Sustainability Task Force Agenda



A Committee of the Chico City Council Mayor Ann Schwab, Chair

Meeting of February 1, 2010 – 3:00 p.m. to 5:00 p.m. Council Chamber Building, 421 Main Street, Conference Room No. 1

1. INTRODUCTION OF NEW TASK FORCE MEMBERS

Chair Schwab will introduce and welcome Trudy Duisenberg representing Enloe Medical Center, and CSU, Chico student Nathan Kinsey as two new Task Force members. These members are filling the vacancies in the Business and University stakeholder groups created by the resignation of Jason Bougie and Deanna Dottai.

2. PRESENTATION ON THE CALIFORNIA PRODUCT STEWARDSHIP COUNCIL'S PRODUCER RESPONSIBILITY CAMPAIGN.

The California Product Stewardship Council (CPSC) is a coalition of local governments, businesses, and other groups related to solid waste, recycling, resource conservation, environmental protection, and water quality working together to support product stewardship and extended producer responsibility from manufacturers and businesses who produce goods and products. The Task Force will receive an update regarding the CPSC's efforts.

3. CONSIDERATION OF CLIMATE ACTION PLAN AND MEASURES

Staff and Intern Kate Taft have been working on the first draft of the proposed Climate Action Plan (CAP). Staff has reviewed the climate action measures that have been previously identified by the Task Force and community members and will be presenting its recommendations on which measures should be included in the CAP. The Task Force is requested to review and provide direction to staff on the proposed measures and content of the plan. Copies of the power point presentation is attached as Exhibit "A" for the Task Force review.

4. REPORTS AND COMMUNICATIONS

a. <u>Update on the Application for Funding from PG&E Innovator Pilot Grant for an Energy Conservation Outreach Program</u>

In December 2009, an Ad-Hoc Committee consisting of Task Force members Buckley, Stallman, Wolf, McNall, Pushnik and Schwab, submitted a proposal for a grant application for PG&E's Innovators Pilot Program. The grant proposal requested \$399,530 to offer energy conservation public education and outreach, free installation of various Weatherization upgrades, programmable thermostats, and "real-time" metering to 100 single-family households and to a 100-unit multifamily complex. Staff received notice that the City's grant application has been selected by PG&E as a final candidate to be considered by the California Public Utilities Commission.

b. Report on the State Energy Program Grant Applications

The City of Chico participated in a collaborative effort with NoRTEC and several other entities from the Shasta, Tehama, Butte and Nevada counties to apply for over \$14 million in State Energy Program funds from the Comprehensive Residential Building Retrofit and the Municipal and Commercial Building Targeted Measure Retrofit Programs. Copies of the Executive Summaries of both grant applications are attached for the Task Force's information.

Julian Zener

c. <u>Update on the Proposed Revisions to the Chico Municipal Code Regarding Residential</u> Energy Conservation Measures Required upon Resale

The Ad-Hoc Committee members Buckley, DiGiovanni, Stallman and Wolf will be presenting the proposed municipal code revisions (RECO ordinance) to Board of the Chico Association of Realtors on February 11, 2010.

5. BUSINESS FROM THE FLOOR

Members of the public may address the Committee at this time on any matter not already listed on the agenda, with comments being limited to three minutes. The Committee cannot take any action at this meeting on requests made under this section of the agenda.

4. <u>ADJOURNMENT</u> – The meeting will adjourn no later than 5:00 p.m. to its next meeting scheduled for Monday, March 1, 2010.

