot project, and this effort should be supported and well understood so that key questions related to increasing building retrofit activities are identified and addressed. New ways to financing energy performance retrofits

need to be tested, as do means of increasing the number of buildings that enter the program as it matures. A careful review of the results of the Sustainable Works/Edmonds pilot should help to assess how to move forward after this initial work at a larger scale.

2A. In conjunction with Sustainable Works, conduct a review of the residential retrofit pilot. Outcomes of the review should include:

- Number of home energy assessments conducted
- Number of retrofits completed
- Number of loans
- Average and total energy savings
- Average and total utility incentives
- Carbon emissions eliminated
- Case studies for promotional materials
- Identification of barriers that prevented homeowners from initiating a retrofit

A critical component of energy efficiency retrofit programs, in addition to direct financing options, is a service that facilitates the retrofit process for homeowners. Sometimes referred to as an energy concierge service, this facilitation works with property owners through the process of energy assessment to bid to financing to retrofit and can help overcome several small barriers to participation. Any review of the residential retrofit pilot should explore how this service impacts homeowners' willingness to participate in the retrofit process.

2B. Engage SnoPUD and PSE to review utility incentive programs and operations. Several aspects of existing utility incentive programs should be included in the review of the retrofit pilot:

- Uptake rates of residential incentive programs in pilot
- Utility incentive metrics
- On-bill financing options for loan program

2C. Leverage Snohomish County residential energy efficiency loan program. Snohomish County made a preliminary award of $650,000 in credit enhancement funds (loan loss reserve and interest rate buy-down) to a local lender. This Snohomish County program will be available for use by residents undergoing home retrofit projects and will provide between $6.5 and $13 million in financing for countywide retrofits.

Building Energy Efficiency (BEE) Action 3—Commercial Retrofits

Commercial buildings use 28% of the overall building energy consumed in Edmonds, and the top 20 commercials customers use 48% of the sector's electric energy. An effort to target those large customers is a simple and effective way to gain some early momentum in terms of increasing building efficiency.

3A. Convene grocery store owners to define energy efficiency goals for sector. The six grocery stores in Edmonds consume over 12,000,000 kWhs of electricity per year, nearly as much as the entire municipal operations. Through the Better Building Challenge, Edmonds can bring together grocery store decision-makers to:

- Establish a sector goal, consistent with the Better Building Challenge
- Identify best practices and products for energy efficiency improvements
- Establish 2010 baseline and develop a monitoring methodology

A concerted effort here should produce substantial gains in efficiency, and a small amount of research and analysis could help create a high-impact program that will product strong benefits.

3B. Engage Swedish Medical Center (Stevens) to define energy efficiency goals for the facility. The Swedish Medical campus in Edmonds consumes over 7,700,000 kWhs of electricity. As with the grocery stores, the City should engage executive-level decision-makers at Swedish to:

- Establish an energy efficiency goal, consistent with Better Building Challenge
- Establish 2010 baseline and develop a monitoring methodology

3C. Secure engagement of other commercial building owners and operators. Retail, restaurant, and office buildings consume over 5,000,000 kWhs of electricity in Edmonds. Under the coordinated communication strategy of CPE 2A, secure the participation of (X number of buildings, % of buildings) for energy efficiency improvements.

Building Energy Efficiency (BEE) Action 4—Nonprofit Retrofits

4A. Convene community nonprofit leaders to define energy efficiency goals for the sector, including a variety of organizations such as churches. Community facilities account for nearly 3,000,000 kWhs of electricity usage in Edmonds. The Housing Finance Commission has a loan program available for nonprofit organizations. Under the coordinated communication strategy of CPE 2A, secure the participation of (X number of buildings, % of buildings) for energy efficiency improvements.

