

futureearth
research for global sustainability

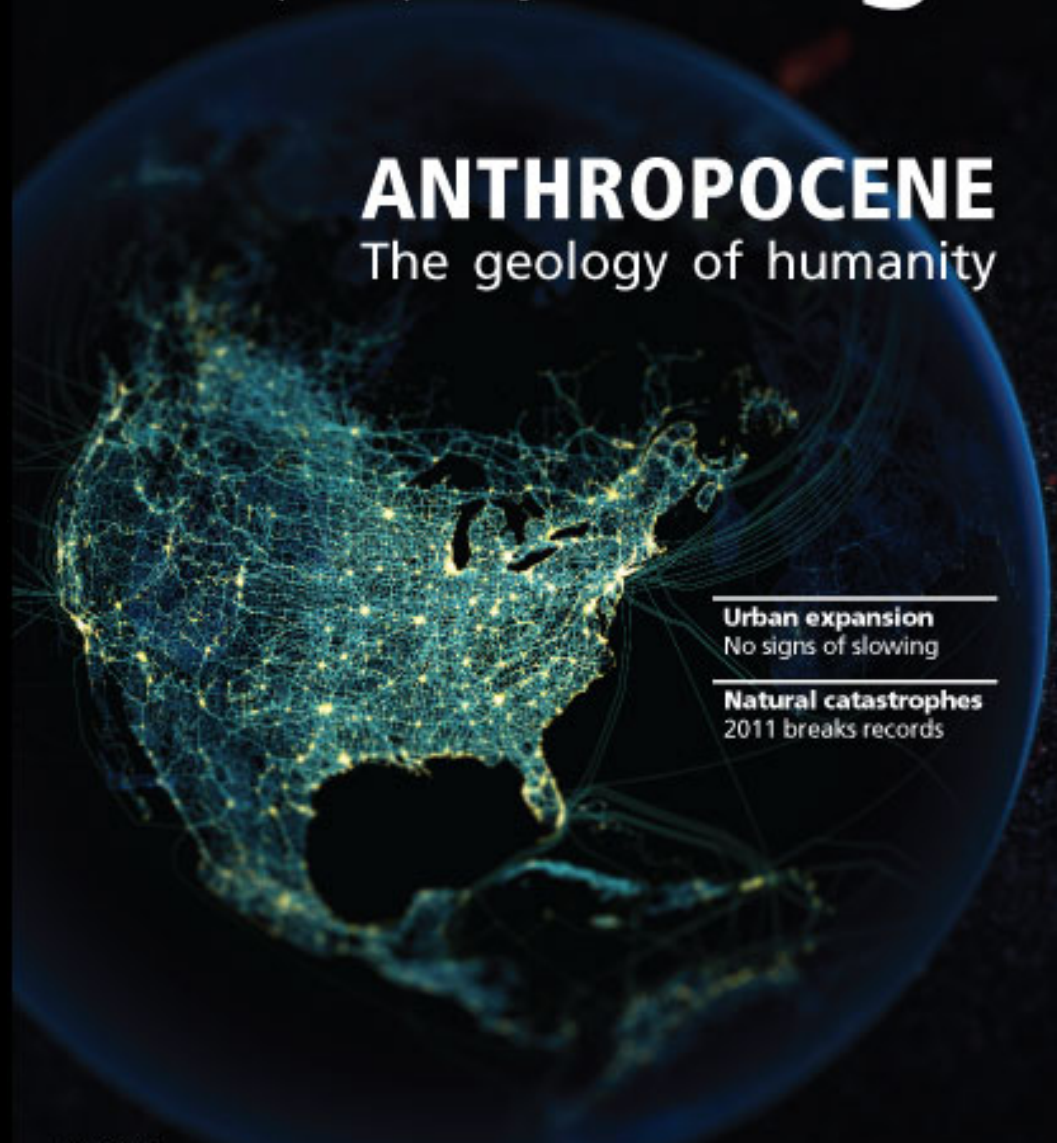
Global Change

International Geosphere-Biosphere Programme

Issue 78 ■ March 2012

ANTHROPOCENE

The geology of humanity



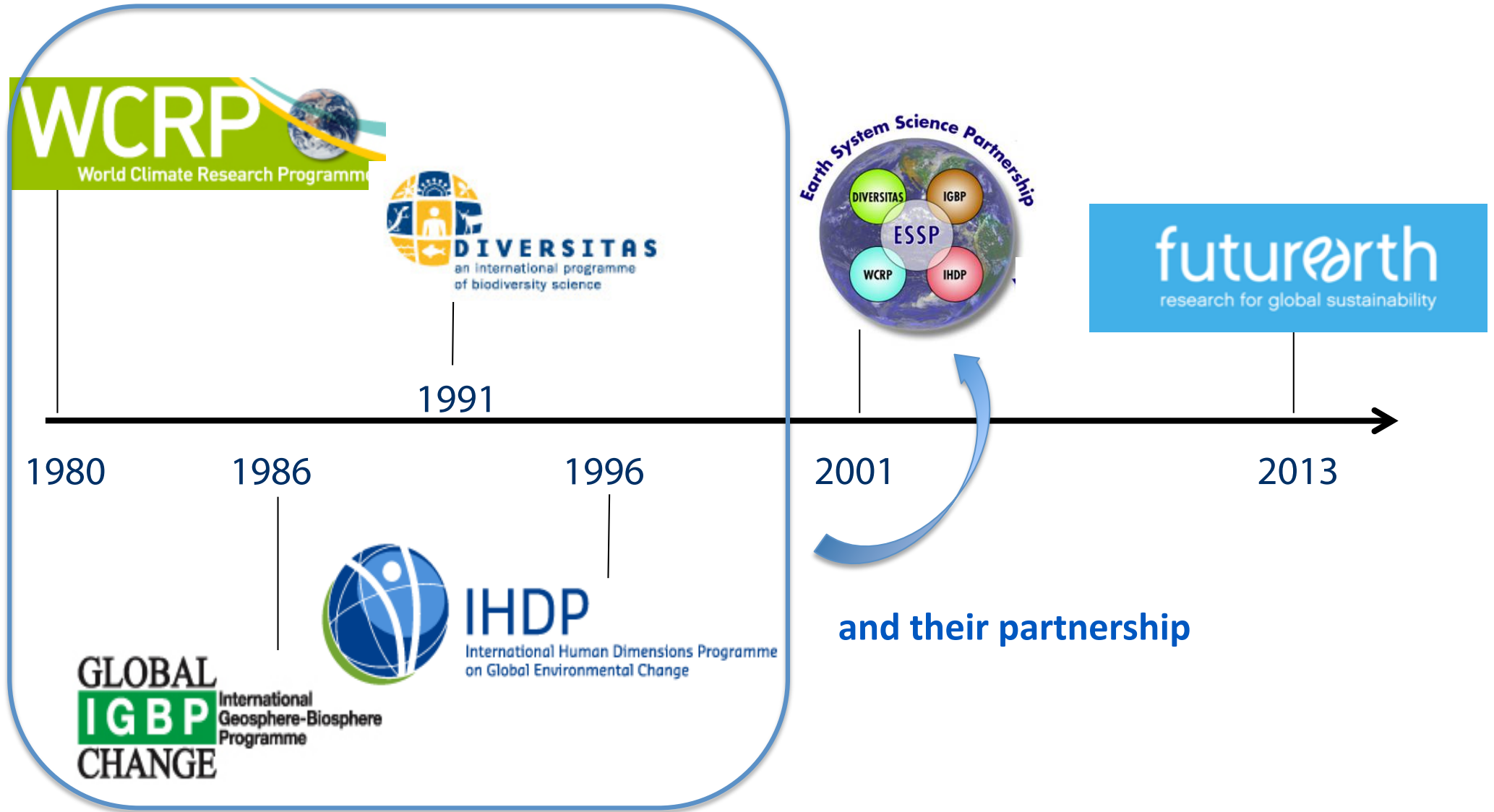
Urban expansion
No signs of slowing

Natural catastrophes
2011 breaks records

Science and Technology Alliance for Global Sustainability



Building from solid foundations





photos: www.dawide.com

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To provide the knowledge required for societies in the world to face risks posed by global environmental change and to seize opportunities in a transition to global sustainability

Future Earth attributes – a global platform

- Augments earth system science with impacts of environmental change on **people**, adaptation and transformation
- delivers **interdisciplinary** research on global environmental change for sustainable development
- strengthens partnership between researchers/funders/users (**co-design**)





photos: www.dawide.com

How and why the global environment is changing?

