# Portland's Energy Supply: Localize the Power Case Study



University of Colorado Denver Studio II May 3, 2011

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This case study of Portland's Energy Supply, Portland, Oregon was produced by members of the Spring 2011 graduate planning studio class in the Masters of Urban and Regional Planning Program at the University of Colorado Denver. For case studies of The Cape Light Compact, Cape Cod, Massachusettes and Marin Clean Energy, Marin, California and the execive summary, please go to: http://cudenverenergystudio.weebly.com/.

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#### 1. THE VALUE OF PORTLAND AS A CASE STUDY

As Boulder undertakes an initiative to democratize, decentralize, and decarbonize its energy supply, lessons from similar efforts in other communities can help inform its strategy. Two efforts to localize electricity supply in Portland, Oregon seem particularly relevant to the options under consideration by Boulder. The first effort took place from 2000 to 2006. In response to concerns over reliable and stable power supply, various organizations made unsuccessful attempts to municipalize the state's largest investor-owned utility. A lack of coordination between regional, city, and citizen groups contributed to the failure of these efforts. In contrast, a portfolio of coordinated policies and planning efforts over the past six years has successfully promoted residential installations of solar photovoltaics in Portland. As the result of citizen involvement and alignment across all levels of governments, an energy transition towards distributed renewable electricity is underway.

Additional elements increase the relevance of Portland as a case study for Boulder. Portlanders share Boulder's concern for reducing greenhouse gas emissions and thus, the motivation to de-carbonize electricity generation is a commonality between the two cities. Like Boulder, Portland is also known for having a well-informed and vocal citizenry. The role of Portland's citizens was significant in the attempts to form a customer-owned utility and in achieving renewable energy goals. The city's planning department also played a key role in supporting and enabling citizen activism.

Through interviews with city officials and advocacy organizations, the key factors contributing to the failure of the municipalization attempt and the subsequent support for renewable energy are investigated in this case study.

### PORTLAND OREGON

2000 POPULATION 529,121 2000 Median Household Income \$40,146 2000 Bachelor's Degree or Higher 32.6%

2000 LAND AREA 134 Souare Miles

Source: http://ouickfacts.census.gov/ofd/index.html

#### **BOULDER COLORADO**

2000 POPULATION 94,673 2000 Median Household Income \$44,748 2000 Bachelor's Degree or Higher 66.9% 2000 LAND AREA 24 Souare Miles Source: http://quickfacts.census.gov/qfd/index.html

#### 2. HIGHLIGHTED PLAYERS IN PORTLAND ELECTRICITY SUPPLY

Each city contains a unique set of resources and relationships that create the context for its electricity supply. An understanding of three aspects of Portland's electricity supply provides a context for the municipalization attempt and the transition to distributed renewable energy: the state's history of customer-owned utilities, the Citizens' Utility Board and Portland General Electric.

#### 2.1. People's Utility Districts

Oregon public participation and citizen desire to be active in energy decisions are evident by the number of public utility districts in existence, referred to as People's Utility Districts. In 1931, the efforts of farmers and rural customers helped passed legislation allowing the formation of publicly owned and operated utilities. With the advent of the Bonneville Power Administration in 1937, consumers had a viable alternative to the existing power companies and four People's Utility Districts (PUDs) were formed. Two more were formed in the 1980's in response to increasingly high electricity rates from the existing investor-owned utilities.[1] Today the six PUDs continue to operate in Oregon along with 12 municipal or otherwise customer-owned electric utilities.[2]

#### 2.2. THE CITIZENS' BOARD UTILITY

In 1984, the Citizens' Utility Board (CUB), a consumer advocacy and lobbying group, was created through a ballot measure.[3] It represents the interests of utility consumers before legislative, administrative and judicial bodies and it has been particularly influential in shaping energy policy in Oregon and in Portland.[4]

Unlike ratepayer advocacy bodies in other states, the CUB is not within the jurisdiction of the state government. Instead the CUB is self-governing and receives half of its funding through memberships. Any ratepayer can become a member through a donation that is limited to between \$5 and \$100 per year. Currently there are nearly 6,000 CUB members.[5]

Without government funding CUB's budget is considerably smaller than most ratepayer advocacy agencies, but independence from utility or government agendas is also a significant advantage. According to CUB's Organizing Director, Jeff Bissonnette, some of the success of CUB efforts is due to its independence. "We call 'em as we see 'em," he says, because the CUB is not accountable to elected officials, but rather their ratepayer members. Short-term political or economic benefits have little influence over the CUB's perspective. In fact the reverse is a truer statement: the CUB has significant influence over energy policy agendas. Representing a large contingent of ratepayers, elected officials and utilities recognize that having CUB as an ally on initiatives is easier than working against them.[7]

The CUB takes a long-term perspective in their advocacy, analyzing the environmental and social costs of policies. For example, the CUB has supported rate increases to fund energy efficiency and renewable energy investment. They also helped form a coalition of over 100 public-interest groups that worked to craft the Restructuring Law of 1999 and advocate for its passage. [8] This mandate provided a key enabling element for the current citizen-led energy transition.

