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# Port Sustainable Management: A Financial Perspective

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Executive Management Conference: Leading Your Seaport to Prosperity  
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- ▶ Overview of Financial Aspects of Sustainability
- ▶ Making the Business Case for Sustainability
- ▶ An **Eco**Nomics™ Approach
- ▶ Case Studies – Sustainable Port Management
- ▶ Conclusion



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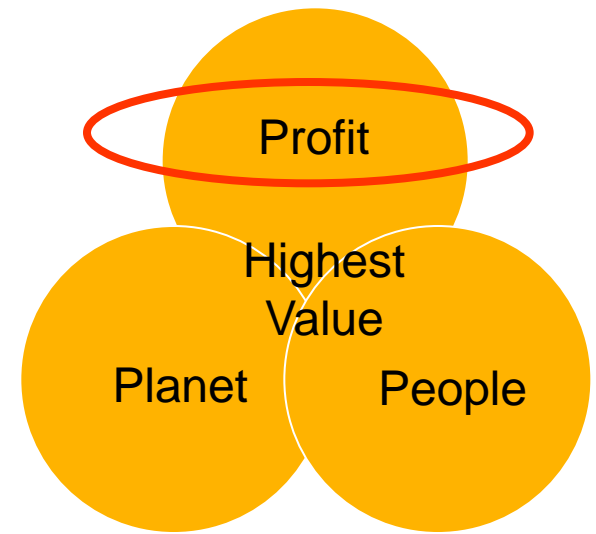
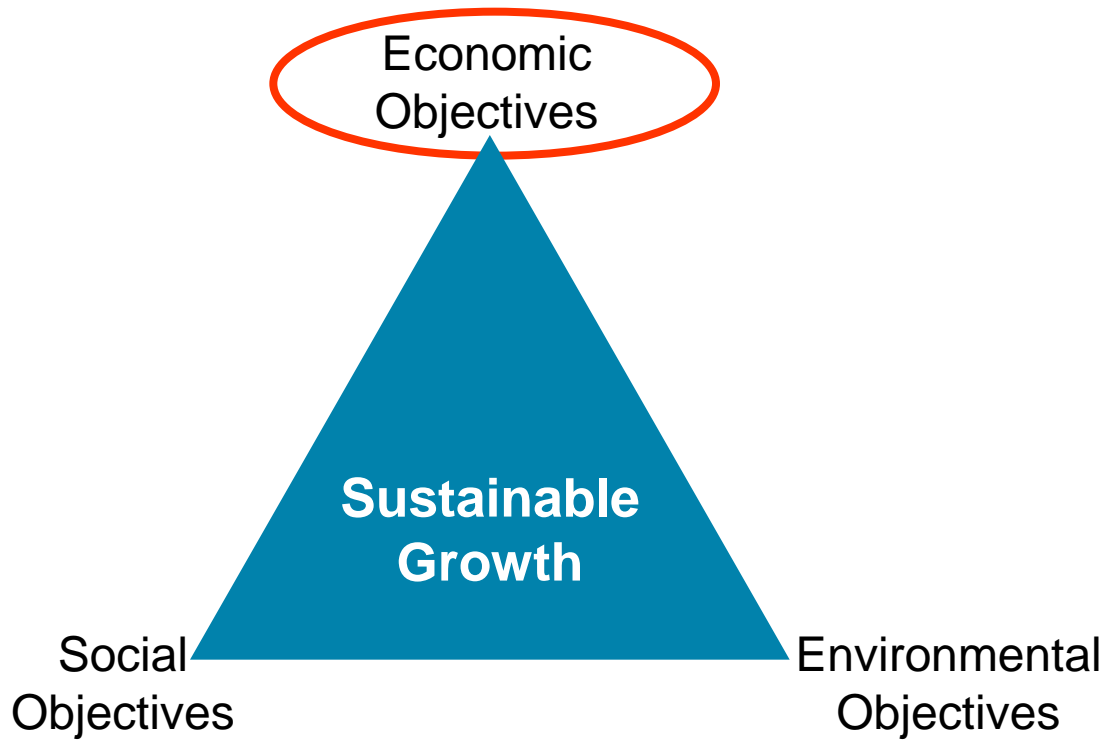
# Overview of Financial Aspects of Sustainability





- ▶ A means of configuring human activity so that society, its members, and its economies are able to meet their needs and express their greatest potential, while preserving biodiversity and natural ecosystems in the very long term
- ▶ Easily put...
- ▶ Sustainability is about thinking and acting in the future tense
- ▶ (Planning for the Future)







## **Beginner**

- ▶ Understanding of key CR issues
- ▶ Compliance systems in place

## **Performer**

- ▶ Senior-level buy-in
- ▶ Vision of sustainable future
- ▶ Systems in place to delivery

