



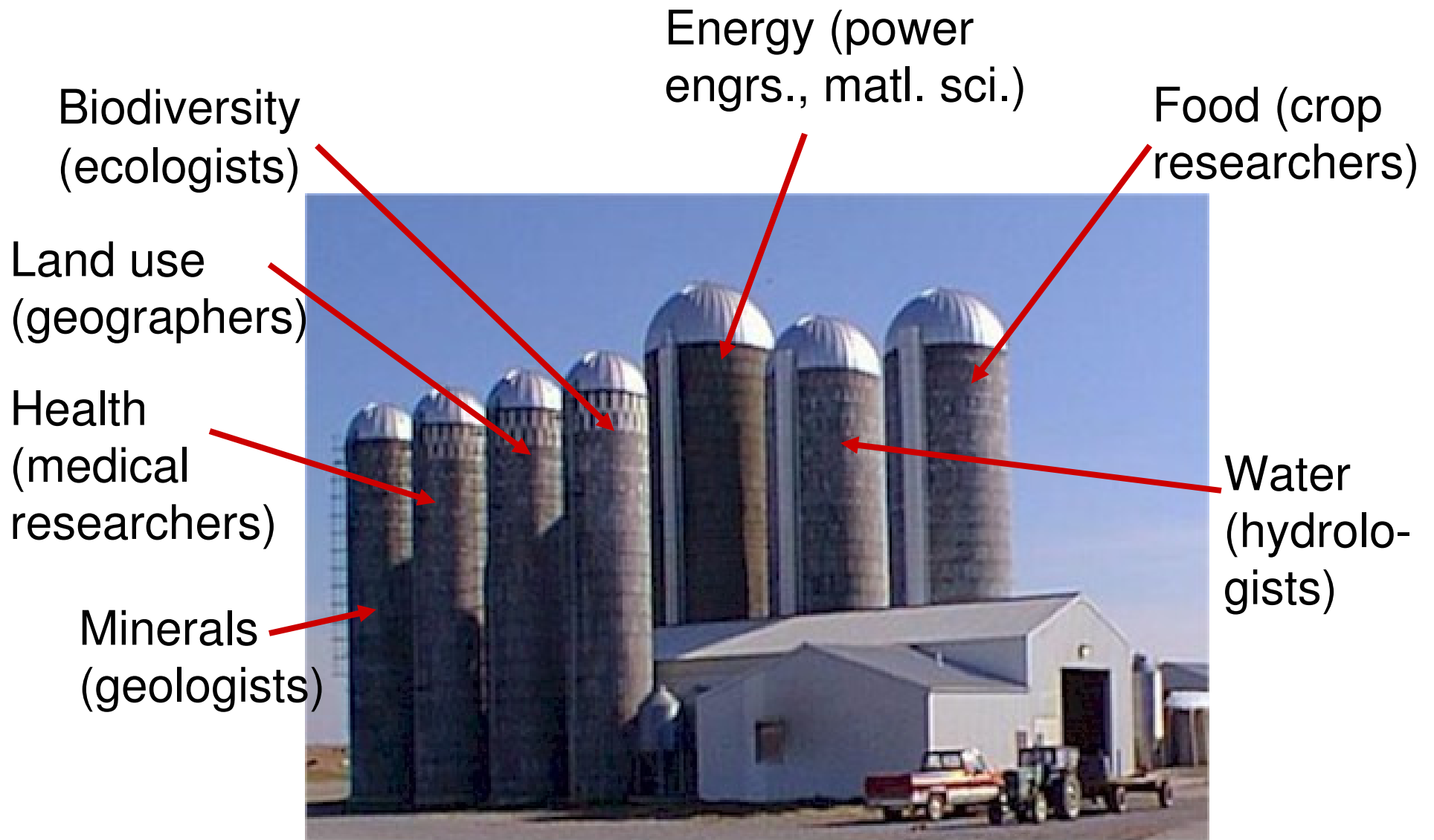
SUSTAINABILITY
AT THE NATIONAL ACADEMIES

