



futurearth
research for global sustainability

*Cross-community Workshop
Berlin, 14-16 February 2016*

*How to leverage Horizon 2020, Future Earth
and the Belmont Forum for ST&I Actions
targeting sustainable development ?*

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New international framework:

ST&I is essential, not only in words:

- ✓ *The 2030 Agenda for Sustainable Development (2015) and its Addis Ababa Action Agenda: ST&I as driving forces;*
- ✓ *The United Nations General Assembly Resolution on science and technology for development (12/2015)*
- ✓ *Belmont Forum (2009) and Future Earth (2012, Rio+20)*
- ✓ *H2020's 60% sustainable development commitment;*
- ✓ *The European Commission's priorities & 2016 Workprogramme = internalisation of SDGs and of importance of STI to reach them (<-> MDGs)*
- ✓ *The EC's « 30 » approach, including for data*



The

S&T Alliance – Belmont Forum – Future Earth

triangle

(and where H2020 fits)



S&T Alliance for Global Sustainability (2010):

making use of S&T to inform on solutions to the most pressing **issues confronting humankind**

Members: ICSU, ISSC, UNESCO, UNEP, UNU, WMO and the **Belmont Forum**

Member of Governing Council

Flagship

Belmont Forum (2009):

group of major **funders** of global environmental change research:

Collaborative Research Actions:

- | | |
|-------------|--------------|
| 1) BF CRA 1 | .) CRA ... |
| 2) BF CRA 2 | x) BF&FE CRA |
| 3) BF CRA 3 | y) BF&FE CRA |
| .) ... | .) ... |

19 funding Members, including:

The European Commission *funding*
→ **Horizon 2020**

Fits into:

Future Earth (2012)

programme of research for global sustainability

8 major challenges:

- | | |
|----|----|
| 1) | 5) |
| 2) | 6) |
| 3) | 7) |
| 4) | 8) |



The Belmont Forum (2009): an international grouping of major and emerging funders of global environmental change research.

"To provide knowledge for understanding, mitigating and adapting to global environmental change"

BELMONT
F O R U M

co-chairs:

Kurt Vandenberghe (European Commission, RTD.I Director)
and Gilberto Camara (Sao Paulo Research Foundation, FAPESP).

The Belmont Challenge:

= a commitment to a collective action agenda to co-design, co-develop, and co-deliver research programmes on the complex relationship of humans with the planet, requiring an integrated and solution-oriented approach.

Promoting solution-oriented actions through the launch of international calls, so-called 'Collaborative Research Actions' (CRAs) and the support of the Future Earth initiative.



19 members, 4 candidates, 4 partners:

- CSIRO (Australia)
- FAPESP (Brazil) → *co-chair (2016)*
- NSFC (China)
- NWO (The Netherlands)
- AllEnvi (France)
- ANR (France)
- BMBF (Germany)
- DFG (Germany)
- MoES (India)
- CNR (Italy)
- MEXT/JST (Japan) → *co-chair (2015)*
- MBIE (New Zealand) → *Candidate*
- RCN (Norway)
- NRF (Qatar)
- Russian Federation → *2 Candidates*
- NRF (South Africa)
- FORMAS (Sweden) → *Candidate*
- SSEESS (Sweden)
- Min. Science and Technology (Taiwan)
- NERC (United Kingdom)
- European Commission (UE) → *co-chair*
- NSF (USA)
- Interested are also:
 - CONACYT (Mexico)
 - CONFAP (Brazil)
 - Canada: 3 Quebec-based funding organizations

Partners: ISSC, ISCU, IIASA, USGCRP.



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Future Earth (2012)
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 8 major challenges:
 1) 5)
 2) 6)
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 4) 8)

Fits into:

funding



: 2 possible routes:

*direct reply to an EC
(H2020) call for proposals*

- *EC call published (annual programme)? Yes?*
- *Any topic of possible interest to Future Earth areas? Yes?*
- *Yes? Prepare & submit!*
- *Funding = 0 or > 0 € depending upon statute of partner*

*Through EC in Belmont
Forum*

- *Future Earth relevant action in the pipeline?*
- *In adequacy with H2020?*
- *If of interest to include a specific Belmont Forum topic in a H2020 call:*
- ***FE-BF Co-branded «CRA»***
Examples: SDGs, Societal transformations, sustainable urban development)



What is a CRA – a Collaborative Research Action ?

