
LOCAL CLEAN ENERGY ALLIANCE

Advancing Clean Energy for All East Bay Communities

localcleanenergy.org

The 21st Century Energy Greenprint for the East Bay

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A Vision for a Local Clean Energy-Powered Bay Area

The Local Clean Energy Alliance of the East Bay envisions a future Bay Area that consumes significantly less energy yet still maintains a comfortable lifestyle and a vibrant economy. Residents actively and consciously reduce energy consumption and greenhouse gas emissions by making their homes more energy efficient, installing solar power, using alternatives to driving, and conserving and capturing water. Cities are less dependent on fossil fuels. Residents consume less energy on transportation because their cities have been configured around local and regional electrified transit systems. All development is governed by strict land use and transportation planning that requires development to be transit-oriented.

We envision a future for the Bay Area that is largely powered by renewable energy, with the majority coming from local, distributed generation that provides affordable, reliable, and clean power. The Bay Area is a clean energy leader, meeting the state-mandated 80% reduction in greenhouse gas emissions years, if not decades, before the rest of the state, providing a model for other regions and the rest of the country. We envision the Bay Area revitalizing and rebuilding its communities around public gathering places, events, and locally owned businesses, all powered largely by local clean energy. All communities share a vibrant and equitable regional economy thanks to tens of thousands of green collar jobs created by energy efficiency, local energy generation, and local green businesses. Communities source their own power and cooperatively build their renewable power infrastructure.

This is our vision. The Local Clean Energy Alliance of the East Bay seeks partners who share our passion for renewable energy and community vitality and are willing to work for change. Join us in laying the groundwork for a sustainable energy future.

About the Local Clean Energy Alliance

The Local Clean Energy Alliance (LCEA) is a growing coalition of local nonprofits, businesses, and community leaders working for a clean energy future in the East Bay. The Alliance was founded by Bay Localize, Pacific Environment and the Sierra Club. Please see our website www.localcleanenergy.org for a complete and current list of all Alliance members. We believe the Bay Area is particularly well positioned for a transition to a local clean energy economy, perhaps more so than any other region in this country.

Our long-term goal is for the East Bay to meet 100% of its future energy needs with a balanced mix of renewable energy, improvements in efficiency, and conservation. Our interim goal is 50% renewable energy by 2017. Additional goals are to:

- *Reduce energy use through conservation and improvements in energy efficiency*
- *Maximize local renewable energy production*
- *Offer stable and affordable rates for all*
- *Create local business opportunities and green-collar jobs*

- *Facilitate local businesses and residents' ability to sell excess energy to the grid*
- *Ensure that the benefits of local clean energy accrue to all communities*

We are coordinating efforts to mobilize East Bay residents, businesses, and organizations around a regional agenda that creates green-collar jobs, reduces pollution and greenhouse gas emissions, and brings affordable, clean energy to our communities.

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Executive Summary

The Bay Area needs to accelerate its transition to a local clean energy economy. California leads the nation in programs and laws that promote greenhouse gas reductions and the development of clean energy solutions. Bay Area cities and agencies are currently developing their own greenhouse gas reduction and oil independence programs. In the East Bay and the greater Bay Area, our leaders acknowledge that climate change is a serious problem and that green technology and jobs are keys to reducing greenhouse gas emissions. However, when it comes to implementing the touted green tech solutions, we as a region and a state are lagging.

If California is to meet its legally mandated targets for increased use of renewable energy, it will require far greater access to and supply of renewable energy than currently exists. It will also require far more ambitious energy efficiency programs. This Greenprint charts the most effective path for the East Bay to ramp up efficiency programs and renewable energy production.

