

Alameda Point

Sustainability Workshop

June 14, 2011

ARUP

Sustainability Workshop Agenda

- 6:30 – 6:50 Introduction
- 6:50 – 7:30 Presentation
- 7:30 – 8:15 Breakout session
- 8:15 – 8:30 Conclusion and next steps

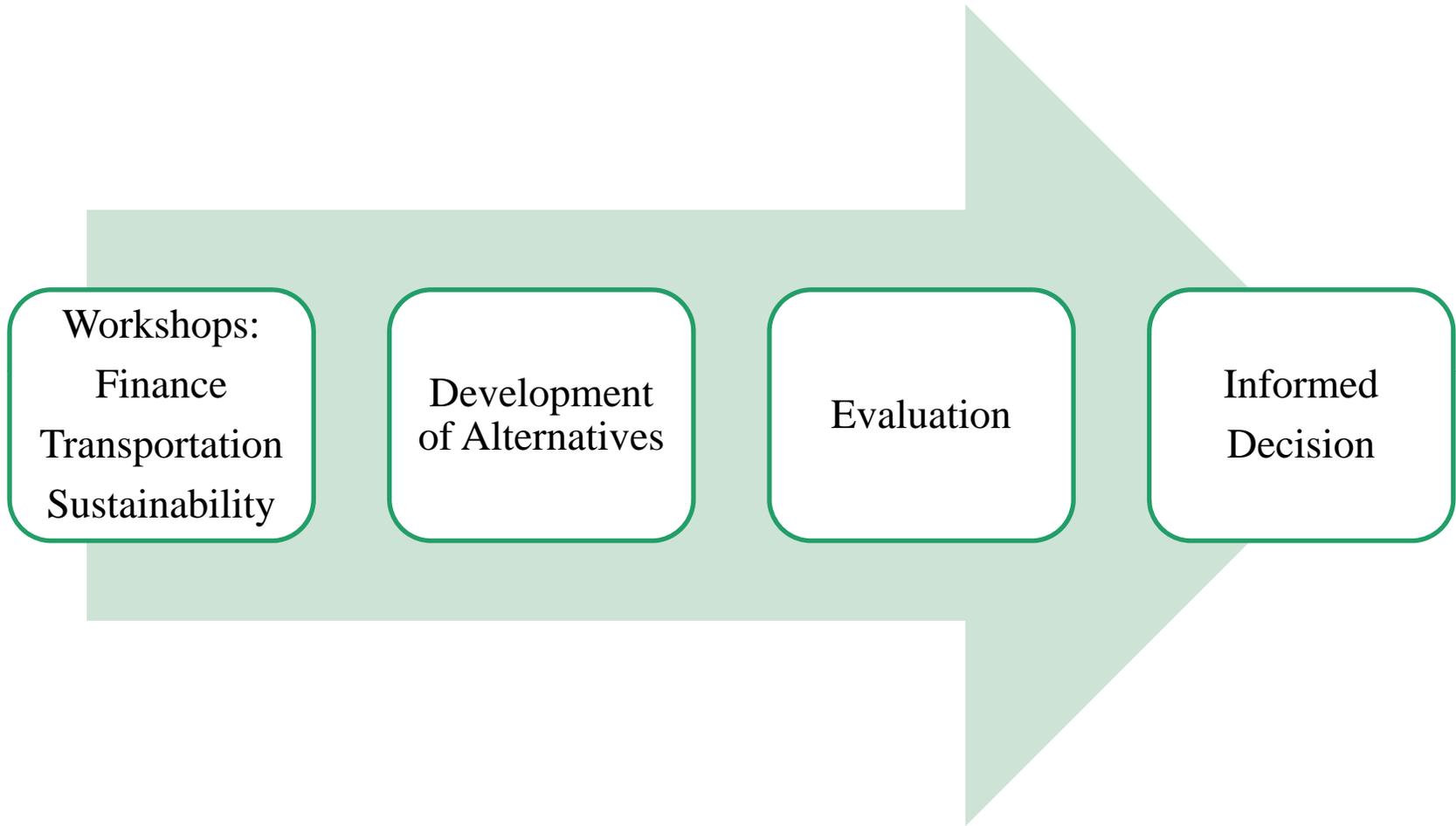
Workshop Objective

The objective of the Sustainability Workshop is to build on the previous visioning efforts, and deepen the conversation about the **Sustainability Vision**, the **Evaluation Framework**, and the **Environmental Innovation Concepts** that are being explored for Alameda Point.

