



# MOCK SOUTH BAY COMMUNITY STRATEGIC SUSTAINABILITY PLAN

**A product from the APA South Bay Strategic Community Sustainability Planning Workshop  
(the “Workshop”) – October 14, 2011**

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## INTRODUCTION

This Mock Plan outlines the vision and community services portions of a strategic community sustainability plan (SCSP). The purpose of this Mock Plan is to explore and illustrate the power and potential of a strategic approach. The essence of a strategic approach to community sustainability planning is a “gap” analysis. This analysis starts by using a principle-based definition of sustainability success to create a vision of community and sustainability. Then the community analyzes existing conditions and compares them to the vision, thereby defining the gap. The resulting creative tension provides the impetus for an on-going innovation program (strategic action plan) to eliminate sustainability violations and create the desired sustainable community, one bold step at a time. An excellent source of detailed guidance on community sustainability planning is the publication, [\*Integrated Community Sustainability Planning – A Guide\*](#), by The Natural Step Canada.

The following Community Vision section was prepared by expanding upon ideas from existing plans. The Community Systems section below was prepared from ideas generated during an exercise completed at the workshop. A glossary and resources follow this material. Detailed results from the workshop exercise are included in Appendix A.

## COMMUNITY VISION

The community vision in a SCSP consists of the sustainability principles, a high-level vision statement, and a statement of 5-7 core community values. Each of these are described and developed below.

### Sustainability Principles

The Natural Step’s four System Conditions for Sustainability (see diagram) form the scientific foundation for community sustainability. Planners can turn the system conditions into principles for community sustainability planning by adding the phrase, “*We will reduce **and eventually eliminate** our contributions to systematically increasing . . .*” before each of the system conditions.

One of the advantages of a strategic approach based on scientific principles of sustainability is that it does not lock a community into a particular technology or image of sustainability (e.g. using only solar power). The principles do not prescribe or force a community to take a particular action or work towards a specific image of sustainability. They simply illuminate the boundary between sustainable and unsustainable (e.g. use energy sources that do not violate the sustainability principles). Any action, strategy, technology, etc., that reduces violations is an option. Over time, these activities form a series of strategic “moves” towards sustainability, like those of a chess game that eventually eliminates violations. The goal and requirement to eliminate sustainability violations is the key to success. The priority and timing of actions is also important. This is how the strategic approach links the environment (sustainability violations) with the economy (innovation/actions) to achieve environmental quality and create a stronger and sustainable economy.



## South Bay Vision Statement

Creation of a vision statement begins with outreach to the community about the qualities most desired in the future. The team then synthesizes responses into a high-level vision statement that captures the community’s essential aspirations for its future. The vision statement is then scrutinized through the lens of the sustainability principles. The team accomplishes this by asking whether the vision includes any elements that may violate the systems conditions, and then revising the vision statement as necessary.

A possible summary vision statement for a Sustainable South Bay might look something like this:

The sun shines brightly on our South Bay economy, communities, and natural areas that are now fully and perpetually restorative. Our citizens, employees, and visitors are proud of their beautiful, vibrant, vital, diverse, peaceful, respectful, active, and enjoyable communities. Our communities honor and meet the universal needs<sup>1</sup> of their diverse residents, employees, and visitors. Our communities have embedded the systems conditions of sustainability at the heart of business and community decision making. Doing so has spurred on-going innovation for sustainability and created a regenerative and restorative economy with durable and secure prosperity.

<sup>1</sup> See ICSP Guide, p 11, for an introduction.

## Core Values

Core values are akin to the community's personality and represent the essence of the community's culture. As with the summary vision statement, the following core values for this Mock Plan are generic but illustrate the type of core value statements that a formal planning exercise might generate with a strategic sustainability approach. Values for South Bay communities might include:

- Our rich heritage;
- Our inspiring natural landscape;
- Our bioregion and ecosystems that provide an abundant natural environment and associated wilderness;
- Our astonishing range of our resident's skills and talents;
- Our pioneering role in the digital revolution;
- Our exceptional commitment to the well-being of others in the community; and
- Our collective effort to be leaders in solving the challenges to sustainable prosperity and well-being of communities nearby and around the world.