Distributed Generation

The electrical energy sources for the City of Edmonds emit relatively low levels of greenhouse gases. SnoPUD's fuel mix is predominately hydroelectric generation from the Bonneville Power Administration, in conjunction with some other low-carbon sources. Overall population growth in the BPA service region is likely to create a need to develop more clean sources in order to maintain that standard, and policy pressures may push even further in reducing the greenhouse gas emissions from electricity generation. Edmonds has several opportunities to begin to explore new, distributed sources of clean, renewable energy.

Distributed Generation (DG) Action 1—Edmonds Community Solar Project
Sustainable Edmonds and Tangerine Power have developed a community solar project to be implemented in the City of Edmonds. The current plan for the 75 kW project is to locate it on roof space at the Frances Anderson Center. The project is seeking City support in the form of a lease for the roof.

1A. Complete community solar analysis to guide city decision-making.

- New Energy Cities team provided an analysis of the Edmonds Community Solar project in time for the City Council vote on March 22, 2011

1B. City of Edmonds partners with Solar Edmonds to complete community solar project.

- Based on the results of 1A above and the City Council decision, the City should pursue a community solar project as a catalyst for community interest in solar photovoltaic electricity production

Distributed Generation (DG) Action 2—Waste Heat Recovery
The Edmonds Wastewater Treatment facility uses a sizable amount of natural gas to incinerate residual biosolids. Some of the heat produced in this process is used for the building's thermal load. Much of it, however, is not captured for other thermal uses and is lost as waste heat. With potential development areas located just to the west of the facility, there is potential to utilize this waste heat as a thermal energy source for existing or future development.

Main Street Project

The City of Edmonds was awarded funding for street-front improvements on Main Street between 5th and 6th Avenues. This project has the potential to become a catalytic public infrastructure demonstration. Incorporating smart grid infrastructure and electric vehicle charging stations could provide a case study for a "Sustainable Makeover – Main Street."

Main Street Project (MAIN) Action 1—Electric Vehicle Charging Station
In order to support the transition to electric vehicles, cities will need to provide the infrastructure for electric vehicle charging.

1A. Solicit a charging station from EcoTality and the EV Project for Main Street.

1B. Consider the establishment of a Business Improvement District to cover the cost of charging.

1C. Develop public engagement strategy around EVs in Edmonds.

Main Street Project (MAIN) Action 2—Smart Grid Fiber
Fiber optic cable connectivity is a key component for the development of a smart grid network.

> **2A. Work with SnoPUD's smart grid project to identify opportunities to install smart grid infrastructure in conjunction with Main Street Project.**

Main Street Project (MAIN) Action 3—Energy Efficient Streetlights
The streetlights along Main Street are historic. Their conversion to energy efficient illumination is challenging.

> **3A. Work with SnoPUD and (historic preservation group) to retrofit Main Street lamps with energy efficient bulbs.**

Financing

Financing for clean energy is changing rapidly as communities, utilities, and the financial sector explore new business models and capital structures to accelerate deployment of both efficiency and clean energy projects. This effort requires innovative financing tools to construct a strong business case for individual projects. The most promising financing tools will be those that facilitate the development of specific projects such as those identified above. During the Workshop, participants identified a myriad of existing and developing financing tools for project development as follows:

Commercial Retrofits	Residential Retrofits	Distributed Generation
Off-book lease structure (e.g. Seattle Steam)	**On-bill, 3rd party financing**	**Community Solar model**
Non-profit low interest loans from Housing Finance Commission	**Revolving loan fund (e.g. Wedgewood neighborhood based program)**	**Solar Express through SnoPUD**
Revolving loan fund (ShoreBank Cascadia partner)	**Existing SnoPUD program (2.9% interest, but no incentives)**	**QECB – low interest bonds**
Existing SnoPUD incentive programs	**Existing PSE programs**	**State alternative energy production incentives**
Existing PSE incentive programs	**Snohomish County EECBG funds**	
QECB – low interest bonds	**QECB – low interest bonds**	
On-bill, 3rd party financing	**Snohomish County and PSE program**	
Commercial PACE	**Sustainable Works**	
Carbon Reduction Fund	**Carbon Reduction Fund**	
Business Improvement Association		

The most promising financing tools will be those that facilitate the development of projects identified above.