THE NATIONAL
ACADEMIES

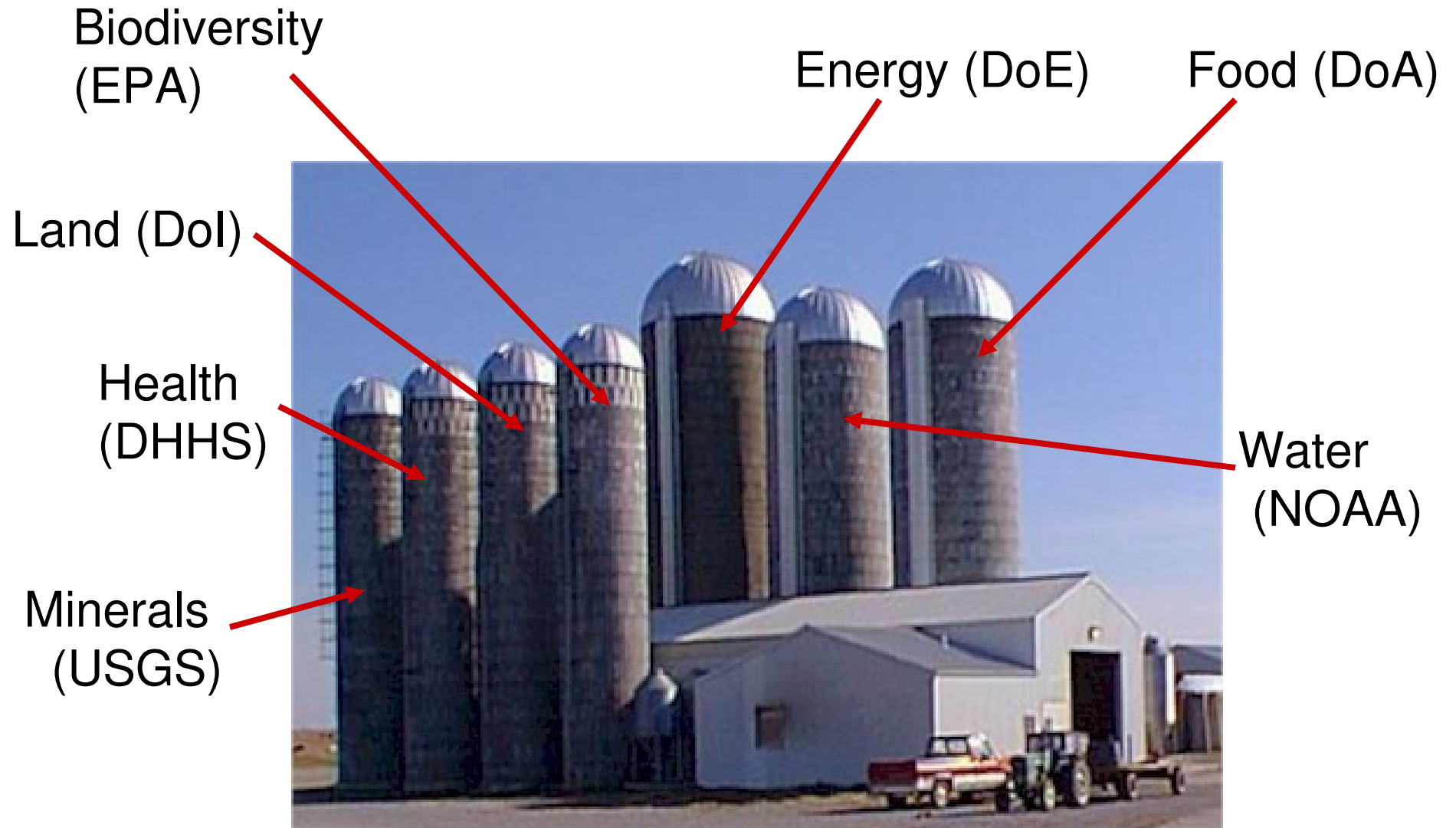
Sustainability Linkages in the Federal Government

**Science and Technology for
Sustainability Program
The National Academies**

The Sustainability Silos of the Experts



The Sustainability Silos of the U.S. Government





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Critical Sustainability Challenge

Move beyond sectoral approaches within the federal (and perhaps state) government to more integrated approaches to sustainability challenges that take into account complex interactions among systems



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Meeting the Sustainability Challenge in the Federal Government

Establish a committee of the US National Academies to design workshops, hold the workshops to explore linkage challenges across federal (and perhaps state) governments, produce reports of those workshops, and make recommendations

Issues for the Workshops

- Linkages form potential constraints to many key components of sustainability
- The linkages are generally not considered in sustainability discussions or analyses
- Linkages need to be much better quantified
- The policy implications of linkages need to be explored and communicated to government agencies