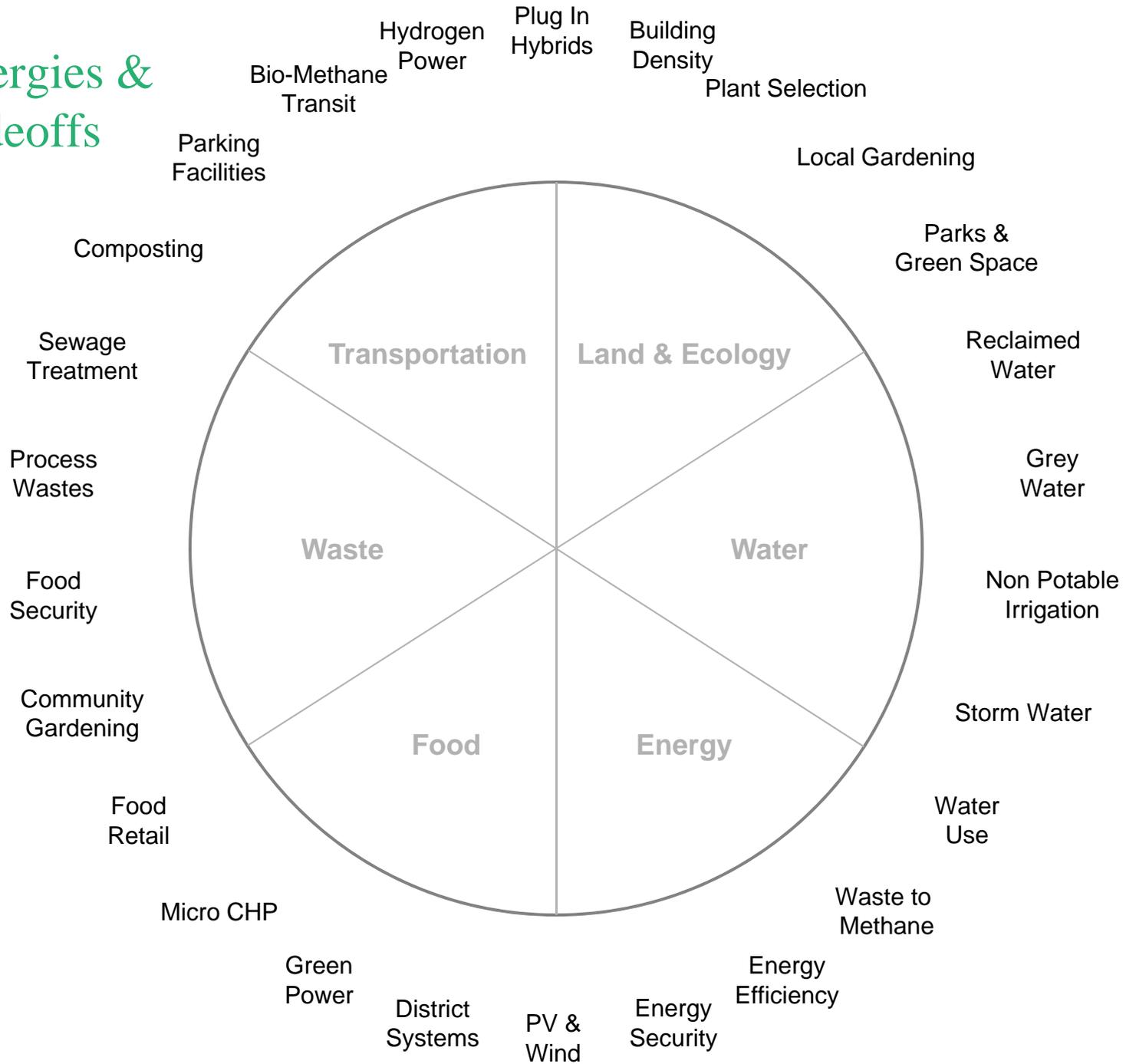
Presentation Outline

- Planning process overview
- Sustainability overview
- Vision of sustainability for Alameda Point
- Evaluation framework
- Environmental innovation concepts
- Breakout session
- Next Steps