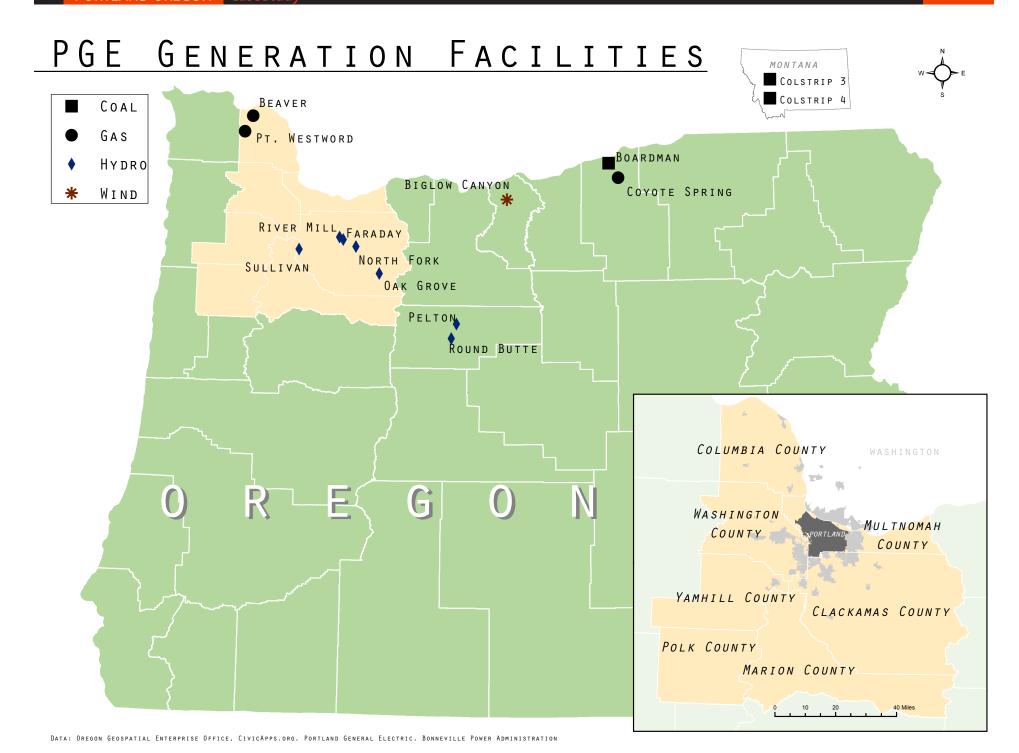
The 1999 Restructuring Law created substantial new funding sources for energy efficiency and renewable energy programs within Oregon. Funds from a 3% public-purpose surcharge on electrical bills are divided among various programs, but the majority, nearly 75%, is allocated to conservation and renewables programs for residents and small businesses.

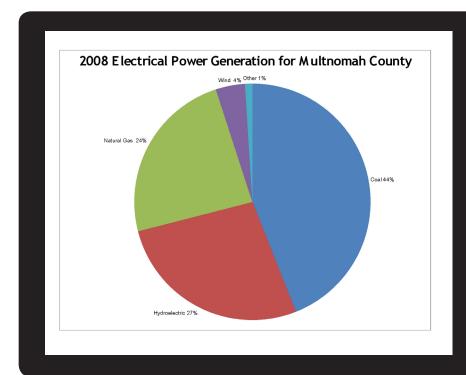
#### 2.3. PORTLAND GENERAL ELECTRIC

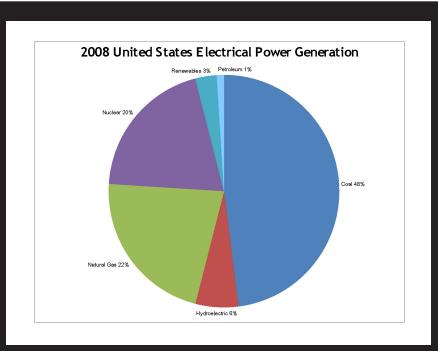
Portland General Electric (PGE) is the largest investor-owned utility in Oregon. It has about 743,000 customers in Northwest Oregon. The city of Portland accounts for a third of PGE's customers in the state. Founded in 1889, it has been an investor-owned utility for most of its existence.[9] Enron bought PGE in 1997 and owned the utility for ten years until 2006.

"OREGON THAT **CONSERVATION RENEWABLES** FOUNDATION OF OUR ENERGY AND ECO-**RESOURCES** NOMIC FUTURE."[6] - GOVERNOR TED KULONGOSKI

2008 Multnomah County 12,081 kWH/PERSON 2010 Oregon Retail Price \$07.48/к**W**н 2010 Colorado Retail Price \$08.31/kWh Sources: Portland/Multnomah County Climate action Plan 2009 WWW.EIA.DOE.GOV/CNEAF/ELECTICITY/ST\_PROFILES/









#### 3. THE PERFECT STORM: MULTIPLE ATTEMPTS TO LOCALIZE PORTLAND'S ENERGY

Portland felt the effects of the California energy crisis in 2001. Wholesale electricity prices per MWh quickly rose to over \$1,000, causing a drastic increase in electricity rates.[11] Historically prices per MWh rarely rose above \$50. Subsequently, PGE raised customer electricity rates by 30% to 50% over a three month period. The ownership of PGE became a related issue for citizens once Enron's role in the California energy crisis became clear. Energy instability and lack of local influence on multi-national corporations became catalyzing issues for Portlanders.[12]

Enron's disregard for local community was further emphasized by a lawsuit regarding Enron's delinquency on ten years of taxes owed the state. The Citizen's Utility Board (CUB) won a lawsuit forcing Enron to repay fees that had been collected to pay the taxes.[13] Local media coverage spent a great deal of coverage on the topics, which helped fuel citizen outrage. The discontent with Enron's ownership of PGE peaked with the energy giant's financial collapse. In bankruptcy, Enron announced it would sell PGE to raise capital.[14] Citizens and city officials saw that this would remove PGE even further from local influence, creating greater instability (and higher bills) for ratepayers.