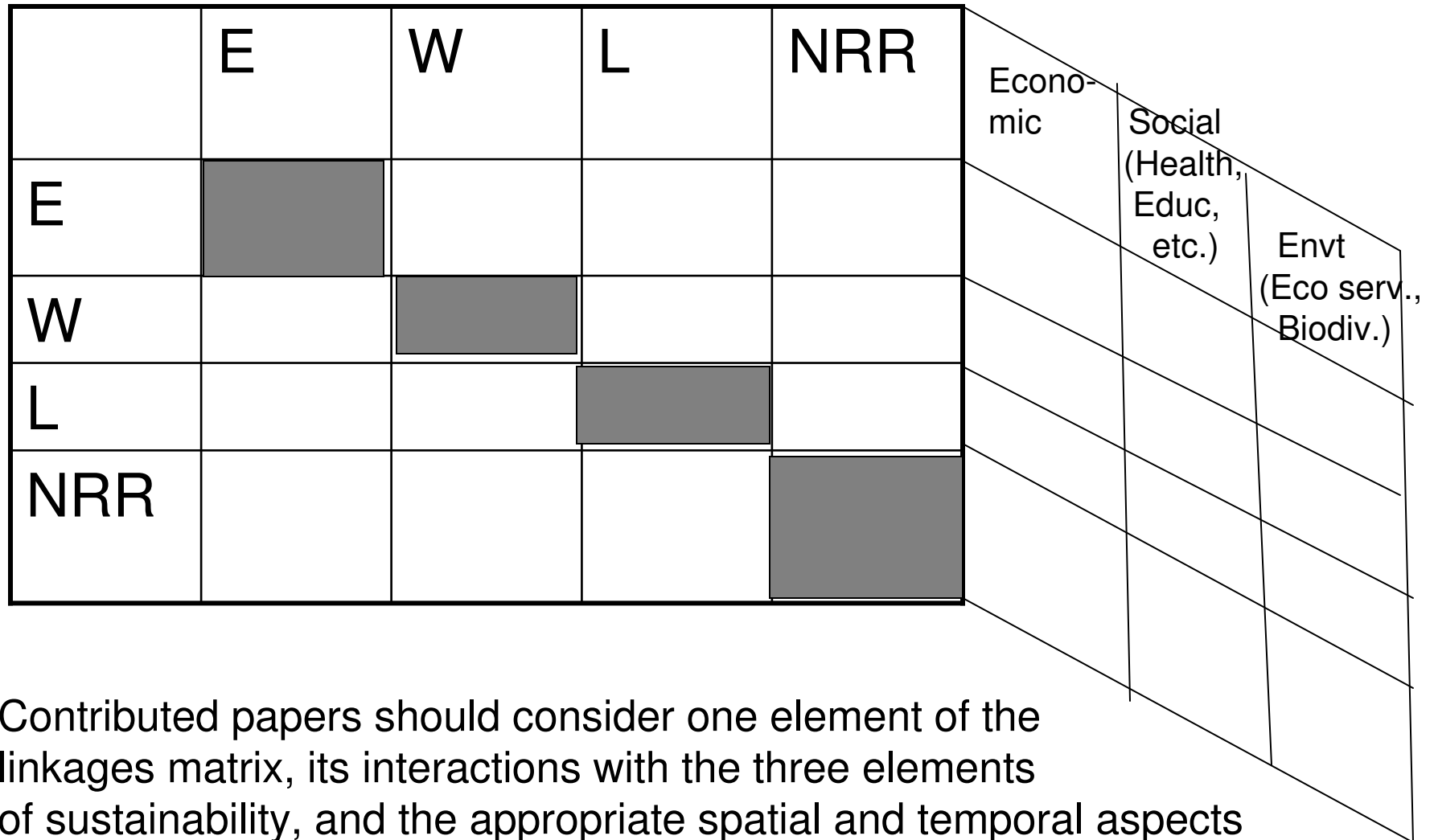
Workshops Approach #1- Resource Focus

- Energy and its Linkages
- Water and its Linkages
- Land and its Linkages
- Non-Renewable Resources and their Linkages

The Domain Linkages Matrix

	Energy	Water	Land	Non-Ren. Resource
Energy				
Water				
Land				
Non-Ren. Resource				

Adding the Three-Legged Stool



Workshops Approach #2 – Landscape Focus



Urban



Coastal



Mineral Rich



Agriculture/Forest

The Landscape Approach

POSSIBLE CASE STUDIES (2-3 per landscape)

- **Urban:** Atlanta, Phoenix, Baltimore or Las Vegas
- **Coastal:** Gulf Coast, California Bay Delta, Chesapeake Bay
- **Mining:** Morenci Mine (Arizona), Pebble Mine (Alaska)
- **Agriculture/Forestry:** Mississippi River Basin (nutrient deposition), Agriculture production of bioenergy crops, Forested lands in southeast U.S.

Sustainability Linkages in the Federal Government: Final Report

- Describe linkages and policies and programs that support long term sustainability
- Identify gaps in understanding of these linkages and consequences for sustainability
- Identify institutional impediments
- Suggest next steps for overcoming institutional impediments

Sustainability Linkages in the Federal Government

Current Status

- Funding commitments received from a number of federal agencies: EPA, DOE, USGS, NASA, . USDA, NSF, and NOAA
- Funding commitments received from two corporations
- Additional funding requested
- Suggestions for committee nominations being solicited
- Study will launch in early fall 2011