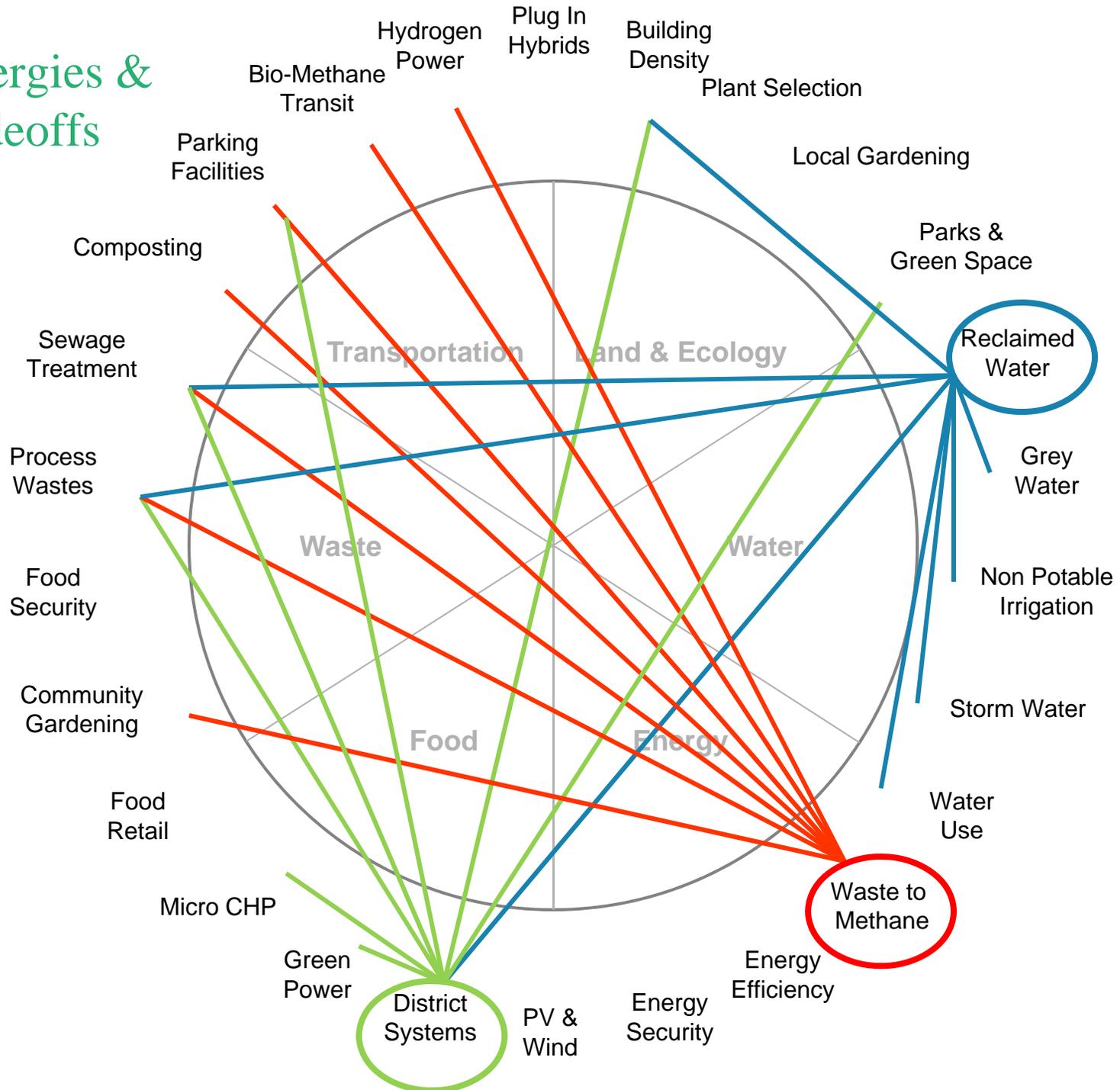
Process



Synergies & Tradeoffs



Synergies & Tradeoffs



Sustainability Overview

Sustainability



Environment



Community



Economics



Transport



**Site and
Landscape**



Waste



Food



Energy



**Housing &
Employment**



Water

Sustainability Vision for Alameda Point

Vision Statement

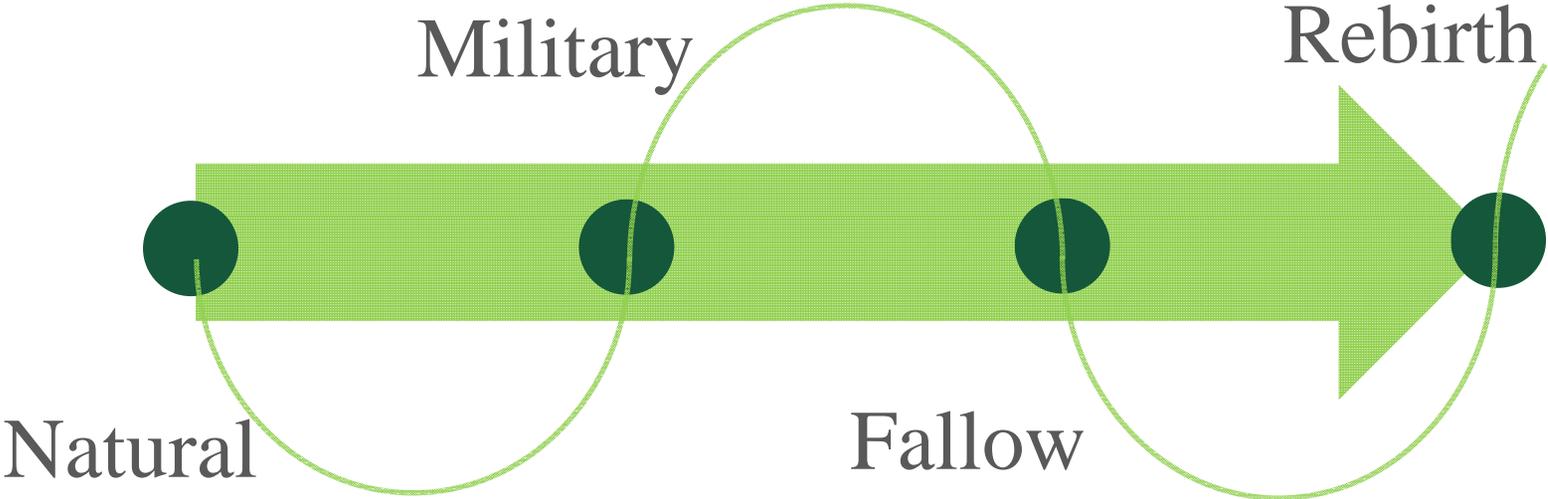
NAS Alameda 1996 Concept Reuse Plan

Between now and the year 2020, the City of Alameda will integrate the Naval Air Station property with the City and will realize a substantial part of the Base's potential. Revenues will have increased and a healthy local economy will have resulted from the implementation of a coordinated, environmentally sound plan of conversion and mixed-use development. While building upon the qualities which make Alameda a desirable place to live, efforts for improving recreational, cultural, educational, housing, and employment opportunities for the entire region will have been successful.

