

**CITY OF
ASHLAND**
OPERATIONAL SUSTAINABILITY PLAN
Framework, Plan Format & Process Outline

Introduction

The Conservation Commission has long been interested in assisting the City in the development of a formal cross-departmental sustainability planning effort to ensure coordination across City operational functions. This planning effort can function as an internal communication and tracking tool to develop prioritized actions to meet a variety of long term goals and objectives as well as provide a location to report on existing efforts relating to operational sustainability and efficiency.

Objective

In addition to the functions described above, an operational sustainability plan is a tool to increase the efficiency of the organization in their resource consumption. Efficiency in this case is defined as a reduction in consumption, an avoidance of use, re-use of resource or process by-product with decision making based on analysis of all inputs and outputs of a given process or product used. The resulting decision and action should lead the organization to increased resource efficiency with a related, defined cost savings over a given period of time.

Goal

In May of 2012, the Commission recommended that Council amend a previous Council goal relating to City operational efficiency. Council approved the recommendation which resulted in the following Council goal:

“Develop a concise sustainability plan for the community and for City operations, beginning with development of a plan framework, suggested plan format, timeline and resource requirements for City Operations that can be used as a model for a community plan to follow”

With the understanding that the content and priority of specific actions will need to be developed by City Staff, matched with budget planning and other existing planning documents and plans, the Commission focused its efforts on the listed Council goal elements of:

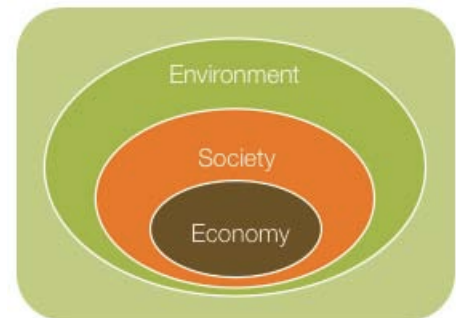
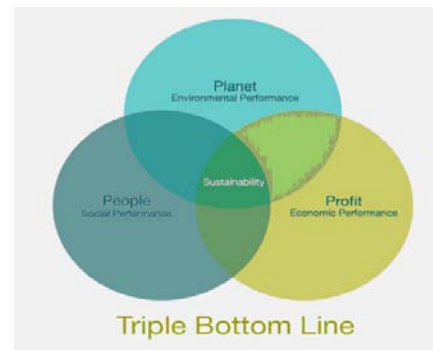
- | | |
|-------------------|--------------------------|
| 1) Plan framework | 3) Process & Timeline |
| 2) Plan format | 4) Resource requirements |

Plan Framework

While the City has undertaken many different actions and programs within its departments and divisions that have led to increased operational efficiency and outcomes that are more sustainable, there has been no formal guiding statement or accompanying principles to help embed sustainability into daily decision making in internal City operations.

The Commission and its Sustainability sub-committee spent considerable time reviewing both community and operational sustainability plans, with a particular focus on the different types of decision making frameworks utilized.