## Strategic Objectives

Strategic objectives are results- and action-based statements that serve as overarching benchmarks against which to measure progress towards a sustainable community. They serve as ultimate goals to motivate on-going innovative actions.

The following strategic sustainability objectives support the vision for a Sustainable South Bay presented above. They serve as an instructive example of the types of strategic objectives involved in creating sustainable communities.

1. **Achieve zero waste** (and landfills) through product/service redesign for end-of-life deconstruction and continuous materials cycling.
2. **Have only benign emissions**/be **non-toxic**.
3. **Use only renewable energy**; be **carbon neutral** if not negative.
4. **Achieve net zero water use** within the local, local-term hydrologic cycle and groundwater recharge rates.
5. **Close technical economic production material loops** to insulate the biosphere's living systems from persistent or toxic human-made compounds.
6. **Restore and enhance natural capital** (ecosystem resources and services) used in the human economy. Have no net loss of nature at minimum; have a restorative effect for enhanced regenerative capacity and ecosystem resources and services production.
7. **Internalize externalities – use full, life-cycle cost** pricing for private and public sector decision-making and 10-year budget for public sector decision-making.



8. **Revolutionize the economy** through dramatic increases in productivity via materials and energy efficiency, effectiveness in a sustainable, regenerative, and restorative economy.
9. **Create new models of governance** that effectively integrate and manage the collective public voice in decision making.

## COMMUNITY SYSTEMS

Community systems are the mechanisms used to provide for the needs of society: transportation, food, energy, recreation, etc. With a high-level community vision defined, the community can apply strategic planning methods to develop corresponding definitions of success, strategic, objectives, actions and indicators for each community system. This multi-step, multi-stakeholder collaborative process would (1) assess existing sustainability violations and community assets and (2) develop a prioritized list of the bold strategies and actions that the community can take to begin bridging the gap and building a foundation for more difficult actions and ultimate success.

During a one-hour brainstorming session, workshop participants developed descriptions of success and objectives for four community systems: transportation, built environment, energy, and recreation. It is natural for such brainstorming to generate ideas for action in addition to results-based objectives. These ideas should be captured for the next phase of planning, as seen below under Transportation Community System. These results are not a polished or finished product, but they show how a plan created using a strategic sustainability approach might differ from one created using traditional planning approaches focused more on actions (that reduce impacts but offer no clear process to eliminate them). See Appendix A for complete results from the workshop exercise.

Other potential community systems not covered in the Workshop exercise include arts/culture/heritage, economic development, food, health and social services, learning, materials and solid waste, natural areas, and water. Communities need to define the particular set of community systems that matches their unique vision statement.

### Transportation Community System

1. **Description of Success:** The transportation community system helps maintain social connections, and provides residents and employees access to food & services, jobs, and places.
2. **Strategic Objectives**
  - Reduce need for trips that use energy through land use
  - Increase number of trips made by walking, biking, and public transportation
  - Become a region of Urban villages – amenities/jobs in close vicinity
3. **Possible Actions**
  - Gas tax
  - Move away from free parking
  - Road diets for bike lanes



- Bus Rapid Transit
- Safe Routes to School
- Bike sharing program
- Connecting bike paths
- Public transportation incentives

## Built Environment Community System

1. **Description of Success:** The built environment creates the fundamentals of community – places to live, work, and play; shelter; movement; economic activity; community; services (food, health care); safety; comfort; and security.
2. **Strategic Objectives**
  - Everyone lives, works and plays in green buildings
  - County land uses reduce the need to travel
  - Building footprints are reduced through higher density
  - Infrastructure is efficient and effective
  - The built environment is reused and recycled before building new
  - There are mobility options (bike, pedestrian, transit)
  - Transit attractive on a cost basis (time & money)

## Energy Community System

1. **Description of Success:** The energy system will provide inexpensive, abundant, renewable energy supplies for stationary and mobile uses.
2. **Strategic Objectives**
  - Eliminate fossil fuels and GHG production by 2050 and peak emissions by 2017.
  - Buildings are energy efficient
  - Compact development reduces the need to drive and thus reduces energy used for transportation

