

US EPA ARCHIVE DOCUMENT

The background of the slide features a large, faded circular seal of the Environmental Protection Agency (EPA). The seal contains the text "ENVIRONMENTAL PROTECTION AGENCY" around the perimeter and a central emblem with a tree and a sun. The text on the slide is overlaid on this background.

# ***Collaborative Science & Technology Network for Sustainability***

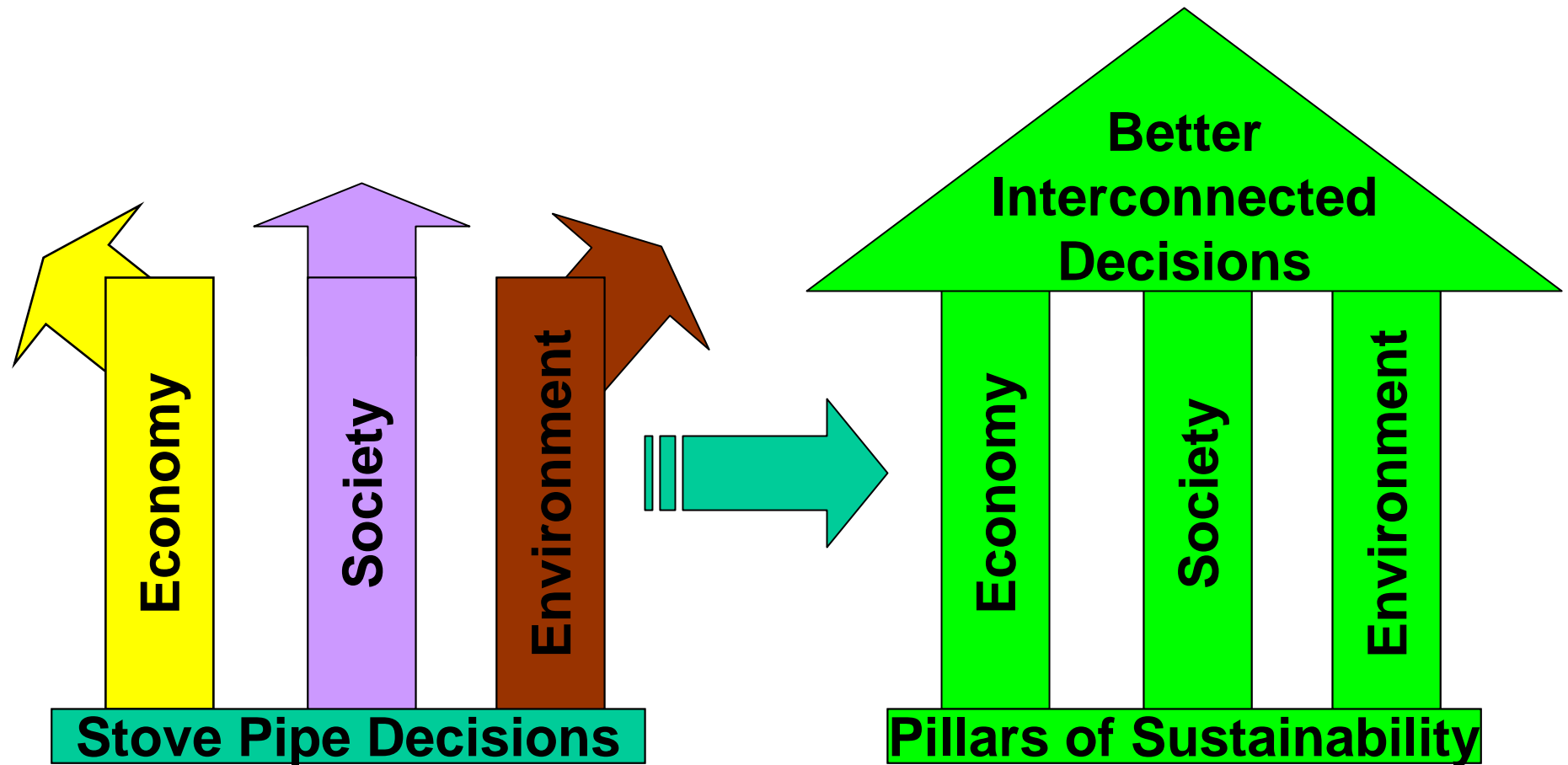
## ***Opening Remarks***

Gary J. Foley, Director  
National Center for Environmental Research  
Office of Research & Development  
EPA

