



Developing Performance Measures for Sustainability

Workshop 2





TERC Sustainability Categories

Community Well-Being

- **Equity and Access (category)**
 - Internal:
 - Diversity hiring and recruitment policy
 - External:
 - Equal level of service policy/goal for different neighborhoods





Let's Practice!

- Environmental Stewardship
 - Energy and Emissions
 - Internal
 - External: unique to your agency





TERC Sustainability Category: Community Well-being

- **Consensus category**
 - Equity & access
 - Cultural & community development
 - Human health & safety
 - Land use
 - Climate change adaptation

- **Optional category**
 - Affordable housing
 - Energy & Emissions





TERC Sustainability Category: Environmental Stewardship

- **Consensus category**
 - Habitat & biodiversity
 - Land use (duplicate to habitat & biodiversity?)
 - Materials & resources
 - Water
 - Energy & Emissions (local and atmospheric)





TERC Sustainability Category: Economic Vitality and Quality

■ Consensus category

- Equity & access
- Fiscal health / financial (internal)
- Best business practices (duplicate to fiscal health?)
- Land use (duplicate to local economic development?)
- Local economic development (external)

■ Optional category

- Energy & Emissions (planning for cost of carbon)
- Affordable housing





Exercise: Covering Your Aspects by Agency

1. **Group yourselves by agency**
2. **5 minutes circle the categories that are relevant.**
3. **15 minutes circle the aspects that are relevant to your agency both internally and externally. Add other aspects as needed.**
4. **10 minutes write internal OR external OR both**
5. **5 minutes reflection of exercise**





Break – 15 minutes



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Centralized resource

- **Defining needs of centralized resource**
 - Update from Jim Schrack, GEO
 - 10 minute brain dump





Who needs sustainability performance measures and why?

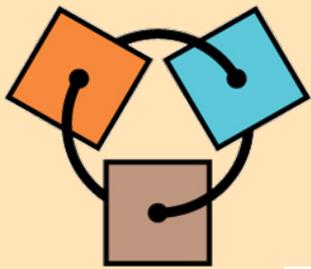
- **Internal stakeholder**
- **External stakeholder**



