



Integrating sustainability concepts

CIVE 324 Sustainable Project Management

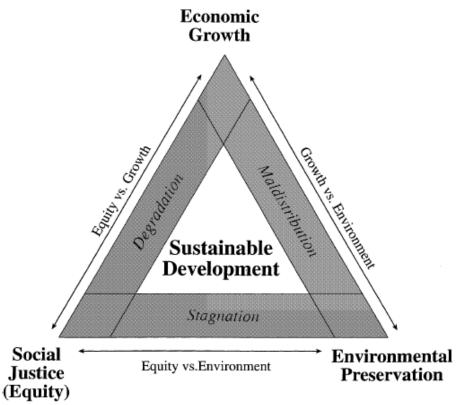
Marianne Hatzopoulou







Emphasizes 3 main goals & balances 3 tradeoffs: (Feitelson, 2002)



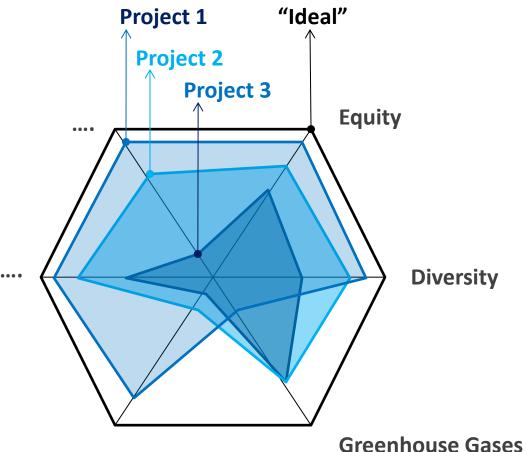






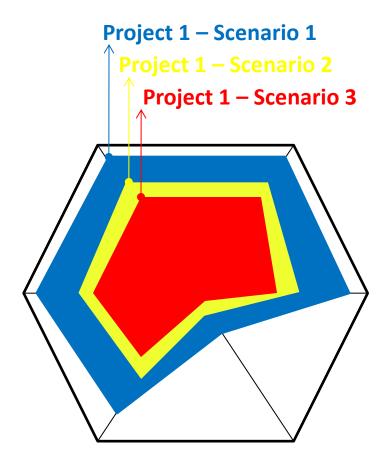
Can we measure sustainability?

Performance



Other measures of sustainability

Reliability

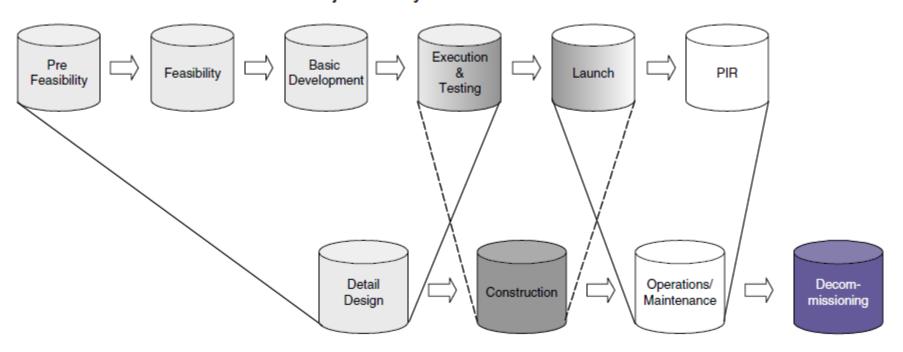






Project vs. Asset Lifecycle

Project Life Cycle



Asset/Process Life Cycle

Fig. 5. Interaction between project and asset life cycle.





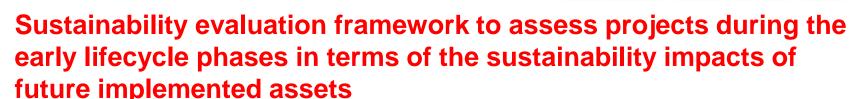


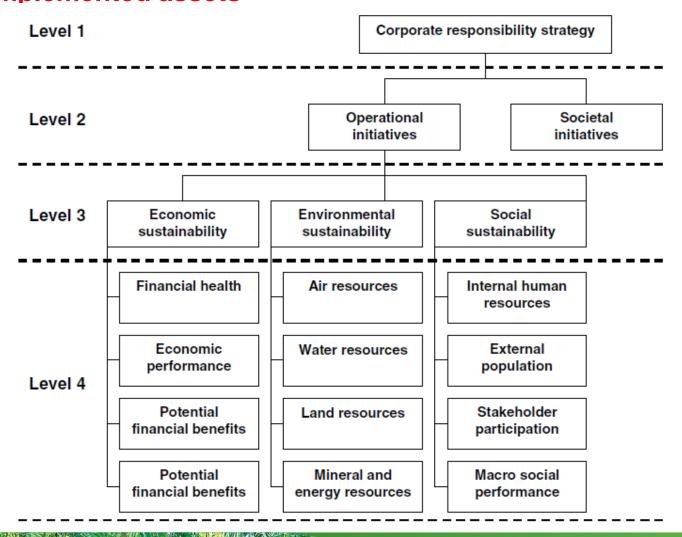
"Aligning project management methodology with the principles of sustainable development therefore requires that the sustainability consequences of the asset lifecycle must be considered during the project lifecycle"

Adapted from: Labuschagne and Brent, 2005









Market Demands or Perceived Needs Definition of Project Objectives and Scope Conceptual Planning and Feasibility Study Conceptual Plan or Preliminary Design Design and Engineering Construction Plans and Specifications Procurement and Construction Completion of Construction Startup for Occupancy Acceptance of Facility Operation and Maintenance Fulfillment of Useful Life Disposal of Facility

The Construction **Project Lifecycle**

Chris Hendrickson, **Project Management for Construction.** Department of Civil and Environmental Engineering, Carnegie Mellon University, Pittsburgh, 1998. Available from http://pmbook.ce.cmu.edu/index.html.

Figure 1-1: The Project Life Cycle of a Constructed Facility