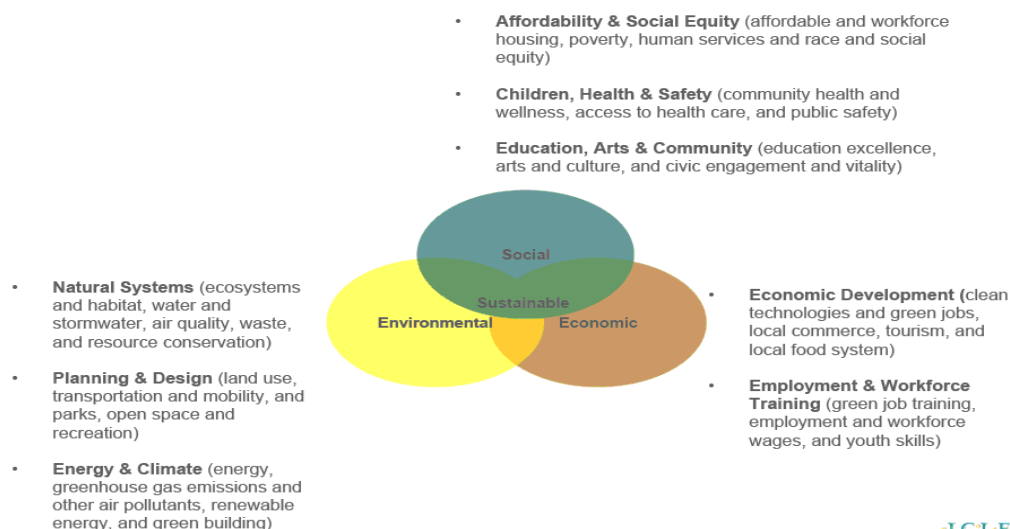
Most, if not all, plans recognize and pay homage to the concept of triple bottom line (TBL) thinking, which recognizes the connections between the three core areas of impact; planet (environment), people (social) and profit (financial) and the need for all three components to be considered in every decision.



ICLEI – Local Governments for Sustainability

Because ICLEI specifically exists to serve local governments in their efforts towards sustainability, the Commission recommends that the operational plan be developed using ICLEI framework, tools and resources. This will provide City staff with a solid, understandable framework and process to follow as the full plan is developed.

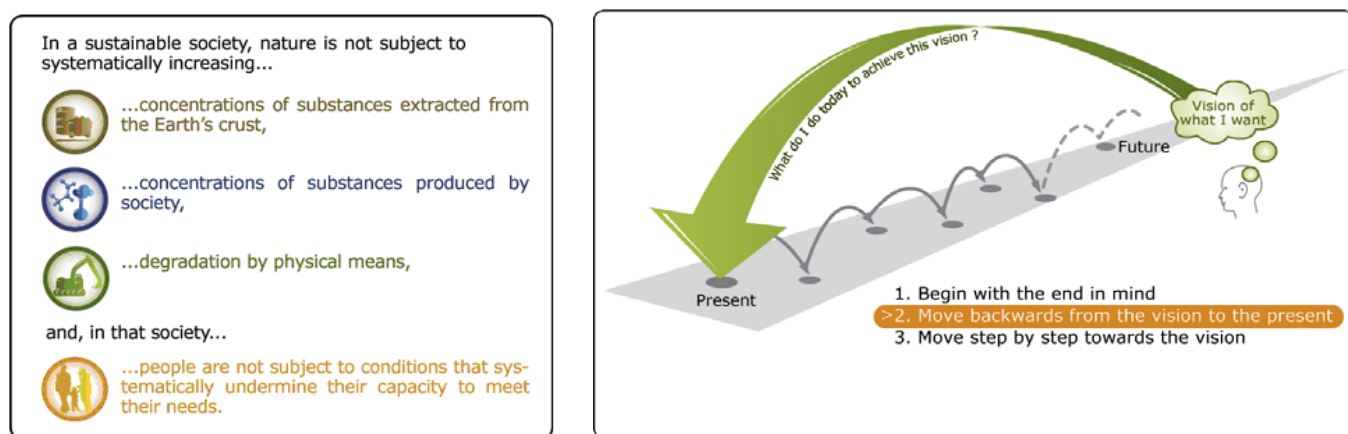
How does ICLEI define sustainability?



Additionally, as a member of ICLEI, the City has access to a variety of Sustainability planning and implementation resources, most notably the Sustainability Planning Toolkit (<http://www.icleiusa.org/sustainabilitytoolkit>).

The Natural Step

The Natural Step is a comprehensive framework guided by basic principles summarized by four system conditions shown below. The framework requires the recognition that strategic planning and decision making must be made within the constraints of the system conditions and uses a process called “backcasting” to set a target or vision of success followed by the development of steps or actions needed to achieve that target.