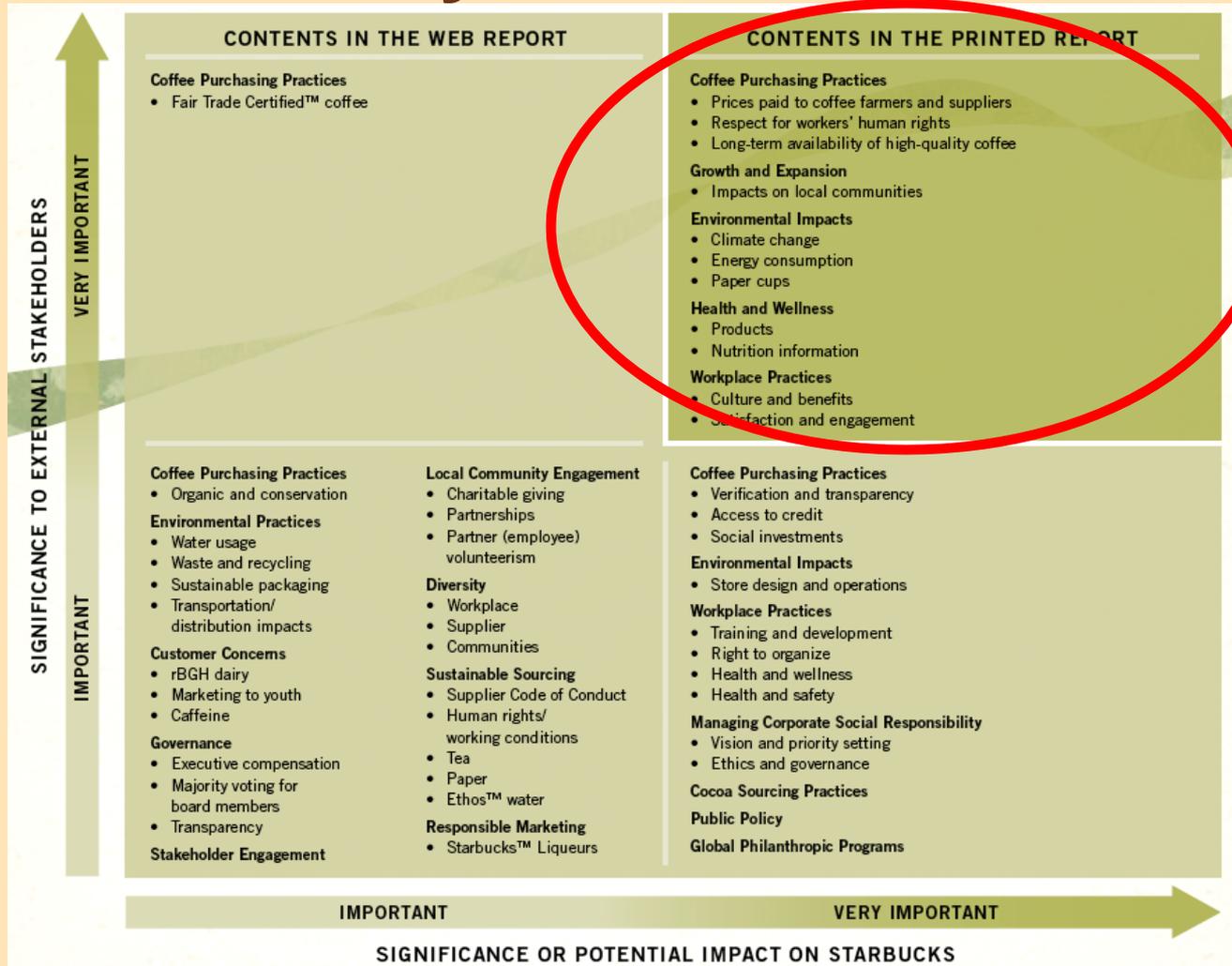


Exercise: Identifying Agency Stakeholders

Stakeholders	Notes for your entity
Internal Stakeholder?	
External Stakeholder?	
Coordination opportunities? Silos that need to speak to each other?	



Materiality





Materiality

- **What is really important to the agency that no one knows about?**
- **What is really important to stakeholders that isn't important to agency personnel?**
- **What is a priority to both?**





Performance and transparency

- **Resistance**
 - Why would we talk about things if we don't have to?
 - Will we draw attention to ourselves unnecessarily?
 - What if we're doing poorly?
- **Measuring is the first action**
 - Perception: reporting/assessing is at expense of action
 - Measures and assessment will take work, resources



Performance and transparency

- **#1: Without assessment, no one knows how or what they're doing**
 - The act of studying yourself teaches you about yourself
 - Sharing successes builds internal knowledge, morale
- **#2: External learning mechanisms are more accessible when you have self-knowledge**
 - Understand and learn of peers' performance (BMPs)
 - Participation in knowledge sharing (e.g., centralized resource)



Describing measures

- **Definitions and guidance**
- **Few vs. many**
- **Qualitative vs. quantitative**
- **Existing and good enough vs. new and perfect**
- **Normalization and comparability**

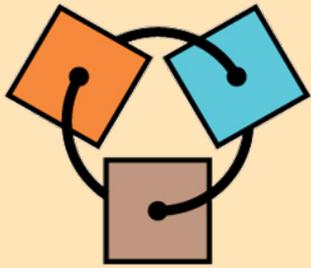




Definitions

- **Aspect**
- **“Goal” or “Target”**
- **“Measure”, “Metrics” or “Indicator”**
- **“Benchmark”**





Long- and short-term goals

- ❖ Double-sided printing and copying – Require that all computer labs and copiers can print double-sided, and set printer defaults to doubled-sided printing.
- ❖ 100% recycled content – Require policies that all paper be 100% post-consumer recycled paper and free of chlorine.