## **Leader**

- ▶ CR a strategic opportunity
- ▶ Sustainable innovation across business

## **Pioneer**

- ▶ Business model refocused to profit from sustainable value creation



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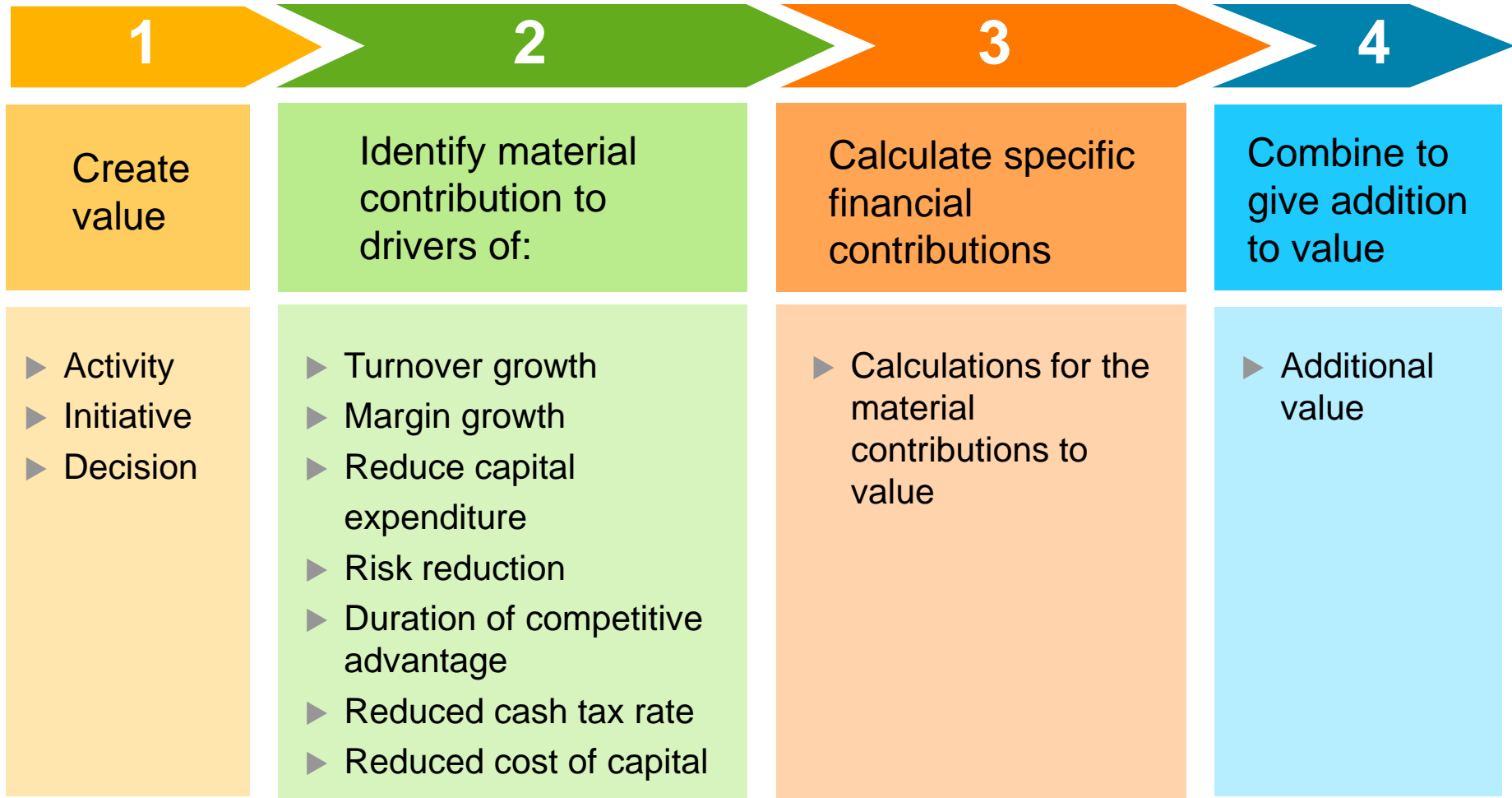
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# Making the Business Case for Sustainability









## Financial Drivers

- ▶ Reduce capital expenditure
  - Avoiding unnecessary demand for fixed assets
- ▶ Duration of competitive advantage
  - Shaping the market to the company's advantage
  - Attracting people
  - Prompt action on emerging strategic issue
  - Enhanced access to key resources
- ▶ Reduce cash tax rate
  - Reduced payments to government
- ▶ Reduced cost of capital
  - Improved access to financial capital at lower rates



## Financial Drivers

### ▶ Turnover growth

- Product differentiation
- New products
- New customers / market share / reputation / brand equity
- Innovation

### ▶ Margin growth

- Eco-efficiency
- Motivating and retaining people

### ▶ Risk reduction

- Increased security and quality of supply chains
- Reduce regulatory risk
- Reduced reputation risk
- Maintain license to operate



# Why is the Business Case so Difficult?

## Challenge

- There is no “one size fits all” business case
- The “societal case” doesn’t automatically make a business case for all situations
- People have led with “responsibility” which feels like compliance
- The more you look, the more you find
- Sustainability and finance professionals speak different languages
- The “no business case, no permission” vicious cycle

## Solution

- ➔ • Only try to find your company’s business case
- ➔ • Don’t expect a business case to exist for future things the company needs to do
- ➔ • Opportunity trumps responsibility: frame sustainability as a way of unlocking opportunity for the company now and in the long-term
- ➔ • Plan to explore how to make sustainability commercial, and how to keep improving your company’s business case
- ➔ • Frame the case for sustainability in terms your finance director will understand, ideally in drivers of shareholder value
- ➔ • Plan small steps to iteratively establish a process of permission and results



- Quantifying sustainability
- Informing, decision-making (DELTA)



- Embedding capabilities
- Delivering sustainable projects

- Identifying opportunities
- Helping forge new directions - advanced solar thermal initiative



- ▶ See finding your business case as part of a wider change program.
  - Who are the key stakeholders? Who can be your champion in the finance function?
  - What are your consistent key messages?
- ▶ Go to the finance department with a safe pilot.
  - Identify a decision/project which won't trigger defense routines and only needs a small amount of resource to investigate.
- ▶ Use the pilot to build credibility and awareness.
  - Where possible, have the finance function do the analysis – building their capacity
  - Demonstrate you are concerned with finding the business case, not only justifying sustainability
- ▶ Keep creating a “permission and results” cycle
  - Address larger and more important areas: key decisions and financial processes (i.e. capital expenditure)
  - Keep building capacity of key individuals along the way



- ▶ Longer Term Benefits
- ▶ Lower Discount Rates
- ▶ Lower Transportation Costs
- ▶ Less Ship Delays
- ▶ Direct/Indirect Sub Job Creation
- ▶ Induces/ Supporting Jobs