Citizens and certain city officials believed that local public ownership presented the best solution to concerns about PGE, but no consensus was generated on how to proceed. Different proponents pursued several separate solutions over the next three years. Discussion of a regional public entity to take ownership of PGE rapidly collapsed due to inter-county distrust. Portland attempted several times to buy PGE and municipalize the utility. The possibility of municipalization through a condemnation process was discussed within Portland, which concerned neighboring counties that were also served by the utility. Condemnation threats also created hostility between the city and PGE. Citizen-led attempts to create People's Utility Districts failed to gain enough support but helped created another faction that would decrease

TALK of condemnation...A **SERVICE** LOCAL GOVERNMENTS TERRITORY. ULTIMATELY THE CITY AND COUNTIES TO FORM A TRULY PUBLIC UTILITY.

This can't become a food fight between the city and Willamette VALLEY POWER PROPONENTS. IF THE CITY AND WILLAMETTE VALLEY DON'T WORK TOGETHER, THE LIKELIHOOD IS THAT BOTH OF US WILL FAIL."[10] - BOB JENKS, CUB OREGON

"Enron IMPLODING, **GOING E**NRON WAS CAPITALIZING AND WAS PAYING ABOUT \$10 IN CORPORATE TAXES TO THE STATE OF OR-EGON, MAKING LOCAL RESIDENTS UNHAPPY."[15] - JEFF BISSIONETTE, CUB OREGON

"The main issue for citizens was the growing instability of RON, AND ITS POSSIBLE COLLAPSE."[16] - LOCAL ACTIVIST

support of city-managed municipalization. Finally, an attempt to purchase PGE through a state-level organization was vetoed by the governor.

#### 3.1. REGIONAL EFFORT TO PURCHASE PGE

PGE provides service to seven counties in the region around Portland. The proposal of a Willamette Valley Power Authority was a regional attempt to address the ownership of PGE. The proposal was supported by the CUB, which saw the power authority as a way to unite Portland's leadership with regional representation and outside financial resources. Representatives from six counties within the PGE service area were included. Financial backing to potentially purchase the utility from Enron was obtained from Goldman Sachs.[17]

The inclusion of Goldman Sachs became a divisive element. The community perceived the financial firm as another large corporation to be distrusted, as seen in these remarks made before the city council: "As far as we can tell, the [purpose of the] Willamette Valley Power proposal is to secretly negotiate an inflated price with the Enron creditors...and that debt would be passed on in the additional revenue bonds that the entity would issue." Attorney and activist Dan Meek underscored what became an alternate narrative to the attempt, saying that "...[the] real threat is that the assets are sold in auction to the so-called Willamette Valley Power, a consortium of counties backed by Wall Street."[18][19]

Additionally, the issue of control over a regional utility proved difficult to resolve. Resistance to Portland's regional dominance and its status as the most liberal enclave of the area hindered communication on the topic. Less populace counties were concerned about their role in discussions over PGE's future. PGE encouraged the potential for regional fragmentation, emphasizing the loss of franchise fees and property taxes for outlying municipalities with a Portland takeover of PGE.[20] As another way to weaken the regional coalition, PGE also publicly suggested that they might relocate headquarters from downtown Portland to neighboring Clackamas County.

#### 3.2. SOLITARY EFFORT:

#### PORTLAND'S ATTEMPTS TO MUNICIPALIZE

In 2002, members of Portland's leadership began to push for municipalization. Commissioner Erik Sten and Mayor Vera Katz led the effort. The city of Portland had completed a study of PGE municipalization in the late 1990's and the study gained sudden relevance with the interrelated problems of Enron's collapse and the energy crisis.[21] A new study was approved in August of 2002, which created the perception that the city was not fully committed to the Willamette Valley proposal, nor to engagement with either PGE or citizens. PGE CEO Peggy Fowler stated that she had not seen a preliminary study, saying that "I was very surprised and very disappointed...that the city really didn't engage us more in the process." PGE spokesman Dean Funk stated "This is not honest brokering. If it were, the city would...have consulted with PGE."[22] Citizens appeared to have minimal involvement in the city's efforts. At the same meeting, several activists spoke in support of greater public involvement as Portland moved forward, suggesting that this had not been a priority for city hall.[23]

The CUB did not agree that municipalization by Portland was in the best interests of all ratepayers in the long term and remained in support of a regional solution. The city government became split on the issue. Some council members expressed concern over the cost and duration of a fight with PGE, especially without regional support. Council member Jim Francesconi said "...I believe that the days of Portland going it alone need to end, and that a regional approach on public power makes a whole lot more sense to me."[24]