***The question facing us is:  
“How can the U.S.  
Environmental Protection  
Agency  
best use its resources to  
advance sustainability?”***



# *Focus on the Decision-making!*



# EPA's Guiding Principles CAMR Rule Development 2005

1. Protect children and pregnant women
2. Stimulate and encourage early adopters of new technology
3. Reduce total emissions by leveraging co-benefits from CAIR
4. Maintain America's competitiveness (electricity and energy)
5. One component of overall effort to reduce mercury emissions

# *Administrator Johnson's Four Priorities for EPA*

These priorities will help us meet the goals of our strategic plan: cleaner air and water, land preservation and restoration, healthier communities and ecosystems, and increased environmental stewardship.



# ***Administrator Johnson's Four Priorities for EPA***

- 1. Accelerate the pace of environmental progress. By supporting legislation over regulation, results over methods, and partnerships over conflicts, we can help usher in a new era of environmental protection. *[Environment]***



# ***Administrator Johnson's Four Priorities for EPA***

***2. Environmental protection can be a driver for economic growth. Through efforts like Brownfields that not only reduce pollution, but also revitalize valuable land, we can achieve this dual goal of protecting our environment while strengthening our economy. [Economy]***





# ***Administrator Johnson's Four Priorities for EPA***

- 3. Focus on using partnerships and other innovative methods to promote environmental stewardship.  
Collaboration, voluntary programs, environmental education and outreach are proven tools of today and tomorrow.  
[Society]***

