



Sustainability
2030



WELCOME

to **SHARPENING**
COMMUNITY SUSTAINABILITY PLANNING
with a
STRATEGIC APPROACH

APA Northern | South Bay RAC & Sustainability Committee
Workshop | Scott T. Edmondson, AICP & Katja Irvin, AICP |
8 am-12:30 pm | October 14, 2011 (v1)

Agenda



- 1. Introduction** (20 mins: 8:30 am-8:50 am)
- 2. Community Strategic Sustainability**
(70 mins, 8:50 - 10 am)
- 3. Break** (10 mins, 10 am-10:10 am)
- 4. South Bay Plan Exercise** (70 mins, 10:10-11:20 am)
- 5. Conclusion** (10 mins, 11:20 – 11:30 am)
- 6. Lunch** (up to 60 mins, 11:30 am – 12:30 pm)



1. INTRODUCTION

Hosts



- **Thank you HMM**
- **South Bay RAC – Katja Irvin**
- **& APA N. Sustainability Committee**
 - Purpose: Develop/Support strategic sustainability
<http://www.sustainability2030.com/apa-northern/>
 - Katja Irvin, AICP & Scott Edmondson, AICP
 - Co-chairs
 - Launched January 2011

Presenters



➤ **Katja Irvin, AICP**

- Life long Environmentalist
- IBM Software developer turned planner
- With Santa Clara County
- Green building, solar, agriculture
- Focus on strategic sustainability
- [Bio link](#) | katja.irvin@sbcglobal.net

Presenters



- **Scott Edmondson, AICP**
 - 25 yrs | env. review | long-range (CCSF)
 - Independent now, env. rev./S2030 start-up
 - SF Sustainability Plan, 1996
 - Strategic sustainability
 - [Bio link](#) | scott-e@sustainability2030.com

Introductions



- **Who is here? Why?**
- **Brief Round robin intros**
 - Name/Organization?
 - Sustainability planning experience?
 - A lot? Little? Type?
 - Particular issue/interest today?

Learning Objectives



- Gain an initial understanding and facility
 - with strategic sustainability planning
 - applied to communities
- Leave w framework; use as lens/compass
 - Key components of Strategic sustainability
 - Application to community
 - Gain inventive capacity & framework
 - Start using it in your thinking and work
 - Learn/do more; Know resources

Workshop Product?



- **1st draft “Contours” of a**
 - South Bay Strategic Sustainability Plan?

- **My question of the day:**
 - how much can you process in a short presentation and what difference might it make to vision, goals, actions?

Logistics Today



- Presentation, etc. available on line,
 - <http://www.sustainability2030.com/ss-workshop-101411>
- Informal | Ask Questions
- Move around as need be
- Will move fast, at high level, key points, to create framework/overview; stop/ask questions

Short Discussion



- Observations?
- Comments?
- Questions?
- Adjustments/requests?

2. COMMUNITY STRATEGIC SUSTAINABILITY PLANNING

➤ KEY QUESTIONS:

- Which way is sustainability?
- Are we doing it?
- How get there quickly enough?
- What's the big deal?
- Why bother?
- What's the benefit?



2. Overview



- **SUSTAINABILITY CHALLENGES**
- **KEY COMPONENTS OF STRATEGIC SUSTAINABILITY**
- **THE ABCD STRATEGIC SUSTAINABILITY PLANNING METHOD**
- **COMMUNITY STRATEGIC SUSTAINABILITY PLANNING**

Sustainability Challenges



Confusing Complexity

Definitional Confusion

Reductionist Approach

Bias to Action

Inaccurate Mental Model

“The” Challenge

Confusing Complexity

- Disagreement
- Too complex
- No constructive or shared understanding
- Agreement if look in right places and ask the right questions.



**Solutions:
Which? When? Why?**

Renewable resource
Zero waste
ISO14001
Waste minimization
Eco-efficiency
Clean Water
Recycled content
Clean Air
Triple bottom line reporting
Design for Disassembly
Life supporting capacity
for future generations

Definitional Confusion



➤ **Brundtland Commission; widely accepted:**

- Meets present needs
- Do not reduce capacity to meet future needs

➤ **Benefits**

- Simplicity
- Universal resonance
- Overriding priority on human needs.
- Limits on environment's productive capacity.

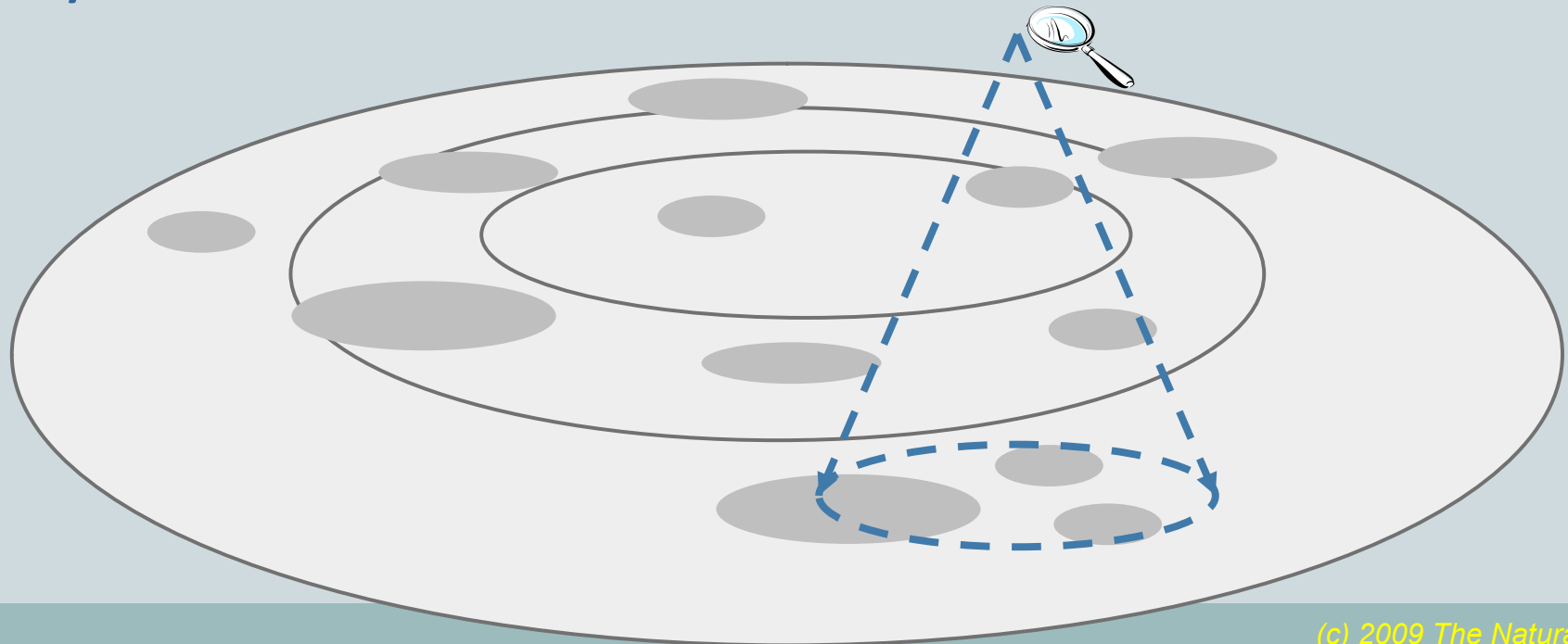
➤ **The challenge is,**

- Operationalizing it. Many attempts. Similar.
- 3 Es -- Balance
- Comprehending how today's actions damage future
- How to plan for a sustainable future.

Reductionism



- Studying parts of complex system only.
- Misunderstand how intervention will change system.



Action Bias



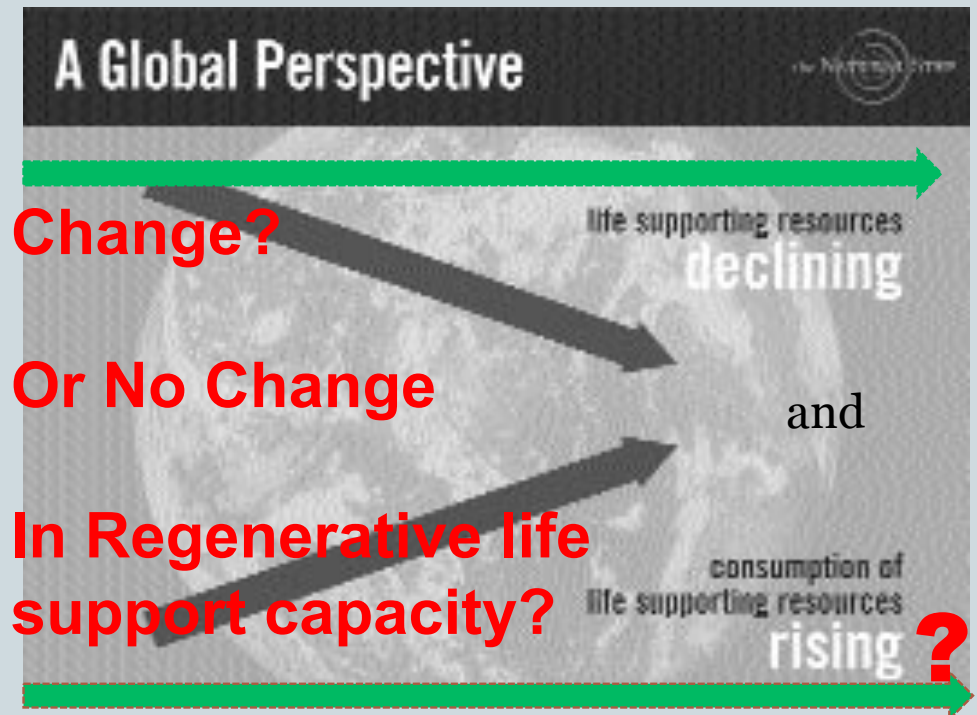
- Humans are wired for action bias.
- Act before understand.
- Typically makes matters worse.
- So . . . , harness bias with accurate understanding and effective method.