## Recreation & Leisure Community System

1. **Description of Success:** Recreation and leisure resources in the South Bay communities bring people together; reduce stress; enhance mental and physical health; develop skills and identity; provide group and individual orientation.
2. **Strategic Objectives**
  - More than 80% of population get at least 30 minutes of activity/day (increased time)
  - Recreation facilities are fossil fuel free
  - Recreation facilities are available in proximity to home, work, and transportation (improved access); five minutes to recreational facility (or distance based); percent of people accessing facility by alternative transport
  - Streets are suitable for recreation (in place recreation, shared commons)
  - Reduced hardscape and stormwater detention in parks reduces runoff



- Improvement on health measures
- More people engage in active transportation (50% walk/bike to work)
- More trails are available for active transportation and recreation

## GLOSSARY

**Biosphere** is the global sum of all ecosystems. It can also be called the zone of life on Earth, a closed (apart from solar and cosmic radiation) and self-regulating system. From the broadest bio-physiological point of view, the biosphere is the global ecological system integrating all living beings and their relationships.

**Ecosystem Resources** are the environment's natural resources, both finite and renewable.

**Full Cost Pricing** uses an estimate that includes more than the financial market price for a good or service when substantial externalities or subsidies are involved. For instance, the U.S. subsidizes the U.S. oil industry for R&D and exploration to the tune of approximately \$400B per year adding approximately \$8.00 to the cost of a gallon of gas for a real economic resource cost of \$12 per gallon. Whenever something is priced lower than the full cost of the resources involved, society will over consume it.

**Life-Cycle Cost** uses the full costs, from resource extraction through disposal in choosing between alternatives.

**Regenerative Economy** mimics the cyclical material flows of nature, uses renewable energy, does not use natural resources at rates higher than their rate of regeneration, and otherwise does not violate the laws of nature that govern the regeneration of life in earth's ecosystems. These ecological constraints are used as design parameters for innovation that redesign economic products and processes that eliminate negative environmental impacts in ways that increase economic productivity and resilience.

**Restorative economy**, same as a regenerative economy, except that human system impacts are not simply neutral, but positive, and enhance the productivity of ecosystems. Human impacts would involve restoring degraded ecosystems instead of simply eliminating damaging impacts.

**Universal Human Need** does not vary by culture or time. It is an approach developed by Chilean economist Manfred Max Neef. He proposes nine universal human needs that are the same across cultures and time (subsistence, protection, participation, leisure, affection, understanding, creation, identity, and freedom), but that are met in ways that do vary across culture and time. The value of this approach is that it anchors the dialogue over human needs in universal needs and clarifies the debate that often occurs when the way the needs are met are confused with the needs themselves. As such, it provides a basis for community sustainability planning whose primary purpose is meeting some degree of human needs at the community level. See the following discussion: [PDF](#) or [MP3](#).

**Value Production** is the notion that programs and products produce more value than the costs they incur.



## RESOURCES

[Integrated Community Sustainability Plan \(ICSP\)](#), the Natural Step Canada

[Whistler 2020](#), a model integrated sustainability plan and on-going implementation and monitoring, British Columbia, Canada.

[Lake Oswego, Oregon](#), Handout description of comprehensive planning update. An example of the difference that using a strategic sustainability approach makes, including the adoption of the Natural Step's sustainability principles







## APPENDIX A

### RAW RESULTS -- WORKSHOP COMMUNITY SYSTEMS BRAINSTORMING

The following text was transcribed from post-it notes generated during the workshop breakout exercise.

#### Transportation Community System

##### 1. Visioning

- System's Purpose in a Sustainable Community: Help maintain social connections, gets food & services to people, get to job/places.
- Human needs met by transportation system: sustenance, participation, affection, identity, understanding, creativity, freedom, protection.
- Description of Success (What will folks say in the future that describes sustainability success?)
  - "I can get where I want/need to go safely, conveniently, affordably – and enjoy the trip."
  - "I have choice in how to get around."
  - The transportation system "supports a healthy community" and "clean energy for vehicles"

##### 2. Existing Conditions

- Violations of System Conditions: Uses natural resources (oil, fuel consumption, roads), pollution (CO2 and criteria air pollutant emissions, air quality, waste)
- Challenges: costs, efficiency