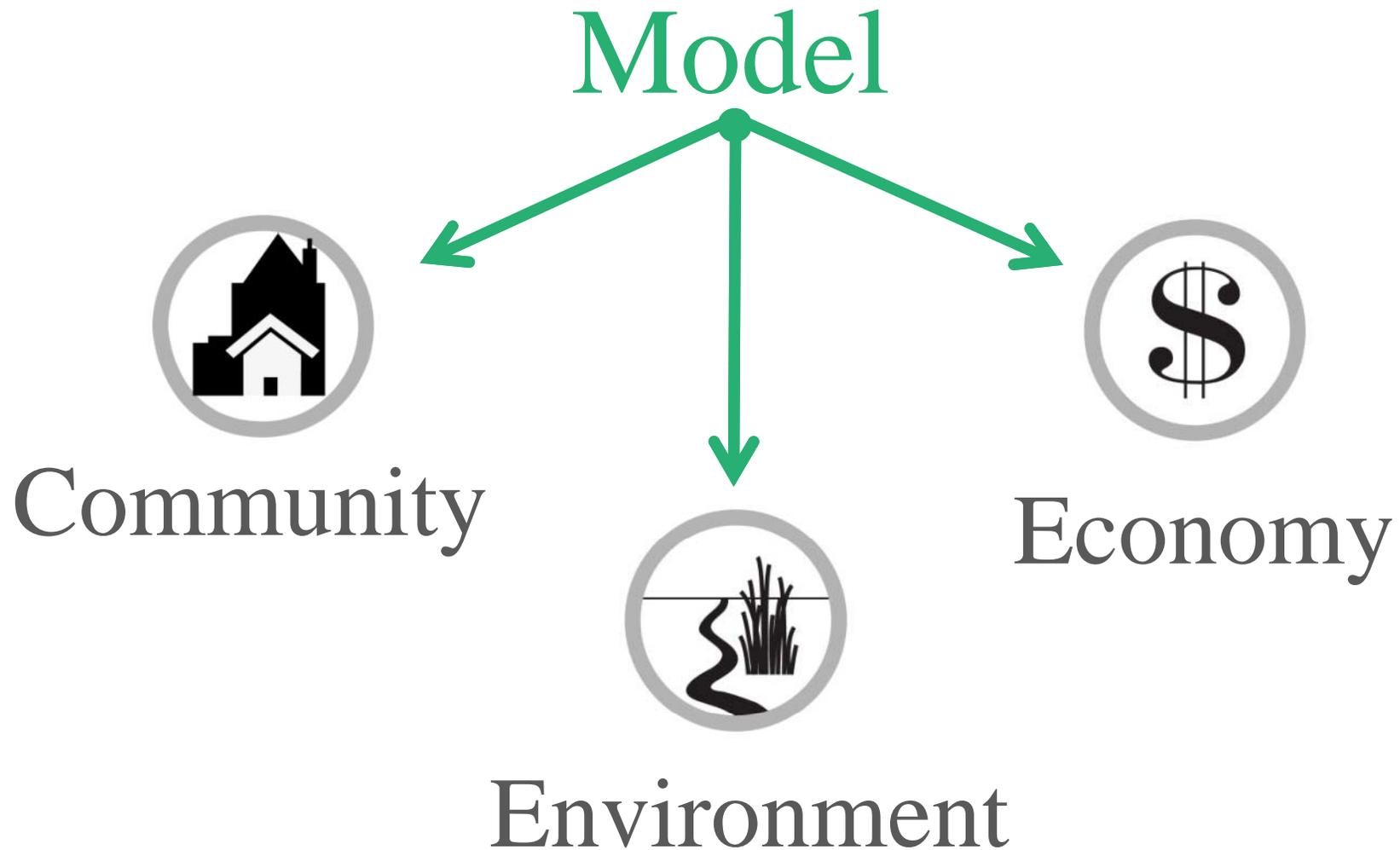
Themes from the 1996 Concept Reuse Plan

- Job creation and economic development
- Small town feeling
- De-emphasis of the automobile
- Transit orientation
- Mixed-use development
- Neighborhood centers
- Sustainable development and design

Lifecycle of Alameda Point



Creating a Model





Creating a Model Community

- A mixed-use community with a small town feeling*
- Clustered development around neighborhood centers*
- Integrate with and complement Alameda as a whole
- A beacon in the Bay...a catalyst for global change
- Work with local organizations, including The Collaborative
- A place that encourages a healthy lifestyle

* 1996 Reuse Plan



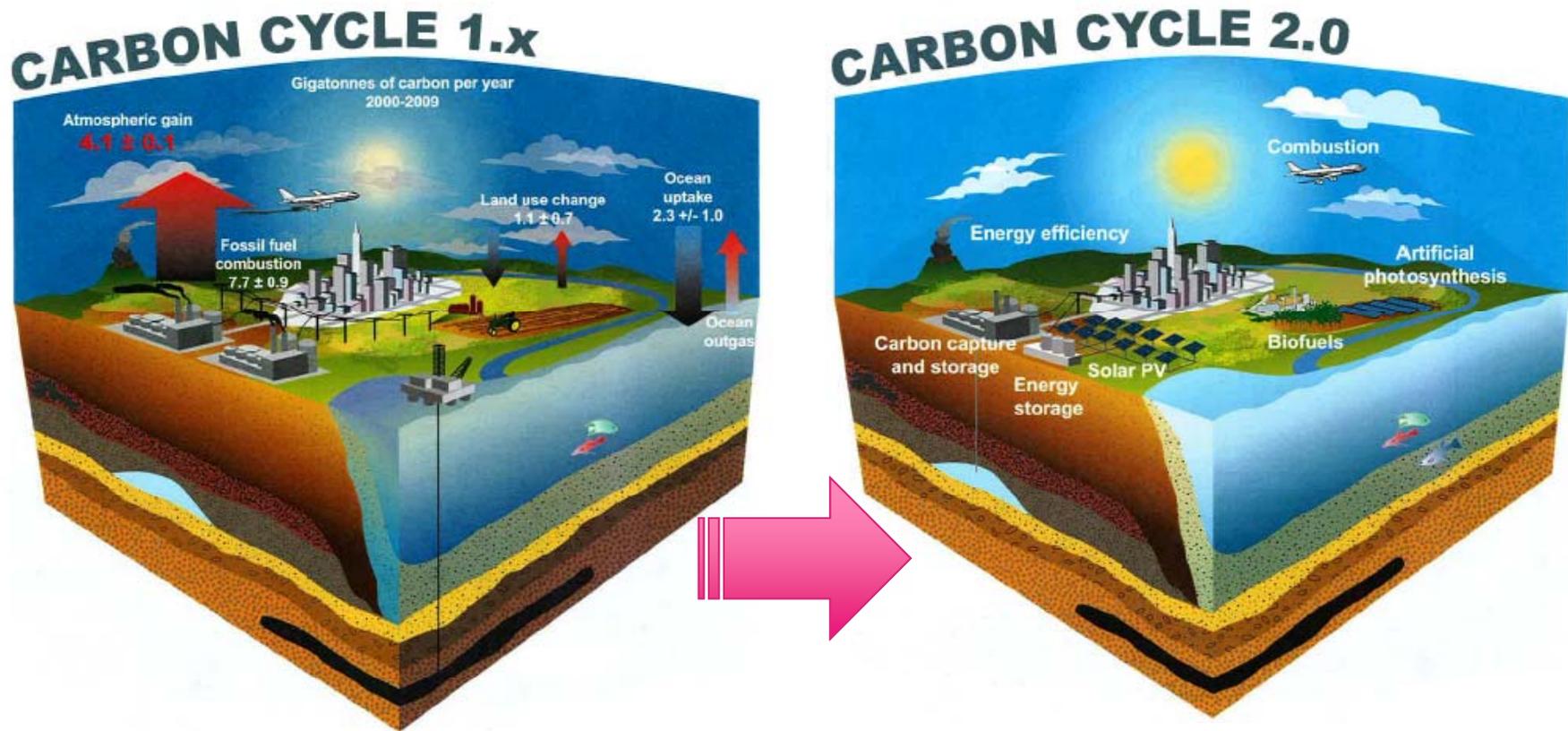
Creating a Model Environment

- Implement best practices in sustainable development and design*
- Transit-oriented, walkable and pedestrian friendly environment, providing alternatives to automobile travel*
- Preserve open space and nurture local habitat and ecosystem
- Re-establish a carbon balance by employing appropriate and innovative technologies
- Develop synergistic, closed-loop systems
- Mitigate and adapt to climate change impacts