Inaccurate Mental Model

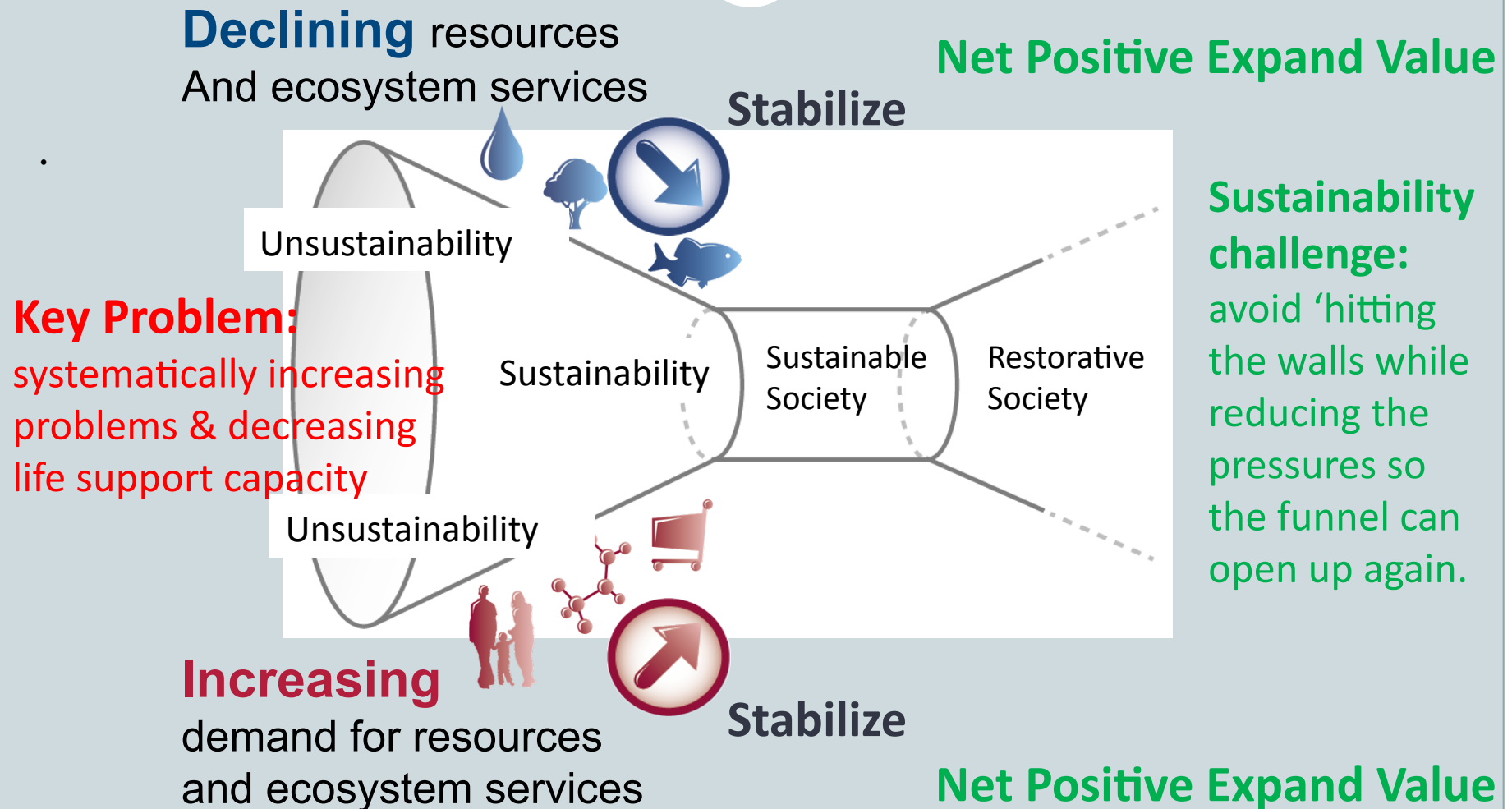
Cylinder or Funnel Paradigm?

Normal day-to-day activity is systematically driving change:

- **Resources decreasing**
 - Clean air, water supply, top-soil, forests, fisheries, oil, etc.
- **Consumption rising**
 - Pop. 6B (2000) to 9B (2050) – unprecedented.
- **Accelerating trends with game-changing effects**
 - Climate, ecosystems, econ.
- **NO sustainability problem w cylinder!**



THE Sustainability Challenge



Green “up” or Sustainable?

- Environment
- Impacts multiplying
- Issues, problems, impacts
- Reducing impacts
- Be less bad
- General S definition or none
- Metrics:
 - Minimize waste
 - End-use recycling
- Treat symptoms
- Bounce – issue to issue
- Prob is Balancing the 3 Es: econ – enviro – equity
- **TACTICAL**
- CSP

- System-earth, biosphere
- System crashing
- Min set system conditions
- Thresholds – no impacts
- No violate principles
- Precise S definition
- Metrics
 - No landfills (zero waste)
 - Redesign for no recycling
- Treat source
- Fix source systems issues
- Prob is upstream economic redesign to eliminate downstream impacts
- **STRATEGIC**
- CSSP

Sustainability Challenge – New Course



- Become restorative
- Sustainability as NEW innovation platform
 - for perpetual prosperity of the planet, economy, and society
- Drive innovation to sustainability by
 - Using ecological constraints as design parameters
 - Eliminating system condition violations

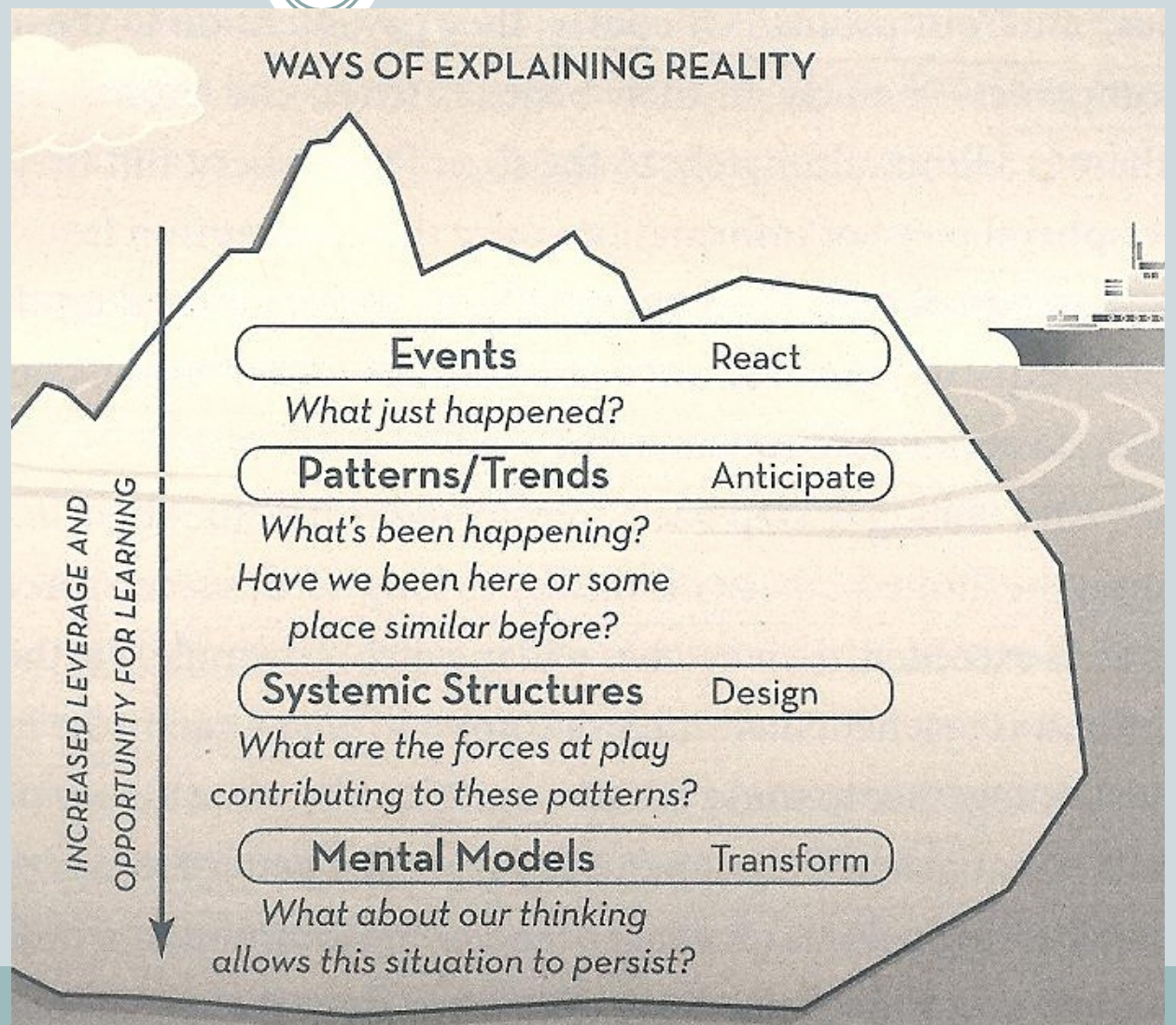
Systems Change: Places to Intervene in a System



- (9) **Numbers (subsidies, taxes, standards).**
- (8) Material stocks and flows.
- (7) Regulating negative feedback loops.
- (6) Driving positive feedback loops.
- (5) Information flows.
- (4) The **rules of the system** (incentives, punishment, constraints).
- (3) The power of **self-organization**.
- (2) The **goals** of the system.
- (1) **The mindset or paradigm** out of which the goals, rules, feedback structure arise.

Systems Change: Explanations of Reality Iceberg

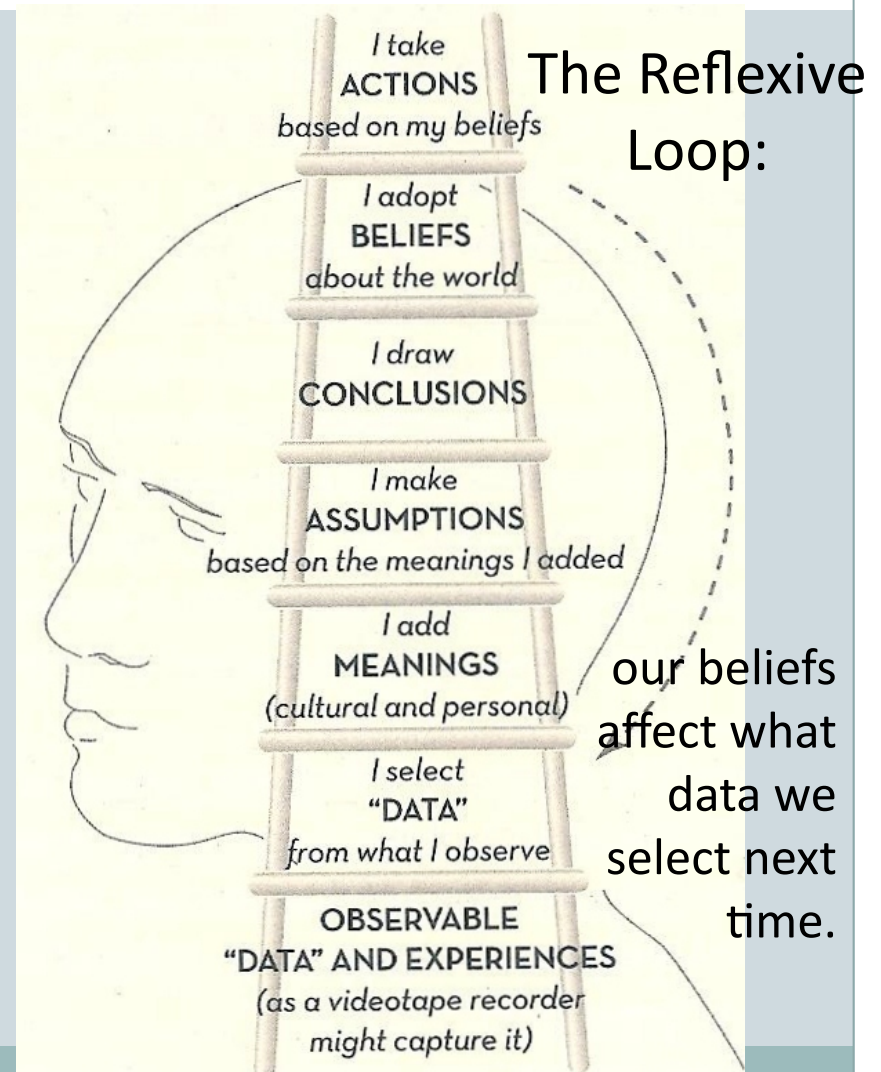
- Level perception
 - dictates actions
 - limits change
- Shifting mental models underlies transformational change



(see Resources: The Necessary Revolution, p. 174/.

