

SCAR Foresight Process

The SCAR Foresight Group

Elke Saggau (DE, Chair)

Stefano Grando (IT)

Egizio Valceschini (FR)

Vivi Hunnicke Nielsen (DK)

Stefano Bisoffi (IT, retired)

Riga, 5 April 2019

SCAR Baltic Workshop



EUROPEAN UNION

Project co-funded by
H2020 Programme under
Grant Agreement n° 727486

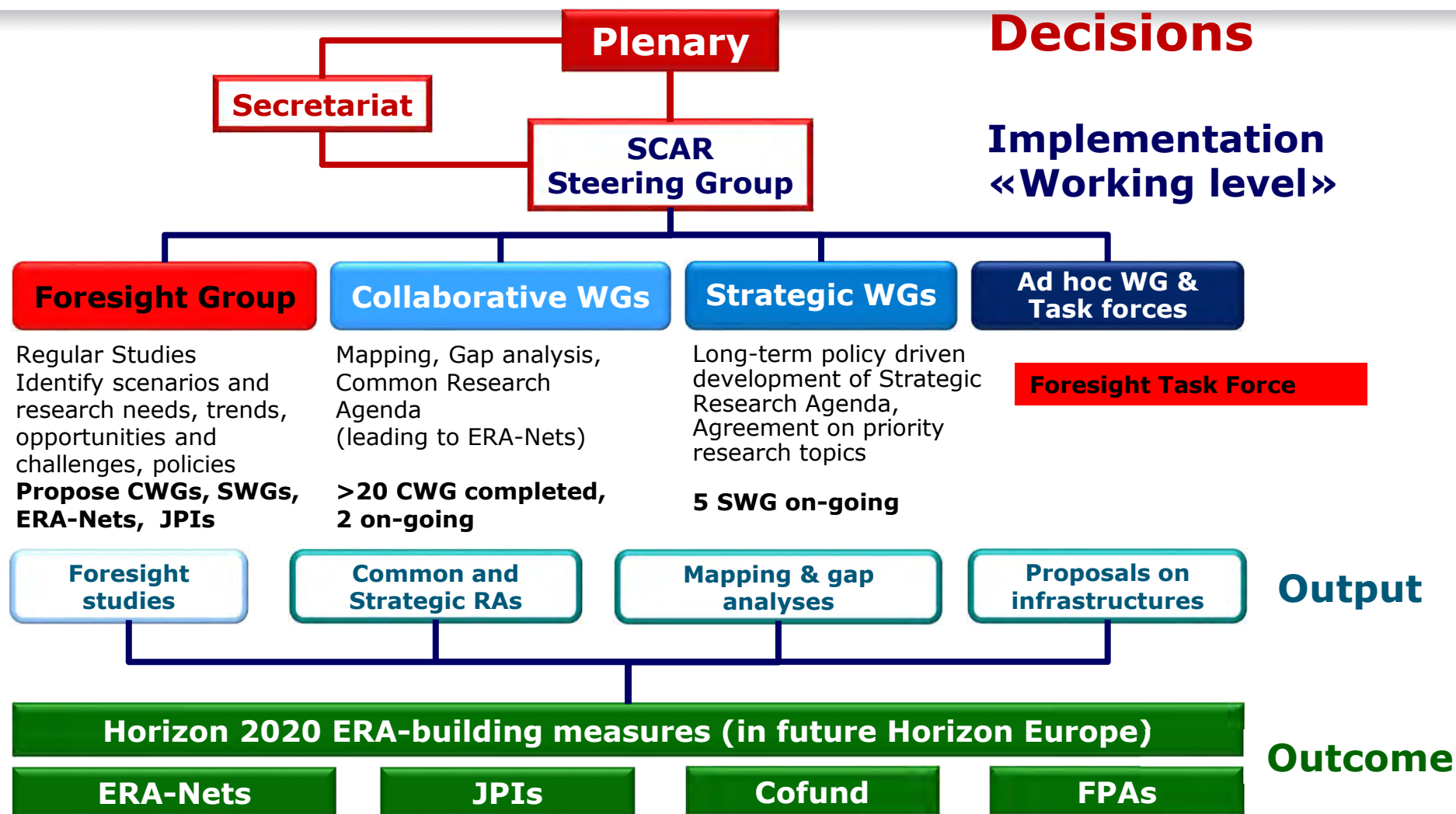
Function of Foresight

The term “ **Foresight**“ describes **activities** such as:

- **Critical thinking** concerning long-term developments – providing “food for thought”
- **Creating recommendations for research and policy** – Future R&D priority setting
- **Shaping the future**, especially by supporting public policy (Policy information & advise & facilitation)