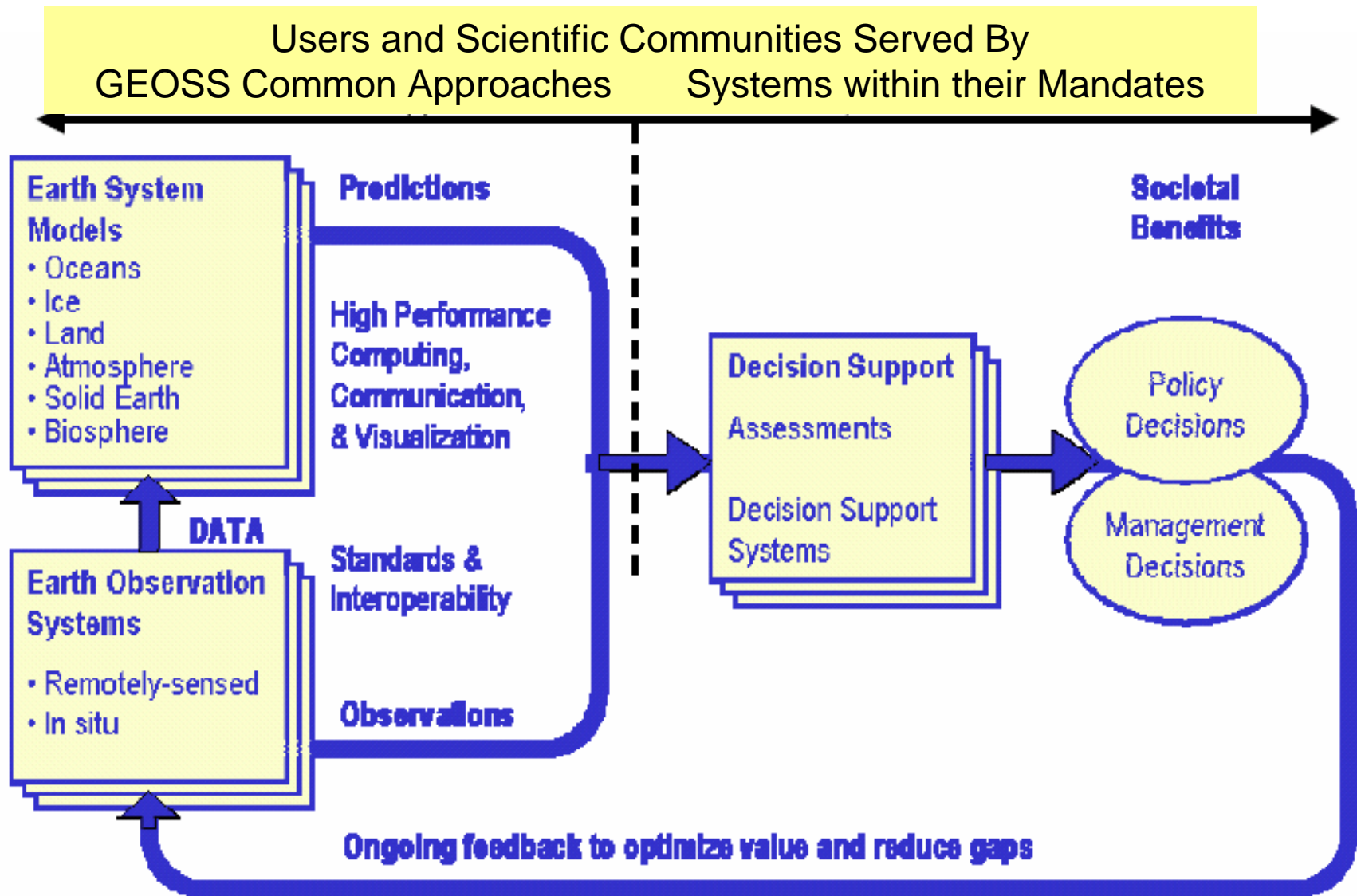


# *Administrator Johnson's Four Priorities for EPA*

***4. Enthusiastically approach these new challenges while maintaining our vigilance in enforcing existing laws and regulations. [Environment]***



# The GEOSS Architecture



# *Nine GEOSS Societal Benefits*

1. **Improve Weather Forecasting**
2. **Reduce Loss of Life and Property from Disasters**
3. **Protect and Monitor Our Ocean Resource**
4. **Understand, Assess, Predict, Mitigate, and Adapt to Climate Variability and Change**
5. **Support Sustainable Agriculture and Forestry, and Combat Land Degradation**
6. **Understand the Effect of Environmental Factors on Human Health and Well-Being**
7. **Develop the Capacity to Make Ecological Forecasts**
8. **Protect and Monitor Water Resources**
9. **Monitor and Manage Energy Resources**