Systems Change: How Shift Mental Model?

- Ladder of Inference metaphor
- Inferences held as true
- Get unstuck
- Suspend assumptions,
- Move up/Down Ladder
- Reflect, test, explore, verify



Systems Change: Org. Change/Learning Orgs.

- SD requires learning & change
- Constantly evolving learning/adaptation.
- Is a long-standing literature and practice on how orgs. learn and manage change
- **Point:** instill intelligence and learning capacity into organizations and their high-performing teams;
- **Learning Org. is embedded in TNS/SS**
- **Ultimately, need** learning institutions, learning society—*learning communities?*



Summary | TNS | Strategic Sustainability



- **What is Sustainability / Development?**
 - Mind-numbing/Tongue-tying complexity – fuzziness; know it when!
- **Need mental models, tools, & skills to:**
 - work effectively in complex, dynamic systems;
 - avoid confusing means as ends;
 - guide knee-jerk “action bias” towards effective action;



- Enter The Natural Step (TNS, 1989)
 - 1st *BRAND* of Strategic Sustainability
 - **Its a whole systems, strategic, organizational learning approach**
 - Built from the ground up for sustainability success
 - Non-exclusive/*INclusive*

Summary | TNS | Strategic Sustainability

An Inclusive Method

Key Point:

- If use TNS – not EXCLUDING use of any other framework, principles, tools, etc.
- 1st-order Method
 - Solves common problems of sustainability.
 - It was built to solve them.
- Therefore -- Start with it, learn it, and . . .
 - Use everything else that makes sense.
- Then, advance it – it's a work in progress

Section Quiz – Sustainability Challenges



1. What is the sustainability challenge?
2. What are the 5 other challenges?
3. What are the 4 system change tools?

Short Discussion?



➤ Observations?

➤ Comments?

➤ Questions?

➤ Feelings?

Key Components of Strategic Sustainability



Goal

Systems Approach

5-Level Framework

Sustainability
Success Principles

Backcasting vs.
forecasting

ABCD Strategic
Planning Method

Sustainability
Principles
Expanded

Keys to
Transformation

GOAL: TNS (& Strategic Sustainability)



- “To develop and share a common framework that centers on easily understood, scientifically based principles that can serve as a compass to guide society toward a sustainable future.”
- Planning for success requires adding time:
 - funnel implies a moving target—declining opportunity to act
 - The baseline scenario is NOT “no” change or positive, but declining prosperity

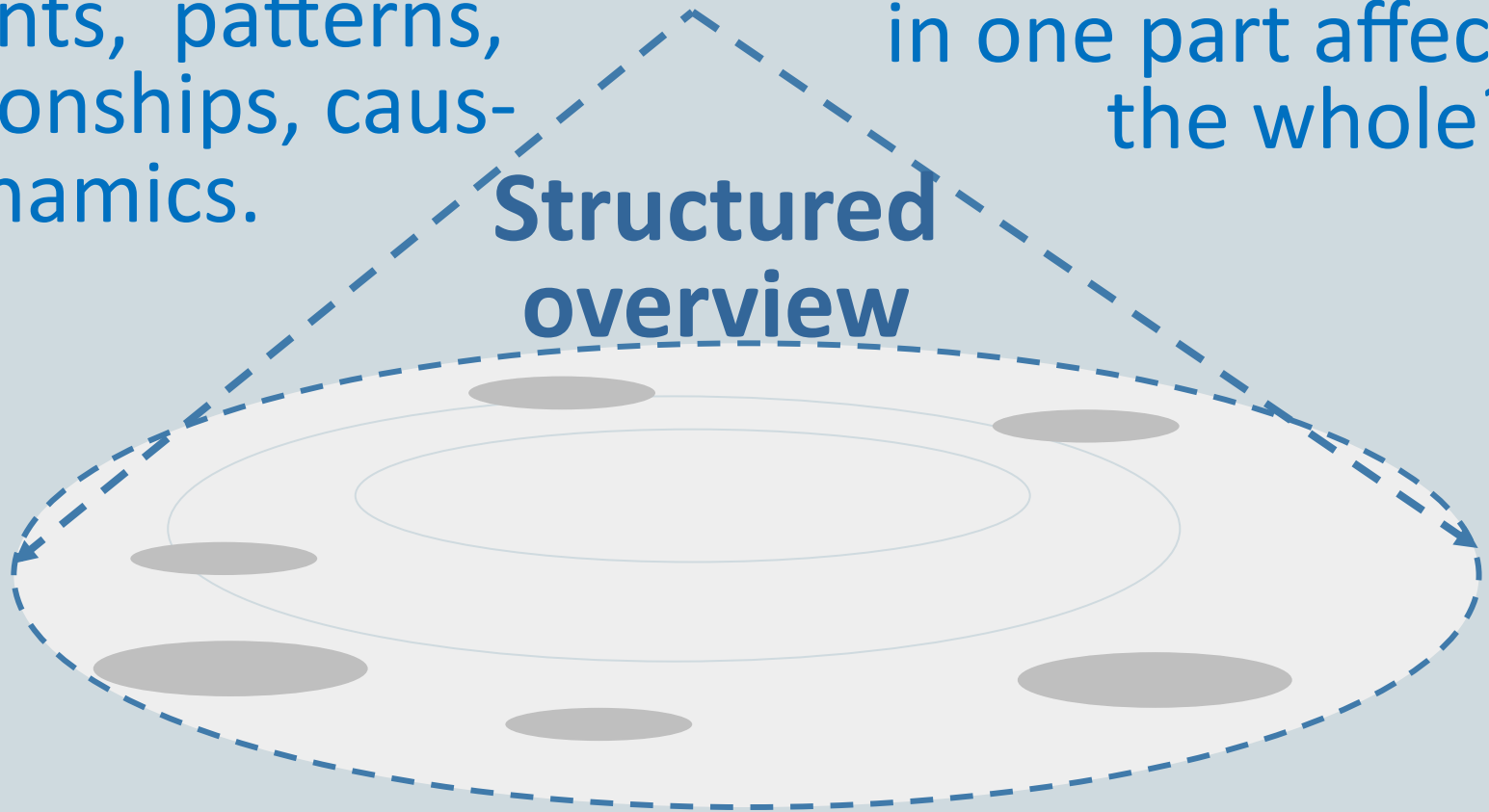
Systems Approach



Understand components, patterns, relationships, causal dynamics.

How will a change in one part affect the whole?

Structured overview



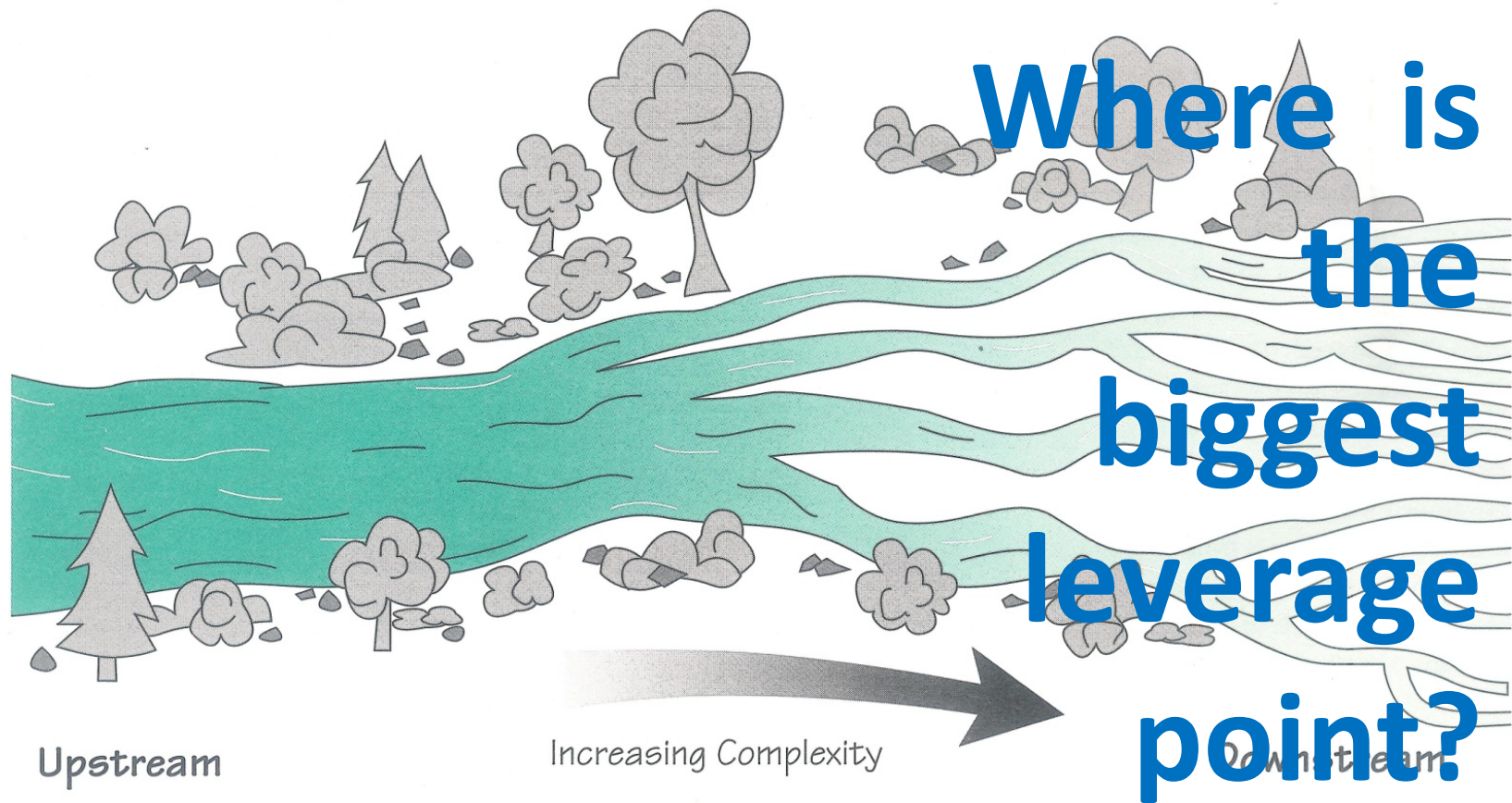
Systems Approach *(cont)*



- **Tree Analogy:**
 - Trunk & branches = system's principles
 - Leaves = details
 - Without trunk & branches, leaves cannot hang
- **Can't ignore systems conditions and expect no problems**
- **Good news: we are all natural systems thinkers**
- **EX: football, driving**