Finance (FNC) Action 1—Building Energy Efficiency Tools
As building owners consider energy efficiency investments in their properties, they will need access to financing tools that recover upfront capital costs with long-term annual operational savings.

1A. Utilize existing residential loan programs that are backed by a loan loss reserve.
- Aggressively pursue residential loan funds from Snohomish County program.
- Utilize current Sustainable Works financing program through Puget Sound Cooperative Credit Union.

1B. Develop a strategy to enhance current residential loan programs.
- Identify additional sources of capital for loan loss reserves.
- Explore using philanthropic funds.

1C. Work with SnoPUD and PSE to enhance current energy efficiency incentive programs.
- Prepare a white paper on the aggregation potential of energy efficiency retrofits.
- Engage SnoPUD and PSE in evaluation of current incentive program.

1D. Utilize Washington's Housing Finance Commission loan pool for non-profit organizations.
- Aggressively pursue nonprofit loan funds from Housing Finance Commission.

1E. Explore the use of Qualified Energy Conservation Bonds for projects.
- Retrofits of publicly owned buildings that achieve 20% energy efficiency.
- Green community programs.
- Distributed generation.

Finance (FNC) Action 2—Distributed Generation
Small-scale wind, solar, and other distributed generation projects will benefit from financing tools that allow property owners to realize net positive cash flows from their alternative energy production. Similarly, aggregating projects to a community-scale will require patient capital sources for cost recovery scenarios.

2A. Facilitate financing options for development of community solar project.
- Identify most promising location, structure.
- Evaluate financing sources.

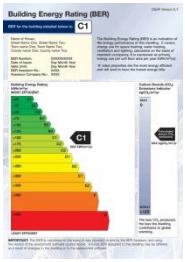
Finance (FNC) Action 3—Main Street Project

The Edmonds Main Street Project has already received a $750,000 grant for street front and lighting improvements. Additional financing tools may provide the resources necessary to implement a "Main Street Sustainable Makeover" project.

3A. Smart Grid pilot funding

3B. Local Improvement District

3C. Business Improvement District



Policy Initiatives

The transition to a clean energy economy requires a supportive local policy environment. Workshop participants identified numerous policy options for decision-maker consideration. New Energy Cities suggests the following action items for potential policy initiatives.

Policy Initiative (POL) Action 1—Building Energy Use

Having accurate information about a building's energy usage is a key component for defining an energy efficiency retrofit strategy. Just like an MPG rating informs a vehicle owner about a car's efficiency, a building energy score can do the same for building owners.

1A. Commercial Building Energy Disclosure. The City may require or incentivize commercial building owners to submit their energy usage information into EPA's Portfolio Manager system. A statewide law is now in effect that requires building owners to provide a Portfolio Manager score upon request from a prospective tenant or purchaser. The City may choose to require an annual report.

1B. Commercial Building Energy Performance Requirement. The City may require or incentivize commercial building owners to reach a minimum score for energy efficiency through the Portfolio Manager systems.

1C. Home Energy Assessment Requirement at the Time of Sale. The City may require or incentivize home energy assessment at the time of a residential sale. This requirement would provide energy efficiency information to customers at a moment of opportunity for retrofit investments.

1D. Building Energy Assessment Requirement at the Time of Permit. The City may require or incentivize building energy assessments as an element of the permit process.

1E. Improve Permitting Process to Incentivize Building Retrofits. The City could enhance opportunities for building retrofits during "intervention points" in the permitting process.

- Require energy assessments with utilities early in the permitting process.
- Include greenhouse gas emissions analysis in SEPA documents.
- Institute "fee-bate" provisions, whereby building permit applicants who plan more efficient remodels or new construction can earn a discount on permit fees.
- Priority permitting for projects planning to achieve greater energy efficiency.