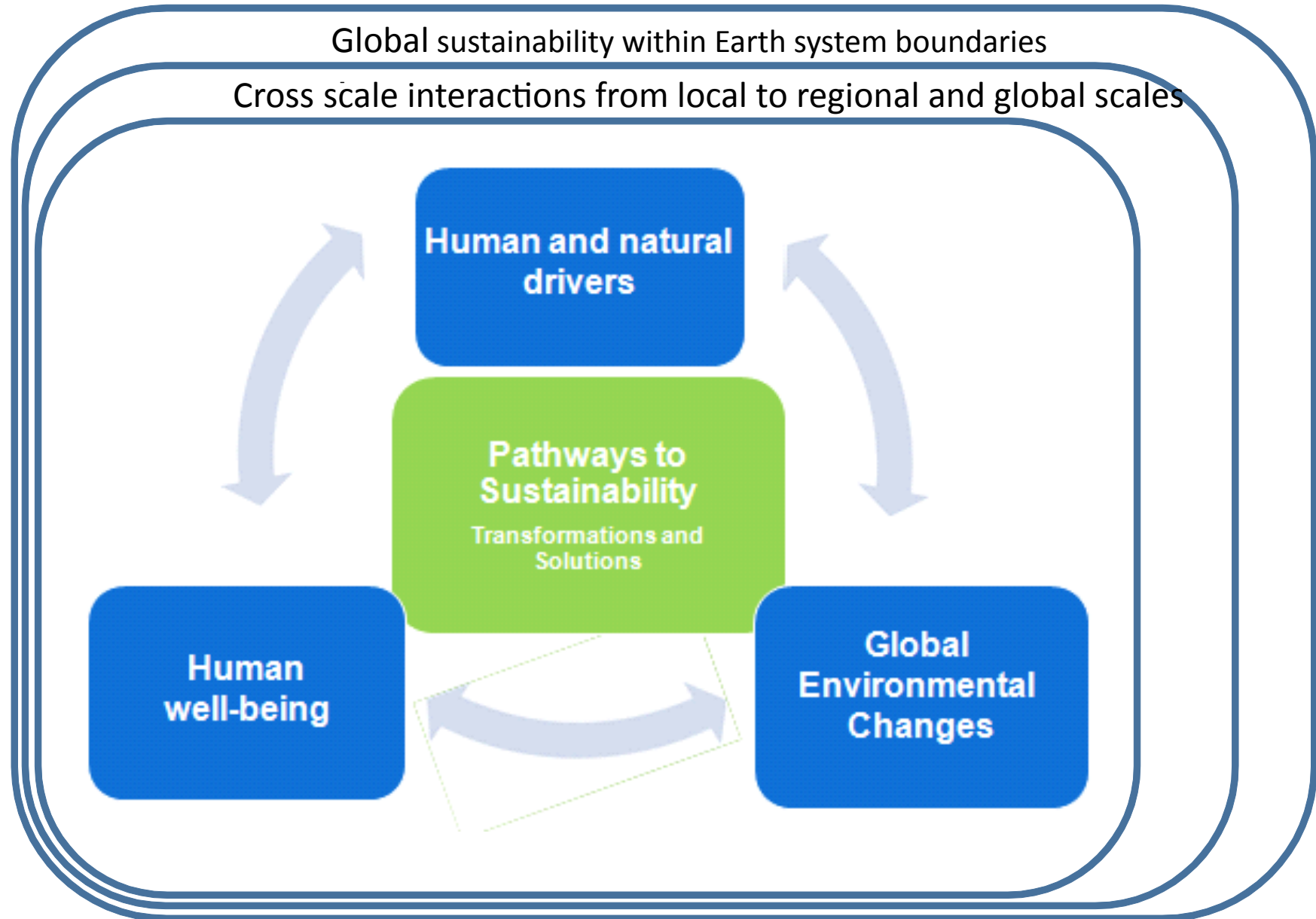
What are likely future changes and what the implications are for human wellbeing and other species?

What choices can be made to reduce harmful risks and vulnerabilities and enhance resilience?

