Sustainable Return on Investment (SROI) Process

Brief Overview

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Common Questions Related to Infrastructure Choices

- **Where should it go?**
  - Low cost site or low impact location?

- **When should it be built?**
  - Now or after other investments?

- **Which design?**
  - Low capital cost or high efficiency?

- **What scale of investment?**
  - Incremental or game-changing?

- **How to choose?**
  - Net present value or payback period?

- **How do you monitor success?**
  - Adaptive management vs. long-run oriented?
Outcomes from Capital Investments:

- Expanded network; human interaction; low cost mobility
- Access to opportunities, affordability
- Efficient resource use; avoided impacts
- Schools, communication networks
- Policies, investments that induce healthy choices

Impacts on Sustainability Goals:

- **Economy:** Entrepreneurship, profit motive
- **Equity:** Opportunities, reduce disparities
- **Environment:** Reduced pollution, efficiency
- **Education:** Human capital, innovation
- **Health:** Reduced long-term costs
HDR’s Sustainable Return on Investment Process

Guiding Principles:
- Best practices in economics
- Triple-bottom line outcomes
- Transparent and comprehensive
- Methods tailored to client, project
- Involve stakeholders, experts
- Long-term, indirect impacts
- Explore impacts on wellness
- Analyze distribution of impacts
- Account for uncertainty
- Communicate multiple indicators
SROI Involves an Objective and Transparent Evaluation

**Step 1: Clarify Objectives**
- Kick-off meeting
- Establish Framework for Estimation
- Research Data on Key Drivers
- Identify Key Areas of Uncertainty

**Step 2: Develop SROI Model**
- Create “Structure and Logic Diagrams”
- Create Spreadsheet Demonstration Tool
- Model uncertainty

**Step 3: Convene Workshop**
- Identify Stakeholders and Experts
- Review Model and Metrics and Define Uncertainties
- Reach Consensus on Inputs

**Step 4: Produce Results**
- Run Model
- Test Sensitivity
- Summarize Findings
- Develop Standards for Communication
SROI Screening Process Identifies Best Options

- Often practical dimensions of technical and financial feasibility limit consideration or projects
- Stakeholder assessments can be conducted to further screen out project alternatives
- SROI can then be used to rank remaining project options
SROI Accounting Framework Presents Multi-dimensional Outcomes

Client-Tailored Framework

Sustainability Initiatives
- Energy
- Water
- Land / Materials
- People

Economic
- Energy Cost Savings
- Water Cost Savings
- Waste Disposal Savings
- Employee Productivity

Environmental
- Lifecycle GHG Reduction
- Water Quality, Quantity
- Reduced Land Contamination
- Environmental Stewardship Initiatives

Community
- Reduced Air Pollution
- Water Supply Reliability
- Reduced Truck Miles
- Community Health and Safety

Estimated Sustainability Value

Financial Impacts

$ Production Cost Savings

$ Environmental Improvements

$ Community Engagement

Financial Impacts

+++ Economic Benefits

+++ Fiscal Impacts

Evidence-Based Analysis
Results quantify impact of uncertainties for financial, societal, environmental value

Outcomes are simulated to provide comprehensive perspective on forecasts

Decisions can be made with a probabilistic level of confidence of being correct

Upside and downside risks are revealed for more effective decision making

SROI Risk-Based Methods Reveals Uncertainty in Decisions
Session 4: What are characteristics of a framework for analyzing sustainability dimensions of a project?

- Consistent framework across project scales and locations
- Transparency in data and methods
- Engage stakeholders, experts
- Comprehensive assessment of impacts, including short- and long-term
- Account for sources of risk and uncertainty
- Communicate impacts in multiple ways
- … Others?
Thanks

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