ATTACHMENTS:

Exhibit "A" - Climate Action Plan Powerpoint Presentation Exhibit "B" - State Energy Program Grant Applications Executive Summaries

Distribution available in the office of the City Clerk:

Prepared: 1/29/10 Chico City Clerk's Office

Posted: 1/29/10 411 Main Street, Chico, CA 95928 Prior to: 5:00 p.m. (530) 896-7250



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Members:

City of Chico Proposed Climate Action Plan

Sustainability Task Force Meeting Monday, February 1, 2010



Climate Action Plan (CAP) Contents

- Executive Summary
 - ► Introduction

(Complete)

- CAP Purpose/Structure
- Climate Change Global Issue, Local Problem
- Legislation/Emission Reduction Targets

(Complete)

- Governor's Executive Order
- ► AB 32 / SB 375
- Chico's Commitment

(Complete)

- ► U.S. Mayor's Climate Protection Agreement
- Line Campaign / Milestones / Software
- ► General Plan/Sustainability Element

CAP Contents Continued

- Greenhouse Gas (GHG) Emissions Inventory (Complete)
 - Inventory Methodology
 - ► Community Emissions
 - ► Government Emissions
 - ► GHG Emissions Forecast
 - ► Chico's GHG Reduction Target
- Achieving Chico's Reduction Target (Complete)
 - ► Reduction Measure Analysis
 - ► ICLEI's Climate Action Planning Program Assistant (CAPPA)
 - ► Initial Cost Analysis

	

CAP Contents Continued Climate Action Strategies (50% Complete) ► Energy Use Strategies ► Transportation/Air Quality/Land Use Strategies Solid Waste Strategies Water Conservation Strategies Implementation & Financial Analysis ► Tier 1 Measures - 2006-2011 Tier 2 Measures - 2012-2016 Tier 3 Measures - 2017-2020 ■ Public Outreach and Education Adaptation to Climate Change Plan Conclusion Appendices ► GHG Inventory ▶ GHG Emissions Calculations and Methodologies ► Data Sources/References **Climate Action Strategies/Measures Energy Use Goals** ■ GOAL 1: UPGRADE AND TUNE-UP EQUIPMENT Promote and Install Energy Star Appliances/Equipment ► Tune-up and Upgrade HVAC Systems ■ GOAL 2: GREEN BUILDING/ENERGY EFFICIENT FACILITIES ► Offer Assistance/Incentives ► Adopt Energy Codes ► Energy Efficient Weatherization Switch From Electric Heat to Natural Gas ► Install Green and Reflective Roofing ► Install EPA Certified Wood Stoves ► Plant Trees to Shade Buildings ► Require Energy Upgrades Upon Resale ► Implement Energy Efficient Affordable Housing **Energy Use Goals**

■ GOAL 3: IMPROVE LIGHTING EFFICIENCY

- Perform efficient lighting retrofits
 Institute a Lights-Out-At-Night Campaign (Commercial/Industrial/Government)
- ► Install Occupancy Sensors
- ► Distribute CFL Bulbs and Fixtures
- ► Use LED Lighting
 - Street Lights
- Holiday Lights
- Exit Signs

■ GOAL 4: RENEWABLE ENERGY

- ► Generate Renewable Energy
- ► Install Solar Photovoltaic (PV) Panels
- ► Install Solar Water Heaters
- ► Purchase Green Electricity and Renewable Energy Certificates
- **GOAL 5: OFFER GREEN BUSINESS**
- GOAL 6: DECREASE STREET LIGHT HOURS