Portland participated in extended negotiations with Enron over the purchase of PGE. The city presented two bids in 2003 and two bids again in 2005. Erik Sten promoted the possibility of public condemnation as a way to forcibly take control of the utility. This was another divisive approach. Francesconi felt that "...to direct an enormous amount of time, energy, and money toward the condemnation process when other pressing issues and needs are out there just doesn't make sense."[25]

Several of Sten's tactics generated backlash for the municipalization attempt. The condemnation option was not popularly supported and strained the working relationship between city and PGE. He was perceived as using citizen-led efforts as useful agitation in a manipulative way as he did so without providing any official support to the organizations. The local media also played a role in discrediting Sten's capacity to manage a utility. When the commissioner was in charge of the water bureau, the agency made an error in software purchases for the agency that had been highly publicized. His credibility with citizens as a capable utility manager was easily undermined because of his taking responsibility for this previous mis-step.

#### 3.3. FAILURE OF CITIZEN-LED ATTEMPTS AGAINST "GOLIATH"

As an alternative path to local utility control, several community groups attempted to create People's Utility Districts (PUDs) in Multnomah and Clackamas Counties. They campaigned to let citizens vote on the PUD option. The campaigns had no backing from local governments, which saw them as unrealistic and distracting to the government-led attempts to municipalize PGE. According to one person involved in the primary PUD effort, the city took an "arm's length approach" to the citizen-led PUD efforts. This didn't mean that the city didn't find them useful: Commissioner Sten arranged for PUD protests during PGE meetings with a potential purchaser.[26]

The initiative was successfully placed on the ballot in 2003, but an opposition group called Citizens Against the Government Takeover created an effective counter campaign. The group was well-organized, it had been created by a professional public relations firm. It also had the resources to produce and purchase television ads as PGE and Pacific Power contributed \$1.34 million to the group. PUD campaigns were outspent by a 60-to-1 ratio and the measure was decisively defeated at the polls.[27]

POPULIST MOVE TO GRAB WHAT THEY BEEN TAKEN AWAY FROM THEM, WHICH IS CONTROL OVER THEIR LOCAL UTILITY."[28]

GARY ACKERMAN, EXECUTIVE DIRECTOR, WESTERN POWER TRADING FORUM

Another People's Utility District effort was started among the precincts that 3.5. WINDOW OF OPPORTUNITY CLOSES had voted in favor of the original PUD referendum. The citizens behind this effort worked to place the initiative onto the special May 2004 ballot, but a court hearing quickly arranged by PGE declared the proposal illegal. The grass-roots citizen initiative ran out of funding and momentum. It was never presented for vote again.

#### 3.4. STATE-LEVEL INTERVENTION

While counties, cities, and community groups pushed competing schemes for public ownership of PGE, Enron pondered its options for the utility. The most promising purchase negotiations began in 2003 between Enron and Texas Pacific Group (TPG).

Local media coverage made the process difficult for Enron. TPG was shown to be a holding company that regularly bought and sold companies to make a profit. TPG tried to demonstrate its concern for the local community by designating a former Oregon govenor to head the holding company that wouldcontrol PGE. The media publicized a financial conflict of interest regarding a state pension fund that was heavily invested in TPG and controlled by the former governor's wife. There was also a sensational underage sex scandal involving the former Oregon governor.[29] Citizen objection to TPG's ownership of Portland's utility based on their lack of civic responsibility intensified with the corruption stories. The transaction between Enron and TPG seemed imminent for several years, but was ultimately rejected by the Oregon Public Utility Commission in 2005.[30] The PUC declared that the sale to Texas Pacific Group would be contrary to the public interest.

The PUC's ruling led to speculation that the state of Oregon could purchase the utility and the state legislature passed a bill to create Oregon Community Power, a body with the power to take over PGE. This attempt lost supporters over the issue of access to federal hydropower, a controversial topic among electricity stakeholders in Oregon. The state attempt to purchase PGE ended with the governor's veto in August 2005.[31]

With the enduring controversy and the final rulings of the PUC, Enron had no quick, easy way to sell PGE. In 2006, Enron decided to disperse its shares of the utility on the open market. The city's attempt to municipalize ended and citizens' concerns about local influence were addressed by the fact that the remaining managers at PGE were all residents of the area.

The municipalization attempt created "all sorts of ill will" between the city and PGE, which the City of Portland has worked diligently to address.[32] As a sign of repaired relationships, the city's planning department actively participated in heated public comment sessions for PGE, on the future of its only coal generation plant in Oregon.[33] With PGE headquarters still in downtown Portland, the city mayor maintains regular contact with PGE's CEO. Because the utility is in fact locally managed, the city experiences more influence with the utility now than when it was owned by Enron. One activist and energy consultant describes the utility as being "as good as a conventional utility could be."[34]

SHADOWY DOORWAYS OF CITY HALL, DETER-MINING OUR FUTURE WITHOUT OUR CONSENT." [35] - DEAN FUNK, PGE SPOKESPERSON

> "Basically, we were legally outmaneuvered." - PUD ADVOCATE

#### 4. Transition to Renewables: a Coordinated, Cross-Level, Multi-Player Approach

As the city's municipalization attempts ended, a more cohesive transition towards localized energy decisions began to emerge. A citizen-initiated program supported with state funding significantly increased residential solar photovoltaic (PV) installations. The program is called Solarize Portland. Factors in the success of Solarize Portland include the extent of state support that the program receives and that the program uses an existing network of local relationships to promote participation.

