

BRIDGE

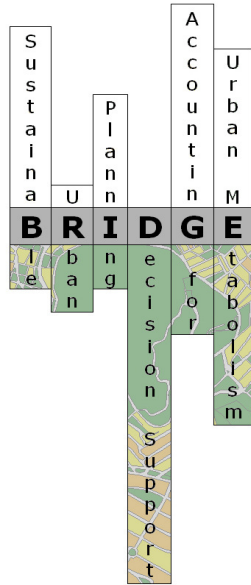
1st CoP Meeting

London, August 24, 2009

The BRIDGE Project



N. Chrysoulakis
FORTH

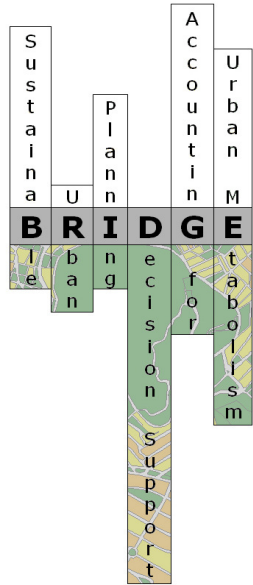


The BRIDGE objectives

- To define urban metabolism by means of energy, water and air pollution fluxes in **local scale**.
- To examine the role of land use and resources use in saving energy, in minimising impairment of the water cycle and in removing air pollutants.
- To develop indicators to quantify the environmental impacts of the above components of urban metabolism.
- To develop a DSS based on these indicators.
- To use this DSS to estimate the environmental and socio-economic benefits of alternative land and resource use.
- To devise sustainable planning strategies based on these estimations.

The problem

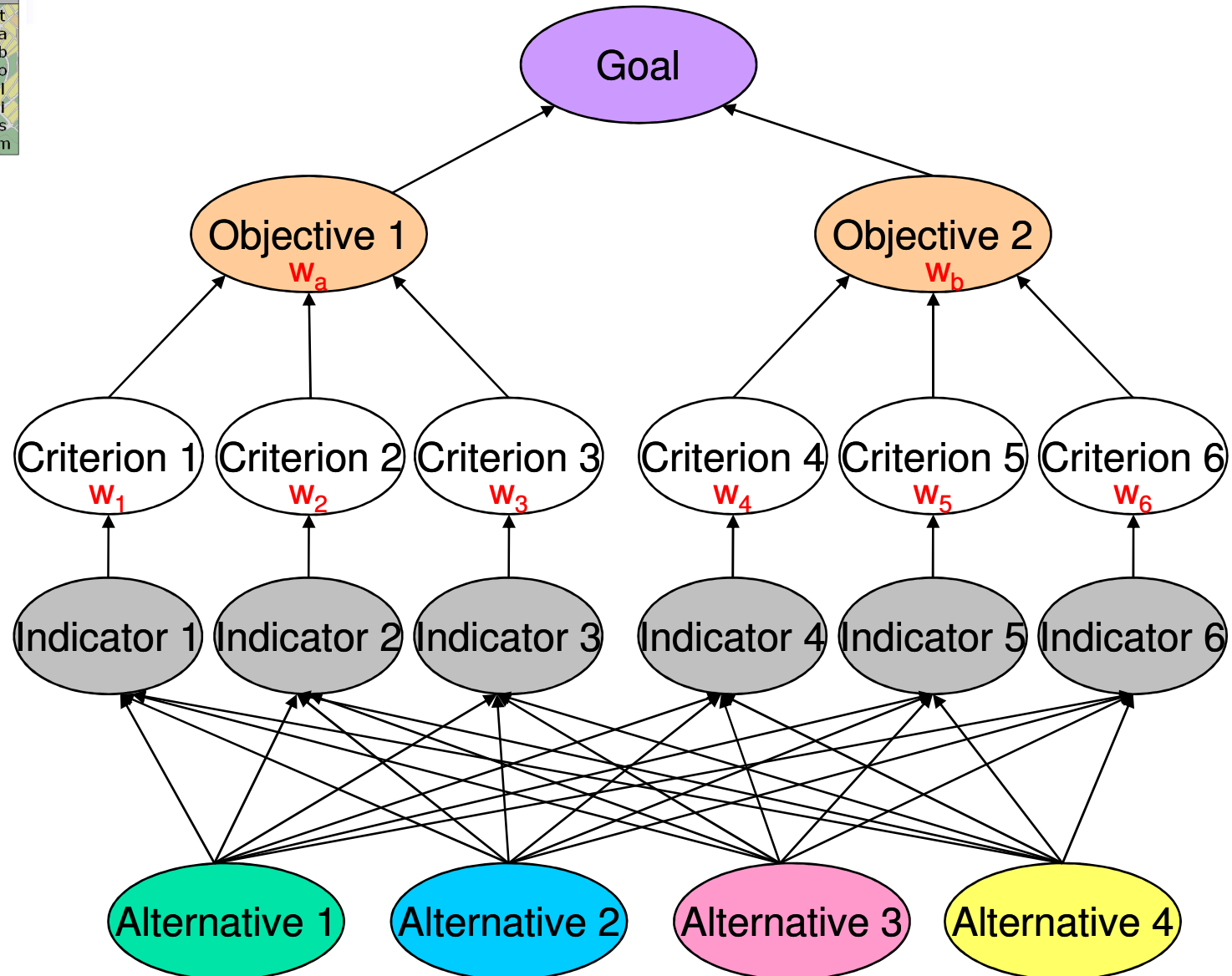
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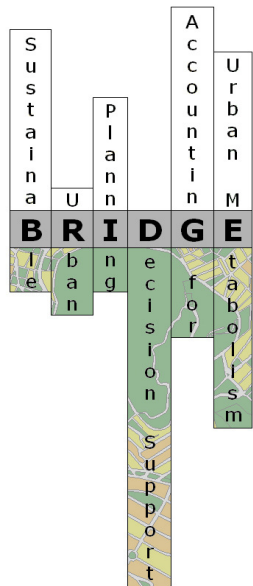