Systems Approach *(cont)*

Allows Simplicity w/o reductionism

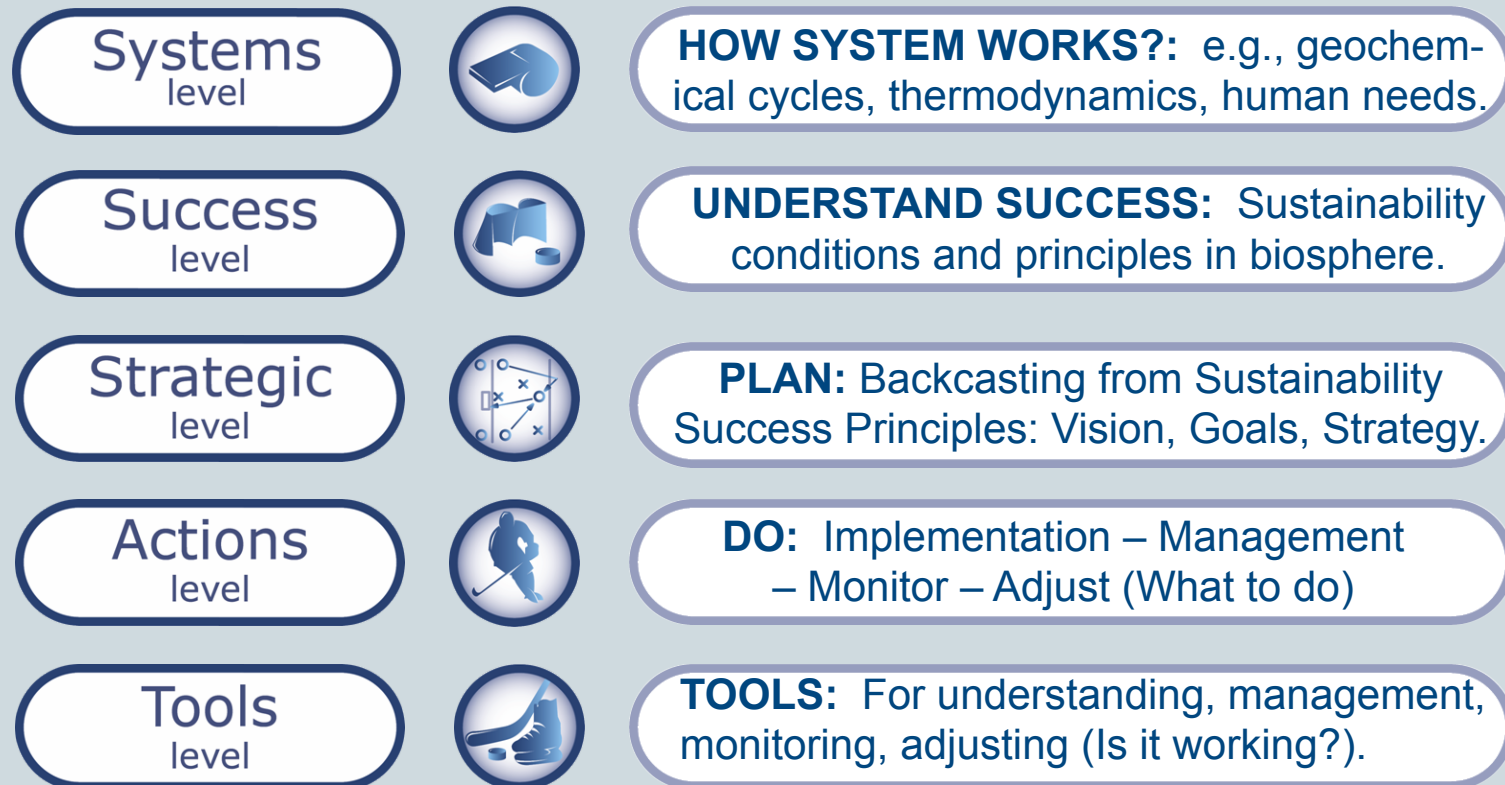


System of Interest

- EARTH: society in the bio-sphere.
- Need to understand
- How does it work?
- How is life supported, maintained, regenerated, perpetuated?
- Need tools to work effectively in complex systems



The 5-Level Framework for Sustainable Development (FSSD)



Produces a structured understanding and process.

Structuring existing data according to basic levels in a conceptual framework helps to deal with complexity and plan strategically from a big-picture perspective.

Understand System: Basic Science



- Points of agreement -- system Earth?
 - Matter & energy do not disappear, only transform; there *is no "away"*
 - Matter and energy tend to disperse
 - Structuring matter creates value (material quality)
 - Photosynthesis is the principal net value creator

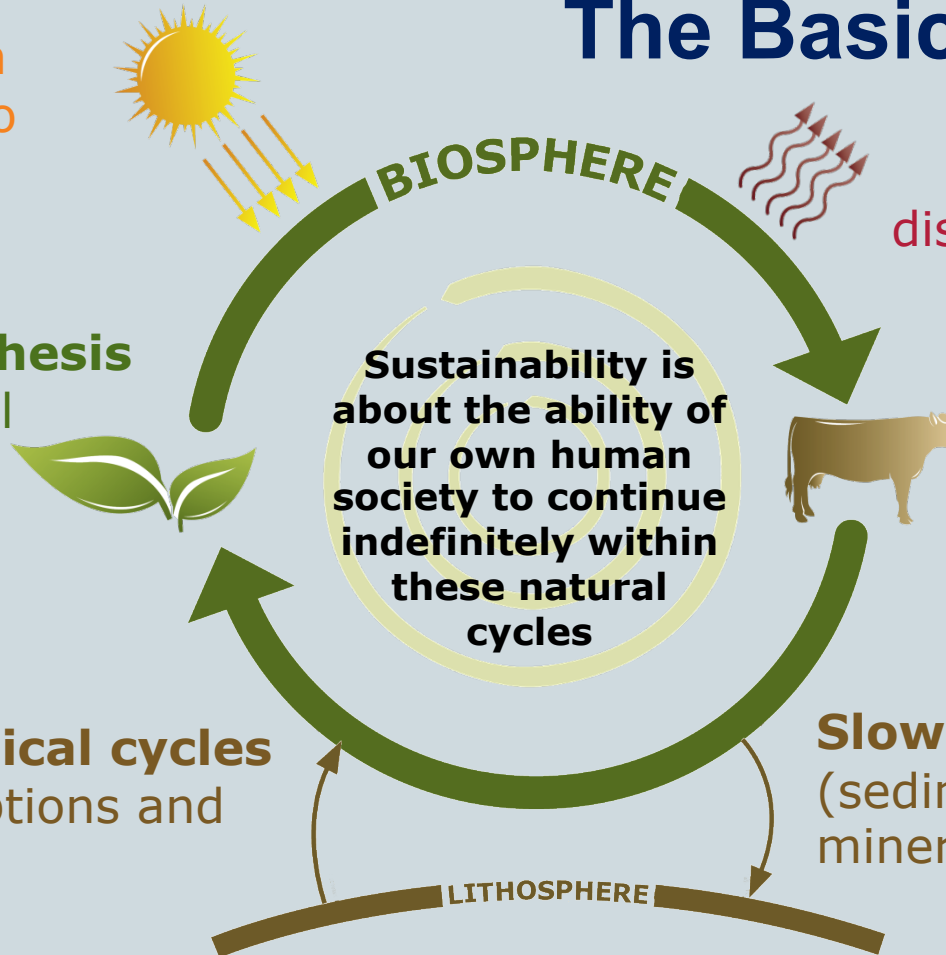
Understand System: Cycles of Nature

The Basic Science

Open system
with respect to
energy

Photosynthesis
pays the bill

Slow geological cycles
(volcano eruptions and
weathering)



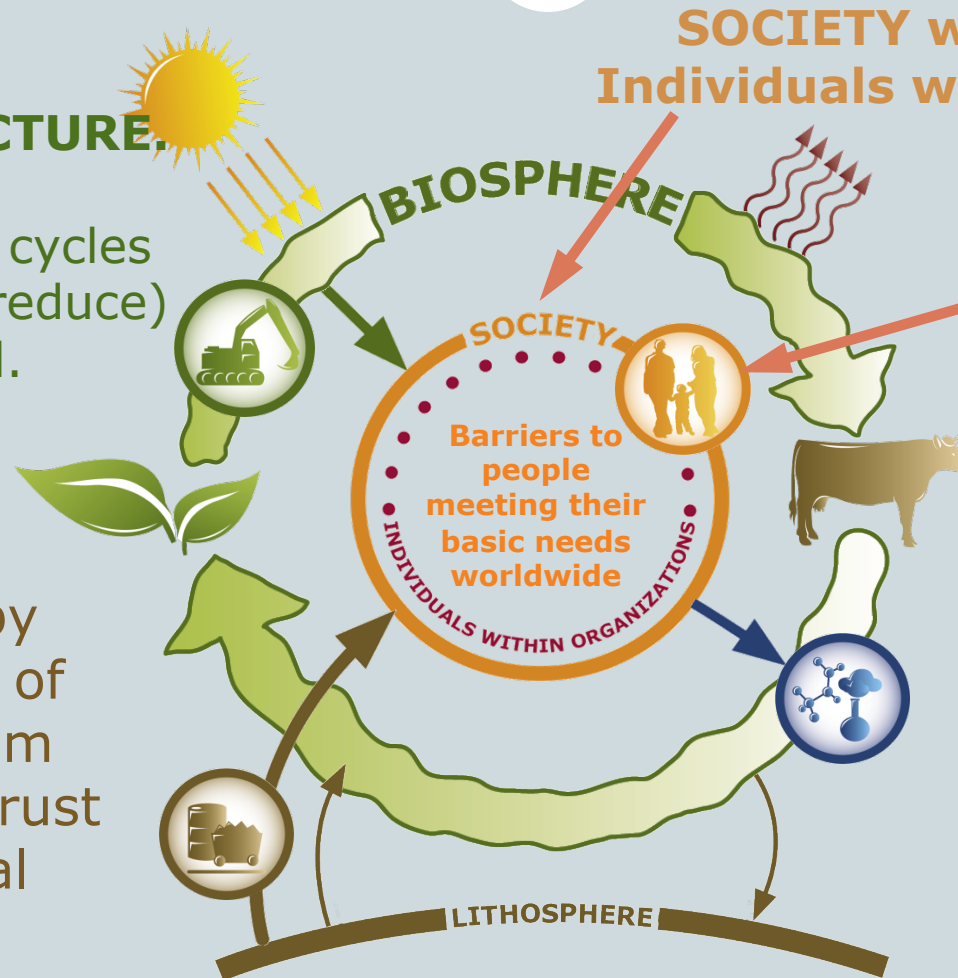
Closed system for matter: 1) Nothing disappears (no away); 2) Everything disperses.

Slow geological cycles
(sedimentation and
mineralization)

System Interference = Unsustainability

DESTROY INFRASTRUCTURE.
Interfere with functioning of cycles and destroy (reduce) natural capital.

INCREASE TOXICITY by raising flows of materials from the Earth's crust above natural rates.



SOCIETY w/i Biosphere.
Individuals w/i organizations.

PREVENT PEOPLE MEETING NEEDS.
Create barriers to people meeting their basic needs worldwide.

STOP MATERIALS CYCLING by creating compounds that natural cycles cannot break down and that can be toxic.

Leads to 4 Sustainability Conditions



In a sustainable society in the biosphere,
NATURE is not subject to systematically increasing



1) ...concentrations of substances extracted from the Earth's crust,



2) ...concentrations of substances produced by society,



3) ...degradation by physical means.

and PEOPLE...



