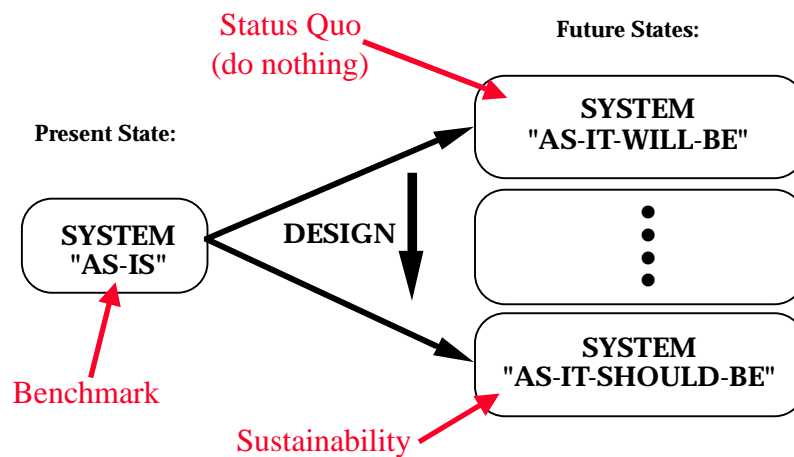


Part III: Implementation Planning

What is the path you will take to achieve sustainability? What steps will you need to take?

Overall Approach



(Zandi 1993)

How should you envision the “as-it-should-be” state?

What would a truly sustainable installation/organization/building look like?



What does a sustainable world look like?

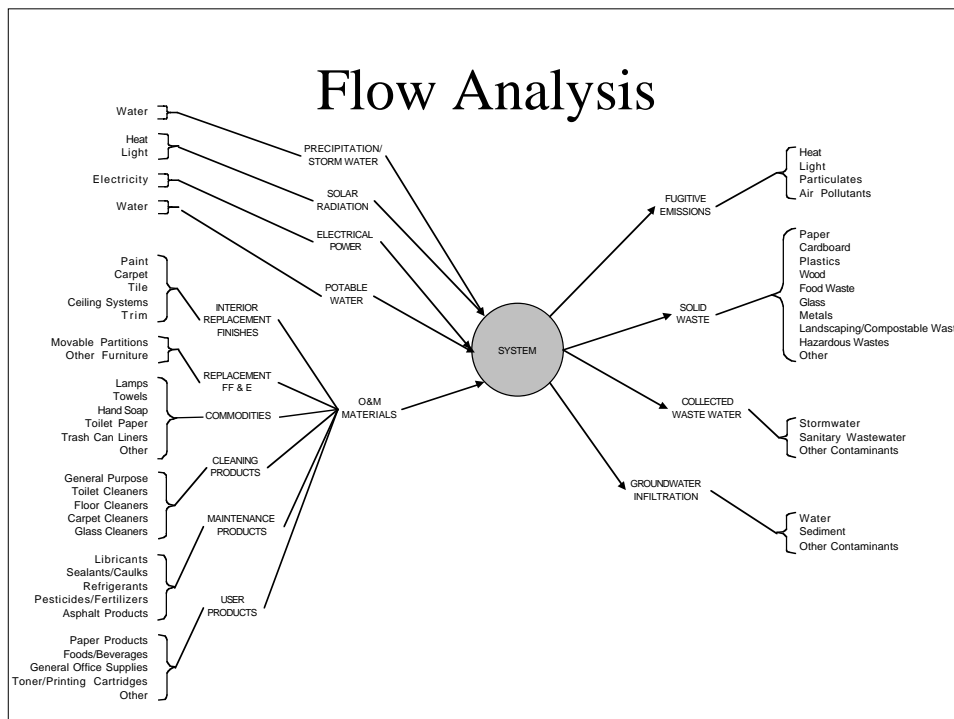
- 1)The resource bases that provide for our needs are not depleted or degraded
- 2)The ecosystems that provide life-supporting services are not destroyed or degraded
- 3)Human needs and aspirations are met

How does this translate to a smaller scale?