Transportation/Air Quality Goals ■ GOAL 1: IMPROVE PEDESTRIAN INFRASTRUCTURE ► Improve sidewalks, slow street traffic and create pedestrian ► Institute a "safe routes to school" program ■ GOAL 2: REDUCE VEHICLE MILES TRAVELED Expand Alternative Transportation Infrastructure - Bicycle Lanes - Shower/Locker facilities Motorcycle Parking Expand/Increase Frequency of Mass Transit Provide Bicycles for Daily Trips - Initiate Car Sharing/Car Pooling Programs - Increase Telecommuting Opportunities - Implement Parking Cash-Out/Incentive Programs - Implement Police/Employees on Bicycles Program Provide Free Bus Passes to Students **Transportation/Air Quality Goals** ■ GOAL 3: EXPAND ALTERNATIVE FUEL USAGE Convert Fleets to Biodiesel, CNG, Electric, other alt. fuels · Construct electric vehicle recharging facilities ► Initiate community biodiesel fueling stations ■ GOAL 4: IMPROVE VEHICLE FUEL EFFICIENCY ► Promote/Purchase Hybrid Vehicles ► Limited Idling Policies Synchronize Traffic Lights/Improve Flow ► Utilized fuel-efficient vehicles for parking enforcement etc. ■ GOAL 5: FLEET OPTIMIZATION ► Reduce government fleet size Procure smaller/fuel efficient vehicles Increase car-sharing ■ GOAL 7: REDUCE VOC'S AND OTHER AIR POLLUTANTS Use Low VOC paints and cleaning products Use non-asphalt pavements Offer gas can and lawnmower replacement programs ► Plant trees for carbon storage **Solid Waste Strategies** ■ GOAL 1: INCREASE RECYCLING AND COMPOSTING ► Expand curbside, business and government recycling programs Expand organics composting and yard waste collection ► Implement "pay-as-you-throw" program Reuse or recycling of construction and demoltion materials Reuse facilities/programs to foster solid waste reduction ■ GOAL 2: CAPTURE WASTE ENERGY Capture Landfill methane ► Capture Wastewater methane

Water Conservation Strategies

- GOAL 1: ADOPT A WATER CONSERVATION ORDINANCE
- Native Landscaping
- Efficient Irrigation Systems
 Reduced turf areas for public properties
- Reduced run-off
- Groundwater recharge
- GOAL 2: INSTALL CENTRAL IRRIGATION CONTROL
- GOAL 3: IMPROVE WATER PUMPING ENERGY EFFICIENCY

SUMMARY TABLE FOR EACH STRATEGY CATEGORY

ENERGY USE STRATEGIES

	Action	Gov't	Comm	MTCO ₂ E Reduced 2005 - 2010	Estimated MTCO ₂ E Reduced 2010 - 2020	Estimated Total MTCO₂E Reduced by 2020	% of Total Reduction*	Cost to Implement
1	Upgrade and tune-up equipment							
2	Green building and energy efficient facilities							
3	Improve lighting efficiency							
4	Renewable energy							
5	Offer green business program							
6	Offer energy efficiency education							
7	Decrease the number of hours street lights are on each day							
	TOTAL							

^{*} Total Reduction is difference between current levels of emissions and the goal of 25% below 2005 levels, 458,213 MTCO2E.

Implementation and Financial Analysis

- Each measure will be evaluated based on GHG emissions reductions, time needed to implement, and initial costs.
- Measures will be separated into three implementation tiers
 - ► Tier 1 Measures that are already in the works or can be completed by 2011.
- Tier 2 Measures that can be implemented from 2012-2016, including conducting a new GHG inventory to determine status of reaching 25% reduction goal.
- Tier 3 Measures that are more costly and are to be implemented in years 2017-2020, if have not yet met the
- Summary table of all measures with GHG emissions achieved for each and costs

Next Steps

- Staff will finalize the first draft for review by the Task Force at its meeting on March 1, 2010.
- Task Force will review document and make revisions in preparation (possibly over several meetings if needed) for City Council preliminary review.
- Conduct "vetting" process through series of public workshops and public review period.
- Conduct Environmental Review of the CAP.
- Submit to Council for final consideration in May or June 2010.
- Begin implementation, if approved by Council.

Exhibit B -COMMERCIAL RETROFIT APPLICATION EXECUTIVE SUMMARY

NoRTEC Commercial Retrofit Program 400-09-402 Volume II Technical and Program Proposal

PROGRAM TITLE

The NoRTEC Commercial Retrofit Program

PROGRAM EXECUTIVE SUMMARY

Key program concepts. The Northern Regional Training & Employment Consortium, a regional workforce investment board, is the proposed prime contractor for this program. By utilizing the regional structure, based on local agency/nonprofit/business entity partnerships, NoRTEC is uniquely positioned to implement over a broad geographic area encompassing many jurisdictions.