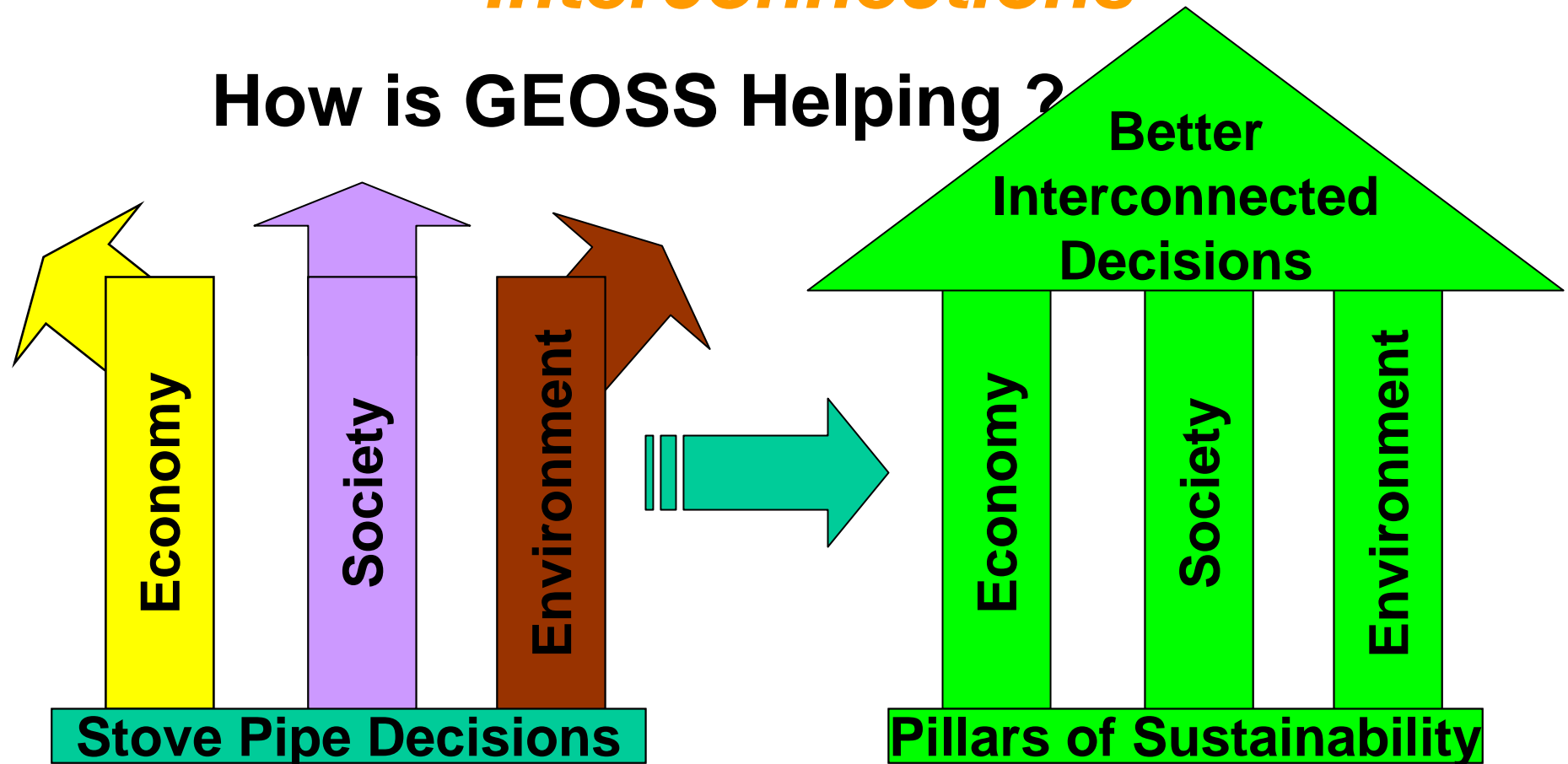
## **Vision Statement**

- Enable a healthy public, economy, and planet through an integrated, comprehensive, and sustained Earth observation system.