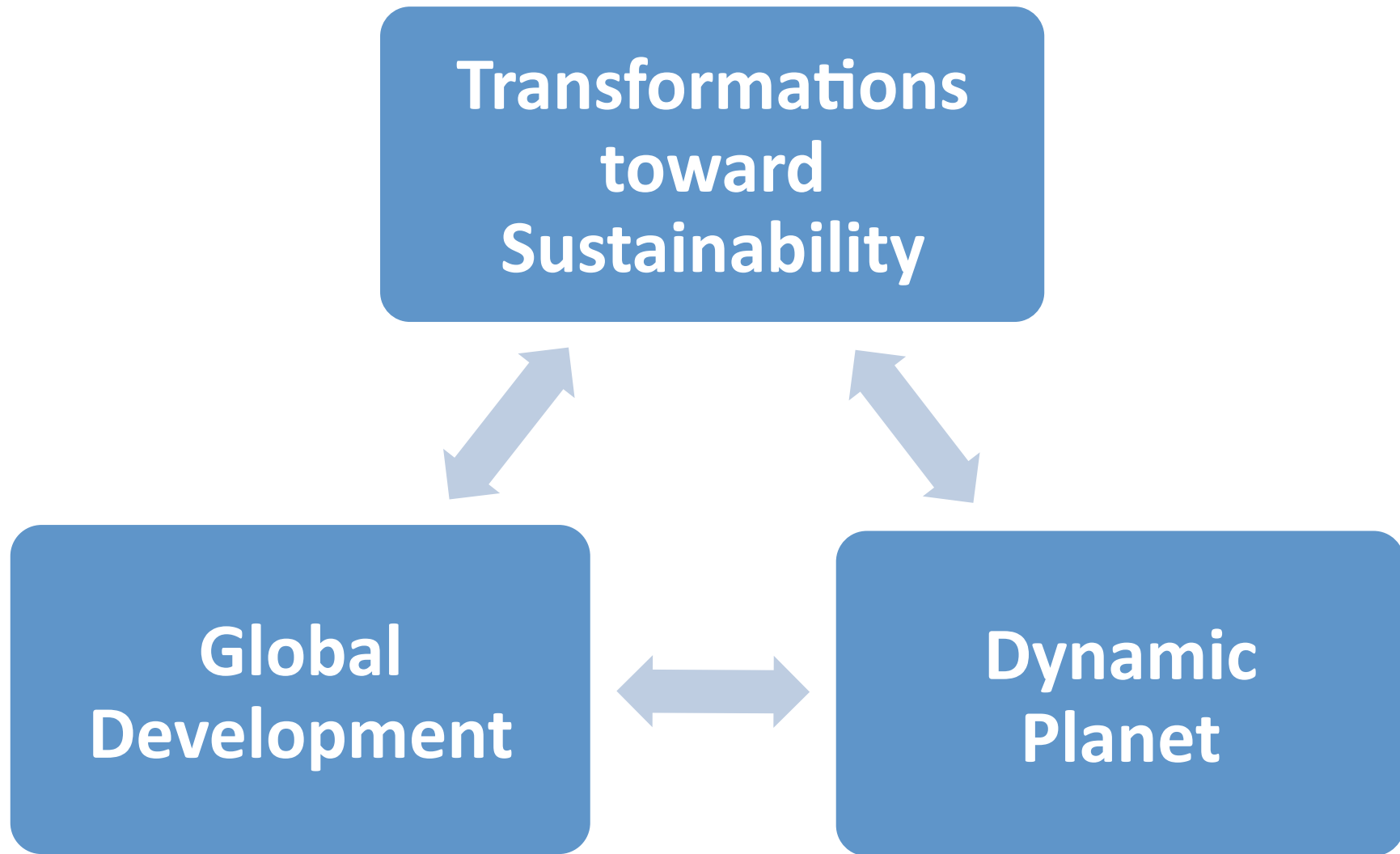
How this knowledge can support decisions and sustainable development?

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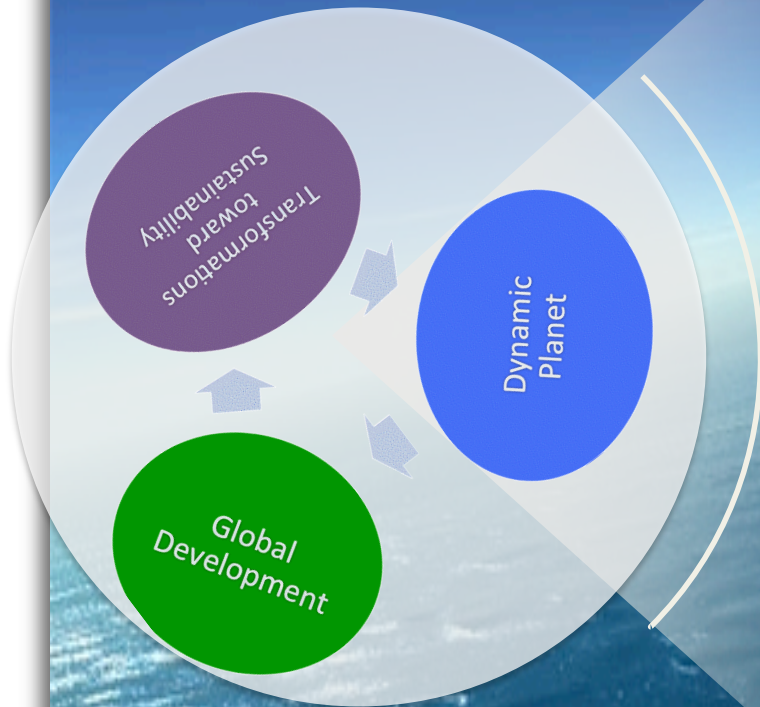
Conceptual framework