#### 4.1. ENABLING STATE-LEVEL POLICIES

Oregon's Restructuring Law provided key funding support for a citizenled energy transition with its 3% public-purpose surcharge on electrical bills. Nearly 75% of the surcharge funds are dedicated to Conservation and Renewables programs.[36]

When the public-purpose surcharge was originally created in 1999, the Energy Trust of Oregon (ETO) was also created for the sole purpose of administering the conservation and renewables surcharges funds. It is an independent non-profit whose 11-member board is appointed by the Oregon Public Utility Commission.[37] Its goals include specific targets in energy efficiency and renewable energy generation from small-scale projects. The ETO determines which programs and services best support its goals and has authority to allocate money accordingly.

Separate legislation passed in 2007 allows PGE to work with the ETO to realize energy savings specifically for residential and small business customers. While the ETO works with the business sector, the agency acts independently of investor-owned utilities. Utility approval of programs is not required and does not limit the types of incentives and programs that the ETO can offer.

Also in 2007, the 3% public-purpose surcharge was assured to 2026 by state legislature.[38] With funding guaranteed for such a long time, the public andbusiness sectors know that ETO can provide consistent and stable support for renewable energy programs. In 2010, the ETO spent over \$118 million on efficiency and renewable energy programs.[39]

In addition to the ETO, other state-level stakeholders in Oregon's energy industry have interests that are aligned with a transition to renewable energy.

Each renewable energy project helps progress towards the localization and greenhouse gas reduction goals that the state, county and city have set. The Citizens' Utility Board supports renewables as a stable energy source with low potential for price volatility, which serves the long-term interests of the ratepayers. There is business support for renewable energy because of a growing solar photovoltaic industry in Oregon. Even the investor-owned utilities benefit from Portland's efforts to reduce demand load and fund distributed renewables. As utilities evaluate their options for meeting the state's Renewable Portfolio Standard with 2014 and 2025 milestones, each solar PV system installed increases the renewable energy resources that the utility can purchase from.

"There's a lifestyle issue involved in this, about our penchant for CONSUMPTION...OTHER FIND TO TALK WITH MY CONSTITUENTS AND MY CITIZENS ABOUT IS ABOUT CHANGING LIFESTYLES."[40]

- GOVERNOR TED KULONGOSKI

#### 4.2. SOLARIZE PORTLAND

Solarize Portland is a program receiving ETO funds that has been particularly successful. It is also notable because extensive citizen involvement is a key element contributing to its success. The idea for the program was initiated by an individual who wanted to install solar power. She thought that a group of neighbors could collectively learn about the best choices for photovolatics and negotiate a group discount. With the assistance of her neighborhood association, the ETO was approached for support and the first solar PV installation campaign was developed.[41] The neighborhood association took the lead in promoting and running the program, with management and technical support from Portland's Bureau of Planning and Sustainability (BPS).

The program started in June of 2009 with neighborhoods in southeast Portland. Initial responses far exceeded expectations. BPS expected 30 to 40 residents would express interest, but within six months the program had signed up 300 homes.[42] The first wave of success sparked citizen interest across the city and multiple Solarize programs are currently underway. The ETO is making plans to expand the program state-wide to other communities beyond Portland.

#### 4.2.1 How the Program Works

Neighborhood associations have existed in Portland since the 1960's. Leveraging these existing social networks, Solarize Portland was structured to encourage neighbors to learn together, organize their interests, chose the most appropriate vendor and install solar power as a group.[43] A step-by-step process and a list of certified vendors guaranteed that requirements for state tax credits were met.

Free educational workshops were offered to residents to help coordinate interest in solar PVs. One of the educational campaigns was organized by the nonprofit Solar Oregon in partnership with the Oregon Department of Energy, the BPS, and the ETO. Solar Oregon's efforts as a non-vendor third party are one reason why the Solarize Portland program became successful with citizens. The workshops were seen as purely educational, not as sales driven. Thus the program gained credibility since it seemed that the citizens' best interests were the primary goal. Working with Solar Oregon was easy for BPS because they had already worked together before on previous outreach campaigns.