Long term

- ❖ Campus-wide Environmentally Preferable Purchasing – Institute a policy and program to cover all high-volume and high-impact products. An initial list for consideration could include custodial chemicals, paint, building materials and paper. With awareness-building and buyer education around uniform criteria and pre-selected vendors and products, the campus will be able to make decentralized purchasing meet environmental performance standards. The campus can also potentially save money by leveraging larger volumes of fewer products in its vendor relationships.

Pie in the Sky Cradle-to-cradle materials use

CSU, Chico will buy *nothing* that cannot be recycled, composted or otherwise 100% reclaimed.





TERC Sustainability Framework

Environmental Stewardship	Category	Long-term goal	Aspect	Short-term goals	Measures
	Materials and Resources	Cradle-to-cradle material use	Paper use	100% recycled content -- Double-sided printing and copying	% of paper purchased with recycled content % -- % of printers and copiers set to print double sided

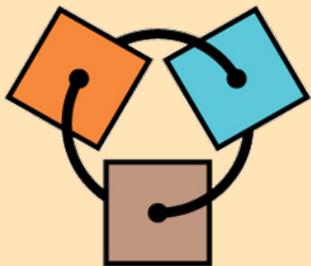




What makes a good measure?

- **What makes a good measure?**
 - Scope – boundaries (operations, departments, programs, projects)
 - Sense of scale
 - Sense of direction
 - Consensus (or possibility to achieve it)
 - Possible to define “good” performance





What makes a good measure?

- **Example: Recycling**
- **Sense of scale**
 - ?
- **Sense of direction**
 - ?
- **Consensus (or possibility to achieve it)**
 - ?
- **Possible to define “good” performance**
 - ?





Few vs. many

- **Reasons for many**
 - Cover all issues you need to cover
- **Temptations of many**
 - “But it matters”
 - Appearance of comprehensiveness
 - Availability of data
- **Reasons for few**
 - Quantity/quality trade-off
 - Conserve effort for subsequent work
- **Punch line: less is more**



Qualitative vs. quantitative

- **Myth: quantitative > qualitative**
- **Reality: depends what you measure**
- **Good quantitative measures**
 - Accurate numbers
 - Possible to communicate sense of scale
 - Sense of direction
- **Good qualitative measures**
 - Describe the presence/absence of a process
 - Demonstrate the application of criteria or key topics
 - Sense of direction
- **“Leading” vs. “Lagging”**



Qualitative vs. quantitative

- **Quantitative measures**
 - ?
- **Qualitative measures**
 - ?



Complementary measures

- **Materials and waste**
 - Recycling rate (%)
 - Total volume (or weight) going to landfill
- **Energy**
 - Electricity from renewable sources (%)
 - Total electricity or energy used (MWh or MMBTU)