The Commission recognizes that there are distinct differences between an operational plan and a community-wide plan and while the Commission recommends the ICLEI framework and protocol for the City's operational sustainability plan, that may or may not be the best fit for the community plan that the Commission is interested in initiating after the operational plan is up and running.

Having the opportunity to test the ICLEI framework for the internal operational plan will be valuable for both City staff and the Commission in providing an assessment and recommendation to Council on a framework for the larger community sustainability plan in the near future.

Plan Format

The plan will need to contain a consistent template to use to set and measure targets across all resource elements based on existing data sets, or benchmarks.

Resource Elements

Each resource element and subcomponents will contain an introductory narrative describing its general use and need within the organization, its total annual consumption, current consumption/utilization rates (could be calculated and displayed several ways), reduction/conservation/utilization target and prioritized actions to meet the target.

Resource Elements Initial Inventory

Energy	Waste	Transportation/Fleet
Electric	Avoided	Fuel Consumption
Natural Gas	Re-purposed/Sold	Miles traveled
Renewables	Recycled	# of vehicles
Back-up Power (diesel)	Disposed	Vehicle Fuel type
Water	Haz Mat	Purchasing/Policies *
Production/Processes	Avoided	RFP Criteria
Irrigation/Landscape	Replaced	Purchasing Criteria
General Use (office/restroom/etc)	Disposed	Construction Standards (LEED)
		Life cycle cost analysis

*This section will describe all administrative policies, acquisition/purchasing policies, project standards or requirements that relate to any and all resource elements detailed in the operational sustainability plan and function as a key tool in utilizing the decision making framework to meet the targets for each resource element

Benchmarks

For City Staff to set and track targets, it is essential to have accurate baseline benchmark data. Based on discussion with Staff, the Commission recommends using 2010 data as the initial baseline benchmark to measure progress on meeting the targets set for each resource element. Where 2010 data isn't available or does not exist for the proposed action, new benchmark data may be created to track progress.

Targets

Specific targets will be established for each resource element with some being set at the sub-component level. For example, the energy resource element contains subcomponents with different target types. Targets at the sub-component level could be structured similar to this:

Electric Target – 15% reduction in total electric consumption

Renewables Target – Minimum of 5% of total electric consumption from local renewable generation

Targets will be set for the initial 2015 milestone, as well as longer range targets beginning with a five year increment, and jumping to 2013 targets, with the intent of pushing the organization to evaluate both short and long term resource and revenue return on investments.

Sample Subcomponent Data Table

Electric				
Primary Uses Facilities Heating/Cooling/Lighting Pumping-Water/Wastewater Departmental Operations – IT Network, Fleet/Shop operations, etc				
Consumption/Use Data	2010 Benchmark	2015 Target	2030 Target	Notes/Comments
Total Annual Consumption				
Consumption per sq/ft of building				
Water System consumption				
Wastewater System Consumption				

Proposed Actions

Each resource element will share a similar template table. Following the table of proposed actions within each resource element, each proposed action will have a narrative explaining detailed project costs, cost effectiveness calculations (ROI, life cycle costing, etc), connection of project to meeting specific resource target, funding options, staffing requirements, responsible department, organizational and/or employee benefits, community benefits and other pertinent information.

Sample Action Plan Table *

*Data for display purposes only, not project specific

ENERGY						
Electric				Target = 15% kWh reduction		
Proposed Action	Cost	Total Savings (kWh/Yr)	% of Target	Completion Date	Est. ROI	Notes
Installation of Variable Speed Pumps at Wastewater Treatment Plant (12 pumps)	\$15,750	272,000	15%	6/30/13		
Replace HVAC System at Water Treatment Plant	\$30,000	54,300	3%	12/31/13		
Installation of lighting occupancy sensors at City Hall	\$7,500	9,000	.5%	9/1/13		
Renewables				Target = 10% kWh renewable		
Conduct solar assessment for all City facilities	\$15,000	N/A		12/31/13		
Install solar panels at 90 N Mountain Service Center	\$275,000		10%	6/30/14		Aprox. 50k kWh generation/yr