* 1996 Reuse Plan

Carbon Cycle 2.0 Opportunity

Alameda is well positioned to support Carbon Cycle 2.0 Research & Testing





Creating a Model Economy

- Foster job creation and economic development*
- Transform a fallow economic state into an opportunity for growth
- Financial viability and fiscal sustainability
- Fiscally neutral to existing City funds
- Strategic phasing to catalyze technological & community development
- Fair distribution of benefits among local stakeholders
- Self-supporting operations and maintenance costs

* 1996 Reuse Plan

Case Study Example: Treasure Island Sustainability Plan



Treasure Island

Sustainability Framework for Treasure Island and Yerba Buena Island

- Diverse community
- Thriving ecosystems
- Healthy neighborhoods
- Affordable solutions
- Global responsibility
- Integrated design and lasting beauty
- Public participation and transparency

What do you think?

What is your vision of
Sustainability for
Alameda Point?

Potential Evaluation Criteria



Potential Evaluation Criteria: Community

Criteria	Indicator
Transportation	No net increase in peak vehicle trips in peak direction Access to quality bikeways and pedestrian facilities Access to fast, frequent and reliable bus and ferry transit
Housing	Impact on Regional Housing Needs Allocation Total amount of affordable units Clustering of housing around transit center
Employment	Estimated number of jobs
Housing & Employment Balance	Ratio jobs/ housing
Public Facilities and Amenities	Acreages of park land and open space s.f. of community facilities
Historic Resources	s.f. of contributing structures with potential for adaptive reuse Restore and connect historic transit routes
Community Character	Responsiveness of plan to sensitive views Incorporation of natural features such as waterfront Diversity of building types that reflect fabric of existing community



Potential Evaluation Criteria: Environment

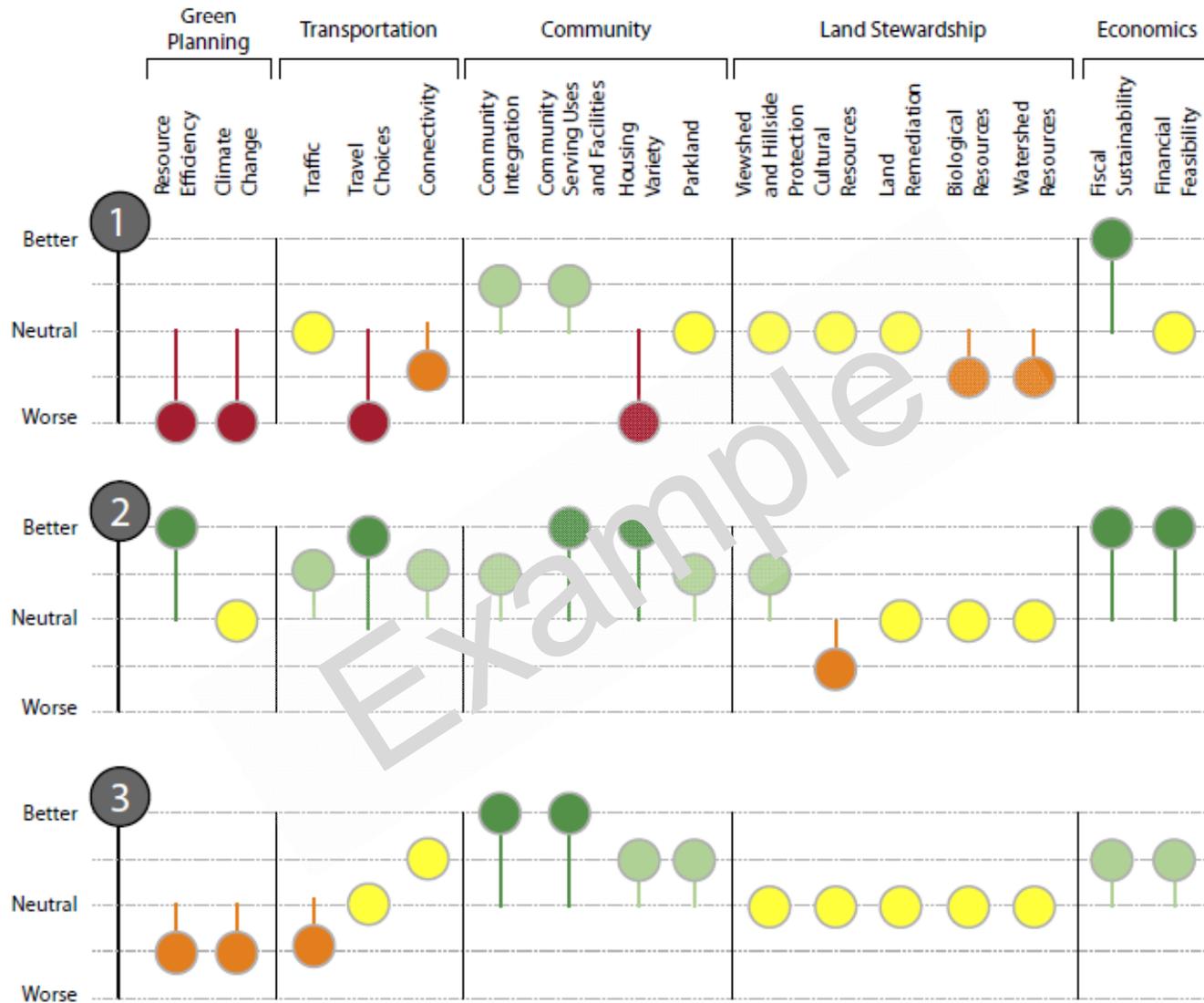
Criteria	Indicator
Energy	Building energy demand per capita s.f. of joint-use facilities On-site renewable energy generation potential
Water	Potable water demand per capita
Waste	Waste projections per capita
GHG Emissions	Emissions estimate: buildings + transportation (operation and construction, including embodied carbon)
Habitat	Acres of protected habitat
Biological Production	Incorporation of productive land uses (farm, aquaculture)
Hazardous Materials	Compatibility of proposed land uses with contaminated areas