The program is intended to accomplish the following goals and objectives:

- Goal 1: Increase energy efficiency and reduce energy use in commercial and municipal facilities
 - Objective 1.1: Install 6,780 retrofits in Butte and Tehama Counties and 2,205 retrofits in Nevada County.
 - Objective 1.2: Achieve at least 63,289 MBtu in energy savings, equivalent to the SEP goal, with 64,850 MBtus estimated to be achieved.
- Goal 2: Build a collaborative across a disadvantaged area that can continue program benefits.
 - o Objective 2.1: Implement consistent training program across three counties to develop a trained energy efficiency workforce;
 - Objective 2.2: Establish coordination mechanisms that can sustain the collaborative including a master operating agreement, web-based communication tools and team face-to-face meetings

<u>Goals and Objectives of the RFP.</u> The NoRTEC Commercial Retrofit Program will target measures across a broad geographic area; implement retrofits through a program that will transform energy use in the region; implement measures that are best practices; train entry level workers and members of the trades to conduct audits and install retrofits, implement through a public/private partnership; coordinate with a Green Jobs program; coordinate with the region's IOU; and collaborate with existing energy efficiency programs.

- The program will implement lighting retrofits and lighting control retrofits, and cost share extremely high efficiency HVAC retrofits for large commercial buildings and parking facilities; small commercial buildings and parking facilities; small manufacturing (including food production); classrooms and limited municipal parking facilities.
- The measures will transform these sectors in the region through increased awareness of energy efficiency benefits; increased knowledge of accessibility of IOU, tax credit and other funding mechanisms for commercial facility owners, creation of a public/private collaborative for energy efficiency and establishment of a trained, experience energy efficiency workforce.
- The program utilizes best practices that provide a high energy savings per dollar spent on a programmatic basis.
- The program will provide a pipeline for green jobs workers into energy efficiency retrofit work through leveraging of NoRTEC's Clean Workforce Training program.
- The program will be implemented through workforce development agencies, local governments, a
 municipal utility, weatherization programs, community colleges, builders' exchanges and an energy
 consulting firm, each with funding from SEP funds and/or leveraged dollars to ensure robust
 participation
- The program includes coordination with PG&E to request dissemination of marketing materials and the program will provide information on PG&E rebates to all participants.
- Richard Heath and Associates will integrate the SEP marketing and participant recruitment into its Energy Fitness program to maximize the value to both programs.

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<u>Energy Efficiency Measures and Building Markets.</u> The following measures will be implemented for large commercial buildings and parking facilities; small commercial buildings and parking facilities; small manufacturing (including food production); classrooms and limited municipal parking facilities:

Table 1 Targeted Measures

Tuble I Tui geteu Meusures			
1. Parking Lot Bi-level	Bi-Level LED (cobra or box)		
	Bi-Level Induction (cobra or box)		
2. Parking Garage Bi-level	LED replacement Kit		
	Induction Lighting		
	Fluorescent		
3. Bi-level Stairway	Occu-Smart fixtures with lamps		
4. Wall packs	Induction Lighting		
	Fluorescent		
5. Classroom Lighting	Occu-Smart fixtures with lamps		
6. Refrigerator Case LED Lighting	T8 LED w/Occupancy Sensor		
7. Lighting Controls	Watt Stopper		
8. HVAC Replacement w/Retro Training	Condenser (14.5 SEER)		

Anticipated Program Benefits. Anticipated energy savings and job creation metrics are detailed in the goals and objectives above. Additional beneficial impacts will accrue from the regional collaborative and its potential to sustain efforts into the future. This program brings together many organizations for the first time in a three-county, regional collaborative to advance energy efficiency in the existing residential housing stock, including workforce development agencies, local governments, a municipal utility, weatherization programs, community colleges, builders' exchanges and an energy consulting firm. The prime contractor will be a regional workforce investment board, with three county-based workforce development agencies as subcontractors. Local governments and retrofit implementers will be subcontracted under these agencies. The program will build capacity for future collaboration based on housing programs, GHG mitigation efforts, low income neighborhood and weatherization services and workforce development programs. The program and resulting sustained efforts will directly benefit an extremely disadvantaged area. It will provide a direct pipeline for Clean Workforce Program trainees, enhancing the benefits of that Employment Development Department funded program.