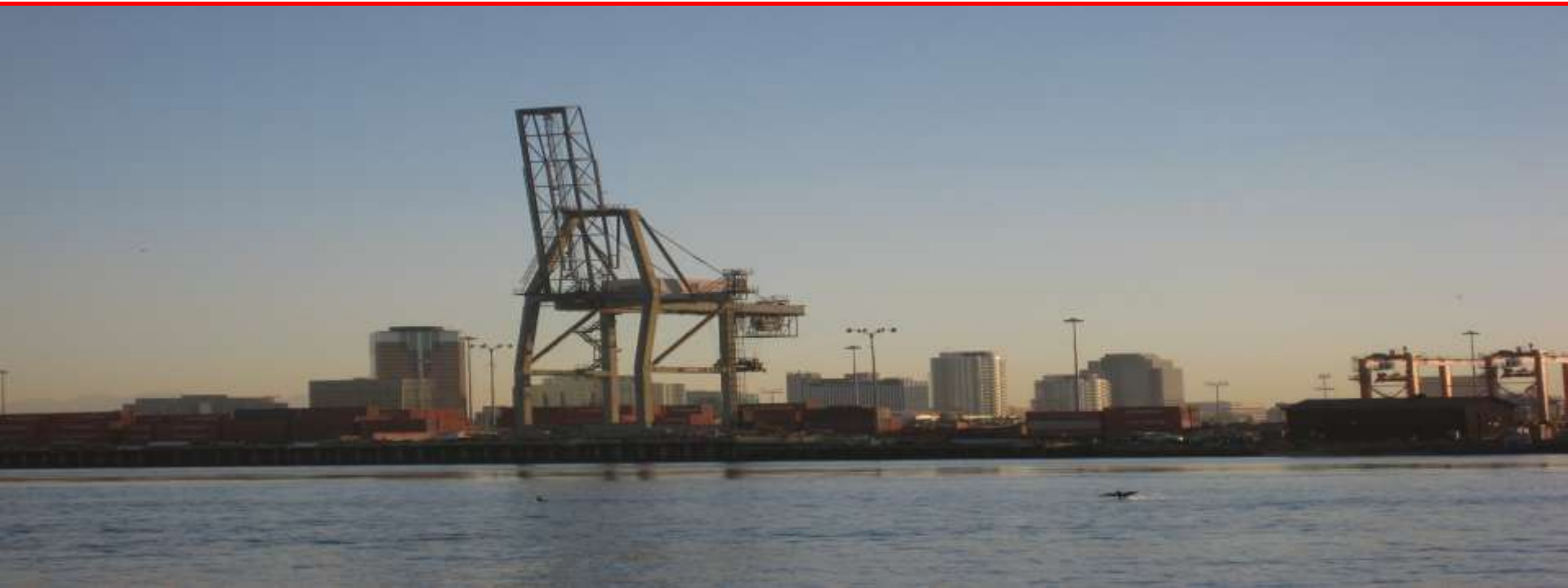
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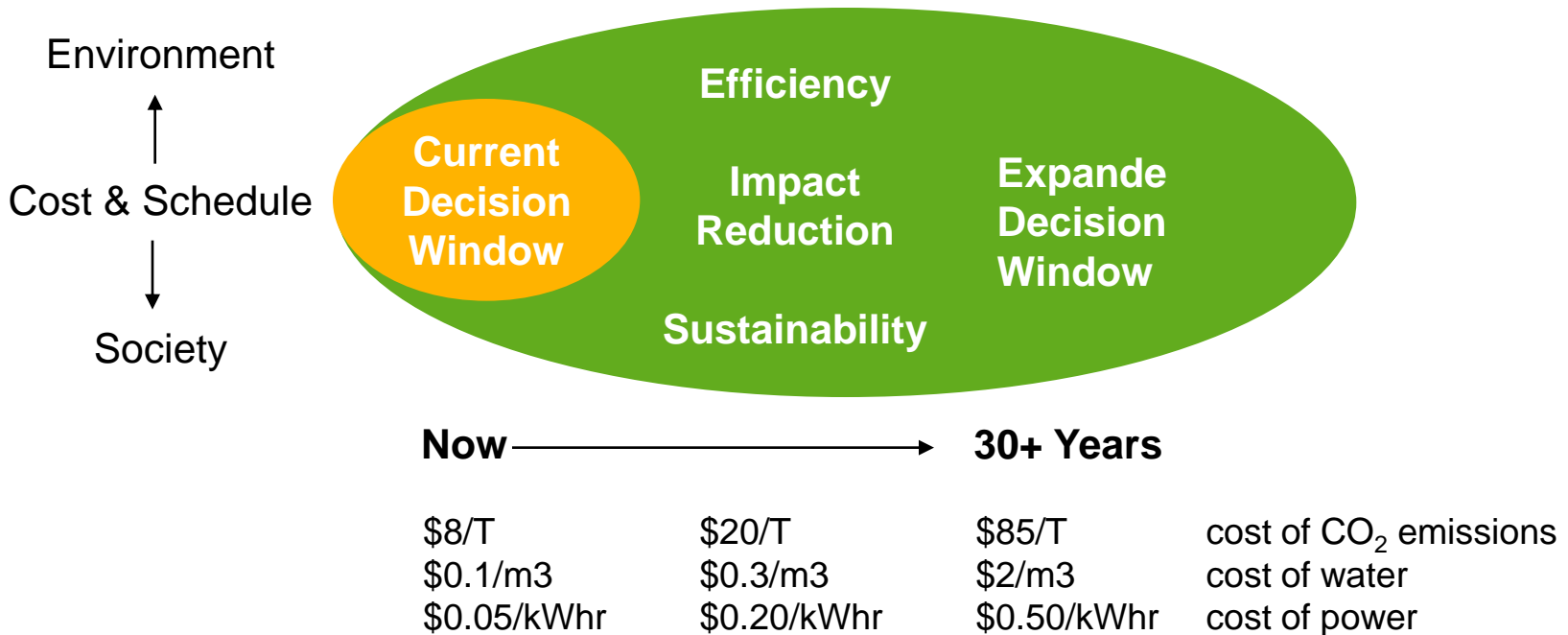
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# An **Eco**Nomics™ Approach