Research themes



Dynamic Planet



projecting environment

- **Approaches and Models**

drivers

societal system

observing

- **States and Trends**

explaining

understanding

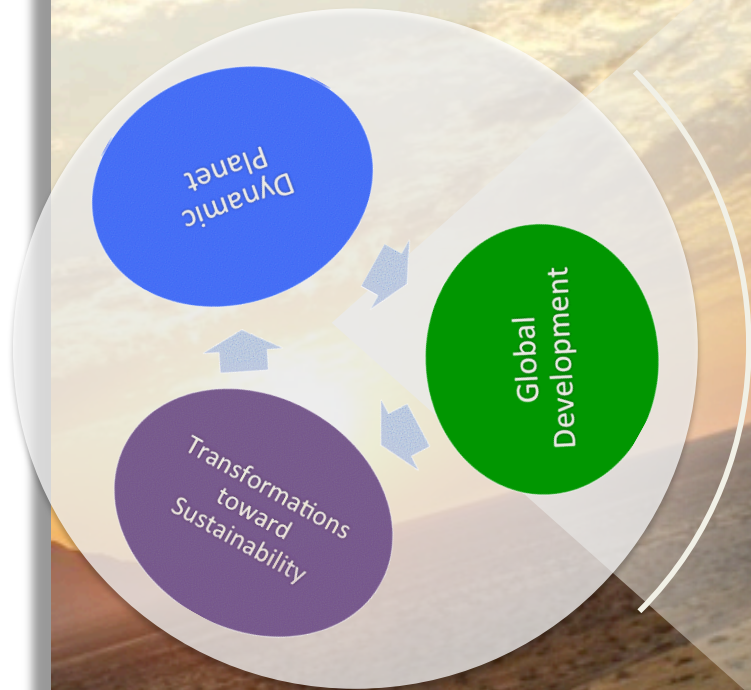
- **Critical Zones**

coasts

tropical forests

polar regions

Global Development



- **stewardship of resources**

mining

materials

biodiversity

- **ecosystem services**

Trade-offs

climate change

fisheries

- **equitable access**

food security

water availability

healthy environment

Transformation toward Sustainability



- **transformation process**

economy

mega-cities

development options

- **Innovation and ideas**

trade-offs

emerging technology

assessment of policies

- **global and regional governance**

International law

regional enforcement

Cross-cutting capabilities

To facilitate integration across research themes, science will be supported by a set of cross-cutting capabilities in science and outreach (many delivered through partnerships).

	Activity	Possible Partners
C1	Observing Systems	GCOS, GEOSS, ...
C2	Data Systems	World Data Systems, ...
C3	Earth System Modeling	Modeling Centers
C4	Theory Development	ISSC, Disciplinary unions
O1	Synthesis and Assessments	IPCC, IPBES, AoA, ...
O2	Capacity Development and Education	START, UNESCO..
O3	Communication	
O4	Science-Policy Interface and interactions	UNEP..

IMPLEMENTATION

Engagement, Governance,
Secretariat, Programme and project
transition, Funding and Activities

Engagement



Governance

- Science Committee - **imminent**
 - c. 140 nominations received
 - decisions taken by ICSU/ISSC
 - decisions endorsed by the Alliance
- Engagement Committee
 - proposal to form proto Engagement Committee to be considered by Alliance in June
- Governing Council
 - Alliance as interim
 - discussion on permanent arrangements in June

