



PACE Commercial Consortium

Overview of Announcement

The PACE Commercial Consortium (PCC), consisting of Lockheed Martin, Barclays Capital, Ygrene Energy Fund, Energi and HannoverRe, aims to foster the implementation of energy efficiency and renewable energy projects through private capital financing. Each member organization will bring a unique approach and valuable skill set to the Consortium.

Who is the Carbon War Room?

The Carbon War Room is a non-profit organization founded by Sir Richard Branson that harnesses the power of entrepreneurs to implement market-driven solutions to climate change. The group was formed on Branson's belief that entrepreneurial leadership is necessary to create a post-carbon economy. The War Room's unique approach focuses on bringing together successful entrepreneurs, business leaders, policy experts, researchers, and thought leaders to focus on market-driven solutions. Murat Armbruster, the Director of the Green Capital Global Challenge (GCGC), was responsible for bringing together the PACE Commercial Consortium members in pursuit of the Carbon War Room mission to identify and overcome market barriers. Launched in 2010 at the Winter Olympics in Vancouver, the GCGC aims to mobilize capital and resources into city led energy efficiency initiatives. The Carbon War Room will bring this mechanism to 30 states that are currently participating in the GCGC to promote continued growth of the energy efficiency marketplace.

PACE Commercial Consortium Members

Barclays Capital is the investment banking arm of venerable European bank Barclays. The company provides financing and risk management services for corporate, institutional, and government clients around the world. Barclays Capital is one of the world's most prolific underwriters of fixed-income securities, in addition to providing services for all asset classes. Active in private equity, with typical transactions ranging between £10 million and £200 million, the firm has invested in more than 350 companies. Barclays Capital has offices in more than 30 countries around the world. Barclays has developed a unique financing arrangement with Ygrene that provides private capital to fund demand throughout the PACE county or municipality.

Lockheed Martin, headquartered in Bethesda, MD., is a global security company that employs about 126,000 people worldwide and is principally engaged in the research, design, development, manufacture, integration and sustainment of advanced technology systems, products and services. The Corporation's 2010 sales from continuing operations were \$45.8 billion. Lockheed Martin will be a provider of engineering and energy services and will offer their capabilities to design and construct projects financed through PACE.



Ygrene was first established in the spring of 2006 when Dennis Hunter and Alan Strachan created the Green Energy Loan program. The focus of the Green Energy Loan Program was to acquire private funding to address the problem of climate change. In the summer of 2008, California's landmark AB 811 made possible a more effective model in the form of PACE financing. Almost immediately Palm Desert and Sonoma County took advantage of the legislation to establish local programs. Sonoma County's government funded SCEIP program, under the direction of Treasurer Rod Dole (now a member of Ygrene's Board of Directors), achieved singular success. Recognizing the potential for PACE and the role private capital could play in its growth, Ygrene entered into discussions with Barclays Capital to secure the strong financial partner that would provide the backbone for financing energy retrofits. With strategic and tactical partnerships in place around the country, Ygrene is now in a position to offer a no-cost PACE program design, administration and funding to cities and counties throughout the U.S.

Energi Inc. is a Massachusetts based Industrial Reinsurance Company that provides innovative risk management and insurance programs to the energy industry. Established in 2005, Energi offers insurance programs in all 50 states and in Canada. Energi, in partnership with Hannover Re, has created a series of warranty programs aimed at supporting the alternative energy industry's growth and development via risk mitigation. Coverage is underwritten through the **International Insurance Company of Hannover Limited**, an AM Best "A" rated operating insurance company of Hannover Re. Energi's Energy Savings Warranty (ESW) program insures the energy savings guarantees offered by an Energy Efficiency Contractor for their building retrofit and other efficiency programs. The ESW program is a valuable risk mitigation tool that adds the security necessary to governmental agencies, municipalities, financial institutions and building owners involved in the projects. Energi will provide additional security to the Consortium by underwriting Efficiency Contractors, reviewing the project design and engineering, and backing the contractor's guarantee with an insurance policy.