Potential Evaluation Criteria: Economics

Criteria	Indicator
Fiscal Sustainability	Funding for operational and maintenance costs of public infrastructure Fiscally neutral to existing City funds
Developer Desirability	Internal rate of return Profit margin
Infrastructure Cost	Total estimate costs Construction, operation and maintenance costs paid by development
Benefit to Existing Community	Community-wide benefits paid by development
Affordability to Residents / Tenants	Cost of transportation Feasibility of subsidized housing

Outcome: A Transparent Evaluation



Case Study Example: Concord Community Reuse Project



March 2007 Open House



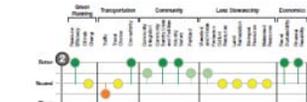
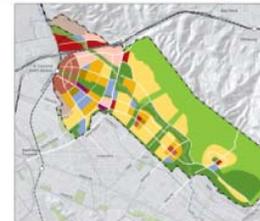
Development of Vision

Concord Community Reuse Plan August 2, 2008

Clustered Villages

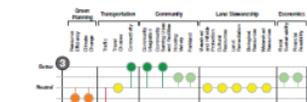
2 "Connected Villages"

Group #



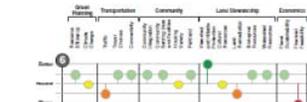
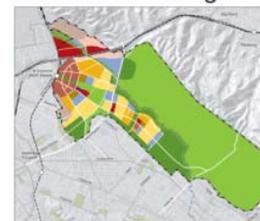
- Population: 30,573
- Housing: 13,000 units
- Jobs: 29,000
- Parks & Recreation: 500 acres
- Open Space: 2,000 acres

3 "Creek Park Villages"



- Population: 26,950
- Housing: 11,300 units
- Jobs: 23,000
- Parks & Recreation: 630 acres
- Open Space: 2,000 acres

6 "West-side Villages"



- Population: 18,100
- Housing: 8,000 units
- Jobs: 20,900
- Parks & Recreation: 500 acres
- Open Space: 3,000 acres



Concord

Evaluation of Land Use Alternatives Concord Reuse Project

What do you think?

Sustainability means different things to different communities

What criteria should we use to evaluate alternatives?

Environmental Innovation Concepts

Water

Water Approach

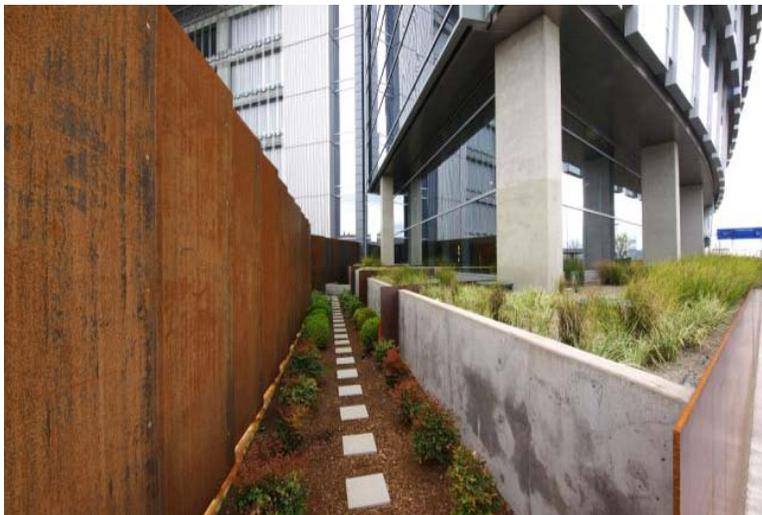


1. Site efficiency
2. Fixture efficiency
3. Cooling efficiency
4. Alternative supply
5. Stormwater management
6. Ecological enhancement