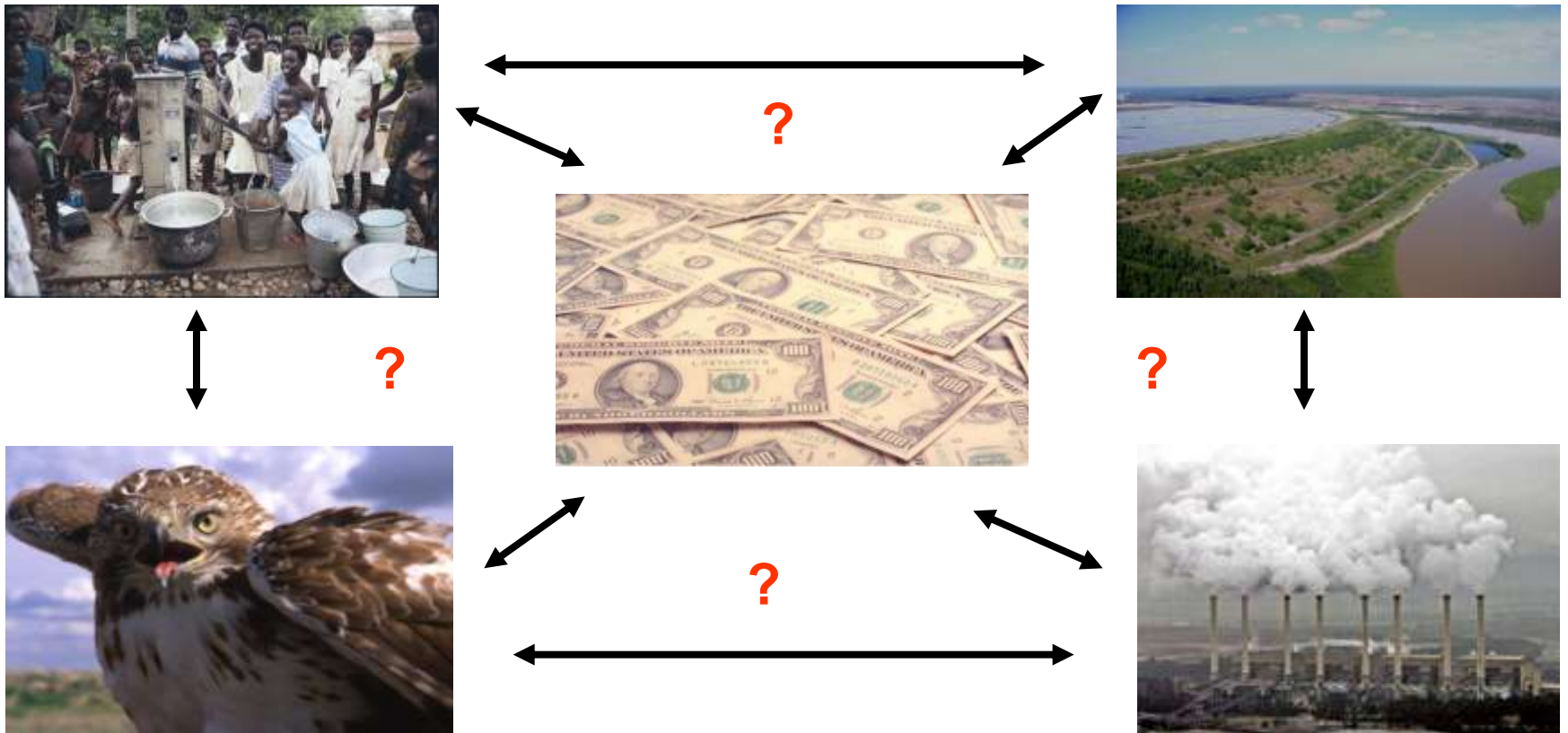
- ▶ An **EcoNomics™** approach broadens the perspective (decision window) out to the future to consider factors beyond budget and schedule.
- ▶ Projects are future-proofed







- ▶ Trade-offs:
- ▶ Risk and Value : Cost and Benefit





- ▶ An **EcoNomics™** project alternatives assessment develops a comprehensive accounting of all benefit, cost, and risk by monetizing ALL influencing factors
  
- ▶ Key features:
  - Analyzes both financial and non-financial costs, benefits, and risks through monetization
  - Process designed to support clients overall sustainability objectives
  - Built-in future-proofing so that client can see long-term effects of and to project options
  - Defensible results based on reliable, non-subjective methodologies and data input
  - Improved ability to communicate value of action to all stakeholders including regulators