PROGRAM DESIGN

The NoRTEC Commercial Retrofit Program will assist businesses and municipalities in saving energy through the funded installation of new technologies developed through the California Energy Commission's (CEC's) PIER Program and facilitating the installation of energy saving measures from existing programs. It is also designed to work towards meeting the goals of the California Long Term Energy Efficiency Strategic Plan for commercial buildings as well as stimulating the local economy by hiring local unemployed and underemployed individuals and local contractors to conduct the audits and installations, providing the linkage between the NoRTEC Clean Energy Workforce Training Program. It will provide CEC's suggested energy efficiency and conservation measures to municipal and commercial facilities by utilizing local entry-level workers and/or professional tradespeople trained through an Employment and Development Department Clean Workforce Training Grant.

The NoRTEC Commercial Retrofit Program will compliment and add to existing non-residential (commercial and municipal) programs currently operating in the area. Programs that do not include the innovate new technologies developed through the Energy Commission's PIER Program. These programs include RHA's Energy Fitness Program (EFP), Sierra Nevada Energy Watch Program, and PG&E's Express Efficiency Program.

Exhibit B -RESIDENTIAL RETROFIT APPLICATION EXECUTIVE SUMMARY

1

Northern Sacramento Valley Weatherization in Neighborhoods 400-09-403 Volume II Technical Program Proposal and Cost Information

PROGRAM TITLE

Northern Sacramento Valley Weatherization in Neighborhoods Program

PROGRAM EXECUTIVE SUMMARY

Key program concepts. The Northern Regional Training & Employment Consortium, a regional workforce investment board, is the proposed prime contractor for this program. By utilizing the regional structure, based on local agency/nonprofit/business entity partnerships, NoRTEC is uniquely positioned to implement over a broad geographic area encompassing many jurisdictions.

The program is intended to accomplish the following goals and objectives:

- Goal 1: Increase energy efficiency and reduce energy use in older homes
 - o Objective 1.1: Install 2,833 Tier I, 224 Tier II and 353 Tier III retrofits (of which 65 are EECBG funded) in pre-Title 24 homes
 - Objective 1.2: Achieve at least 86,694 MBtu in energy savings
- Goal 2: Build a collaborative across a disadvantaged area that can continue program benefits.
- o Objective 2.1: Implement consistent training program across three counties to develop a trained energy efficiency workforce;
- Objective 2.2: Establish coordination mechanisms that can sustain the collaborative including a master operating agreement, web-based communication tools and team face-to-face meetings

Tiers will be addressed as follows:

- Tier I will be implemented in cooperation with the local weatherization provide during an program
 intake assessment, where CFLs, low flow showerheads and faucet aerators will be installed and
 information provided about behavior changes and further retrofitting through SEP or weatherization
 programs, depending on income;
- Tier II will be implemented in the SEP program for homes exceeding 200% of poverty and will include a HERS assessment and follow a loading order to optimize the effectiveness of measures; and
- Tier III will build on the basic Tier II retrofit measures and provide a more integrated approach that will utilize diagnostics to correct defects in existing previously installed work that was not included in the Tier II process and will include optimal HVAC sizing, optimal whole house lighting retrofit, and comprehensive water audit and retrofit.

Goals and Objectives of the RFP. The Northern Sacramento Valley Weatherization in Neighborhoods Program will create jobs; implement retrofits through a Tiered approach; work through a consortium; provide a pipeline for funded Clean Workforce Training grant participants into green jobs; leverage affordable housing and neighborhood stabilization programs and benefit a disadvantaged area as follows.