Mobilization of resources:

- centralised objectives – agreed upon consensually by all members – but the participating agencies decide what their financial involvement will serve for and how it will be mobilised. (= no basket fund or similar!)

With as main goals:

- Addressing the Belmont Challenge priorities - Deliver **knowledge** needed for action
- Promoting **innovative** research, **inter-** and **trans-** disciplinary, **co-design** and **co-production**.
- Aligning international funding through **international added value**



A Future Earth-relevant action in the (BF) pipeline :

Belmont Forum to consider a CRA proposal () from Future Earth at every annual plenary meeting:*

- if adequacy between the BF Challenge and the FE transversal challenges;*
- some initial entry requirements:*
 - demonstrated added value
 - bottom-up mobilization
 - Joint scoping phase with BF (unless otherwise accepted)
 - Transdisciplinarity, multi-stakeholders as from the start
 - Solution-oriented.
- the CRAs to follow the usual Belmont Forum procedures.*
- co-branding: Belmont Forum CRAs, but inspired by Future Earth.*

() probably no more than 1 or 2 to be funded in a given year due to limited resources.*



The Belmont Forum data policy (Oslo, 2015) is and will be actively promoted by EC.

(to widen access to data and promote its long-term preservation in global change research; to help improve data management and exploitation; to coordinate and integrate disparate organisational and technical elements; to fill critical global e-infrastructure gaps; to share best practices; and to foster new data literacy.)

Data should be:

- Discoverable through catalogues and search engines,*
- Accessible as open data by default, and made available with minimum time delay,*
- Understandable in a way that allows their use by researchers – including outside the discipline of origin,*
- Manageable and protected from loss for future use in sustainable, trustworthy repositories.*

Examples of ongoing CRAs

Between 2012 and 2015 (~ 50 M EUR)

- *Coastal vulnerability (led by NERC, UK)*
- *Freshwater security (led by NSF, USA)*
- *Food security and land-use change (led by FAPESP, Brazil)*
- *Biodiversity scenarios (led by DFG, Germany)*
- *Arctic observing and sustainability (led by NSF)*
- *Mountains as sentinels of change (led by CNR, Italy)*
- *Climate predictability and inter-regional linkages (led by MoES, India + ANR, France)*



3 new CRAs (Oslo, 2015):

- ✓ *'Managing the food, water and energy nexus in cities^{*}'*. Led by NSF (USA) with a strong participation of Urban Joint Programming Initiative, which will leverage a 5 M EUR co-fund from H2020.
- ✓ *'Open access to data and e-Infrastructures'*. Led by the NSF (USA) and NERC (UK) , with strong involvement of EC, ANR (France) Coordination with the RDA (Research Data Alliance) and GEO (Global Earth Observation).
- ✓ *'Societal Transformations to sustainability^{*}'*. Led by NWO (NL), leveraging a H2020 SC5 co-fund of 3 M EUR through the NORFACE ERA-Net. The total budget for this joint call in 2016 - 2017 in the order of 15 M EUR.

* Future Earth – Belmont Forum co-branding



BF-FE CRA: « Transformations to Sustainability »
Joint scoping, transdisciplinary, result-oriented,...
NWO (NL) = Theme Program Office (TPO)

GPC Group of Program Coordinators



Funds from the non-H2020 CRA partner

National funds from H 2020 Members + eligible for H 2020 funding



Some instruments for EC / H 2020 funding:

- *Research action (project)*
- *ERA-Net Cofund*
- *CSA – Coordination & Support Action*
- *Joint Programming Initiative (JPI) [not funded as such by H2020]*
 - *EU / Associated countries at onset, but "joint initiatives" are possible*

Note: *R&I open calls for proposals; funding: Non EC-members eligible or not, depending upon country; non eligible countries can join if they fund their part.*



The H 2020 Work Programmes:

<http://ec.europa.eu/research/participants/portal/>



Thank you!