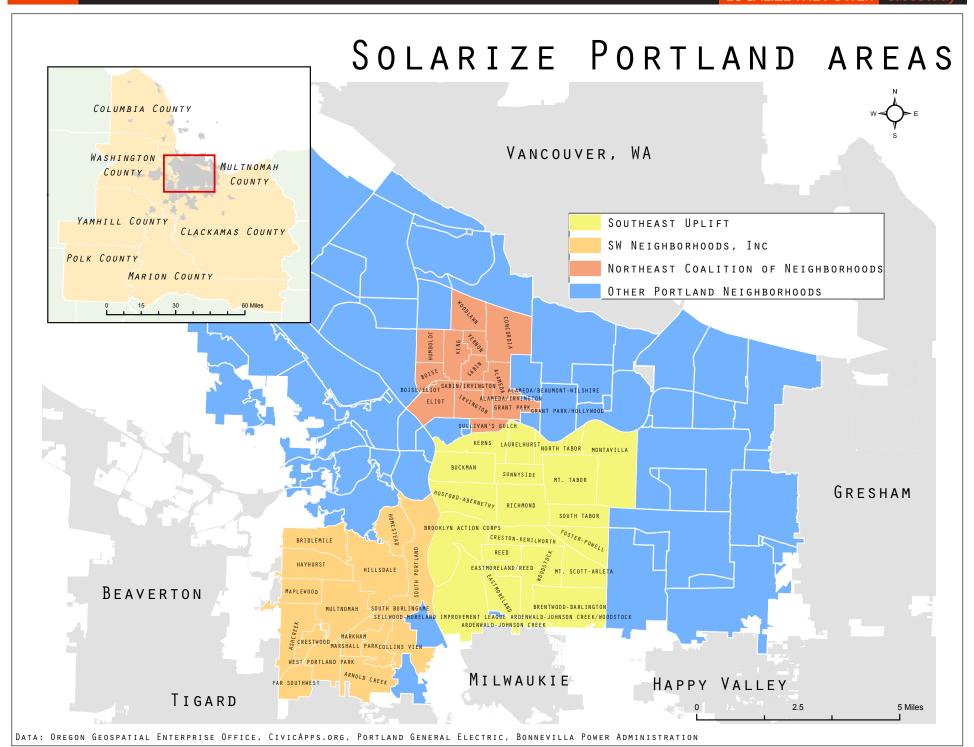
Solarize Portland was seen as being run by the neighborhood association leaders, rather than the city. For vendor selection, rather than dictate which vendors the neighborhood associations should use, the program let each neighborhood evaluate which tax-credit certified solar contractors was most appropriate according to its own priorities and vetting process.[44] While education and price negotiations took place as a group, each individual made their own final decision on whether to sign a contract with the vendor.

Demand for photovoltaic panels is increasing world-wide and they are being manufactured more efficiently year after year. This has resulted in a decrease in PV panels costs. Participation in Solarize Portland helped reduce installation costs for residents even further. Vendors could reduce costs by purchasing in large quantities. The program also found that vendors would offer better pricing when they knew several installations would take place within the same certain time period in a given location.[45] Even PV installations that were not done with Solarize Portland benefitted as vendors worked to be cost competitive with each other.

As a final element to the program, the state offerd tax credits for PV installations. The discounted bulk pricing maximized the impact of these tax credits. The amounts available covered nearly 80% of residential costs in some installations. Because of expiring tax credits, there was a "limited time offer" on this deal, and the city has noted that a sense of urgency helped spur citizens into action.

## SOLARIZE PORTLAND

ACTORS	OUTREACH/EDUCATION	TECHNICAL ASSISTANCE	FINANCIAL ASSISTANCE	
ENERGY TRUST OF OREGON		PROGRAM DESIGN TEMPLATE, RFPS FOR CONTRACTOR SELECTION	CASH INCENTIVES, TAX CREDIT AND FINANCING WORKSHOPS	
NEIGHBORHOOD COALITIONS	VOLUNTEER LABOR, MARKETING, OUTREACH, WORKSHOP PLANNING		SOLARIZ	E
Bureau of Planning and Sustainability	DESIGN OF OUTREACH MATERIALS, INTRODUCTORY WORKSHOPS	PROGRAM MANAGEMENT, PROJECT COORDINATION, STEAMLINED PERMITTING, SUPPORT ON RFPS	STARTED  STARTED  STARTED  STARTED  STARTED  STARTED  SOUTHE  UPLII	SOLARIZE NOW!
Contractors		FEASIBILITY AND FINANCIAL EVALUATIONS, BULK PURCHASING, TECHNICAL WORKSHOPS	ENERGY TRUST OF OREGON  OREGON  CONTRACT	AL CE, M
SOLAR OREGON (AMERICAN SOLAR ENERGY SOCIETY)	"SOLAR AMBASSADORS" AT WORKSHOPS	ASSISTANCE WITH BUILDING CUSTOMER DATABASES	DEPARTMENT OF ENERGY  SOLAR AME CITIES O	BUREAU OF PLANNING AND
09: SOLARIZE SOUTHEAST 2010: NW PORTLAND 120 INSTALLATIONS SW PORTLAND SE, ROUND II 400 INSTALLATIONS			SOLAR	>



#### 5. Discussion Topics Relevant to Boulder

The two efforts detailed in this case study describe different ways Portland pursued localization. The contrast between the two paths is striking: nearly a decade ago multiple groups lacked a cohesive vision for taking on the regional investor-owned electric utility, while the rapid adoption of renewable energy has since been enabled by coordination between state, local, and citizen groups.

Six topics highlight how a quickly executed, haphazard approach contributed to the failure of the municipalization attempt, yet how the same actors involved in a more carefully crafted, gradual development of connections have achieved a degree of success in localizing Portland's electricity supply through a different path. The six topics of interest are 1) enabling policies, partnerships and planning processes, 2) key leadership roles, 3) the role of regional or national networks, 4) the role of community capacity in creating commitment, 5) the events that created windows of opportunity, and 6) the effectiveness of communications strategies.

#### 5.1. ENABLING POLICIES, Partnerships, AND PLANNING PROCESSES

The municipalization effort was spurred into action by Enron's collapse and consequent efforts to sell PGE. The quick response by Erik Sten and heightened drama created by media coverage didn't allow time for a collaborative process to align multiple stakeholders before the "window of opportunity" closed. In contrast, the current transition to distributed renewables has its foundation in coordinated policies and planning efforts that include influential players across all levels of government along with citizen involvement.