The closer the Bay Area gets to 100% green energy, the less vulnerable it will be to the rising costs and risks of using fossil fuel and nuclear energy. A study by the Community Environmental Council in Santa Barbara notes that cities face serious costs and risks by relying on current energy supplies. The study found that the cost of electricity generated by nuclear, coal, and gas is projected to rise considerably between now and 2030. For example, if current price trends continue, switching to a 100% renewable power system would save each Santa Barbara resident about \$3,015 annually by 2030.¹

Fortunately, the East Bay has immense potential for producing solar energy, and Oakland and Berkeley are already leaders in encouraging solar installations. Based on a recent case study by Bay Localize, if solar photovoltaic (PV) panels were installed throughout Berkeley, Oakland and Emeryville, they could generate up to 70% percent of the total annual electricity load (see the Appendix for detailed calculations).²

Of all the policy tools available to promote energy efficiency and local renewable power, Community Choice Energy is the most effective. Other highly effective and mutually reinforcing policy tools are feed-in tariffs, Sustainable Energy Financing Districts, and community purchasing programs. Community Choice Energy could be the mechanism to implement all of these programs in the most cost-efficient manner.

¹Community Environmental Council, Oct 30, 2007. *A New Energy Direction: Bold Local Solutions to a Global Problem, A Blueprint for Santa Barbara County*, <http://www.communityenvironmentalcouncil.org/EnergyBlueprint/CompleteBlueprint.pdf>

²Bay Localize. *Tapping the Potential of Urban Rooftops*. <http://www.baylocalize.org/?q=node/48> accessed 1/24/08.

Community Choice Energy

Currently, most businesses and residents in the Bay Area are unable to purchase cleaner energy through the grid. Installing solar panels is one way to have cleaner energy, but is not economically feasible for everyone. Likewise, purchasing “green credits” and carbon offsets are not the same as renewable energy delivered directly to your business or home.

Community Choice Energy gives customers a choice in their energy provider. With Community Choice Energy, cities and counties contract with a licensed energy service provider to purchase energy in bulk, build renewable energy generating facilities, and implement energy efficiency programs. This efficient public/private partnership makes it possible to get the greenest energy at the best rates. Each consumer is enrolled in the program unless they “opt out.” In other words, consumers can choose to buy electricity through the community choice program or stay with the investor-owned utility (IOU). The city or county keeps prices competitive—and affordable for low-income residents—while investing in renewable energy generation and energy efficiency with full citizen oversight. The utility company continues to handle transmission and billing.

Oakland, Berkeley, and Emeryville are considering creating an East Bay Joint Powers Authority for Community Choice Energy to meet a target of 50% renewable power by 2017 and to offer stable, affordable rates. This is a considerably higher percentage of renewable energy than Pacific Gas and Electric (PG&E) is projected to offer by that date. The Local Clean Energy Alliance advocates that any East Bay Community Choice Energy program prioritize local generation of power and equitably distribute the job and wealth creation benefits of local clean energy. The alliance estimates that meeting 50% of the summer electricity demand of Oakland’s commercial building sector through local solar power would create nearly 1,000 new long-term jobs and be a significant step towards Oakland Mayor Dellums’ goal of creating 10,000 jobs for Oakland residents. The Alliance is supportive of local hire polices and workforce development initiatives.

A recent study explored the job creation possibilities of a San Diego Community Choice Energy program that increases electricity efficiency by 40% and installs PV systems on about 20% of its roofs and parking lots. The study found that installing PV panels and electricity efficiency improvements would create more than 123,000 direct job-years of employment over 40 years. This is 13 times more direct job-years of employment than continued dependence on and investment in fossil fuels and nuclear power.³

The Local Clean Energy Alliance advocates the establishment of a community advisory committee consisting of community leaders and local experts to provide oversight for Community Choice implementation and administration.

³ Jim Bell and Dr. Heather Honea, 2007. *Electricity Supply and Price Security in San Diego County: Comparison of Strategies for the Production/Procurement of Electricity and Elimination of Greenhouse Gas Emissions*, <http://www.jimbell.com/mayor/index.html>.