- 1)Our decisions/installations/buildings do not cause resource bases to be depleted or degraded
- 2)Our decisions/installations/buildings do not cause the destruction or degradation of natural ecosystems
- 3)The needs and aspirations of our stakeholders are met

Situation Assessment

- From the problem side, we need to understand what we're doing that violates sustainability constraints:
 - How are we depleting/degrading resource bases?
 - How are we destroying/degrading ecosystems?
 - How are we failing to meet the needs and aspirations of our stakeholders?
 - How would these change if we changed our actions?



Situation Assessment

- From the solution side, we need to characterize:
 - The organization
 - The change agent(s)
 - The opportunities
 - The context
 - The strategy (and current status)

Situation Assessment

- Characteristics of the Organization:
 - Organizational structure
 - Organizational infrastructure
 - Demographics of people
 - Attitude toward change
 - Knowledge base
 - Available internal resources (e.g., support staff)
 - Available external resources (e.g., P2AD)

Situation Assessment

- Characteristics of the Change Agent(s):
 - Status as change agent
 - Personal attributes
 - Personal knowledge
 - Behaviors
 - Influence and perceived authority
 - Individual resources

Situation Assessment

- Characteristics of the Opportunities*:
 - Demographics of client base
 - Project types and user types
 - Availability of slack resources
 - Client drivers and constraints
 - Receptivity to change/existence of precedents
 - Availability of transparent solutions

*for a service-based (A/E/C) or Owner organization; additional attributes are needed to characterize a product-generating organization

Situation Assessment

- Characteristics of the Context:
 - Availability and visibility of precedents
 - Status of competition
 - Overall market demand
 - External drivers and constraints (e.g., regs)
 - Overall knowledge base

Situation Assessment

- Characteristics of the Strategy:
 - Initial impetus/driver/trigger
 - Mission/vision/goal attributes
 - Execution plan attributes
 - Rollout strategy attributes
 - Mechanisms for progress tracking and lessons learned capture
 - Changes in organizational structure/individual responsibilities

Sustainability Implementation

- Achieving sustainability is about addressing the problems we uncover using the resources we have available, to the best of our abilities.
- The goal is to design an implementation plan that:
 - Moves us in the direction of sustainability
 - Can be successfully executed, given the situation

Sustainability Adoption in Organizations

- Components of an Implementation Strategy:
 - What? What is the envisioned end state?
 - Why? What was/is the driver?
 - When? What was/is the timeline?
 - How? What has been/will be the mechanisms?
What resources have been/will be used?
 - Who? Initial change agent? Propagation strategy?
 - Lessons learned? What has worked/not worked?

Steps of an Action Plan for Implementing Sustainability

- Vision/Mission
- Policy
- Goals
- Objectives
- Indicators
- Execution Plan
- Progress Check

(Vanegas & Pearce 2000)

STEP 1

Create an organizational vision and
mission that address sustainability



Creating a Vision Statement

A well-conceived vision consists of two major components:

- Core ideology
 - Core values
 - Core purpose
- Envisioned future
 - 10 to 30 year BHAG
 - Vivid description of what it will be like when the organization achieves the BHAG

(Collins and Porras 1997)

Sample: Vision Statement

The President's Council on Sustainable Development

“Our vision is of a life-sustaining Earth. We are committed to the achievement of a dignified, peaceful, and equitable existence. A sustainable United States will have a growing economy that provides equitable opportunities for satisfying livelihoods and a safe, healthy, high quality of life for current and future generations. Our nation will protect its environment, its natural resource base, and the functions and viability of natural systems on which all life depends.”

(Towards a Sustainable America 1999)

What is a Mission Statement?

A company mission statement describes how your company's operations fit *within* the company's vision for the world

Sample: Mission Statement

Certified Forest Products Council

“Conserve, protect and restore the world's forests by promoting responsible forest products buying practices throughout North America.”

(www.certifiedwood.org)

Sample: Mission Statement

“Our mission is to improve the conditions of humanity, especially the children, and the earth by producing the strongest, highest quality, most energy efficient building products, by providing top service to our customers, and creating an empowering corporate culture that fosters professional development and safety for all people. This is to be done to the best of our ability, as God’s will directs us, producing consistent profit and growth.”