The challenge

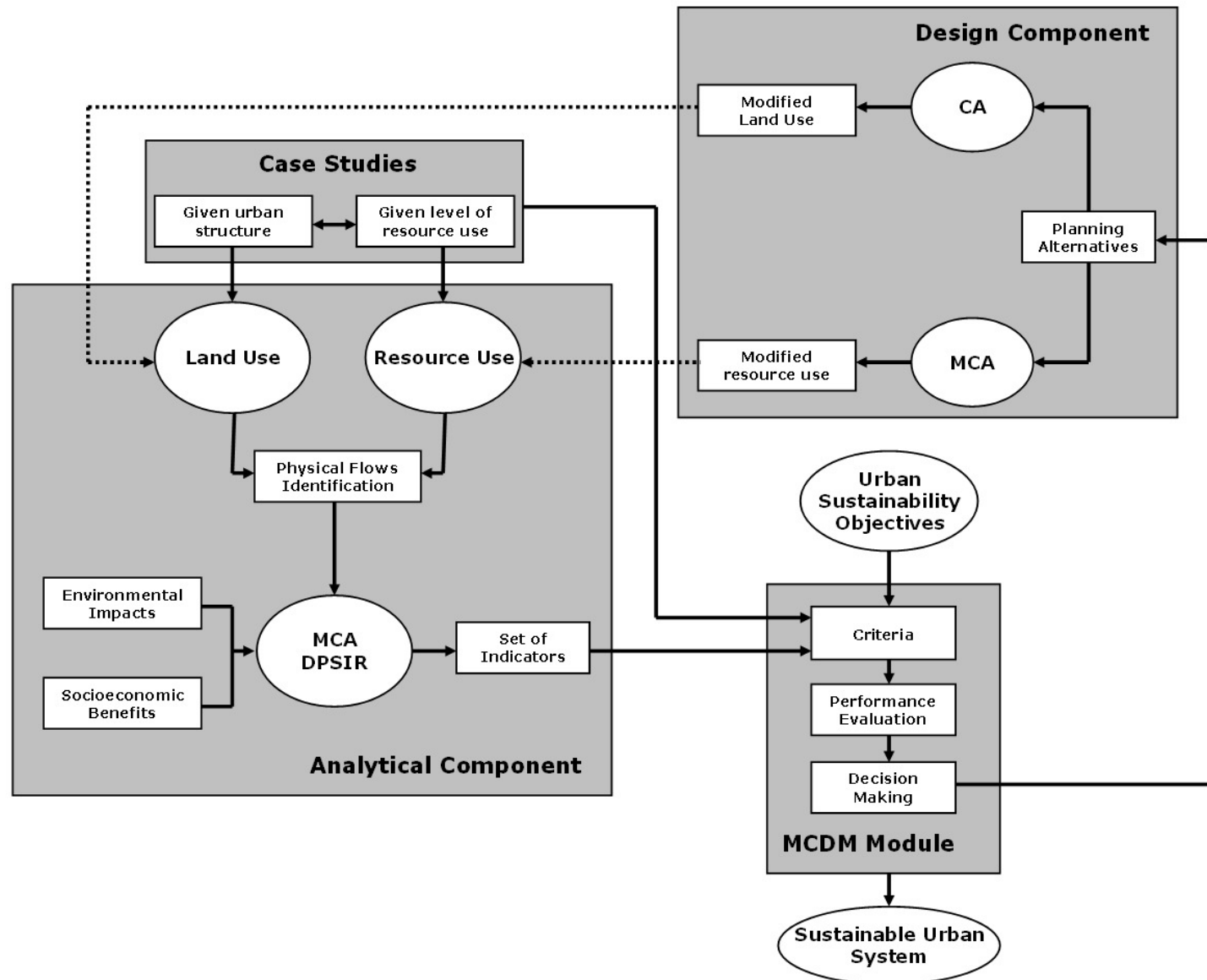
- **Urban metabolism** is considered as the exchange and transformation of energy and matter between a city and its environment.
- The city is considered as a **system** and the physical flows between this system and its environment will be quantitatively estimated.
- BRIDGE will focus on the following components of urban metabolism:
 - ✓ **Energy**
 - ✓ **Water**
 - ✓ **Carbon and pollutants**

