2/10/15 AGENDA, ITEM 6c: CARBON NEUTRALITY
SUPPLEMENTAL PRESENTATION SLIDES SUBMITTED TO THE CITY MANAGER'S OFFICE FROM KRISTY MORRIS
ON 2/9/15 AT 6:01 P.M.



Hermosa Beach Economic Benefits of Carbon Neutrality

Council Follow-Up Response

Purpose

- Provide an update to City Council based on questions and comments from the November 5, 2014 meeting
- Present additional information to supplement the original Economic Benefits of Carbon Neutrality findings

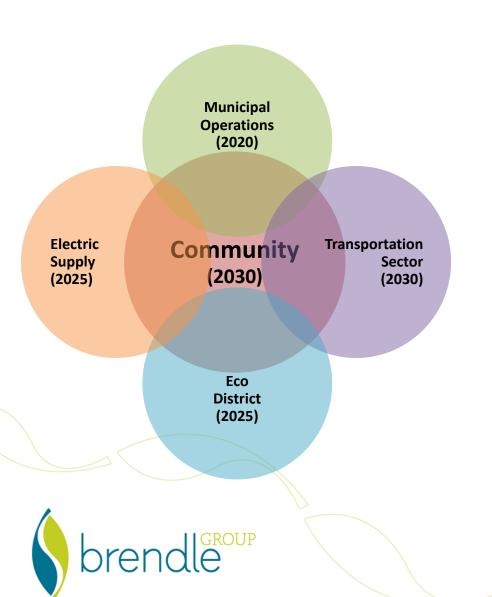


Reminder: Project Overview

- Analyze the potential benefits of a "first-to achieve" carbon neutrality position
 - Research specific evidence of 'first-to' benefits compared to benefits from carbon neutral adoption more broadly
 - Qualitative analysis (e.g., interviews, case studies)
 - Quantitative impacts (to the extent possible)
- Pre-Requisite to analyzing 'first-to achieve' benefits: Options for the City
 of Hermosa Beach to credibly pursue carbon neutrality
 - Background research and benchmarking
 - Coordination with other recent efforts



Reminder: Potential Options for Carbon Neutrality



- Need to define "carbon neutrality" in order to estimate the costs and benefits
- Aggressive target dates proposed to position Hermosa Beach as "first-to"
- Evaluation Criteria Ingredients for "first-to" success (note: dynamic tension among these)
 - Differentiating
 - Credible
 - Ambitious
 - Attracts Investment
 - Drives Innovation
 - Reflects community character
 - Replicable

Engineering Sustainable Change

Reminder: Findings

- Hermosa Beach could credibly pursue carbon neutrality communitywide, and could be among the first, if not the first US community to achieve carbon neutrality
- The goal is economically and technically feasible for Hermosa Beach with a host of community benefits – environmental, economic and social
- Added benefits from being 'first-to' achieve carbon neutrality are less substantiated and very difficult to quantify
- 'First-to' for Hermosa Beach may not garner significant outside attention due to GHG inventory size, which is smaller than many neighborhoods, eco-districts, major employers or universities within leading cities with aggressive carbon reduction goals



Previous Council Questions and Comments

- Explain the potential role of the City in implementing community carbon neutrality.
- Present the costs and savings in a way that shows the direct investment needed by and benefits to the City organization.
- Further define and quantify the health and other indirect benefits of reduced emissions.
- Expand the process to allow for greater exploration of the potential benefits of carbon neutrality investment from a range of community stakeholders.



City Role in Carbon Neutrality

- Carbon neutrality is an aggressive goal and cannot be achieved without the city dedicating financial resources to achieve
- Potential Roles for the City
 - Leadership by example e.g., carbon neutral municipal operations
 - Community convener initiate and sustain conversations
 - Social mobilization education and incentives to spur change
 - Cost sharing and program funding direct investment, partnerships



City Investment and Benefits

- A more defined goal and pathway for getting to community carbon neutrality is needed to determine level of City investment needed
- City cannot invest in community carbon neutrality alone potential financing options/roles below

Local Government	Individuals & Businesses	Others
 Bonds Tax increment financing Consumer grants, loans, and direct installs Community Choice Aggregation Funding program development and delivery 	 Self-funded Mortgage/Home equity Traditional bank loans or consumer lending Energy efficiency loans Property Accessed Clean Energy (PACE) Programs On-bill tariffs or financing 	 Sponsorships and donations User fees and revenue Regional, State and Federal grants Development exactions



Other Benefits: Health Savings

- Investments to reduce carbon emissions from the transportation sector are most likely to benefit the health of Hermosa Beach residents
- Reductions in overall vehicle miles traveled (VMT) by Hermosa Beach motorists will likely mean shifts to other, more active modes of transportation
- Estimated \$1.9 4.8 million per year in additional community health cost savings
 - Based on an estimated \$0.069 health care cost savings for each VMT reduction
 - Approximately \$200 500 per household per year



Other Benefits: Job Creation

- Investments into energy efficiency improvements and renewable energy installation within the City of Hermosa Beach are most directly quantifiable
- Estimated total 800 to 1,000 job-years created
 - 6 jobs created per \$1 million investment in energy efficiency measures
 - 8-11 jobs created for solar PV installations (depending on size)
 - 1 job year = 1 full time equivalent (FTE) position for 1 year



More Inclusive and Robust Process

- Alignment with General Plan Update Process
 - Explore carbon neutrality with General Plan Working Group
 - Evaluate strategies in the context of how they impact carbon neutrality objectives
 - Long-term carbon neutrality policies and implementation strategies in General Plan
- Carbon Target and Action Plan
 - Further definition of the goal and timeline
 - Pathway to achieve it
 - Near-term strategies and budget alignment





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