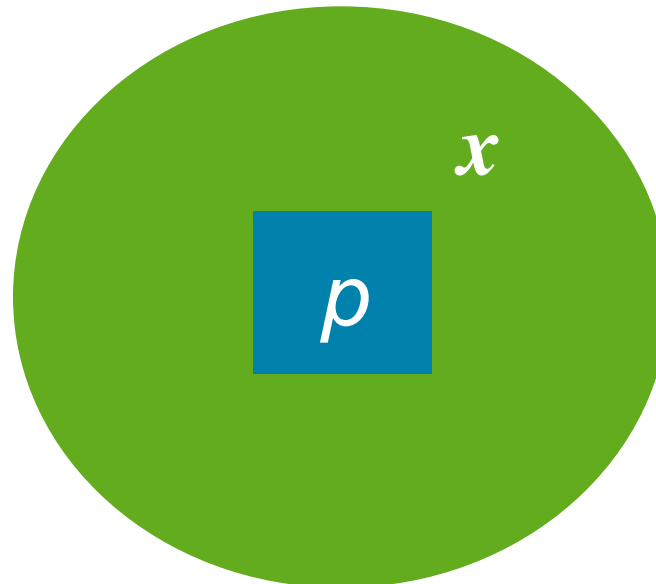


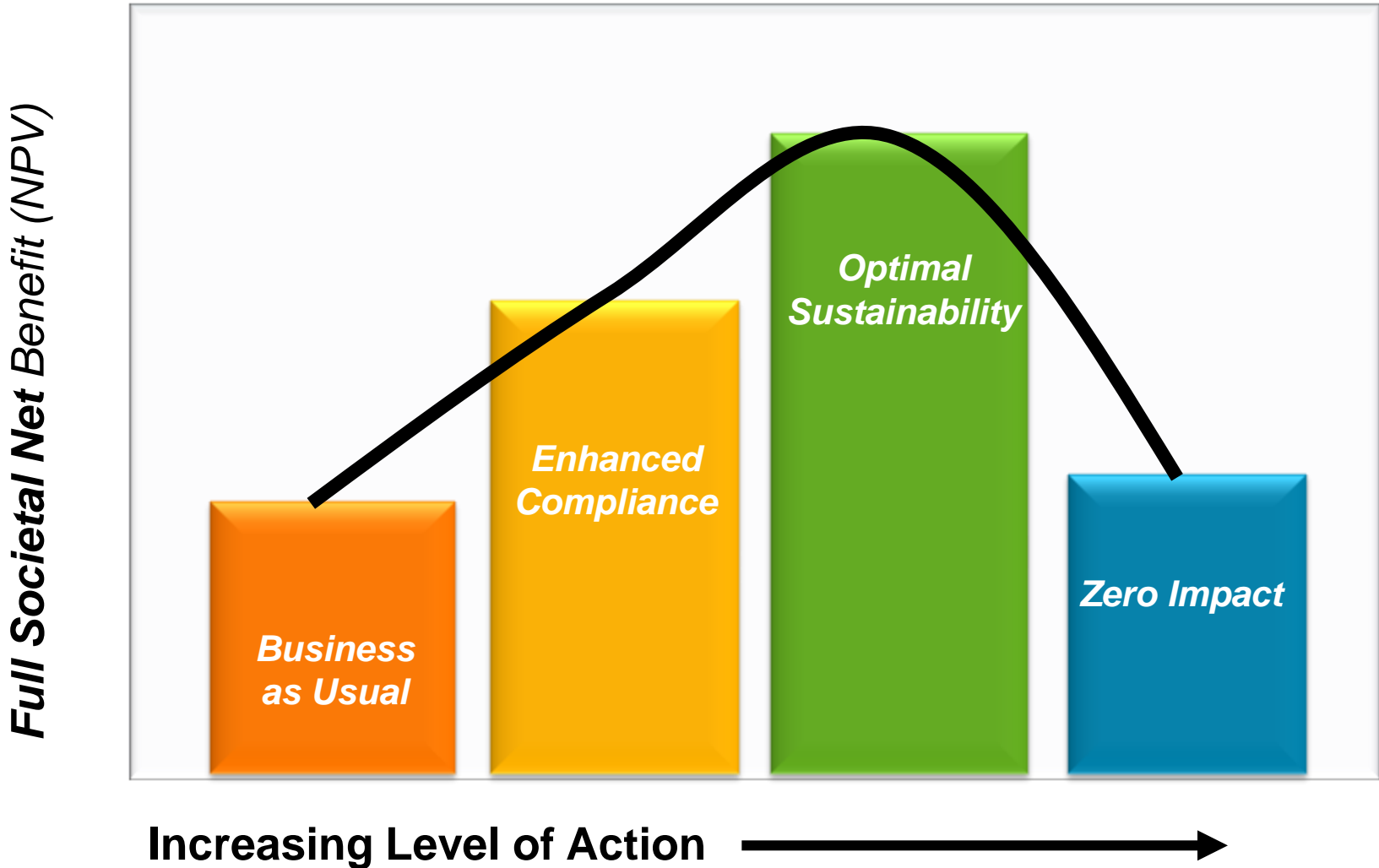
$$NPV = \sum_0^t \left[ \frac{(B_p + B_x) - (C_p + C_x)}{(1+i)^t} \right]$$

The equation is annotated with four arrows pointing to the terms in the numerator: a blue arrow points to  $B_p$ , a green arrow points to  $B_x$ , a blue arrow points to  $C_p$ , and a green arrow points to  $C_x$ .

P = project (internal)

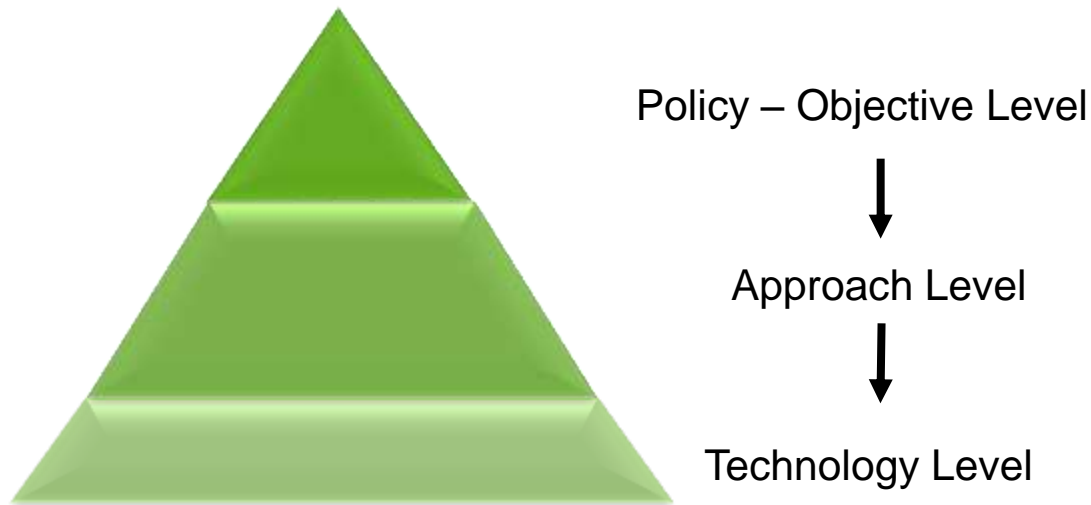
x = society and environment (External)

