

City of San Leandro Memo



To: City of San Leandro Facilities Committee
From: Deborah Acosta, Chief Innovation Officer
cc: Chris Zapata, City Manager; Lianne Marshall, Asst. City Manager; Debbie Pollart, Public Works Director; Cynthia Battenberg
Date: October 6, 2015
Re: Smart San Leandro: Proposed Renewable Energy Mesh Grid Project

SUMMARY:

This report is for your information only. As this project progresses and the role of the City is more defined, the City Council will be updated and direction requested.

Representatives of Olidata Smart Cities LLC, a U.S subsidiary of Italian-based Olidata International Innovation Development S.r.l will present a program intended to create a public/private partnership with the City of San Leandro and other key partners to develop a renewable energy micro grid project ("Smart San Leandro"). The initial phase of this project would be to use privately owned rooftops and parking lots in the industrial area to create renewable energy through wind, solar and other developing technologies. Creation of a City of San Leandro micro grid would reduce reliance on the external PG&E grid and produce an impactful reduction of carbon emissions.

BACKGROUND AND ANALYSIS

In 2009, the City of San Leandro adopted its Climate Action Plan: Vision of a Sustainable San Leandro. The City of San Leandro's climate strategy is based on the Local Governments for Sustainability (ICLEI) 5-Milestone process:

1. Conduct an inventory of city-wide greenhouse gas emissions – *completed 2005*
2. Set a reduction target/goal – *25% below 2005 level by 2020 adopted June 2006*
3. Establish a Climate Action Plan – *adopted December 2009*
4. Implement a Climate Action Plan - *underway*
5. Monitor and evaluate progress

The Climate Action Plan and GHG reduction measures and actions are structured around the four general categories of GHG emissions: energy use in buildings; transportation and land use; waste; and municipal operations.

In March 2013, the Council was provided an update on the [San Leandro Climate Action Plan](#). The report identified various departmental efforts that resulted in extensive energy upgrades with Federal Stimulus (EECBG) funds, as well as other Federal, State and City resources.

Federal and State Climate Action Initiatives continue to support efforts to reduce greenhouse gas emissions. An important Federal initiative was the adoption of [America's Clean Power Plan](#) in August 2015. The Plan sets “achievable” standards to reduce carbon dioxide emissions by 32 percent from 2005 levels by 2030. It also sets carbon pollution standards for power plants. The Plan is expected to boost wind and solar power generation and could also provide a boost to technologies that can help integrate that renewable energy into the grid as a means to its end.

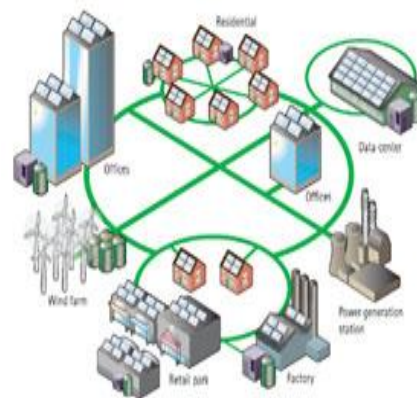
At the State level, the California Energy Commission's EPIC Challenge: Accelerating the Deployment of Advance Energy Communities is an important competitive grant funding opportunity. Through the Electric Program Investment Charge Program, funding has been established for a competition to develop innovative and replicable approaches for accelerating the deployment of **Advanced Energy Communities**. Advanced Energy Communities are community-scale developments based on systems integration in which energy efficiency, renewable energy, and storage technologies meet the energy supply and demand needs of its residents and businesses and supports local grid reliability and safety.

The City of San Leandro is currently exploring numerous opportunities to reduce energy costs and generate new revenue streams using clean technology products and applications. One of the major projects underway is the Climatec project which includes a detailed energy assessment of all City real estate assets and a future proposal to enable the City to invest in energy upgrades through bond financing. A second major project is the City's engagement with the County of Alameda and its member cities of the potential of implementing a Community Choice Aggregation (CCA) program.

Smart San Leandro: Renewable Energy Micro Grid

The *Smart San Leandro: Renewable Energy Micro Grid* is an opportunity that grew out of San Leandro Solar Week, April 2015 with the goal of leveraging City of San Leandro's public and private real estate assets to create a locally-generated renewable energy network.

The City of San Leandro has been invited to engage in a public/private partnership for the purpose of developing and building a renewable energy micro grid project. The initial



phase of the project is intended to engage residential, commercial, industrial, government and non-profit organizations in using underutilized rooftops and parking lots to create renewable energy through solar and wind.

The project is being developed with the additional goal of engaging San Leandro's business community and other clean tech providers working with the City, including Halus Power Systems, Energy Recovery Inc., Power Factors, and others.

The following companies are the primary collaborators at this stage of project development:

- Olidata International Innovation Development S.r.l.: Project Lead
 - Felipe Cano, CEO
 - Alberto Colombo, Director, Olidata S.p.A.
- Enel Green Power N.A.: subsidiary of Enel, Italy's largest utility company
 - Valerio Vadacchino, Manager, Smart Grid Business Development
- Transformative Capital; Financing
 - Mark Chasan, Chairman & CEO
- Clean Coalition: Non-profit focused on facilitating transition to renewable energy, modern grids through technical, policy and project development expertise
 - Greg Thomson, Program Director
- OSIssoft:
 - Dr. Pat Kennedy, Founder and CEO
 - John Matranga, Customer Innovation and Academia
- Westlake Urban:
 - Sunny Tong, Managing Director