Biological Wastewater Treatment: Living Machine



Illustrative living machine

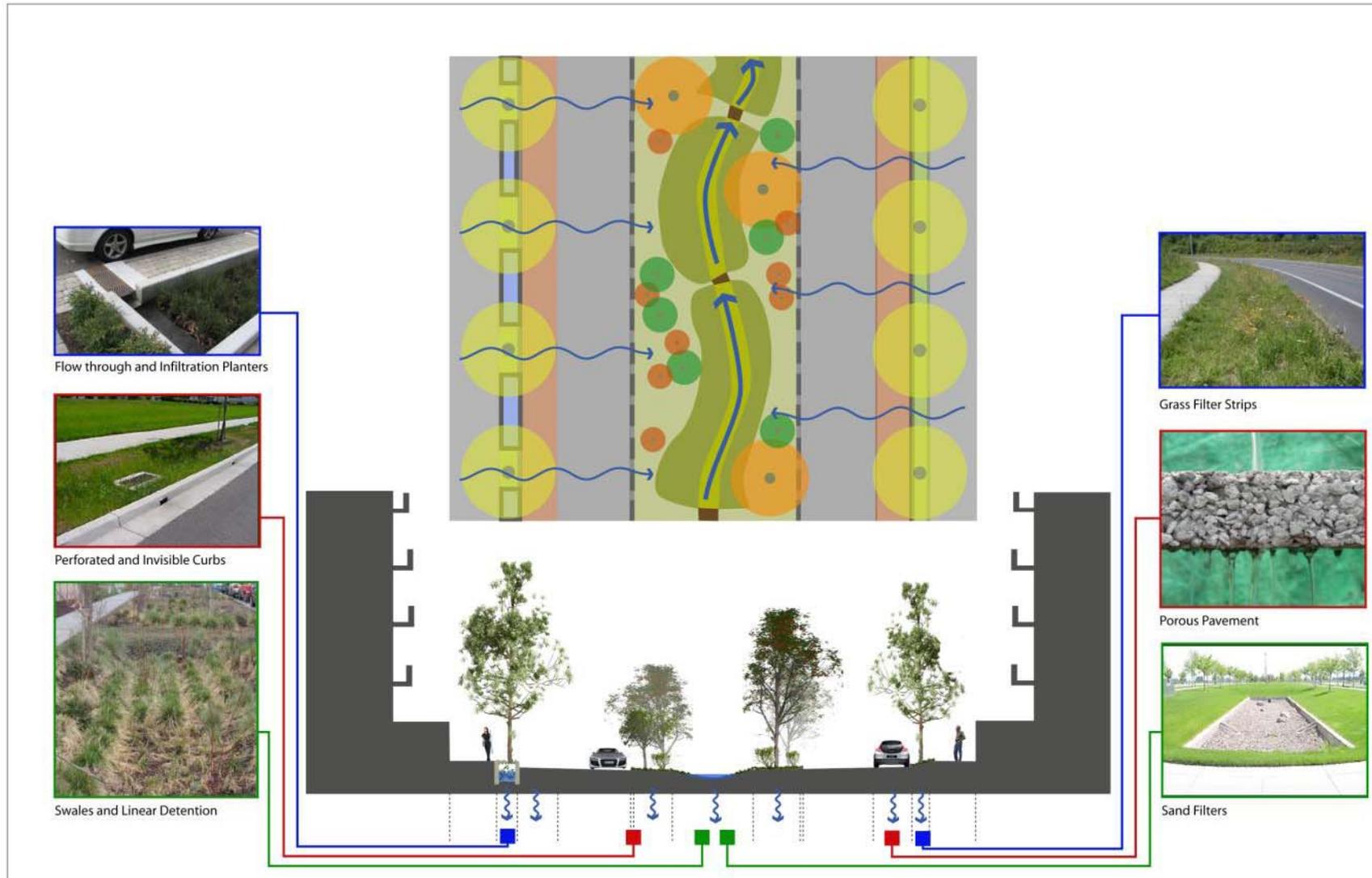


Port of Portland, OR: Indoor / outdoor living machine



Esalen Institute, CA: Outdoor living machine

Low Impact Development



Low Impact Development



Swales and linear detention



Porous Paving



Infiltration Planters



LID Street Section

Wetlands



Holistic Integration of Water



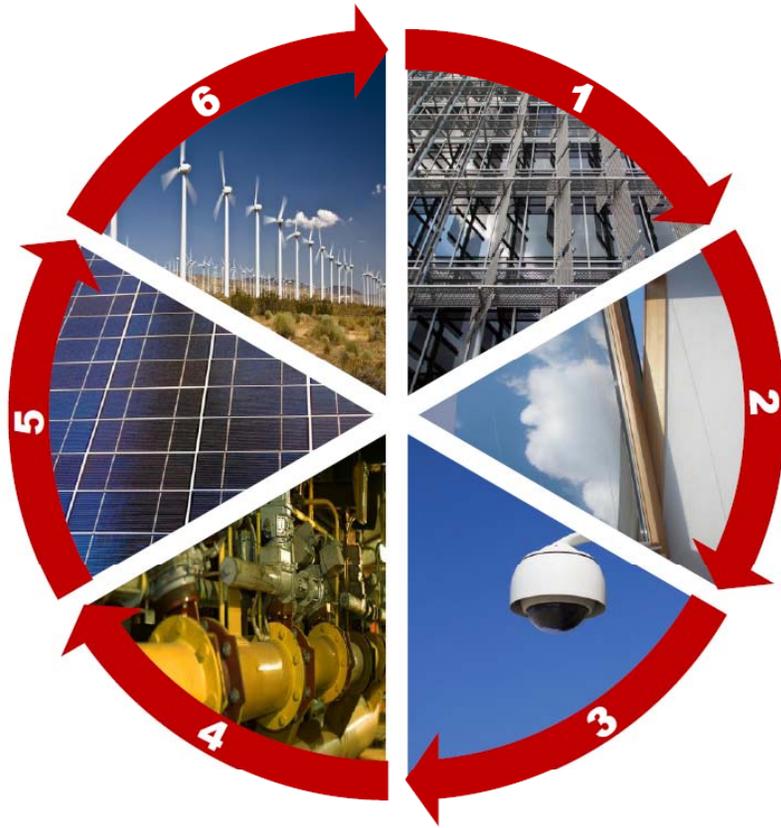
Energy and Carbon

Carbon Approach



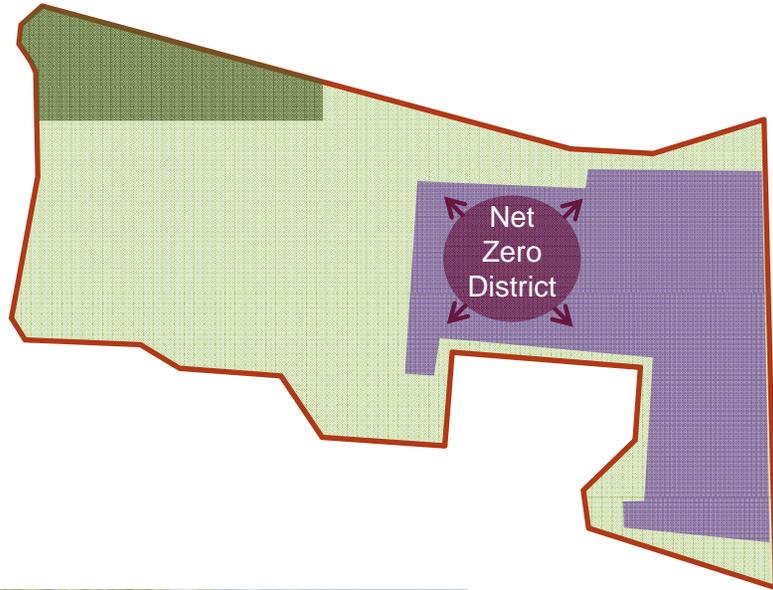
1. Cluster development
2. Implement transit solutions
3. Encourage efficient use of energy
4. Allocate land for renewable energy generation
5. Restore habitat areas
6. Offset remaining impacts