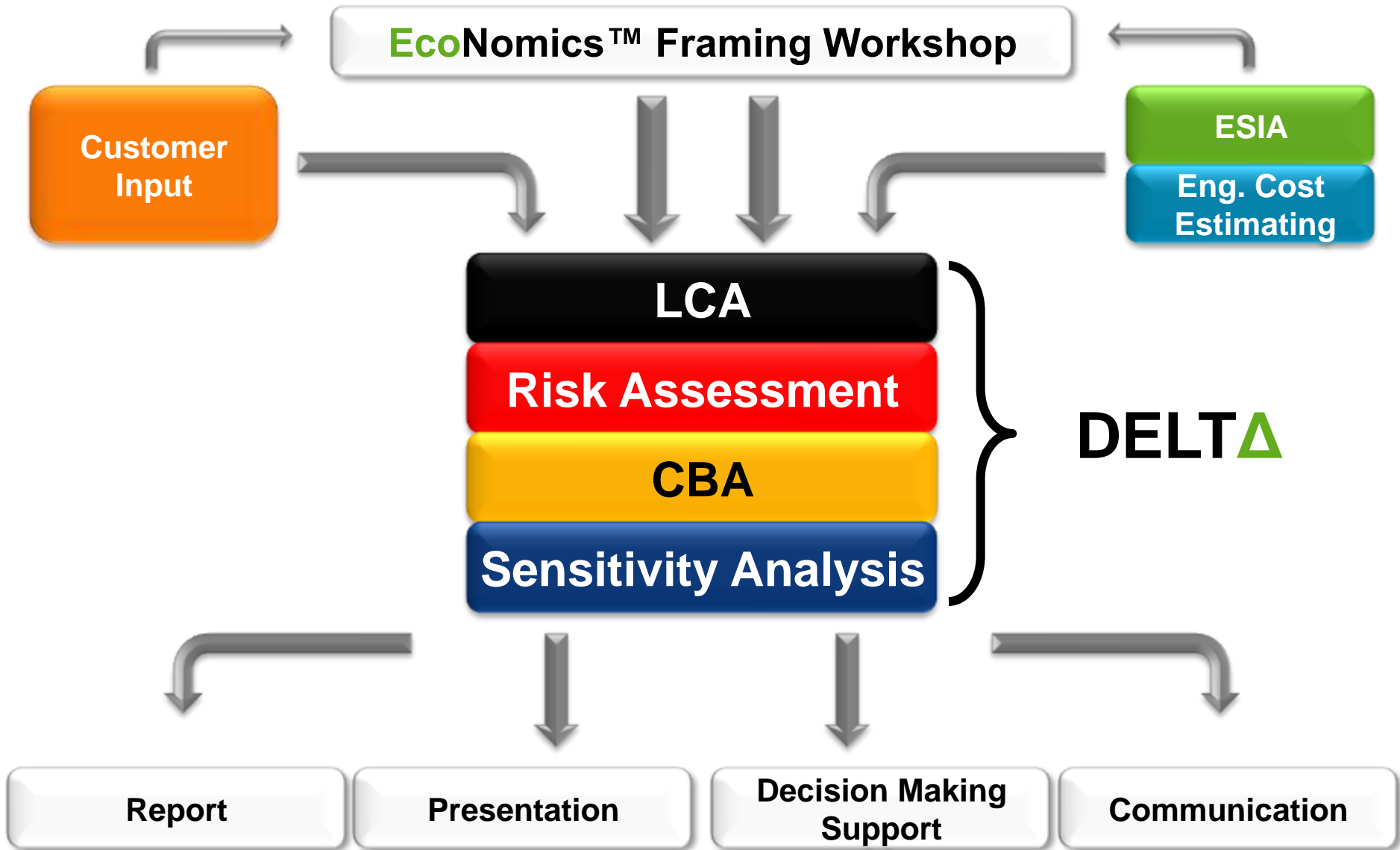






- ▶ What level of assessment is appropriate?
- ▶ Comparison of options at which level?







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# ENA Example 2: Former MGP Site Remediation





- ▶ What should I do at this site?
- ▶ Most sustainable method of remediation and how much should I spend?
  - Nature and extent of contamination
  - Risk (Human Health, Controlled Waters, Resources, Environment, Property)
  - Regulations
  - Stakeholder views







▶ Possible Objectives:

- Eliminate Human Health Risk
- Make site fit for redevelopment – **Property Holder**
- Protect the Public Water Supply (PWS) by preventing vertical migration – **Water Utility**
- Protect the River – **Environment Agency**
- Remediate the aquifer itself – **Environment Agency**

▶ Which one is best??



- ▶ R1: Treat water at Public Water Supply Well (PWS)
- ▶ Monitored Natural Attenuation (MNA)
- ▶ P1: Hydraulic containment in bedrock (**Agency + WCo favored**)
- ▶ P2: Hydraulic containment in gravel
- ▶ P1 and P2
- ▶ S3: Excavation above WT, ex-situ treatment (**PH favored**)
- ▶ S1: Partial excavation + In-Situ Chemical Oxidation
- ▶ S2: Full excavation (with piling), ex-situ treatment (**Local Government favored**)