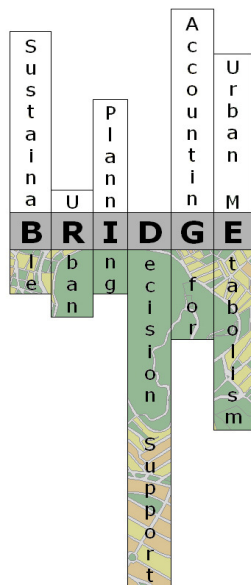
Decision Making



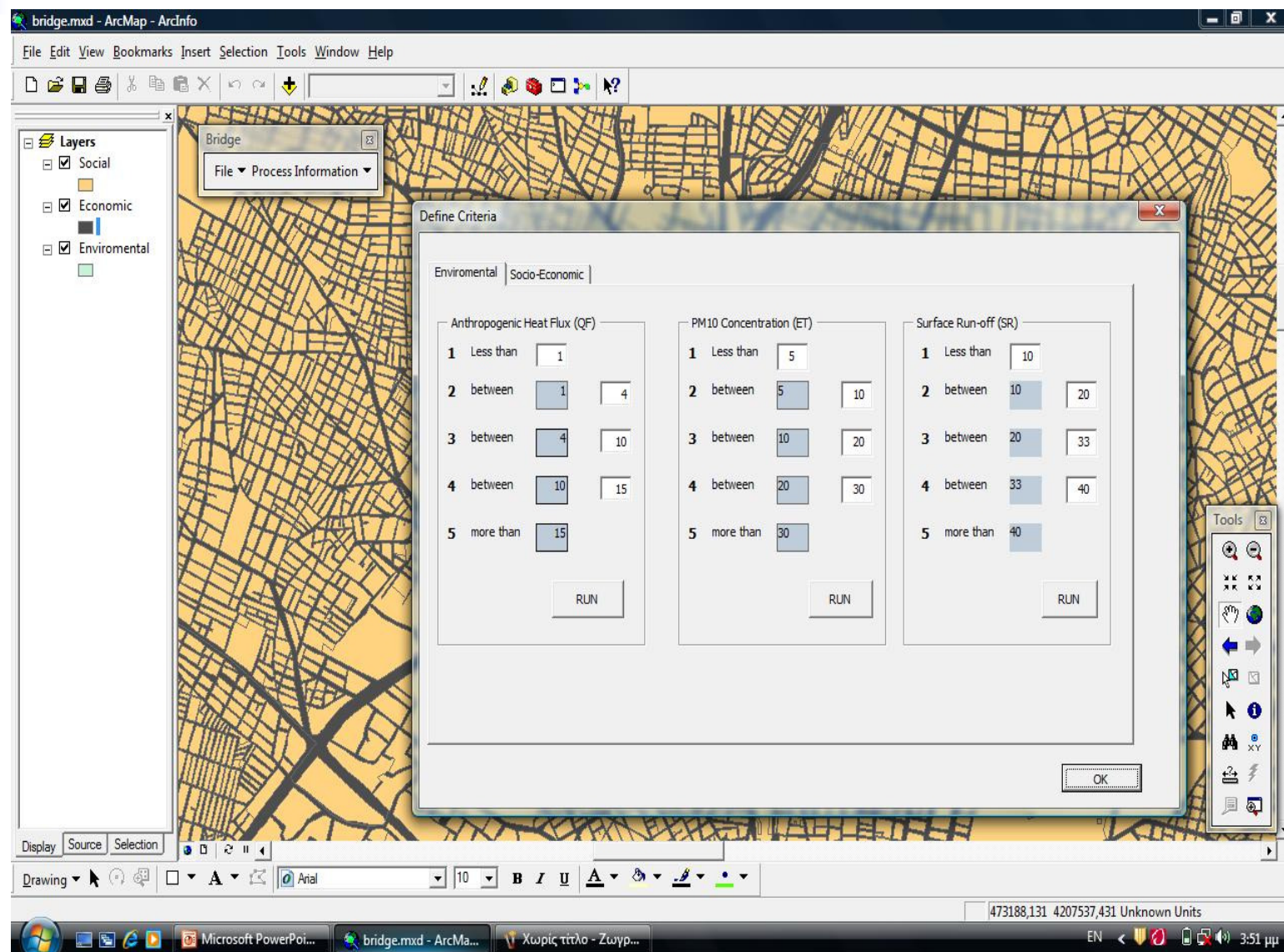


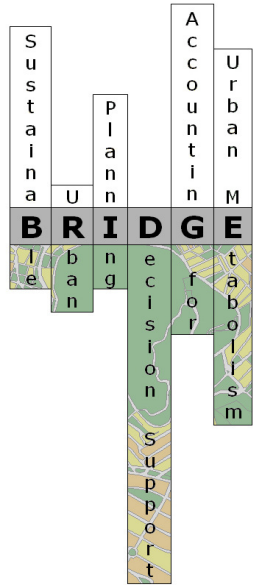
DSS components



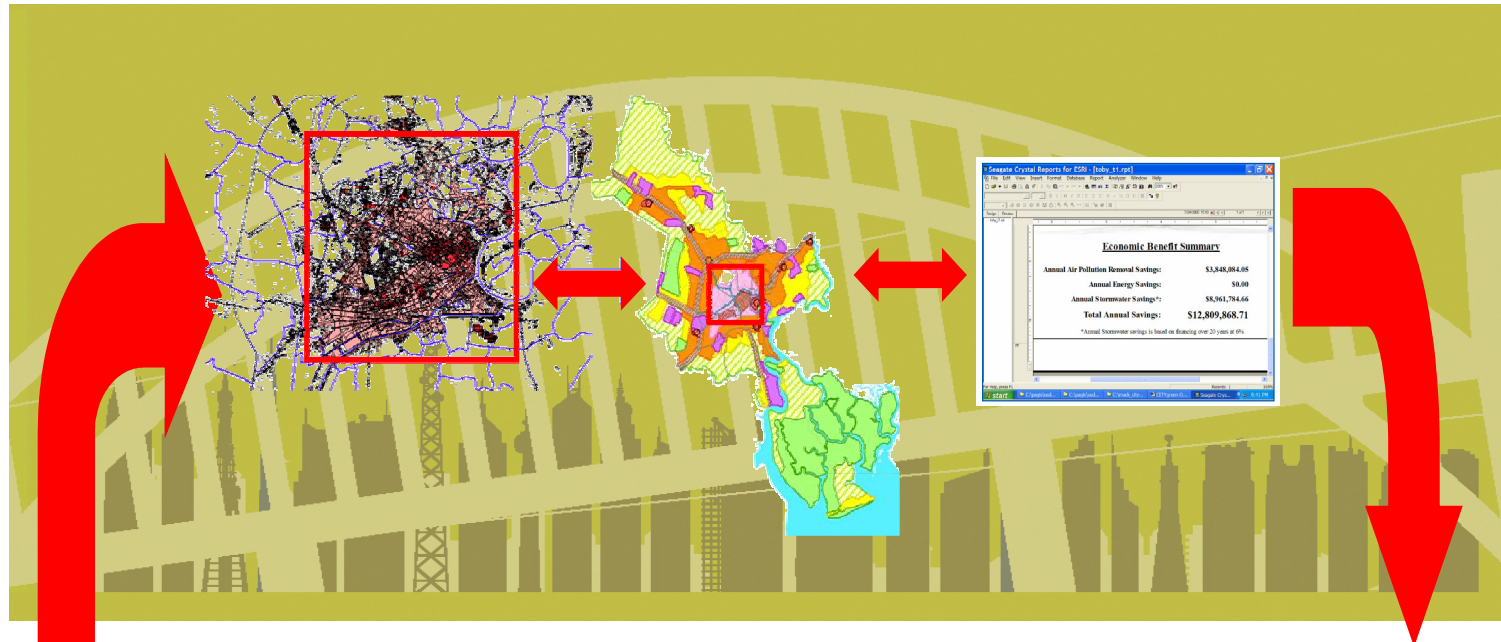


The DSS mockup





The vision: BRIDGE in planning



A crossword puzzle grid is displayed over a map of the San Francisco Bay Area. The grid contains the following words:

- Across:**
 - 1. Sustainable
 - 2. Urban
 - 3. Planning
 - 4. Bridge
 - 5. Decision
 - 6. Support
 - 7. For
 - 8. Tablism
- Down:**
 - 1. Sustainable
 - 2. Urban
 - 3. Planning
 - 4. Bridge
 - 5. Decision
 - 6. Support
 - 7. For
 - 8. Tablism