Policy Initiative (POL) Action 2—Water Conservation

The City sets utility rates for water and wastewater services. At this point, rates are based on a per-unit charge. A tiered rate for consumption would send an appropriate price signal for enhanced conservation.

2A. Utility Pricing. The City may consider setting graduated rates for water and wastewater in order to encourage conservation.

Policy Initiative (POL) Action 3—Transportation Alternatives

The use of fossil fuels for transportation is the single largest component of Edmonds' carbon footprint. Two fundamental strategies can reduce this impact—fewer trips and cleaner trips.

3A. Zoning. Land use is the primary driver for transportation options in a community. Alternatives to single occupant vehicle usage are more productive and therefore, more feasible in dense urban environments. The City should establish zoning parameters to enhance transit and alternative transportation-friendly neighborhoods.

3B. Complete Streets. City staff should evaluate each road project to determine if the infrastructure meets the needs of pedestrians, bicyclists, transit riders, as well as vehicles.

3C. Electrification of the Transportation System. Shifting the transportation fuel source from fossil to clean electricity is one of the most effective carbon reduction strategies in the Puget Sound region. The City should evaluate its building codes to determine if there are policies that would enhance the charging station infrastructure.

- Charging station mandates for multifamily construction.
- Partnership with Washington State Ferries on electrical charging station for ferry holding.
- PHEV or EV preference for new city-owned vehicles.

The public transportation system provides another major opportunity for Edmonds to build on its New Energy Cities program. Numerous Community Transit and Metro Bus lines have their final destinations in Edmonds. If these buses are converted to hybrid or full electric engines,

then Edmonds should work with Community Transit and Metro to provide whatever facilities are required for the conversion.

Next Steps

The New Energy Cities team and the City of Edmonds Workshop Planning review this document to refine and complete the Phase I process for prioritization, resource allocation, timelines, and responsibilities. Top of the list is to address the question of project direction going forward. After the team is in place that will guide the City of Edmonds New Energy Cities initiatives, decisions need to be made about which catalytic projects to start with and how they should be scoped and financed. Next attention will need to shift to public engagements strategies. When the projects, policy, financing, and engagement next steps are identified, the region will move on to Phase II implementation.

Overextending early in the process would undermine the overall success of the Action Plan, and so clear focus areas are needed in the beginning. We recommend that the City of Edmonds focus on narrowing the choices among the action areas listed in this action plan. In each action area, the region could proceed by developing a workplan, determining responsibility, assigning tasks, and determining funding for successful implementation.

Phase II: Implementation—6-12 Months

The second phase of this Action Plan centers on getting catalytic projects started, while building the critical relationships and resources needed to deliver these projects successfully and use them to inform future efforts. Phase II is focused on getting early projects implemented, so that the results of these projects can help shape longer-term policies and reinforce the emerging approach to community engagement:

1. Carry out the set of projects that will produce success stories to build upon, as well as data to inform future projects.
2. Roll out a communications strategy, developed in Phase I, with ongoing resources to ensure a consistent message and collaboration with community partners.
3. Refine the potential financing options for future projects, with an orientation toward testing and exploring priority options in order to resolve questions on legal structures, accounting and tax considerations, and risk analysis.

The transition from Phase I to II can be challenging and will reflect the City of Edmonds' ability to mobilize people and resources to prioritize the projects and goals that have been articulated and flesh out the desired projects' scope, scale, and financing.

Phase II should serve as the planning cycle for developing the Phase III timeline, preparing the community for an extension of the pilot projects across the community, refining the financing strategies and models for ongoing, long-term implementation. In addition, this process would create the capacity to monitor progress, measure impacts, assess costs and benefits, and inform adjustments and new directions.