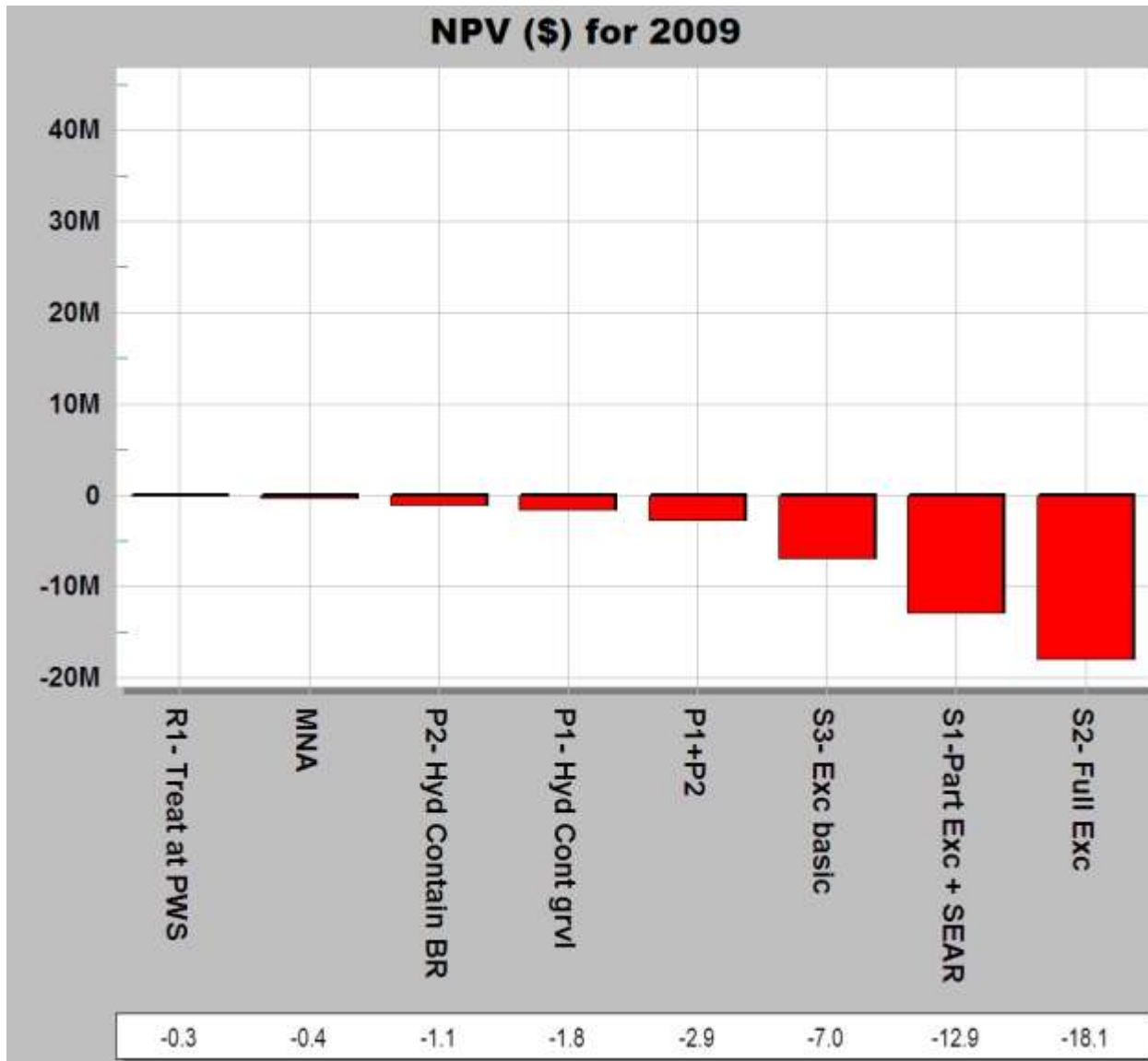


▶ **Intended Cx:**

- GHG emissions during remediation
- External costs of road transport

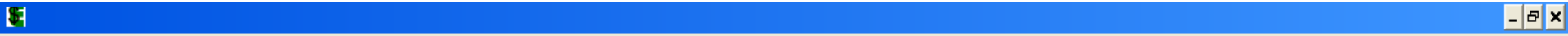
▶ **Unintended Cx:**

- Introduction of contaminant to bedrock via piling (putty chalk risk)



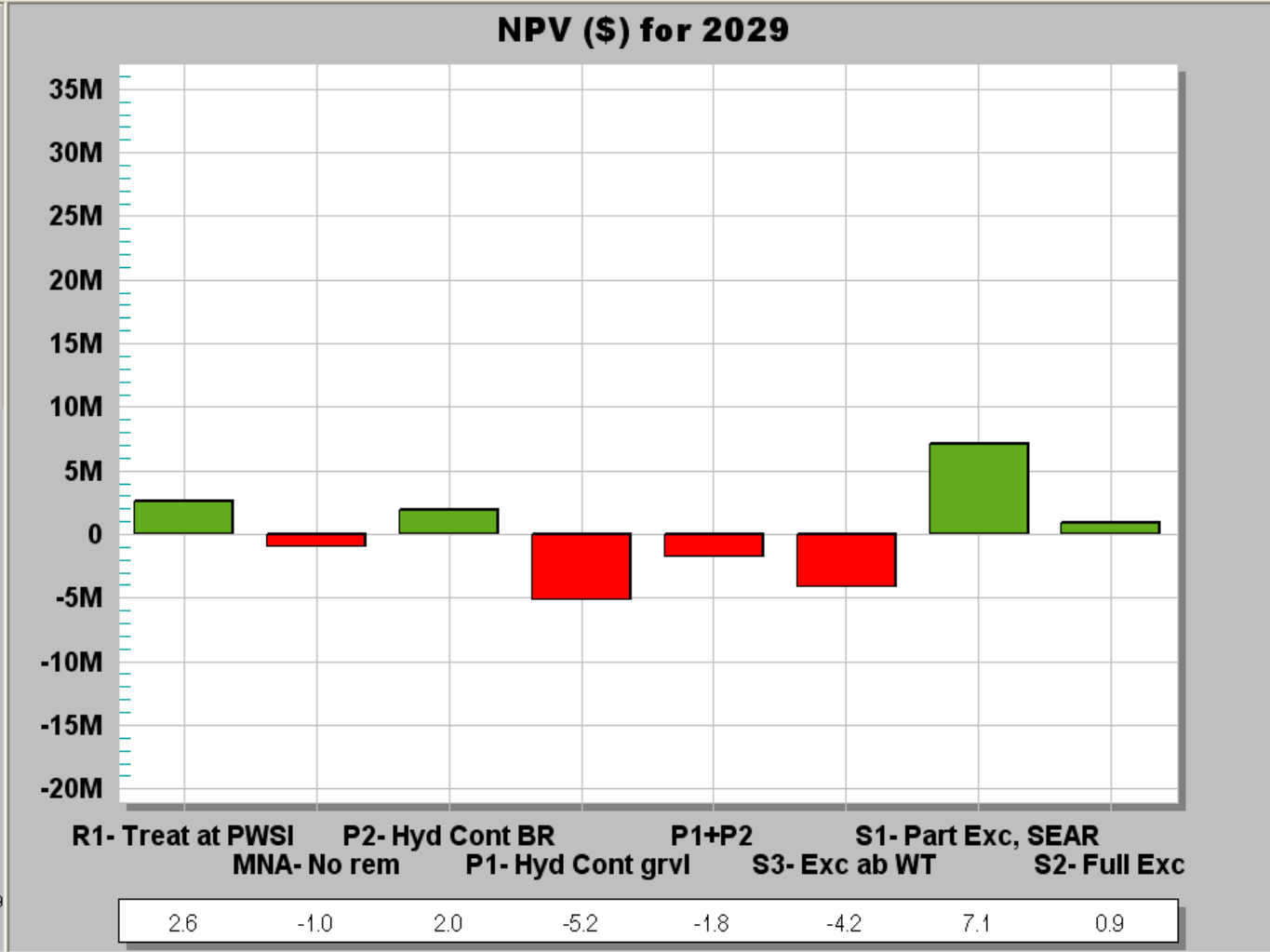
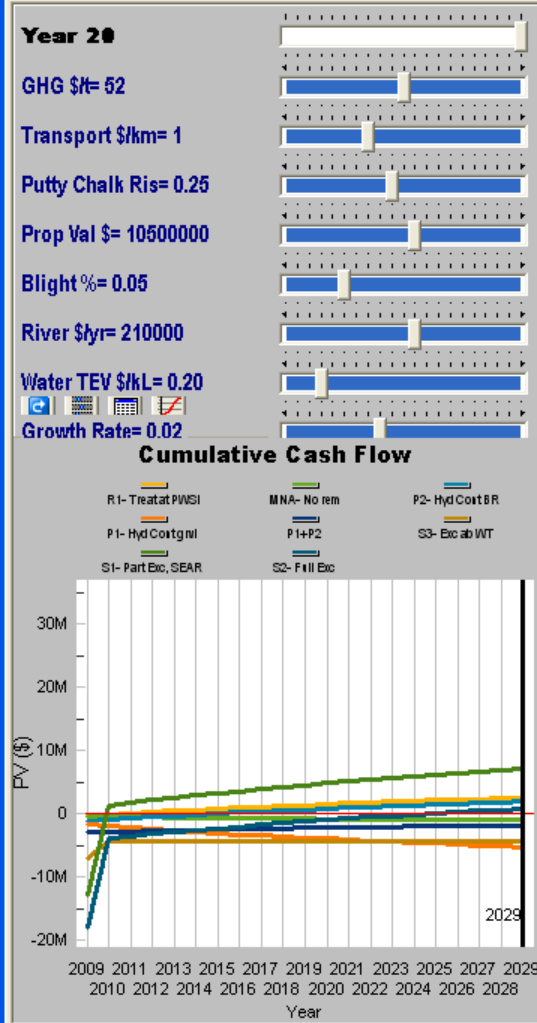