4) ...are not subject to conditions that systematically undermine their capacity to meet their needs.

**To create a sustainable organization or community, add
“*ELIMINATE our contribution to systematically . . .*” at minimum.**

HOW Eliminate SC Violations?



➤ **Key strategies:**

- dematerialization and substitution.

➤ **Natural Capitalism's 4 Strategies:**

- Radical resource productivity
- Biomimicry:
 - shift to biologically-inspired production and whole systems design methods
 - closed loops, no waste, no toxicity.
- Shift business model from things to service things deliver.
- Reinvest in natural and human capital.

Nine Universal Human Needs



Subsistence

Protection

Participation



Idleness

Affection

Understanding



Creativity

Identity

Freedom

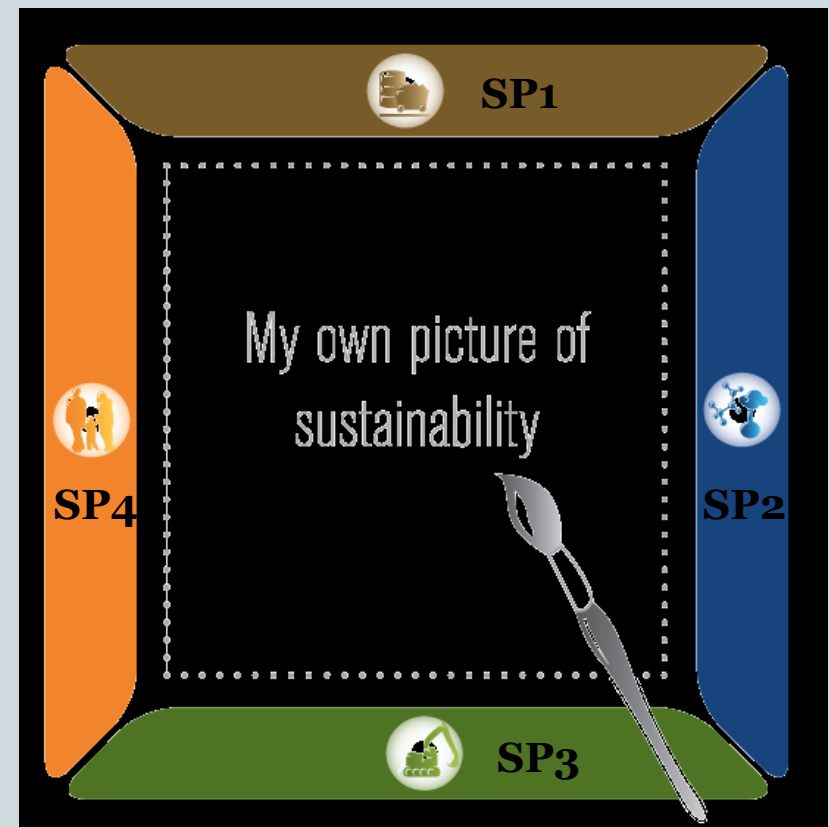


Principles = Lens/Compass for Success



Use to define and “see” sustainability

- Current violations
- Vision/goals for sustainable org/community
- Defining actions
- Evaluating actions
- Assessing trade-offs, generating creative alternatives.



Sustainability Principles Expanded



1. EARTH MATERIALS. Reduce and eventually eliminate our contribution to the systematic accumulation of materials from the earth's crust. This means . . .

- ❖ Substituting common, abundant trace minerals (aluminum) for those that are scarce in nature (e.g., mercury in electronics, cadmium in batteries, or lead in paint-dyes, etc.)
- ❖ Enhancing efficiency with productivity increases
- ❖ Developing closed technical loops in econ/manufacturing
- ❖ Shifting from fossil fuels to renewable energy (coal- and gas-fired electricity and heating, fossil-fueled transportation).

Sustainability Principles Expanded (*cont*)



2. HUMAN SUBSTANCES. Reduce and eliminate our contribution to the systematic accumulation of substances produced by society. This means . . .

- Substituting abundant natural materials that breakdown easily
 - **For scarce persistent and unnatural compounds**
 - (PVC in piping, VOC in cleaners, paints, adhesives, CFC in refrigerants, brominated fire-retardants in electronics and furniture)
 - **or for natural substances used in volumes much greater than natural flows**
 - (carbon dioxide, nitrogen oxides, etc.),
- Enhancing efficiency with productivity increases
- Redesigning products/processes so no waste; reharvest product/ materials at end life: cradle/cradle, biomimicry.
- Shifting business models – Close technical economic loops.

Sustainability Principles Expanded (*cont*)



3. **NATURE DESTRUCTION.** *Reduce and eliminate our contribution to the systematic physical degradation of nature.* *This means . . .*

- *Use resources only from well-managed eco-systems* at rates within renewable resource yields.
- *Stop direct ecosystem encroachment and modification* (land use dependence on urban sprawl; introduction of foreign/invasive species; biodiversity and productivity reduction from clear-cutting, monoculture agriculture; mining; landfill for waste management).
- *Stop using water in quantities greater than the natural flow* in the watershed source.

Sustainability Principles Expanded (cont)



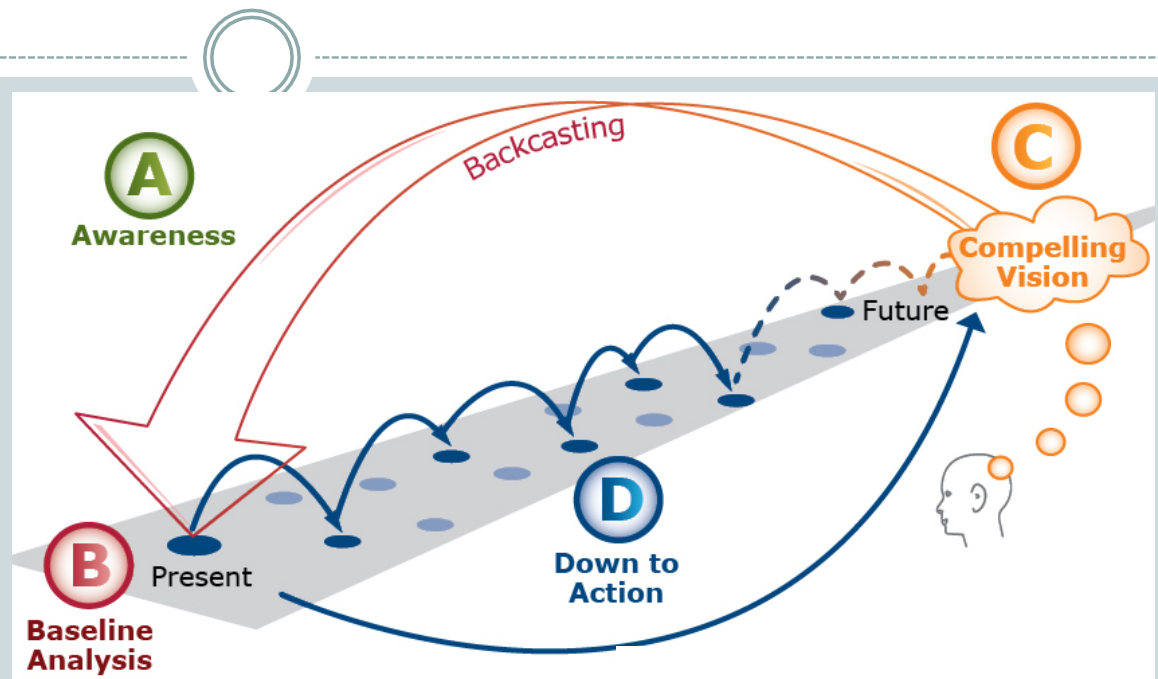
4. **UNIVERSAL HUMAN NEEDS. Reduce and eliminate our contribution to conditions that systematically undermine people's ability to meet their needs. This means . . .**

- *Obstacles imposed by authorities*, such as prohibitions against union organizing, associating, and political organizing; humiliating practices; enforced labor; discrimination.
- *Economic barriers* such as child labor; low salaries; not paying social costs of education, health care; wasting resources).
- *Unsafe and unhealthy work or living environments* (overly long working hours; workplace hazards such as chemical exposure and accidents; local water and air pollution, etc.