- Using the Council of Economic Advisers' Estimates of Job Creation (May 2009) from the American Recovery and Reinvestment Act of 2009 for total program dollars (SEP funds plus leverage funds), 118 jobs are estimated to be created or retained. Using directly funded jobs by SEP dollars, 38 jobs are estimated to be created or retained.
- Through the three Tiers described above, the program is estimated to provide 91,523 MBtu of energy savings.
- The program will be implemented through workforce development agencies, local governments, a
 municipal utility, weatherization programs, community colleges, builders' exchanges and an energy
 consulting firm, each with funding from SEP funds and/or leveraged dollars to ensure robust
 participation;

• The program will benefit a disadvantaged area with a Median Household Income of \$39,443 (as compared to \$61,154 statewide) and 14.1% unemployment (as compared to 11.6% statewide).

Program Impacts. Anticipated energy savings and job creation metrics are detailed in the goals and objectives above. Additional beneficial impacts will accrue from the regional collaborative and its potential to sustain efforts into the future. This program brings together many organizations for the first time in a three-county, regional collaborative to advance energy efficiency in the existing residential housing stock, including workforce development agencies, local governments, a municipal utility, weatherization programs, community colleges, builders' exchanges and an energy consulting firm. The prime contractor will be a regional workforce investment board, with three county-based workforce development agencies as subcontractors. Local governments and retrofit implementers will be subcontracted under these agencies. The program will build capacity for future collaboration based on housing programs, GHG mitigation efforts, low income neighborhood and weatherization services and workforce development programs. The program and resulting sustained efforts will directly benefit an extremely disadvantaged area. It will provide a direct pipeline for Clean Workforce Program trainees, enhancing the benefits of that Employment Development Department funded program.

PROGRAM DESIGN

This proposal describes the development and implementation of the California Comprehensive Residential Building Retrofit Program in a program called the Weatherization in Neighborhoods Program (WIN). This project will be implemented in a three-county region in Northern California (Butte, Tehama, and Shasta counties) that have recently been awarded funds by the CEC under the California Clean Energy Workforce Training Program. The WIN Program will complement the Clean Energy Workforce Training Program by employing trainees and local contractors that hire trainees, to conduct energy surveys, HERS II audits, installation of energy efficiency measures, and the installation of solar technologies. The participating entities include workforce development agencies, local governments, a municipal utility, weatherization programs, community colleges, builders' exchanges and an energy consulting firm.

In addition to utilizing trainees from the Energy Workforce Training Program, the WIN Program will also provide residential conservation, efficiency, and renewable energy measures, as well as water conservation measures at the "whole neighborhood" level and pull together a variety of different utility and governmental programs working to reduce energy consumption in homes at all income levels. While most weatherization programs target low-income households, this program will provide energy services to all households in selected neighborhoods coordinating with city/county housing programs and local weatherization agencies, and utilizing a variety of funding mechanisms. The program will also incorporate components to work towards meeting green-house gas reduction, air quality, and waste reduction goals on an ongoing basis once this source of funds is exhausted.

The WIN Program will utilize existing utility Low-Income Energy Efficiency (LIEE) programs and low-income weatherization programs funded by the Department of Energy's Weatherization Assistance Program (WAP) and the Department of Health and Human Services Low-Income Energy Assistance Program (LIHEAP), as well as Energy Efficiency and Conservation Block Grant (EECBG) and Community Development Block Grant (CDBG) to provide weatherization to low-income households in the target neighborhoods, while relying on CEC SEP funds, and homeowner investment to fund the retrofits in the above low-income sector. The program will be implemented as follows.

Tier I – Low-cost Measures and Energy Education. This level of service is designed to enroll households into one of the three "**Pathways to Energy Efficient Homes**" as well as to provide basic energy education to household members. An Energy Specialist will conduct the walk-through and