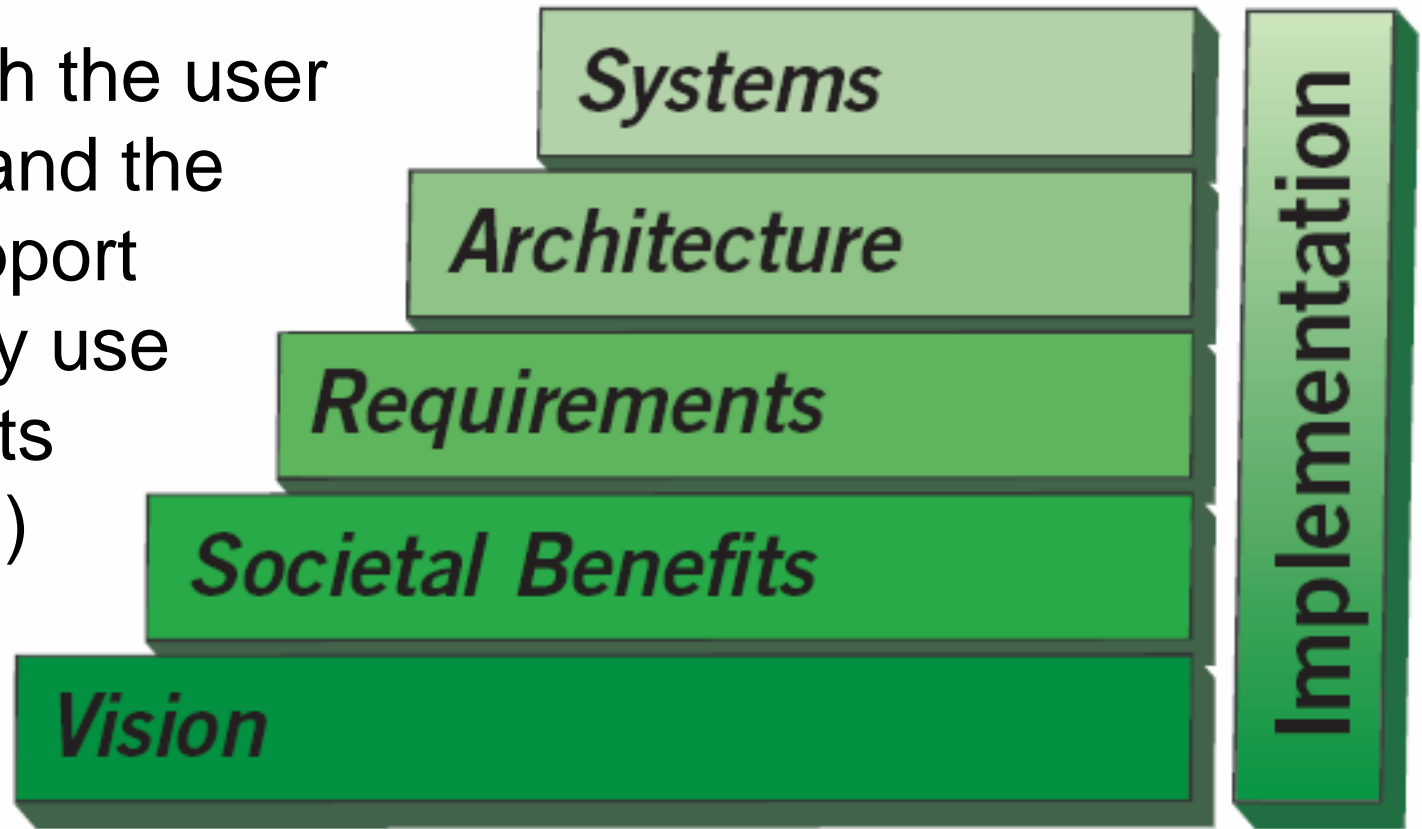
# *Sustainability Making the Interconnections*

## How is GEOSS Helping ?



# *Approach to Implementing the U.S. Integrated Earth Observation System*

Interface with the user  
community and the  
decision support  
systems they use  
(requirements  
specification)