ABCD Strategic Sustainability Planning Method

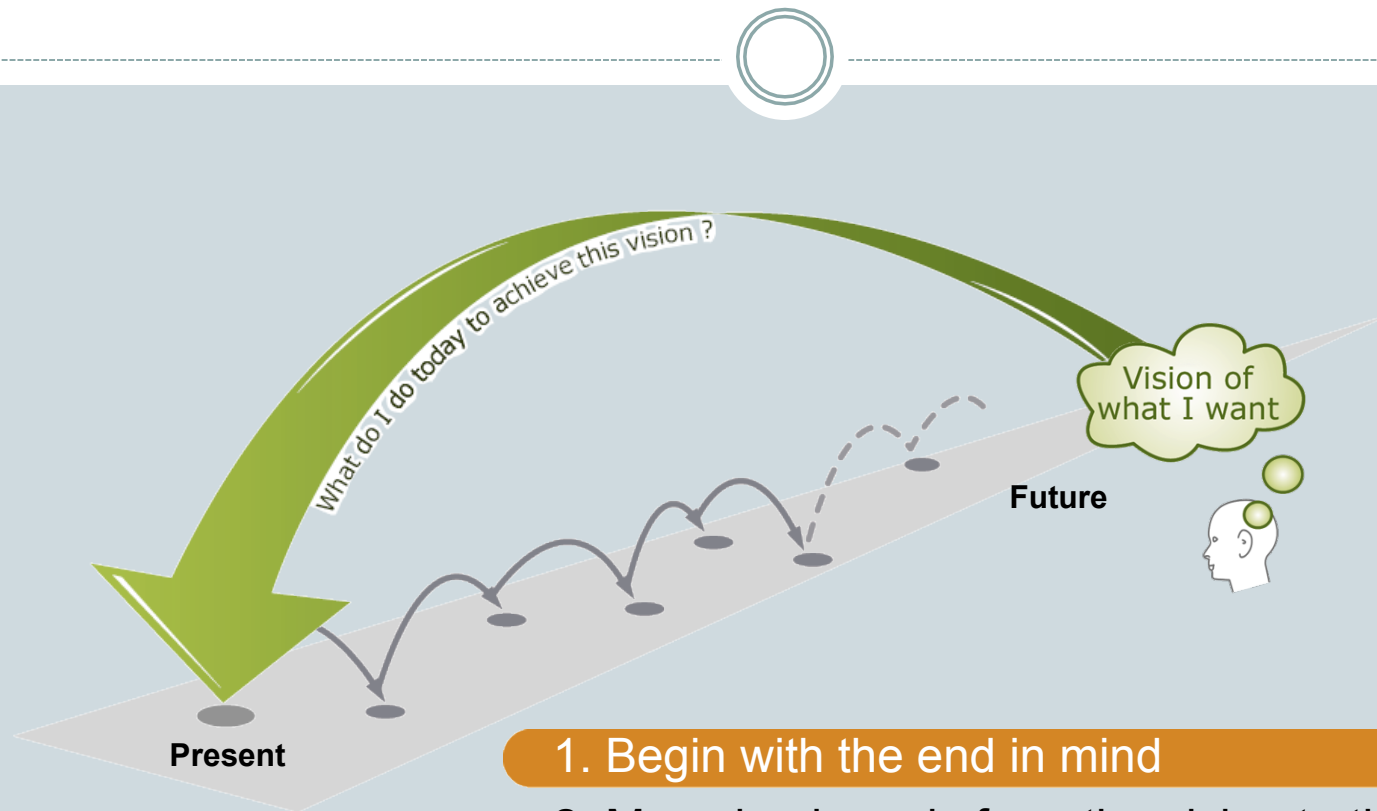
Backcasting

ABDC “Chess”
game of
sustainability



Bringing it all together

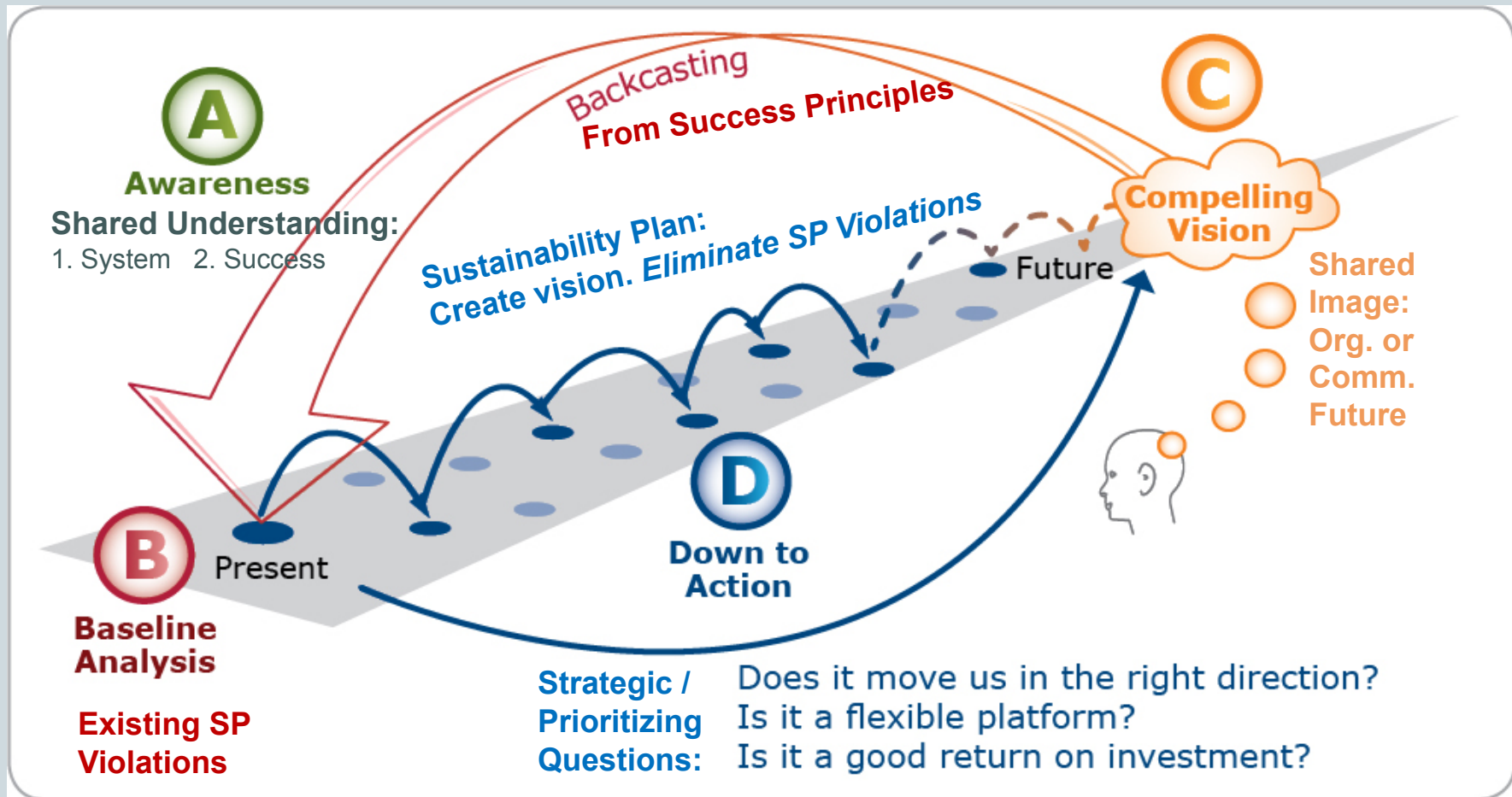
Backcasting – from SUCCESS



1. Begin with the end in mind
2. Move backwards from the vision to the present
3. Move step by step towards the vision

**Backcasting is an adaptive planning methodology.
Allows experimentation and mid-course adjustment.**

ABCD Strategic Sustainability Planning Method



Key Drivers of Success



- Not purely a technical exercise
- Larger challenge of societal innovation
- Key Drivers:
 - Sustainability Principles as lens/compass
 - Honoring the “gap” – Managing creative tension
 - Work “upstream:” economy not environment
 - New innovation platform for econ/comm prosperity
 - Embedding at heart of enterprise & community
 - Learning Organization / On-going innovation
 - High-Performance Leadership

Section Quiz



- Goal?
- Systems approach?
- 4 Sustainability Conditions?
 - Key pts?
- Strategies?
- Human needs?
- How use SCs?
- ABCD Method?
- Key Drivers

Short Discussion?



- Observations?
- Comments?
- Questions?
- Feelings?

Community Strategic Sustainability Planning



Business Examples

Ecomunicipalities

ICSP = TNS Communities

Whistler, BC, Canada

Lake Oswego, Oregon

Business Applications



- More extensive and developed
- Good examples of resulting changes
- Look at 2
 - Interface Corporation (USA/global carpet manufacturer)
 - Landmark Builders Group (Canadian developers)

Interface Corporation Strategy

The Seven Fronts of Mount Sustainability:

1. Eliminate Waste
2. Benign Emissions
3. Renewable Energy
4. Closing the Loop
5. Resource-Efficient Transportation
6. Sensitizing Stakeholders
7. Redesign Commerce

Vision: 1st Restorative Corporation by 2020



<http://www.interfaceglobal.com/Sustainability/Our-Journey/7-Fronts-of-Sustainability.aspx>

The Landmark Group of Builders



7 Strategic Goals form Vision of Organization in a Sustainable Future

- Sustainable Land Use (restore/enhance natural and human capital)
- Carbon Neutral
- Non-Toxic
- Empower People
- Zero Waste
- Closing the Loop
- Revolutionize the Industry

<http://www.landmarkgroup.ca/Sustainability/Company/BuildingSolutions.aspx>

Community Planning Challenge



- “Sustainability isn’t just about how far a community has come or even where it is heading. (i.e., the ‘effort’”)
- A community needs to understand the gap between where it is today and where it wants to be in a successful, sustainable future.
- ***Creative Tension:*** The tension established by this “sustainability gap” is fundamental to the creativity and innovation necessary to find new ways forward.” (Peter Senge)

Community Planning Challenge



- Reach/exceed power of business application
- Community application harder
- Will require more invention
 - Work in progress
- (re)new(ed) Role for Pl. Profession?

Eco-municipalities



Municipal Adoption of TNS/SPs:

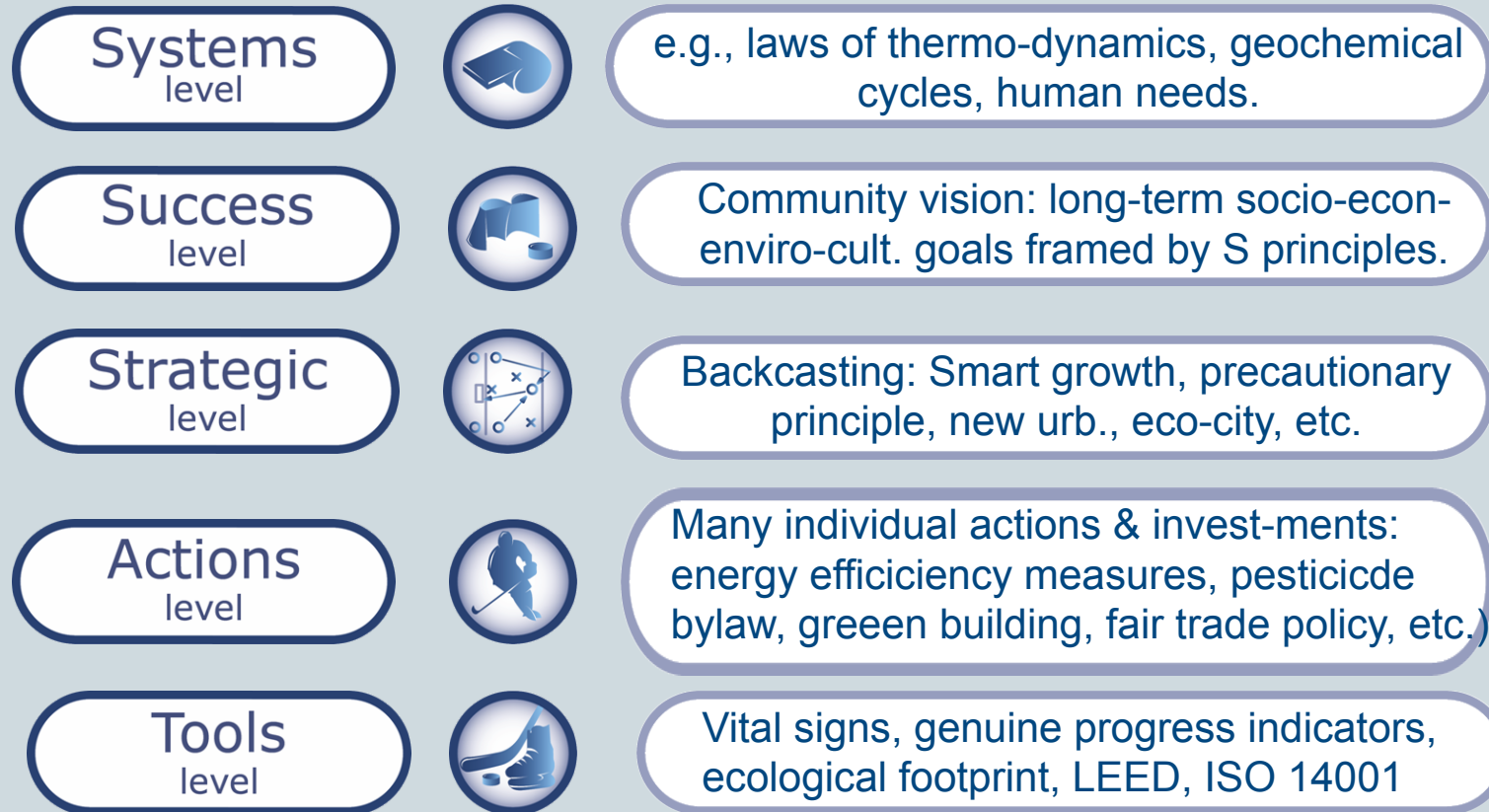
- Eco-municipalities, originated in Sweden.
 - 70 cities and towns (25%) adopted sustainability principles
- United States, 20+ eco-municipalities:
 - 1st=Ashland, Washburn, Madison (2005); 12 in WI; Duluth MN, Lawrence NJ, Portsmouth & Hanover NH,
 - The APA adopted similar objectives (Pol. Guide 2000)
 - 30+ municipalities have adopted
- Also: Japan, Estonia, Africa, and New Z.