Phase III: Refine and Scale Up-18 Months

In Phase III, the City of Edmonds will get feedback on the impacts of the early pilot projects, and, presuming success, will have extensive political support due to partnership development and engagement with the community. Phase III becomes a threshold step, in which the community moves beyond pilot projects and into an ongoing, consistent implementation program of defined projects over a set period of time.

Phase III provides an 18-month period during which the community could strive to solidify the policy foundation for the next 20 years of project implementation.

1. Create and seed the community's finance and investment vehicles, with a strategy for ongoing funding or re-capitalization.
2. Develop a basket of incentives and requirements to effectively gain universal participation in efficiency, renewable energy, and infrastructure programs.
3. Forge lasting partnerships that ensure that progress is measured, results are communicated broadly, and the program is subject to routine review and analysis for improvements.
4. Invest in human resources to manage implementation of the array of activities, and institutionalize that capacity with stable funding and succession planning.

In Phase III, the City of Edmonds should consider developing a strategy of widespread deployment of energy efficiency, distributed renewable energy, electric vehicle infrastructure, and smart grid technologies that could include the following components. Phase III is too far out to be specific about what might be embraced at this stage of its New Energy City plan, but we feel it is useful to highlight some of the directions that could be explored:

A Long-Term High Performance Building Strategy

A future of very efficient buildings that produce their own energy and are part of an intelligent energy network will require aggressive and consistent efforts over time. Efforts should be made to put building codes in place that would allow for more green building branding, and that development standards and the county's comprehensive plan need to be revised with energy in mind.

A Long-Term Financing Approach

Local jurisdictions that develop innovative policies to reduce the risks associated with investment and add certainty to potential investors should be expected to gain access to long-term, patient sources of capital.

Distributed Renewable Energy Generation

A significant element of distributed generation could be addressed within a high-performance building strategy. However, substantial additional opportunities exist for communities to accelerate and deepen the role that distributed renewable sources could play in their overall approach.

Smart Grid Infrastructure

The City of Edmonds should integrate closely with SnoPUD and its smart grid technology deployment.

Electric Vehicle Infrastructure and Deployment

The City of Edmonds should integrate closely with SnoPUD and EcoTality and its electric vehicle deployment plans.

Ongoing Recommendations

Throughout all Phases of the City of Edmonds New Energy Cities Action Plan, it is important to keep the following three ongoing requirements in mind at all times:

Engagement – A consistent, sustained commitment by elected leadership to invest in engaging the community to fully understand the path and collective benefits to this New Energy System, and to support the needed policies, programs, and investment resources is crucial. This level of collaboration with the community is a significant step beyond traditional engagement efforts, and is critical to success.

Experimentation with New Policies and Programs – New policies and programs are needed, some of which will exceed expectations while others may fall short. The need to experiment and refine our approaches is a fundamental component of the leadership challenge and a defining element of a New Energy City. Such an approach means that elected officials will have to communicate effectively about the process for trying new ideas and refining them over time.

Institutional Capacity – Ongoing resources and training will be needed to support the City of Edmonds' new energy efforts. The community and key partners, from utilities to nonprofits to businesses, all need a focal point for collaboration, and need to be supported by this focal point in order for their efforts to consistently contribute to progress and support all of the innovations in clean energy that the City of Edmonds has such a strong appetite to explore.

Conclusion

Climate Solutions' New Energy Cities program works with innovative city and county leaders that wish to be early adopters of the integrated clean energy system that will bring economic development to their communities, reduce greenhouse gas emissions, and leverage public investment with large-scale private investment.

The New Energy Cities Team believes that the City of Edmonds has considerable potential to be a successful Pioneer City that fundamentally transforms the way it uses and produces energy and that will serve as a model for other cities in the Northwest and throughout the country.

We thank you very much for the opportunity to walk with you down the road to a new energy future for the City of Edmonds and its community and look forward to finalizing this Action Plan and moving into the Implementation Phase.

Appendix A: Edmonds Energy Map