Performance Tracking

A consistent tracking system will be developed and implemented for all resource elements and will contain the following metrics:

Source data ID	(where it comes from)
Collection responsibility	(who is collecting it)
Collection location	(where it is collected/entered)
Frequency of collection	(when it is collected)
Analysis or calculations required	(what needs to be done with it)
Frequency of review/reporting	(how often does it get distributed/reviewed)
Review responsibility	(who does the data/report go to)

The creation of a strong and consistent tracking system will provide continuity of the plan over time and allow transition of responsibility among different staff members with no loss of data, accuracy or consistency in calculations or analysis.

Reporting

To adequately integrate the plan into City operations and daily decision making, the Commission feels strongly that an annual report should be prepared and presented to the City Council to acknowledge successes and progress towards the targets, discuss areas of needed focus, provide suggested modifications to targets, etc.

Internally, quarterly updates to the City Administrator with a copy to the Commission would be recommended to work through initial implementation issues and identify potential changes in plan format, targets, reporting details, etc. The Commission could function as a reviewer of adjustments and provide recommendations and support for small operational modifications of the plan.

A comprehensive review and update of the plan should occur on or near five year periods, beginning in 2015. This review provides an opportunity to review and evaluate emerging trends, changes in technology, major alterations to various business practices, regulatory changes, etc. as well as the ability to include additional resource elements, tracking procedures and other updates to better meet future targets

Process & Timeline

Because many of the potential actions require financial resources to accomplish, the Commission is hopeful that the initial draft operational plan can be developed parallel to the City's annual budget preparations. Upon Council approval of the plan framework, format, timeline and resource requirements provided by the Commission, City staff could begin drafting the full document in January of 2013 and have a completed final draft for review and approval in May of 2013.

The Commission is anticipating being a resource to staff as the plan is developed and would welcome several in-process updates as the plan is put together to offer guidance, evaluate and recommend targets and generally support the plan development process.

Implementation of elements of the plan could begin in July of 2013 which presents a clean starting date for funding requirements as well as for tracking and benchmarking purposes.

Resource Requirements

The Commission has also been supportive of the City dedicating staff specifically for the development and implementation of both the Operational Sustainability Plan and ultimately playing a role in a community sustainability plan. The opportunity to start with the drafting of the operational plan with the guidance outlined in this Commission recommendation allows City staff and Council to determine whether dedicated staffing is needed initially or if a coordinated core inter-departmental team charged with plan development and implementation is effective.

If Council and City Administration determine that current staffing availability does not exist to assist City staff on the plan development, a number of consultants locally, regional and statewide provide specific services in this area and could be selected through a request for proposals process. Depending on the desired or available level of involvement from City staff, the Commission has found a range of cost from similar projects in other cities to be from \$15,000 to \$40,000. Where this plan fits within this range is dependent upon the scope of work for the consultant vs. internal City staff.

Whether the plan is developed and coordinated internally or contracted to a consultant, staff resources will be required to provide the raw data, existing lists of projects and potential projects, actions and activities to be evaluated, prioritized and recommended for inclusion in the plan.

As the decision making framework is fully integrated into administrative policies and actions are implemented and successful, overall coordination and “next level” projects, such as complex treatment systems equipment at the City’s water or wastewater treatment plants, may require more specialization and focus than an inter-departmental team has the ability to accomplish or manage alongside their regular job duties within the organization.

The Commission recognizes that there are multiple ways staffing resources and consultant services could be deployed to effectively meet the targets set and bring an increased level of sustainability planning and awareness to the organization and the Commission will continue to be available to City staff and Council as those types of issues arise through the duration of the development and implementation process.

Additionally, the Commission feels strongly that the further integration of sustainability principles and practices into the organization will lead to significant cost savings across many Departments and Divisions of the City and those financial savings will be tracked and accounted for along with the various resource savings achieved. The result should validate that sustainable operations is financially prudent as well as environmentally and socially necessary.