##### 3. Strategic Objectives

- Land use patterns reduce need for trips that use energy
- Increase # of trips made by walking/biking/public transportation
- Urban villages with amenities/jobs in close vicinity

##### 4. Actions

- Gas tax
- Move away from free parking
- Road diets for bike lanes & BRT
- Safe Routes to School
- Bike sharing program
- Bike paths/connections
- Public transportation incentives

#### Built Environment Community System

##### 1. Visioning

- Purpose – Creates the fundamentals of community – places to live, work, and play; shelter, movement, economic activity, community, services (food, health care), safety, comfort, and security.



- Vision: Human needs met by built environment: sustenance, understanding, protection, identity
- Description of Success: What will folks say in the future?
  - How energy efficient to be?
  - Is transit viable?
  - Aesthetics – How much does it look like Europe with the convenience of San Jose?
  - Opportunities to walk
  - Efficiency = Sustainability

## 2. Existing Conditions

- Violations of System Conditions / Challenges
  - Lack of affordable housing
  - Non-sustainable building materials (earth's crust – still extracting but getting better)
  - Building practices (GHG emissions); building new buildings when there are vacant buildings (waste of embodied energy)
  - Subsidized green field development
  - Focus on near-term profit vs. long-term value

## 3. Strategic Objectives

- Everyone lives, works and plays in green buildings
- County land uses reduce the need to travel
- Building footprints are reduced through higher density
- Build efficient, effective green infrastructure
- Reuse and recycle the built environment before building new
- Provide mobility options (bike, pedestrian, transit)
- Make transit attractive on a cost basis (time & money)

## Energy Community System

### 4. Visioning

- Purpose –provide inexpensive, abundant, renewable energy supply for stationary and mobile uses.
- Vision: Human needs met by energy system: sustenance, protection, freedom
- Description of Success/ What will folks say in the future?
  - Renewable energy is the standard choice
  - People and corporations demand sustainable energy choices
  - Mindset is towards always improving energy use, continual upgrades
  - Retrofit of existing facilities
  - Use less energy but still feel comfortable

### 2. Existing Conditions

- Violations of System Conditions Challenges
  - Dispersed services increase driving and requires more energy for transportation
  - Need monitoring
  - Existing buildings and facilities are inefficient
  - Water use far from source requires energy to pump water
  - Not all companies/developers/people consider sustainability, but more are



### 3. Strategic Objectives

- Eliminate fossil fuels by 20??
- Building efficiency
- Compact development that reduces need to drive and thus reduces energy used for transportation

## Recreation & Leisure Community System

### 4. Visioning

- Purpose in a Sustainable Community – Bringing people together; reducing stress; health – mental & physical; develop skills & identity; group & individual orientation; supports sustainable people as individual system
- Vision--Human needs met by recreation & leisure: freedom, creativity, idleness, participation, identity, protection
- Description of Success/What will folks say in the future?
  - We are all responsible for our open space and recreation system
  - Open space and recreation system improves water supply and recycles stormwater
  - We are sharing resources
  - This is a healthy place: clean air; can be physically active
  - Virtuous cycle of physical/mental health fitness that supports desire/ability to be part of a sustainable society

### 3. Existing Conditions

- Violations of System Conditions / Challenges
  - Poor resources
  - Tension between parks, planning, and health concerns
  - Negative impacts on water/land
  - Water usage on grass fields
  - Cost of turf (life-cycle analysis)
  - Institutional/regulation, e.g. fire department street requirements vs. complete streets
  - How to provide the opportunities & facilities for recreation & leisure for X years

### 4. Strategic Objectives

- More than 80% of population get at least 30 minutes of activity/day (increased time)
- Recreation facilities are fossil fuel free
- Recreation facilities are available in proximity to home, work, and transportation (improved access); 5 minutes to recreational facility (or distance based); % of people accessing facility by alternative transport
- Streets are suitable for recreation (in place recreation, shared commons)
- Reduce hardscape and provide stormwater detention in parks to reduce runoff
- Technology innovation & flexibility
- Improvement on health measures
- Increase active transportation (50% walk/bike to work)
- More trails