Lack of partnerships and coordination between stakeholders contributed to the failure of Portland's municipalization attempt and citizen-led PUD efforts. A lack of planning effort to create consensus among all the stakeholders may have been due to a sense of urgency and the desire to act quickly with PGE for sale. Yet failure to seek consensus resulted in the lack of critical support at the state level above, and from below at citizen level. Weak communication and the inability to align interests between Portland and the surrounding counties caused the implosion of the region-wide approach. The complexity of the issues overwhelmed newly formed alliances that were not strong enough to succeed within the short window of opportunity. Without a regional approach, the CUB had concerns about the long-term impact that fragmentation of PGE assets would have on all ratepayers, not just those within Portland.

The current energy transition to distributed renewables has evolved more gradually and with stronger partnerships. Energy Trust Oregon is the statelevel organization that leverages public-private cooperation and city-to-citizen relationships, fostering partnerships across sectors and across levels of government. Its mandate is clearly focused on small-scale projects and citizen-driven decisions. While ETO works in cooperation with businesses and utilities, it considers local impact over economic return. The advantage of having a citizen advocate as the third-party administering funds is that the ETO connects directly to the PUC and does not have to seek funding approval through the utilities on renewable energy programs for the community.

Additional state-level policies encouraging the growth of the solar PV industry in Oregon through incentives and tax credits are also synergistic with the ETO's citizen-focused efforts and the state's commitment to reduce greenhouse gases in its Renewable Portfolio Standard. In this way the renewable energy transition relies less on a "window of opportunity" but reflects a fundamental, evolving long-term approach that has the support of a full network of stakeholders.

Effective city planning in support of community activism and the use of local partnerships complete the cross-scalar approach. The Solarize Portland program was started by a neighborhood association and funded by the ETO, but implementation succeeded because of management by the Portland Bureau Planning and Sustainability (BPS). The BPS worked behind the scenes to provide technical support and marketing funds to neighborhood associations. They used existing partnerships to respond quickly to citizen interest, working to simplify citizens' learning curves and streamline vendor-quoting processes. This is how Solarize Portland successfully aggregated a series of individual decisions and created an attractive market for solar PV installers. At the same time, the BPS worked with each community's unique set of priorities and maintained enough freedom in the program for each community to feel ownership and leadership of their project. They were careful not to assume control of the program or encumber progress with city-imposed requirements.[46]

#### 5.2. KEY LEADERSHIP ROLES

In the attempt to municipalize the main protagonist would be Erik Sten. The city of Portland's effort became negatively associated with the Sten's leadership and political style. His polarizing personality made it easier for opponents and local media to challenge the validity of the municipalization approach. Trying to circumvent the consensus process did not lead to success for Sten in Portland.

In the transition to renewable energy, there has been little focus on a single individual leader. The state can be seen as taking the lead in promoting an aggressive RPS and supporting both industry and citizens with related tax credits. Aggressive state policies permit the local leadership in Portland to push further with even more aggressive greenhouse gas reduction goals. But within a framework of supportive state policies, the energy transition relies on local community leadership to mobilize citizens to action.

#### 5.3. REGIONAL AND NATIONAL NETWORKS

An effort was made to create a regional network for municipalization, but there are reasons why the regional effort was not strong enough to succeed. It was formed mainly through the urging of state-level influences, rather than being formed through common goals and interests of all members. A strong coalition might have been positioned to make municipalization work, but more time spent in communication and planning processes would have been required to strengthen the Willamette Valley Power Authority.

For the transition to renewables, the ETO serves as a regional network. It evaluates program successes and drives the effort to propagate the Solarize Portland program to the rest of the state. Portland is a primary test-bed and contributor to ETO programs, but the broader mandate that governs the ETO makes it a more credible leader in promoting regional influence.

#### 5.4. THE ROLE OF COMMUNITY CAPACITY

Influencing energy policy ever since the first vote to allow public utility districts in 1931, Portland citizens have a long history of engagement in energy issues.[47]

The strength of Portland's activist community can been seen in the successful inclusion of the PUD measure on the 2003 ballot, despite a small campaign budget and lack of support from the city. The government leadership may not have viewed the PUD initiatives as realistic and did not exert any effort to include community momentum in its own municipalization attempt, but the investor-owned utilities perceived enough of a threat to invest substantially in counter-campaigns to defeat the measure.

The current energy transition harnesses the power of Portland's grassroots activism and uses existing local relationships to generate citizen interest. The Solarize Portland program relies on city planning support for implementation, but BPS understands how its citizens find trusted sources of information and works within that framework to successfully promote renewable energy programs. The city uses partnerships with educational outreach firms and the numerous neighborhood associations to provide information to citizens and enhance their ability to take action.

An emphasis on supporting community capacity has led to democratic and decentralized decision-making and has helped foster new approaches to move Portland beyond carbon-based energy sources. Future programs based on Solarize Portland will continue to harness citizen-led community action.