Secretariat

Interim

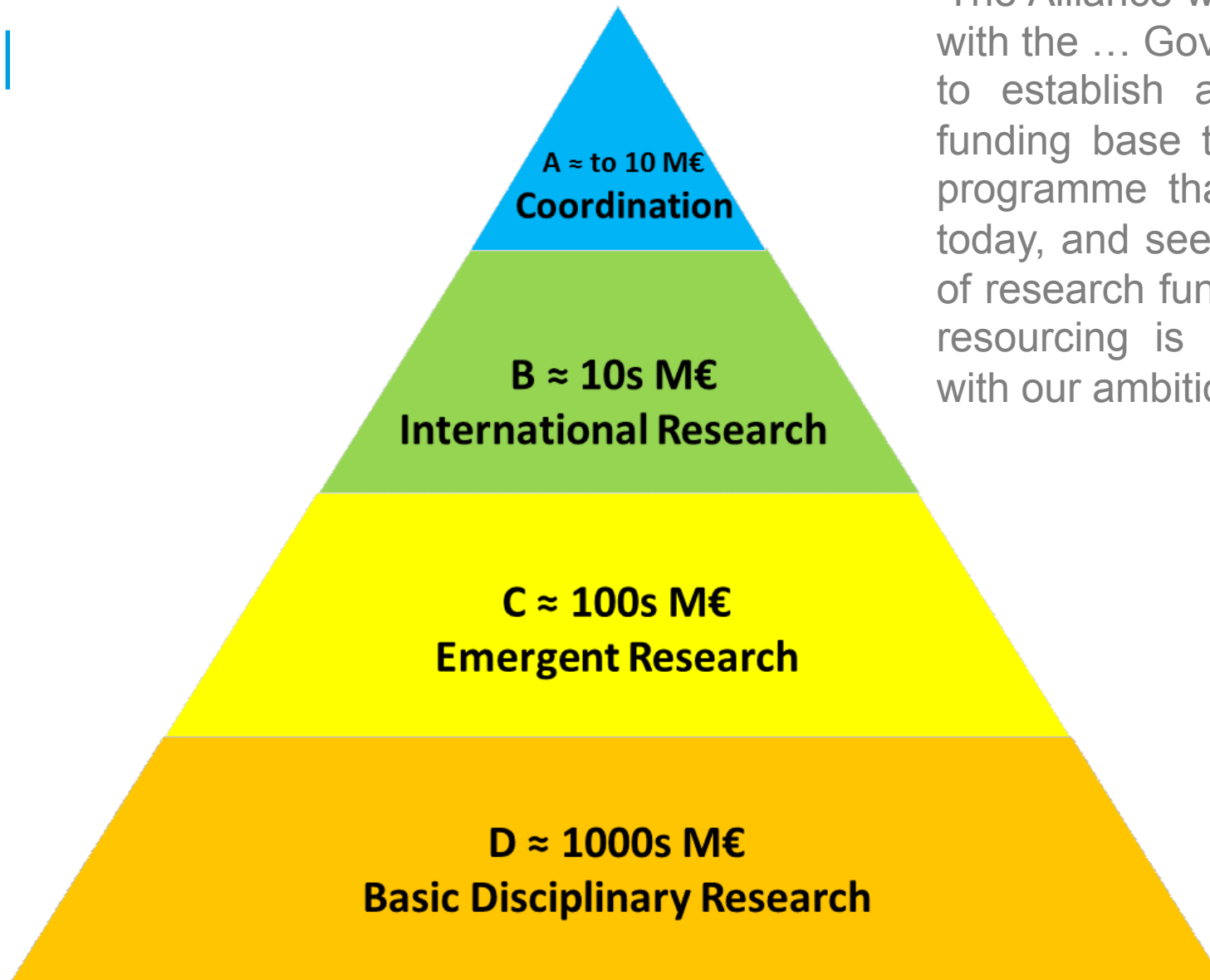
- Interim Director - **imminent**
- Interim secretariat
 - ICSU team and dedicated recruitments
 - Alliance
 - GEC programme secretariats
- 18 months

Permanent

- Director, HQ and regionally distributed secretariat
- 3 stage process starting June
 - expressions of interest
 - bidders conference
 - full networked bids
- Proposals
 - must be resourced
 - innovative solutions to the requirements

Programme and project transition

- Programmes merging into Future Earth
 - Diversitas, IGBP, IHDP
 - from mid 2014 onwards
- GEC projects invited to become part of Future Earth through phased approach and asked to consider:
 - scientific readiness
 - strategic benefits
 - stability
- Next projects conference – July / September



‘The Alliance will work closely with the ... Governing Council to establish a more stable funding base to manage the programme than is available today, and seek new sources of research funding to ensure resourcing is commensurate with our ambition’

Early activities



Sustainable development goals for people and planet



International Symposium on Future Asia

13-14 December 2012
RIHN Lecture Hall, Kyoto, Japan



5. Nationales Kolloquium des NKGCF





www.futureearth.info