The history of international global change research programs
an ambitious mandate for a time of change

*Future Earth*

We will generate high-quality global sustainability science that is relevant to societies, connect research communities across disciplines and geographies, and drive a step change in how international science engages with societal partners and stakeholders.
Co-produced, actionable science

A USGCRP Interagency Priority
Science to inform policy making and management, with an emphasis on enhanced joint-production of actionable science between science producer and science user/decision-maker communities and expanding the utilization of USGCRP science findings, tools, or resources

Central to Future Earth
Bring together the multi-disciplinary expertise, stakeholders and resources needed to co-design and conduct global change research
Make knowledge, models, tools, and capacities accessible and actionable for decision makers, businesses and society.
Science and Technology Alliance for Global Sustainability
50,000+
Our networks reach 50,000 global sustainability researchers and people interested in this research.

>20
National networks established, and many more in progress.

8
Knowledge-Action Networks.

>20
Major international research projects.

5
Global hubs

7
Regional centres
Secretariat Functions

- Research Enabling
- Capacity Building
- Communication and Engagement
- Synthesis and Foresight
- Coordination
Sustainability challenges

- Variability
- Forcing
- Responses and Impacts
- Predictions and Feedbacks

LCLUC

- Resilient Cities
- Health
- Consumption & Production
- Risk & Governance
- Natural capital
- Rural landscapes
- Food, water, energy
- Climate change

Sources:
Photo: Fishing in the Mekong © Tan Someth Bunwath / WWF-Cambodia
KNOWLEDGE-ACTION NETWORKS
structured communities of practice catalyzing new research and deep engagement with society
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Challenge Focused
- Future Earth Nexus
- Future Earth Heath
- Future Earth Cities
- Future Earth Assets

Crosscutting
- Future Earth Goals
- Future Earth Oceans
- Future Earth Transformations
- Future Earth Finance and Economics
A Boundary Organization

- Science / Research communities
- Funding communities
- Societal partners (private sector, public sector, civil society)

Value Add

- Research and funding coordination (Knowledge-Action Networks)
- Synthesis support and increased research visibility
- Training and capacity building in co-design, co-production, and transdisciplinary science
- Global platform for interaction, engagement, community building (Future Earth open network)
supporting global sustainability science, connecting research communities, and supporting a step change in science engagement with societal partners
USGCRP Goal 1. Advance Science: Advance scientific knowledge of the integrated natural and human components of the Earth system.

Research and Collaboration
Research and Collaboration

- Building funding coalitions to support co-created science for sustainability
- Shaping the International Transdisciplinary Ocean Sustainability Research Agenda
- Launching the Ocean Knowledge Action Network

USGCRP Goal 1. Advance Science: Advance scientific knowledge of the integrated natural and human components of the Earth system.
Building Capacity

USGCRP Goal 4. Communicate and Educate: Advance communications and education to broaden public understanding of global change and develop the scientific workforce of the future.

Photo: The NYC Big U, a proposed string of parks designed to protect the city from storm surge ©BIG-Bjarke Ingels Group
Building Capacity

USGCRP Goal 4. Communicate and Educate: Advance communications and education to broaden public understanding of global change and develop the scientific workforce of the future.

- Trans-disciplinary training
  - With ISSC in Africa
  - for Food Water Energy in Urban Systems
- IIASA / Future Earth fellows program
- Global bottom-up needs assessment for science capacity building
- Africa Regional Program Development (Rwanda and South Africa Regional Offices)
USGCRP Goal 4. Communicate and Educate: Advance communications and education to broaden public understanding of global change and develop the scientific workforce of the future.
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futureearth
research for global sustainability

Photo: MIT artificial leaf splitting water into H and O ©Sun Catalytix