# THE SPECTRUM OF USERS

From observations

Earth observations &  
earth system models

Data-to-Information  
archiving & services

Decision support tool  
development

Decision making

Assessment of benefits



Earth system scientists  
and modelers

Earth system service  
providers

Environmental process  
modelers & researchers

Environmental managers

Public officials, advocacy  
groups and the Public

To societal benefits



RESEARCH & DEVELOPMENT

*Building a scientific foundation for sound environmental decisions*

# User Requirements for Earth Observations

Generally well documented

Earth observations &  
earth system models

Data-to-Information  
archiving & services

Decision support tool  
development

Decision making

Assessment of benefits



Earth system scientists  
and modelers

Earth system service  
providers

Environmental process  
modelers & researchers

Policy Makers &  
Environmental managers

Public officials, advocacy  
groups and the Public

Less able to document needs



RESEARCH & DEVELOPMENT

*Building a scientific foundation for sound environmental decisions*

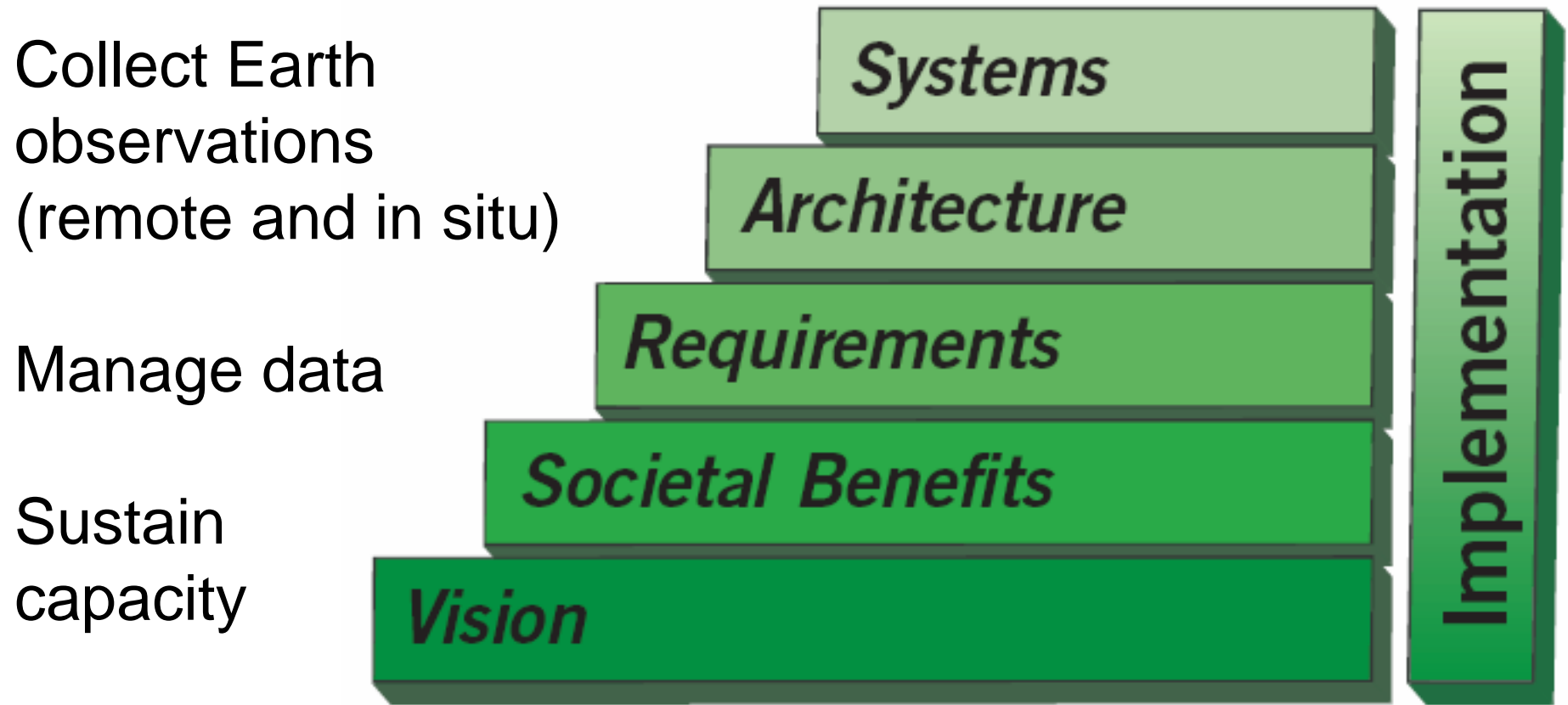


# A Generic Community of Practice

The Public &  
Public Officials

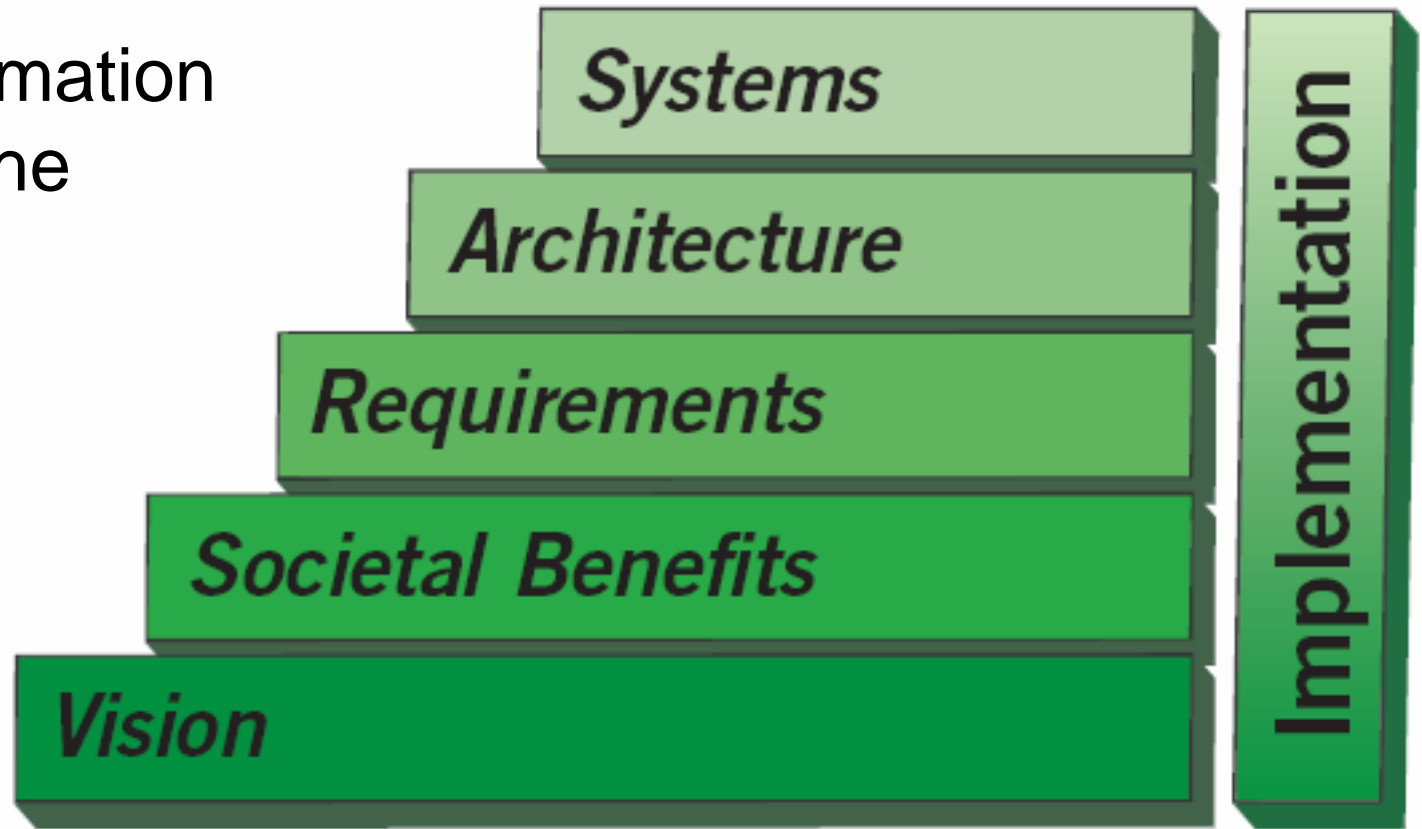


# *Approach to Implementing the U.S. Integrated Earth Observation System*



# *Approach to Implementing the U.S. Integrated Earth Observation System*

Deliver information  
(tailored to the  
needs of  
the user  
community)



# Focus on the Decision Support Tools In Each of the Pillars

Get the DST Developers  
And Users to Identify  
Unfilled Data and  
Information Needs

Get All User Com-  
munities To Specify  
Their Needs

Build Partnerships  
To Create Decision  
Support Systems for  
The Whole Community of Practice