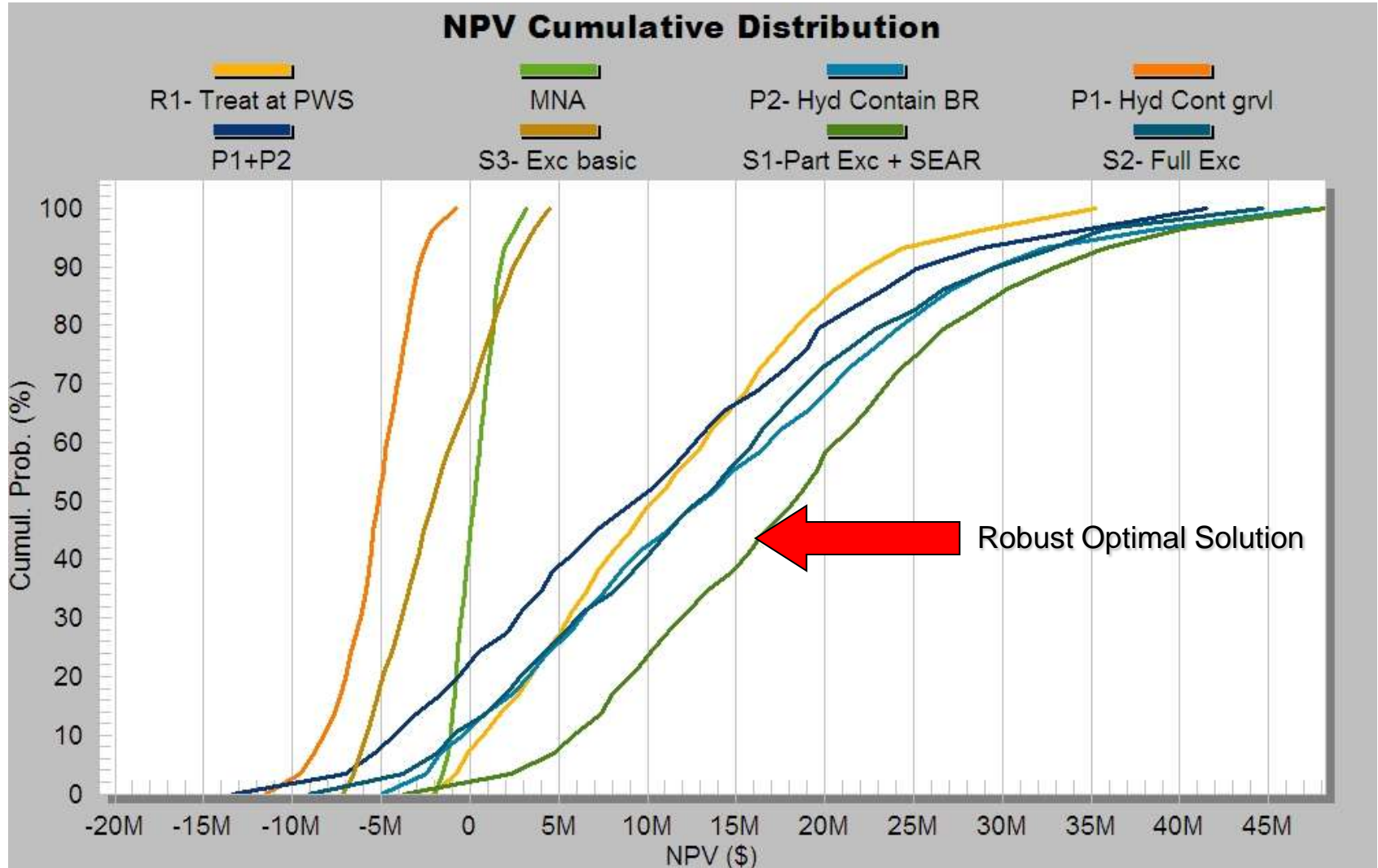
<b>Benefit Category</b>	<b>20 Year Benefit (\$m)</b>
Property value increase	10.5
Neighborhood blight reduction	3.9 (77.5 x 5% BF)
Aquifer Protection	8.1
River Protection	2.8
<b>TOTAL (Maximum)</b>	<b>\$ 25.3 m</b>



File Edit Calcs Help

EcoNomics DELTA







- ▶ Good for complex, high value issues
- ▶ Good when outside forces are pushing for expensive solutions
- ▶ Good for helping determine course of action when multiple stakeholders involved
- ▶ Good when perspective is needed
- ▶ Good when multiple risks and tradeoffs are evident
- ▶ Sustainability issues important
- ▶ Significant external assets at risk
- ▶ Regulatory or public scrutiny
- ▶ Reputation issues
- ▶ Decision-making challenge