Energy Efficiency Programs

It is often said that the “cleanest kilowatt is the kilowatt we don’t use.” The state of California recognizes that energy conservation and efficiency are the best and least expensive paths toward a clean energy grid. Making the East Bay more energy efficient will save energy, reduce emissions, lower bills, and lessen the city’s consumption of natural resources. In addition, better insulated buildings improve comfort and lessen illnesses for residents and workers. Furthermore, great potential exists to stimulate economic investment and job creation by using the money saved through conservation for building efficiency improvements. Energy efficiency programs often pay for themselves quickly, which benefits the investor.

Community Choice Energy offers a dramatic opportunity to ramp up energy efficiency technology deployment due to two major factors: (1) Community Choice programs have a greater incentive to invest in energy efficiency than IOUs, and (2) there is high potential for reinvestment of “Public Goods” surcharges in the East Bay. A Community Choice Energy program in the East Bay could place the highest priority on energy efficiency improvements that reduce the need for new energy resources, power lines and substations and make living in the Bay Area more affordable for low-income households.

Feed-in Tariffs

Feed-in tariffs enable businesses and individuals that invest in renewable power systems to obtain a predictable and profitable payment rate for the energy they provide to the grid. A stable payment rate would create a powerful incentive for building owners to install larger renewable energy systems that could provide locally generated, clean electricity to customers in their service area. As municipalities and joint powers authorities operating Community Choice Energy programs enjoy low costs of capital and nonprofit status, they could potentially provide more renewable energy and offer attractive feed-in tariffs while still delivering rates comparable to PG&E.

Sustainable Energy Financing Districts

Sustainable energy financing districts, as pioneered by the city of Berkeley, will enable building owners to pay for solar panels and solar hot water systems over 20 years through a special tax on their annual property tax bill. This program overcomes a common obstacle of costly upfront investments which may take more years to recoup than the owner intends to keep the building. The owner immediately begins saving money on electricity bills without incurring the upfront cost of installing a solar system. The interest portion of the assessment may be deductible on the owner’s federal income tax return.⁴ When the house is sold, the solar array and the tax assessment remain with the property, passing on to the new owner.

Another option is to work with redevelopment districts to help finance solar installations and energy efficiency measures. Redevelopment districts spend local taxes in the same

⁴ Tax deductibility depends on financing, IRS, and individual taxpayer circumstance.

neighborhood where they are collected to meet specific neighborhood goals. One of these goals is keeping the cost of living affordable for existing residents in the neighborhood. Decreasing the cost of utilities through energy efficiency improvements and installing solar panels can help keep the cost of living affordable. The Oakland City Council has recently granted funds to the nonprofit Grid Alternatives to install solar PV panels on several homes owned by low-income residents or a non-profit in the one of the city's redevelopment areas.

Community Purchasing Programs

Community purchasing programs are likely to become very popular in the coming years and will make it even more cost effective for East Bay communities to go solar. Community purchasing programs pool a neighborhood's purchases of solar photovoltaics, thermal arrays, and energy efficiency improvements. Buying in bulk, a group can save 20% or more on the individually owned installations. Participating residents can effectively manage these programs at the neighborhood level. However, larger bulk purchasing efforts administered by a Community Choice Energy program could achieve additional efficiencies and cost savings. Coupled with the federal tax deductions and state rebates, community purchasing programs can significantly lower the out-of-pocket cost of solar panels.

Conclusion

The East Bay has great potential to increase our energy efficiency, invest in our community, reduce greenhouse gas emissions, and secure our energy future. The economic, environmental, and social risks of not doing so are formidable. The Local Clean Energy Alliance recognizes Community Choice Energy, energy efficiency programs, feed-in tariffs, Sustainable Energy Financing Districts, and community purchasing as leading policy initiatives to increase energy efficiency and local renewable energy in the East Bay. By pursuing these complementary policies in a coordinated manner, we can increase the resilience and long term viability of our region's electrical grid, create new green-collar job opportunities, and make bold strides in cutting global warming emissions.