Integrated Community Sustainability Plan (ICSP)*

- Most advanced conceptual formulation of TNS applied to communities
- Canada – 10 years of many applications
 - Federal Requirement – Every municipality – Gas tax funding
- Highly transferable/adaptable
 - Work in progress
- Particular formulation varies by community
 - Key elements & drivers the same
 - Effectiveness can suffer; trade buy-in for boldness
 - Ultimately, a leadership challenge

(*See Resources: ICSP Guide)

The 5-Level Framework for Community Sustainable Development



Produces a structured understanding and process.

Structuring existing data according to basic levels in a conceptual framework helps to deal with complexity and plan strategically from a big-picture perspective.

ICSP Process



- **Phase 1:** Cultivate S Dialogue & Interest, Invite
- **Phase 2:** Structure Process, Build Capacity
- **Phase 3:** Conduct Community Visioning
 - Create Shared Understanding, Adopt Principles, Build capacity
- **Phase 4:** Understand Sustainability Gap
 - for Key Community Systems
- **Phase 5:** Bridge the Gap: Id Strats/Initiatives
- **Phase 6:** Do the Plan: journey, monitor/adj.

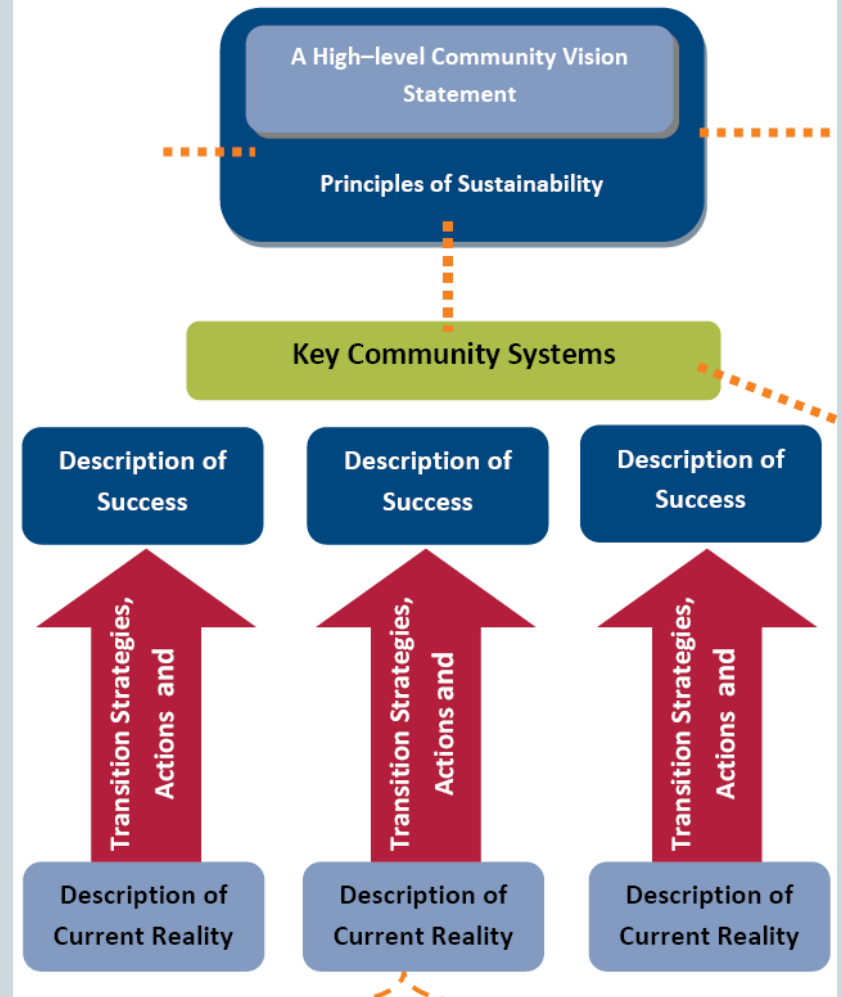
Structure of ICSP

➤ Community Vision

- High level statement
- Values
- Sustainability Principles

➤ Community Systems

- Description of Success
- Description of Reality
- Transition Strategies & Actions
- Benchmarks/Indicators



ICSP – All Phases -- *Capacity Building*



Strategic Sustainability (FSSD) -- A key for

- Common language & understanding key issues
- The 4 min. conditions for sustainability (SPs).
- Shared understanding for effective collabor.
- Key topics:
 - Sustainability challenge;
 - Importance of systems thinking;
 - Business case for sustainability;
 - Need for vision-based action plan
 - how to move strategically toward success.

ICSP Phase 3 -- Shared Vision



- More than definition – forge shared purpose
- Need process that helps
 - Articulate community aspirations
 - Understand requirements for a sustainable future
- Long term community goals framed by sustainability principles
- "Compelling visions are felt in the heart and understood in the mind." (Bob Doppelt*)
- Clear success required for effective back-casting & strategy (ies)

ICSP Phase 3 – Shared Vision



- **Adopt Sustainability Principles: Council Res. or Sustainability Declaration***
 - Long term conditions, not vision
 - Provide questions to test vision/develop plan
 - Frame vision & DofS so desirable AND sust.
 - Lead to DofCR that defines current unsustain.
 - Ensure strategies/actions eliminate violations
 - Ensure shared understanding & sust. commitment
- **It's the compass to reach sustainability**

(*See Resources: ICSP Guide, Apps 6, 7)

ICSP Shared Vision – Phase 3



- **EXAMPLE: The City of Calgary | 100-year vision! 17,000 citizens**
- **Dialogue on future:**
 - What do you value about Calgary?
 - What is it like for you to live here?
 - What changes would you like to see?
 - Dreams for Calgary in 100 years?
 - How could you help make this happen?

ICSP Shared Vision Example



- **Calgary 100-Year Vision:** We can make it happen! With purpose, drive and passion, Calgary will be a model city, one that **looks after the needs of today's citizens and those to come.** We make imagination real; it's the Calgary way. It's what we've always done and will always do. Calgary: a great place to make a living, a great place to make a life.
- **Values:** **connected to one another, our places, our communities, beyond our boundaries.**

<http://www.imaginecalgary.ca/vision.php>

ICSP Shared Vision Example



- **Wolfville, Nova Scotia** (pop. 3,800) is a vibrant and versatile university town.
- It is a town rich in natural, built and cultural heritage. Its citizens, businesses, institutions and government value and protect our natural environment, economic vitality, social equity, life long learning, cultural diversity and heritage.
- **Everyone accepts responsibility for making decisions that lead to a healthy, equitable and sustainable future**

ICSP Shared Vision Example



- Wolfville (cont.). Guided by principles of sustainability, work towards achieving objectives: **A community . . .**
 - based on *SOCIAL EQUITY* and guided by *CITIZEN ENGAGEMENT* through ongoing *PUBLIC CONSULTATION*;
 - that fosters and supports affordable housing, a healthy business sector and a *CREATIVE AND ADAPTIVE ECONOMY*;
 - whose energy needs are reduced and largely met by *RENEWABLE RESOURCES*;
 - where our food and material needs are **produced locally**, when possible;
 - in which the *NATURAL ENVIRONMENT* is respected and protected as our *MOST VALUABLE ASSET*;
 - where *POLLUTION IS REDUCED* and *SOLID WASTE PRODUCTION IS MINIMIZED* and increasingly recycled;
 - with active transportation networks where *PEOPLE DO NOT HAVE TO DEPEND ON THE AUTOMOBILE* either for their mobility within the community or their links to the larger world.”

ICSP Phase 4 – Sustainability Gap

Defining Community Systems

- **Systems Approach:** Community as diversity of interdependent systems. Think human needs.
- Which systems required to achieve vision (C+S)?
- **Key challenge:** how to ensure both comprehensiveness and integration. Think interrelationships
 - Consider all aspects in context, not isolated.
 - Use the same framework and process to review all community systems and to identify synergistic strats.
 - Design cross-system fertilization engagement process.

ICSP Phase 4 – Sustainability Gap

Defining Community Systems

- Based on vision statement, engage stakeholders in conversation:
 - What are **great characteristics** of their **community 25 years** from now that are **good reasons** for their **grandchildren to move back**?
- Have descriptive conversation in present:
 - “We have a **great transportation system**; most people, especially those who live in the downtown, **do not bother with owning a vehicle**. Work, live and play **opportunities are well integrated** so **most travel is done by foot or bicycle**.”
- Synthesize into key community systems

Community Systems Example



Arts/Culture/ Heritage	How arts, culture and heritage will be supported, enhanced and delivered, and how they will stimulate and support the transition to sustainability in your community.
Built Environment	How to develop and renew buildings, neighborhoods and facilities that will contribute to making your community unique, live-able, affordable and sustainable.
Economic Development	How to create a strong local economy and develop and maintain successful, resilient businesses that help move the community toward sustainability.
Energy	How to meet your community's energy needs in an efficient, affordable, sustainable and reliable way, while managing greenhouse gas emissions and air quality.
Food	How to ensure a healthy, nutritious and sustainable food supply that maximizes opportunities to build the social, ecological, cultural and economic capital of the community.
Health and Social Services	How to meet the health and social needs (including physical, mental, spiritual and emotional) of the community.
Learning	How to meet community needs for formal and informal lifelong learning.
Materials and Solid Waste	How to meet your community's need for material supply and disposal through the most efficient use and reuse of the most sustainable materials and keeping waste out of the natural environment.
Natural Areas	How ecosystem integrity and biodiversity will be protected and where possible restored in your community/region.
Recreation & Leisure	How recreation and leisure activities for both residents and visitors will be delivered to exceed expectations while protecting the environment.
Transportation	How to move people, goods and materials to, from and within the community in a more sustainable manner.
Water	How to provide a dependable supply of high quality water in a way that maintains healthy aquatic environments and uses water efficiently.

ICSP – Phase 4 – Sustainability Gap

Description of Success (DoS)

For EACH community system:

- characteristics of success framed by 4 sustainability principles
- Derived from answers the question,
 - What **characteristics** would the **community system** have {energy, food, transportation, etc...} when fully aligned with the four sustainability principles?
- **Form:**
 - a statement of purpose & highest aspirations
 - 5 to 7 long-term strategic objectives (detail)

(See Resources: ICSP Guide, Appendix 15)

DoS -- Example



- **Community System: Local Food and Ag.** Our regional food system is resilient, locally-focussed, healthy and contributes to the overall enjoyment, development and health of our community, its individual members and our local ecosystems. Traditional food areas of First Nations are respected and celebrated. Food is a crucial bond between communities, individuals and the land in which they are situated. Our challenge is to build an accessible, secure and resilient food system in the region that supplies for our community's needs and health while contributing to the overall health and wellbeing of the local ecosystems and economy.
- **Objectives:** We will be successful when we have achieved:
 - Effective use of local knowledge and practices
 - Celebrating our local foodstuffs
 - Protecting health and environment
 - Accessibility and economy
 - Protecting the longevity of our food system

(See Resources: ICSP Guide, App 17.)

