

# Wilshire Center Cool District Carbon Master Plan (WCCD-CMP) 4/18/09 Draft Narrative - Energy Efficiency & Conservation Block Grant

In 2007, Wilshire Center Business Improvement District (WCBID), representing 37,000,000 sq. ft. of commercial, retail and multifamily building area, established a Cool District Program making a commitment to reduce their Greenhouse Gas Emissions by 80% by 2050. The execution of this commitment will create a healthier district and planet as well as inspire other BIDs to do the same.

## ***Vision***

Their vision incorporates all aspects of urban life including home, work, transportation, food, as well as, durable and consumable goods. From this perspective three categories will be considered in terms of resource management and Greenhouse gas reductions: Buildings, Transportation and Goods.

## ***Greenhouse Gas (GHG) Reductions***

The district strategy for GHG reduction success is based on *an overall vision* starting with implementing energy efficiency measures and renewable energy in its existing building portfolio. The goal is to retrofit all buildings in the district by 2020. The commercial and more challenging residential existing buildings will be audited, retrofitted and monitored. For commercial buildings, an aggregate 30% and possibly up to 50% energy savings is expected, with 20 to 30% savings for residential buildings. The following outlines our strategy to achieve this goal:

1. Energy Efficiency and Conservation Strategy (EE & CS)
  - a. Develop EE & CS Strategy
  - b. Implementation of EE & CS Strategy
  - c. EE & CS Self-Funding Strategy
2. Audits
3. Public Education
4. Public Report
5. WCCD-CMP Vision and Competition
6. Benchmarking
7. Results

## ***Self-funding for energy efficiency program:***

Initial funding will be utilized to undertake benchmarking and preliminary assessment level audits of a cross-section of the WCBID buildings. This will enable the team to assess the potential initial candidate buildings to enable quick wins and establish the awareness and benefits of the program. In addition it is proposed to utilize the funding to undertake some Investment Grade Audits (IGA) (which are required to obtain financing for project implementation and hard costs). Prior to the IGA's the building owners will be asked to commit to implement all identified savings with 3-year or less

simple payback and the BID, possibly by utilizing their partner's, Wilshire Enhancement Group, 501(c)3 status and volume of buildings, should be able to leverage preferential finance rates.

Once an IGA is complete the building owner will be able to finance the project implementation costs, including the cost of the audit itself. The recovered audit cost will then be utilized for the next building to enable the program to continue throughout the whole building stock and be self-funding, not requiring any further outside investment. If the building owners choose to self-finance the implementation work they will commit to reimburse the WCBID for the audits, again allowing continuation of the program.

The initial funding allows for the program to be started, covers negative cash flow potential and risks of building owners not following through, but we believe that the program can be self-funding over a period of less than 10 years to achieve at least a 25% reduction in carbon emissions due to building energy demand.

We hope to fund the entire WCCD-CMP with this program. In 10 years after the buildings have been retrofitted funding will be available for the next WCCD-CMP steps outlined in the vision.

### ***1. Energy Efficiency and Conservation Strategy***

The WCBID Energy Efficiency and Conservation Strategy addresses the residential and commercial buildings in the BID using seed funding to initiate a self-funding program reliant on the income stream from energy savings. Establishment of the EE & CS is expected to utilize seed funding for a span of 3 years for development and implementation. Fortunately, the residential buildings are of the same era, same scale and will have very similar EE & CS strategies. The commercial buildings have more variety and will require more specific attention. In each case, a sample of buildings will be audited and retrofitted to both demonstrate the effectiveness of the program to other building owners and to initiate an income stream. For success these building types require very different auditing and retrofitting approaches.

### ***2. Audits***

Commercial building audits are in three parts: Preliminary Assessment for 8 million SF, Retro-commissioning and Investor Grade Audits for 60% of the most promising buildings.

Residential buildings audits are in two parts: Preliminary Assessment for 5 million SF and Investor Grade Audits for 10% of these buildings. We believe that the same retrofit solutions developed from these audits can be applied to almost all the multi-family buildings in the area.

### ***3. Public Education***

Educating the building owners, the tenants, employees and visitors as well as other BIDs and communities will be done through a community center, a public outreach campaign and a website. The following three activities will

directly support Public Education: public report, vision & competition, and benchmarking. (See below)

#### **4. Public Report**

This document reports on an ongoing basis to the public the goals and achievements of the development and implementation of the WCCD-CMP.

#### **5. WCCD-CMP -- Vision & Competition**

The vision and competition are all inclusive. The vision to transform the WCBID into a thriving sustainable residential and business community will be communicated as part of the WCCD-CMP. Building energy efficiency, renewable energy and district heating and cooling are only part of the master plan. The WCCD-CMP will also address water use, water and solid waste management, open space and urban farming, bicycle sharing, and public transportation. In 2010, the WCBID intends to invite international design teams to create sustainable community visions for the BID as part of a public outreach effort. We hope to inspire other communities to do the same and to glean some good ideas.

#### **6. Benchmarking**

Benchmarking of the energy savings and carbon reductions will be conducted via energy modeling, utility bills and actual instrument measurement and verification. These will be continually reported as part of a carbon calculator and dashboard on the BID's website. In addition, carbon units will be calculated for various activities to offer a decision tool for occupants and visitors.

#### **7. Results**

By implementing the WCCD-CMP, we are increasing economic vitality, energy security, and environmental quality in the District. The Energy Efficiency & Conservation Block Grant (EECBG) program funds will have maximum impact. The Plan will create and retain jobs and stimulate the economy in the short term while laying the foundation for a long-term and sustainable clean energy economy.

- *Leverage other public and private resources.* The plan will use federal funds to attract lending and investment from public and private sources.
- *Enhance workforce development.* The plan will create and maintain jobs in energy auditing, energy modeling, existing building retrofitting, as well as jobs in construction, transportation and green building design.
- *Persist beyond the funding period.* The plan will use federal funds as seed funding for a 40 year self-funded program.
- *Promote energy market transformation.* The plan will use revolving and low cost loans to support energy savings performance contracting. The plan may help to advance energy codes to support building and home retrofit incentives and polices.