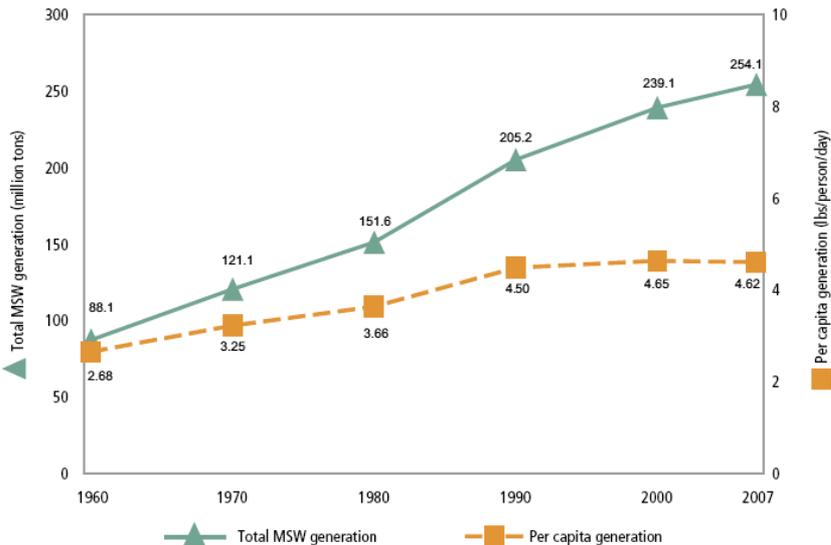


Complementary measures

- What is the story here?
- Does this give direction for action?

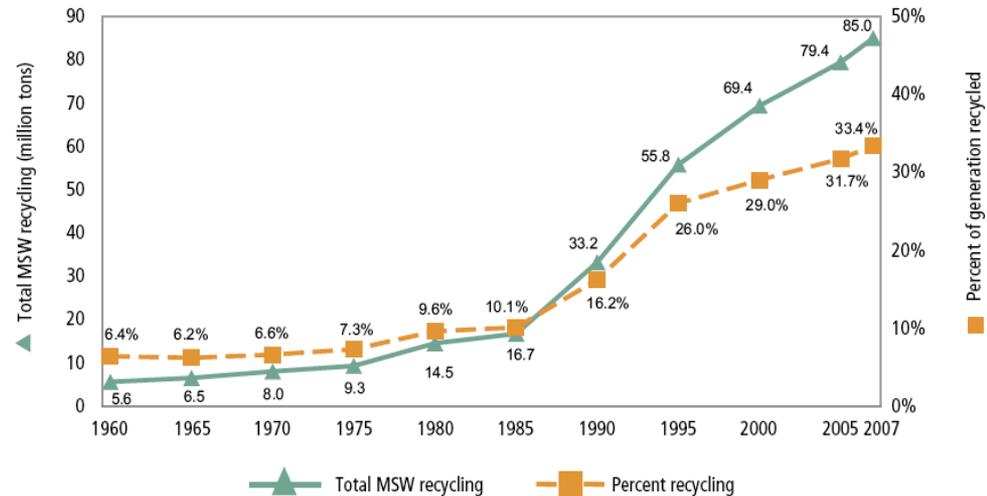
Per capita MSW (lbs) and total MSW (tons)

Figure 1. MSW Generation Rates, 1960 to 2007



Recycling rate and total recycled (tons)

Figure 2. MSW Recycling Rates, 1960 to 2007



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Activity: Creating Complementary Measures

Aspect	List multiple measures
Paper use	
Landscape water	



Existing/Good Enough vs. New/Perfect

- **Existing data**
 - Easier and less costly to get
 - Often not exactly what you want
- **Have explicit conversations about what information the organization wants**
 - This is a conversation about goals
 - Often need an assessment to start this conversation
- **Acknowledge when you need new information**





Existing/good enough vs. new/perfect

- **Example**

- ODOT – the pursuit of energy intensity



Normalization & Comparability

- **Goal: apples-to-apples comparison**
- **Examples:**
 - Energy: BTU per square foot (per year)
 - Water: gallons per person (per year)
- **Challenges**
 - Finding a denominator: “per person”
 - Intelligible sense of scale: “per scaled campus user”
- **Middle ground: the best benchmarking is often against yourself (e.g., over time)**





Replicability

- **Questions to ask**
 - “Reasonable” interval for revisiting these issues?
 - Effort involved in revisiting them?
 - True cost of the assessment? (opportunity cost of time)
- **Advice**
 - Timeliness/longevity
 - Audit Trail
 - Include assessment in your “effort budget”
 - Force yourself to have an explicit target in mind





Wrap-Up

- Categories
- Aspects
- Measures
- Homework – Performance Measure Handbook – sent via email