Benefits of Energi's Energy Savings Warranty (ESW)

ESW mitigates the performance risk in projects for financial institutions, project owners and contractors:

- **Energy Efficiency Contractors** provide a performance guarantee on the energy savings associated with the design and installation of the energy conservation measures
- With the purchase of ESW, **Energy Efficiency Contractors** transfer the risk associated with the performance guarantee to the International Insurance Company of Hannover, a wholly owned subsidiary of Hannover RE
- **Barclays** gains the security on their investment that projects will perform according to their design and generate guaranteed energy savings, enabling building owners to repay loans
- **Building owners** receive added security around the performance of systems to reduce energy expenses and increase profitability

Property Assessed Clean Energy (PACE)

- PACE (Property Assessed Clean Energy) enables municipal governments to tap into private capital markets to finance renewable energy and efficiency improvements for residential and commercial properties such as solar panels, insulation and HVAC systems
- Repayment is secured by a tax lien on the property, which is amortized over the life of the improvements. Funds to make the tax payments come from the reduced utility bills that result from making the improvements
- PACE assessments are not approved unless the energy cost savings are greater than the cost of the improvements
- Financed on a project by project basis, the program has so far resulted in 2,800 projects worth \$65 million in three states. Research indicates that this has contributed to \$162 million in local economic impact, creating 1,000 new jobs
- The UK government recently announced plans for the 2012 launch of a program similar to PACE, which could offer new business opportunities to US firms in Europe

Process of PACE

- *State and local governments* establish through law or public policy a specific goal or objective; for example promoting energy efficiency as a means to promote jobs and improve air quality
- *A municipal government* may establish a type of land or real property secured benefit district
- *Property owners* within the district (or the municipality if a district is not required) can voluntarily choose to participate
- An *experienced contractor* will assess the scope of desired improvements. This may involve a thorough energy audit for efficiency measures and their projected savings and costs
- The *municipality* will provide financing for the project typically by selling bonds secured through payments made from participating property owners
- *Property owners* repay the costs of improvements through property tax assessments or charges for a certain time period.

Benefits of PACE

PACE solves two key upfront barriers that hinder the adoption of energy efficiency and small-scale renewable energy. The long-term PACE financing structure eliminates sizeable upfront cost barriers, and assessments that can be transferred to a new owner in the event a property is sold ensure that new owners pay fairly for improvements to the property. PACE programs are locally controlled and provide a more efficient opportunity for communities to sponsor programs that meet their individual needs.

- Creates permanent jobs – Every \$4 million in PACE spending = 60 jobs (EcoNorthwest Study)
- Economic Stimulus—economic activity and tax generation; for example Sonoma County, CA reportedly experienced more than \$20 million in program spending activity by April 2010
- Infrastructure development – PACE is a privately financed large scale upgrade to the nation's power grid
- Promotes Energy Security and Green House Gas Reduction Goals – large carbon footprint reduction done profitably



Initial Activity of the PACE Commercial Consortium

Miami Dade County and the city of Sacramento are the first municipalities to sign contracts with Ygrene, the Consortium's California based PACE finance administrator

- In Miami Dade County, Florida, an initial \$550 million in funding was recently made available to cities and municipalities. This funding will help to generate up to \$1.8 billion in economic activity.
- In the city of Sacramento, California, an initial \$100 million will be made available, stimulating an additional \$530 million in economic activity.
- The total impact is projected to reach \$2.3 billion and more than 17,000 jobs in the combined cities. The Carbon War Room will also bring this mechanism into thirty cities that are participating in the GCGC, as a means of promoting energy efficiency growth and development.

Status of PACE in Massachusetts

Massachusetts enabled PACE financing through the Municipal Relief Bill (HB 4877), which authorizes local governments to establish an Energy Revolving Loan Fund to provide financing to private building owners. The Division of Green Communities, a focused group within the Mass Department of Energy Resources, will determine which improvements will be eligible for financing. Massachusetts possesses 137,430 commercial buildings and has the potential for \$3.752 billion dollars in energy efficiency projects through the financing program. In 5 years, the economic output could result in an estimated \$9.928 billion dollars in economic output (assuming a 3.5% market penetration). Massachusetts has indicated its interest in PACE financing of energy efficiency and renewable energy projects. It is now up to local governments to establish PACE districts and begin financing projects.

Recognizing the economic importance of their involvement with the PACE Commercial consortium, Energi has begun to leverage its existing connections within the energy industry to assist in the implementation of PACE project financing in Massachusetts. Energi believes that PACE financing is an ideal mechanism to help generate clean energy growth and job development. *"These investments are 100% private capital. There is no government debt or cost involved. The markets can supply this financing because the economics are sound, engineering performance is insured, the security is strong, and clean energy capital assets are profitable."* (Remarks by Energi CEO & President Brian McCarthy)