#### 5.5. WINDOWS OF OPPORTUNITY

"You have to be super opportunistic," said one city official, because conditions change fast.[48] In Portland, rapidly rising energy costs, an infamous corporate collapse, and an uncertain future for the local electric utility seemed to create the perfect climate for municipalization. Despite this "perfect storm," the utility remained a corporate entity and was nearly sold to a holding company that had no vested interest in local concerns. The window of opportunity closed relatively quickly, within five years, because of Enron's desire to resolve its financial situation. In the end, the city failed to coordinate all the stakeholders in time to take advantage of the seemingly favorable conditions for municipalization.

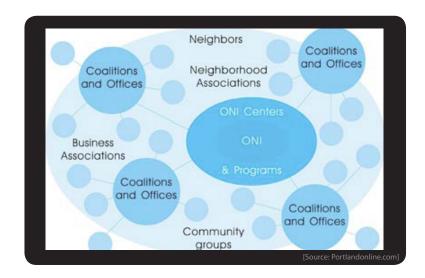
The window of opportunity for solar PV was presented by opportune market economics, but the foundation of coordinated policies, cross-sector support, and city-vendor-citizen partnerships was built over several years. Trust in established neighborhood associations and having the BPS enhance the capacity of those associations was another key enabler for Solarize Portland's success. With a portfolio of policies and networks in place, Portland was well-positioned to take advantage of the opportunity more quickly than other states have been able to.

#### 5.6. Effectiveness of Communication STRATEGIES

It is evident that Enron and PGE had larger budgets to spend on countercampaigning and television ads against PUD and municipalization attempts. Yet, with the level of public distrust in Enron and jurisdictional conflicts, one can surmise that the reasons for the municipalization failure were due primarily to the limited degree of benefit to all the other stakeholders involved. The processes used by the city lent to a haphazard approach that did not successfully address the lack of consensus. The city's "go it alone" approach ultimately contributed to the demise of municipalization efforts, fragmenting stakeholders groups and amplifying state-level concerns about unequal representation. What Portland's municipalization attempt underscores is the value of coordinating institutions and activists at all levels of government to reach consensus on goals and strategies when working against a corporation with deep pockets. PGE was able to fend off near-simultaneous city and citizen efforts.

For Portland, the silver lining to the drama created by the media and countercampaigning is that Enron did not find an easy path to selling PGE as they had wanted. The city's communication strategy to scare off competitive bidders may have been effective, but equally significant was media coverage. In fact, media coverage may have been *more* effective at communication because of the sensational nature of the stories.

A more cooperative communications approach is part of Portland's longterm energy transitioning goals. The city depends on citizen engagement to advance its ambitions goals. Community outreach and education are central in Portland's policies, but the over-arching communications strategy is to provide information through neutral third-parties to the most trusted sources and to let them take the lead. For this reason, Portland's neighborhood associations play a key role. The BPS provides marketing and technical support to neighborhood associations championing renewable energy programs with the help of Energy Trust funding. This supports a model of decentralized and democratized decision-making.



#### 6. CONCLUSION

The conclusion drawn from studying Portland is that the path to democratizing, decentralizing, and de-carbonizing the energy future does not exclusively demand the municipalization of the electric utility. In Portland, municipalization was pursued quickly and without a substantial planning attempt to involve key policy players. This approach resulted in fragmentation among civic and social leaders in the region.

In contrast, a slow and deliberate process to build consensus around renewable energy funding has shown success. Established neighborhood coalitions, whose capacity is enhanced by city support, make citizen action possible. The build-up of support for distributed solar PV comes from a long-view approach with policies, economic development, citizen-focused programs, and planning processes working together. Conflicting interests were eliminated through the creation of several independent organizations to which funding or political resources were allocated.

Significant success has resulted from the coordinated roster of initiatives that tie into long-held values of the community, and indications are that a true energy transition has been set in motion. Due to more than the promotion of a single policy or vision, Portland's energy transition to distributed renewable energy results from a robust civic culture that values participation and localization.

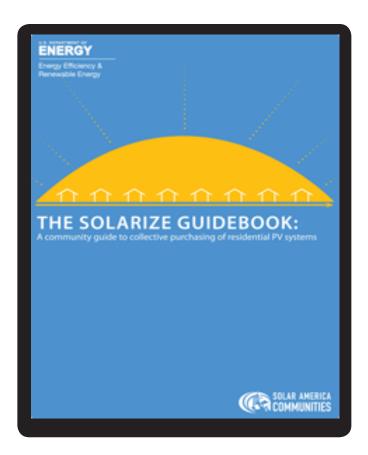
Certain key elements can be emulated by Boulder such as investing in local networks and partnerships to increase community capacity, and establishing independent entities to support individual citizen action, with the overarching goals to aggregate and promote successes broadly. These elements can be added to Boulder's own portfolio of efforts with the current Energy Future at its core. Boulder might be a regional pioneer in its efforts, and the action it takes to shape its energy future can only be strengthened by alignment with local goals, state policy, and regional partnerships.



#### 7. References

"The Solarize Guidebook, A community guide to collective purchasing of residential PV systems"; L. Irvine et al., Northwest Sustainable Energy for Economic Development (Northwest SEED) for U.S. Department of Energy, EERE and Solar America Communities; February 2011.

An excellent resource of detailed "lessons learned" from the Solarize Portland programs. Sample costs are provided and a step-by-step approach to creating similar programs while avoiding common start-up mistakes is given.



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