FischerSIPs, Inc.

STEP 2

Develop a policy that articulates
the organization’s vision and
mission for sustainability

What is a Policy?

“A plan or course of action
...intended to influence and
determine decisions, actions, and
other matters”

–The American Heritage College
Dictionary, Third Edition, 1993

Sample: Policy



Delta’s Environmental Policy is based on
three key principles:

- First and foremost is the principle of environmental excellence.
- The second principle is the concept of environmental stewardship.
- The third principle is the concept of sustainability.

(Delta Air Lines Environmental Report 1999)

Sample: Policy

Blue Circle's Environmental Policy is to:

- Comply with applicable environmental legislation
- Continuously improve its environmental performance
- Contribute to long-term economic, environmental and social sustainability



(Blue Circle Industries PLC Environmental Report 1999)

STEP 3

Develop specific strategic goals that address each element of the policy

Specific Strategic Goals

- Describe the end state
(e.g., eliminate waste)
- Do not include how to get there
(e.g., reduce air emissions)
- Provides a point of reference for
changing organizational behavior in
terms of existing practices

Sample: Goals (HOK)

HOK's goal is to influence its entire body of work as a firm, to move its projects and the profession as whole, toward sustainable design. The goal is, quite fundamentally, to redefine design quality in the built environment.

(Mendler and Odell 2000)

Sample: Goals (Interface)

1. Eliminating Waste
2. Benign Emissions
3. Renewable Energy
4. Closing the loop
5. Resource Efficient Transportation
6. Sensitivity Hookup
7. Redesign Commerce



(Interface Sustainability Report)

STEP 4

Develop specific measurable
objectives to evaluate progress
toward the goals

Sample: Objectives (Interface)

Goal: Benign Emissions

Objectives:

- Benign Air Emission
- Benign Water Effluent
- Toxics Elimination
- Improve Indoor Air Quality



(Interface Sustainability Report)

STEP 5

Choose the sustainability indicator(s) to measure progress toward reaching objectives

Sample: Indicators

Goal: Benign Emissions

Objectives: Benign Air Emission

Indicators:

- Pounds of carbon monoxide emitted to make one yard of fabric
- Pounds of NO_x emitted to make one yard of fabric
- Pounds of hexane emitted to make one yard of fabric

(Interface Sustainability Report)

STEP 6

Develop a clear and detailed execution plan for each objective

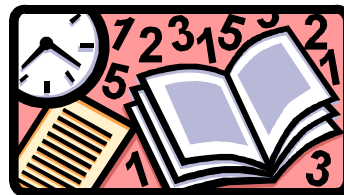


Execution Plan

- Describes how the company will operationally accomplish the specific measurable objectives
- Includes specific actions to be taken
- Explains how meeting the objective(s) will accomplish the company's goal

Components of Execution Plan

- Over-arching Goals
- Associated Objectives
- Specific Actions
 - Needed resources
 - Timeline for implementation (phased approach)
 - Defined roles and responsibilities
 - Anticipated barriers & barrier breakers
 - Processes for data flow
 - Mechanisms for capturing lessons
 - Incentives &/or penalties
 - Checks, balances, feedback loops



Sample: Execution Plan

Goal: Benign Emissions

Objectives: Benign Air Emission

Execution Plan Action:

- Guildford of Maine installed a computerized boiler to increase wood-burning efficiency
- Bentley Mills replaced their flat goods dryer with a low NO_x, high efficiency dryer
- Rockland React-Rite installed a water-cooled stack, condenser, and a refrigerated box on their emission stack

(Interface Sustainability Report)

STEP 7

Check your progress using indicators and continuously change process to move toward measurable objectives and long-term goals



Sample: Progress Check

In our last example, the action (installing a computerized boiler) achieved a 98% reduction in particulate emissions and carbon monoxide emissions

Need to change the process again (and again) to achieve a 100% reduction

(Interface Sustainability Report)