ICSP Phase 4 – Sustainability Gap

Description of Current Reality (DoCR)



- For EACH community system, today's situation relative to the DoS;
 - Identify main sustainability principle violations
- Takes the form of:
 - Five to seven key sustainability challenges
 - A list of existing community assets to leverage
 - A stakeholder analysis to identify allies and barriers

DoCR Example – Williams Lake



● Assets

- **Local wisdom:** Tradition of foraging, growing, preserving, farming, ranching food in the area. TEK and First Nations knowledge of local food stuffs, climate and soil types.
- **Community resources:** Local beef production; existing farmer's market; local food policy committee with a strong and committed presence; existing community garden network.

● Key S Challenges

- Non-local food dependency
- Unequal access to food
- Development pressure on agricultural land
- Lack of local food system

ICSP – Phase 5 – Sustainability Gap *Strategies & Initiatives to Bridge the Gap*



For each community system:

- **brainstorm strategies, inits., and investments**
 - Solicit input from many different people
 - Don't reinvent, scan existing best practices, go beyond
 - Review inventory of assets and stakeholder analysis, build on unused assets, create synergies
- **Prioritize based on 3 strategic questions.**
 - Right direction (i.e. toward goals & no SP violations)?
 - Flexible platform—strategic stepping stone to future moves?
 - Adequate return on investment (\$ & non\$)
- **Phase over time: cost, difficulty, period**
 - Short (easy success) – Medium - Long-term

ICSP – Phase 5 – Sustainability Gap *Strategies & Initiatives to Bridge the Gap*



Outcome--Prioritized Strategies & Actions:

- Community adopts prioritized list of initiatives;
- List becomes ICSP.
- Integrate with the planning cycles of the municipality and community partners.

Phase 6: Continuing the Journey



- **Greatest challenge: implementation**
 - Integrate S into org decision making & ops.
- Create process: continually develop, monitor, and modify strategies and initiatives.
- Form Partnership Agreements
- Schedule regular plan review/update
- Report to stakeholders/celebrate

Lake Oswego General Plan Update



- Have had sustainability plan (2007)
- Updating now; **adopted** TNS SPs.
- See PDF overview handout.
- Shows how strategic sustainability adapted to local, but retains common elements

Sustainability Plan Update: <http://welovelakeoswego.com/about-the-plan/>

Summary Handout: <http://www.sustainability2030.com/storage/wrkshp101411/LakeOo40711.pdf>

(See also Resources)

Whistler 2020, British Columbia



- ICSP poster child – really interesting
 - Website <http://www.whistler2020.ca/>
- Indicators/Tracking: see I-Explorer
 - [Whistler 2010 Score Card](#) (get pdf)
- Capital Budgeting Decision Support
 - [Action Assessment PDF](#)
 - [Major Capital Projects Form](#)

Section Quiz - CSSP



- Why is community application harder?
- Why is ICSP worth studying/knowing?
- Six ICSP Phases?
- What are key differences between ICSP & Comprehensive Planning?
- What are key requirements for success?

Short Discussion



- Reflections & Observations?
 - Comments?
 - ✦ Questions?
 - Feelings?

Summary / Conclusions

Strategic Sustainability



Core Concepts:

- Inclusive method
 - Systems
 - The 5-Level Model
 - Success Principles (SPs)
- Backcasting from Success (SPs)
 - ABCD Method / Innovation
- On-going journey to ultimate sustainability

Community Strategic Sustainability Planning



Key Questions:

- Which way is sustainability?
- Are we doing it?
- How get there quickly enough?
- What's the big deal?
- Why bother?
- What's the benefit?

Answers:

- 4 Sustainability Principles
- Not so much
- Not without a big change—Use SS
- Regen. success vs.
- Regen. success vs. . . .
- Perpetual prosperity
Prosperity masters

Summary – Success Drivers



- Sustainability Principles as def./lens/compass
- Embed at heart of decision making (org/comm.)
- Honor the “gap.” Lead w creative tension
- Work “upstream:” economy not environment
- New innovation platform for prosperity (econ/comm)
- Drive on-going innovation with elimination of SP violations
- Methods:
 - Ecological constraints as design parameters
 - Substitution, dematerialization, natural capitalism strategies
- Create learning community to institutionalize innovation
- High-performance leadership to navigate difficulties

Sustainability Challenge & Opportunity



- Final Exam / Last Frontier / Innovation platform
- AND a strategic innovation process
- to create durable economic prosperity
- By eliminating SP violations & simultaneously
 - reversing climate change successfully (1C warming limit; peak CO2 by 2018/zero emissions by 2050),
 - and meeting the universal needs of the next 3B and the total 9B of us everywhere on the globe by 2050.
- Reinvent economy & community in 1 gen.

Resources for You



Go To: <http://www.sustainability2030.com/ss-workshop-101411>

KEY RESOURCE:

[Integrated Community Sustainability Planning \(ICSP Guide\)](#) (TNS Canada)

Also: The Natural Step for Communities –

[How Cities and Towns can Change to Sustainable Practices](#) (seminal source), Sarah James & Torbjorn Lahti, New Society Publishers, 2004.

The Natural Step (TNS) International: <http://www.naturalstep.org/>

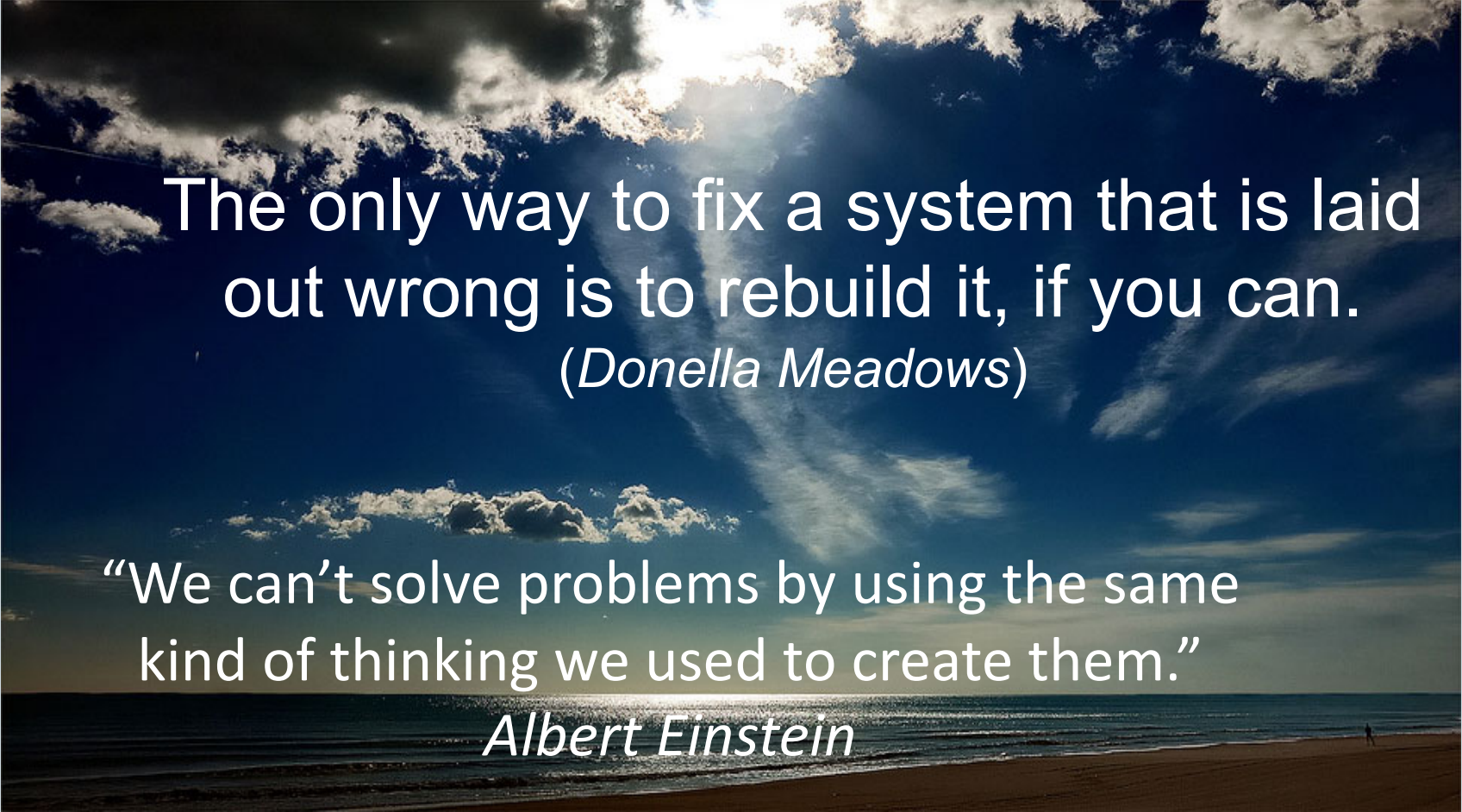
- **[USA Network : http://www.naturalstepusa.org/](http://www.naturalstepusa.org/)** (Active US Office and Website; different from TNS US somehow).
- **[TNS Primer, Starter Guide and Other Resources.](#)**
- **[TNS “Story”](#)**
- **[TNS USA for Community Planning](#)**
- **[TNS Canada](#) and its [Community Planning Program](#)**

Resources for You



- **The Natural Step Story:** [Seeding a Quiet Revolution](#). Karl-Henrik Robèrt,. (2002).
- **TNS METHOD**
 - TNS Primer, Starter Guide and Other Resources ([link](#)).
 - Simplicity without Reduction: Thinking Upstream towards a Sustainable Society ([link](#)).
 - Opportunities for Global Sustainability (Global ABCD) ([link](#))
 - Learning Resources for Community Strategic Sustainability Planning USA ([link](#))
 - **The Natural Step: A Framework for Achieving Sustainability in Our Organizations** ([PDF Version](#)) \$10.95, Pegasus Communications, also hard copy:
- **Creating Sustainable Organizations: Meeting the Economic, Ecological, and Social Challenges of the 21st Century** ([PDF Version](#)) \$10.95, Pegasus Communications
- **Cases:**
 - Whistler BC 2020 Plan ([link](#))
 - Case Studies on Principles and Processes ([link](#))
 - Lake Oswego GP Update [Sustainability Handout](#)
- **Institute for Eco-Municipality** [Education & Assistance](#).
- **A Natural Step Case Study:** The North American Eco-Municipality Network ([PDF, free](#))
- **Further reading** (Wikipedia: http://en.wikipedia.org/wiki/The_Natural_Step)

Thank you | Discussion | Q&A | Break



The only way to fix a system that is laid out wrong is to rebuild it, if you can.
(Donella Meadows)

“We can’t solve problems by using the same kind of thinking we used to create them.”
Albert Einstein

4. EXERCISE



SOUTH BAY STRATEGIC SUSTAINABILITY PLAN

5. CONCLUSION



- **Feedback – how did it go?**
 - Meet Goal & Learning objectives?
 - Meet Your expectations
 - What to do MORE of and LESS of?
- **Next Steps?**
 - ???
- **Complete Evaluation**
- **Lunch**