Energy Approach



1. Load reduction
2. Passive strategies
3. Efficient systems
4. Energy recovery
5. Renewable energy
6. Offsets

Net Zero District



UC Davis West Village

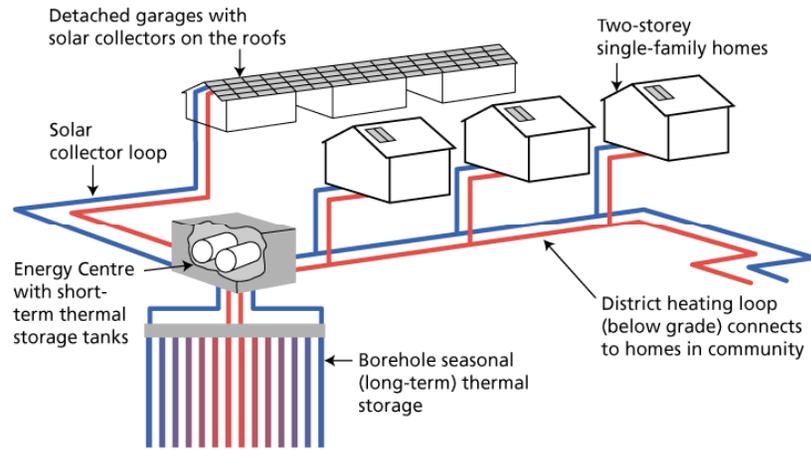


Zeta Townhomes, Oakland



UC Davis West Village

District Energy



Residential District Energy



Central Energy Plant Building, UC Merced



Site Issues

Phasing Opportunities

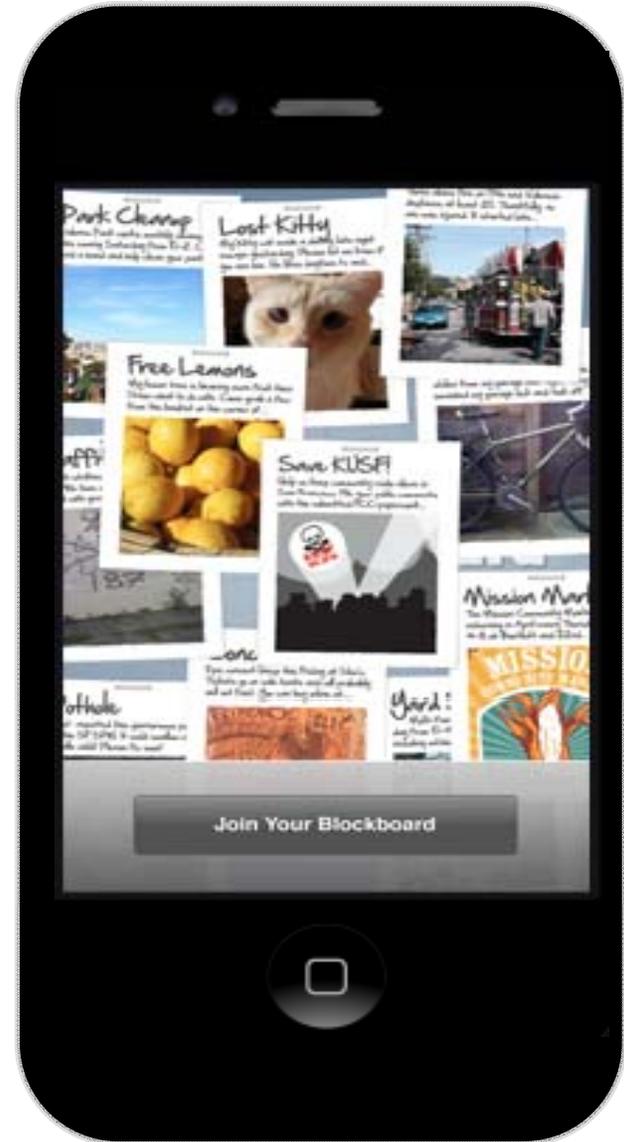


Information and Telecommunication Technology

- Real-time energy and water use
- Smart grid
- Traffic and parking monitoring
- Transit tracking
- TSM / TDM monitoring

Connected Community

- Universal broadband access
- Digital bulletin board
- Carpooling, carsharing through mobile



Digital Bulletin Board: Blockboard.com

An aerial photograph of a coastal city and harbor, overlaid with a semi-transparent green filter. The city is densely packed with buildings, and the harbor is filled with water and ships. The text "Your thoughts?" is written in a white, serif font across the middle of the image.

Your thoughts?

Next steps in the planning process

Next Steps

- Preparation and evaluation of alternatives
- Other ongoing community involvement
 - Financial workshop
 - Urban Greening Plan meetings
- Monthly updates to ARRA
- Review by community and Boards and Commissions
- Presentation of Preferred Alternative(s)

Next Steps – LBNL Second Campus

- July 13, 2011 community meeting
 - BBQ – 6:00 pm
 - LBNL Formal Presentation – 7:00-9:30 pm
 - Auctions by the Bay – 2700 Saratoga Street
- Postcard campaign
- Lawn/window signs
- Stay involved
 - www.lab2alameda.org
 - Facebook page
- November decision on preferred site

Breakout session

Stations

- Water
- Energy and carbon
- Site issues