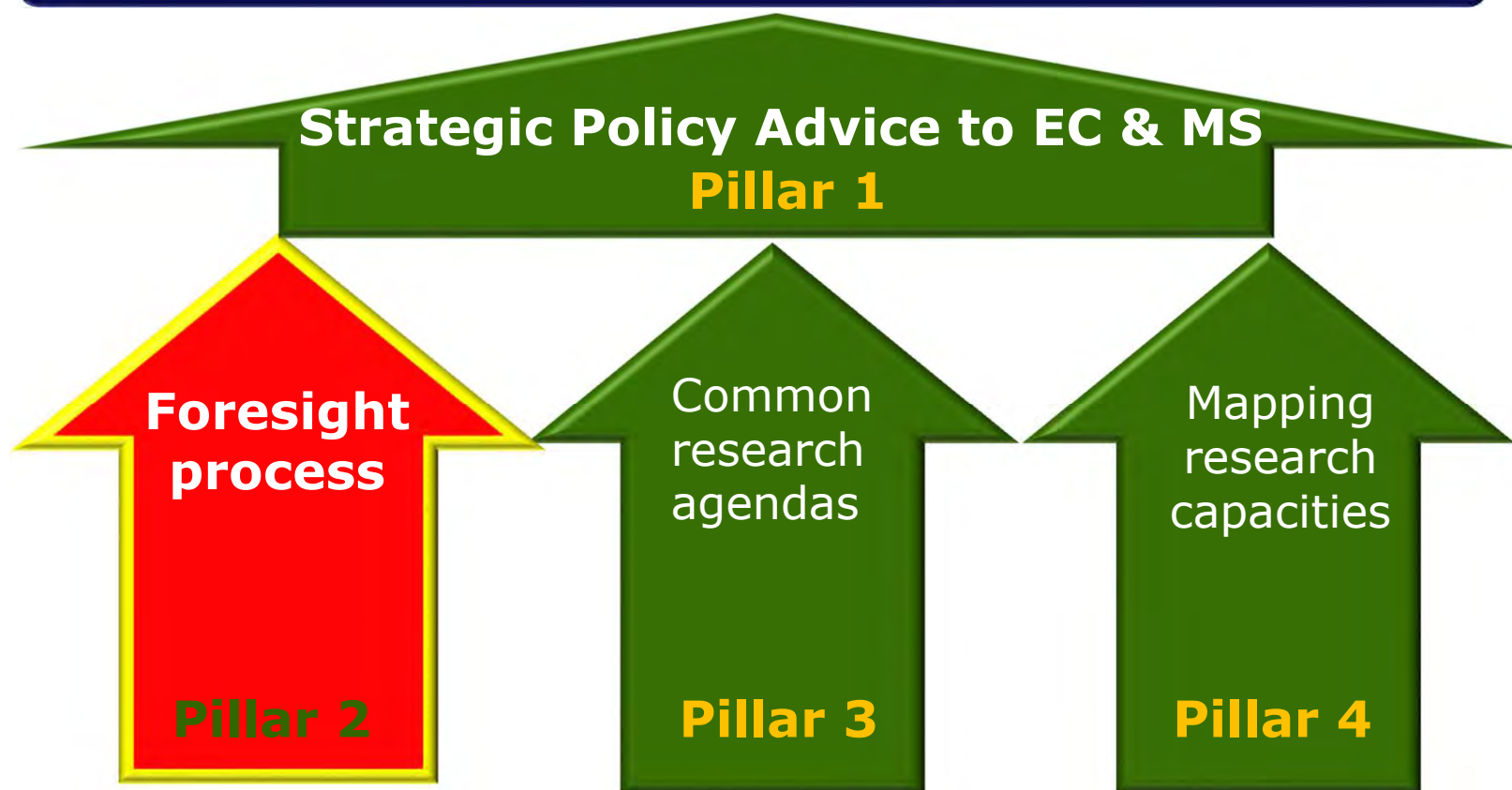
**Foresight is an instrument for
strategic planning and public policy building**

SCAR structure and functions



Foresight, a pillar of SCAR activities

European Research Area in the Bioeconomy



The importance of the SCAR Foresight Process

- The **SCAR Foresight process** adapts to new challenges continuously, takes up cross-cutting issues, **feeds the strategic planning process of research policy making**, provides “Food for thought” and gives **advice to political decision makers** (MS, COM).
- The **SCAR foresight exercises** highlight weak signals as well as **future opportunities** (e.g. mid- to long-term priority setting) to provide input for a more integrated research system for primary production and the broader Bioeconomy in Europe.
- The **SCAR Foresight reports** have resulted in a **high number of joint activities between Member States**, such as the implementation of working groups (SWGs & CWGs, ERA-Nets and Joint Programming Initiatives with a wide scope (e.g. Climate Change, Food security)

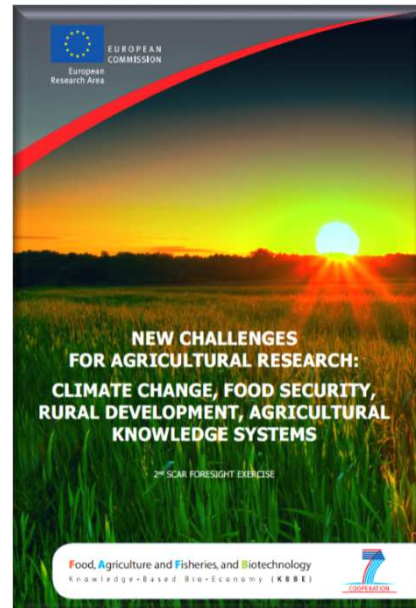
Four SCAR Foresight Studies in Series...

Climate Change and Energy



2007

Resilience and Food Crises 2008



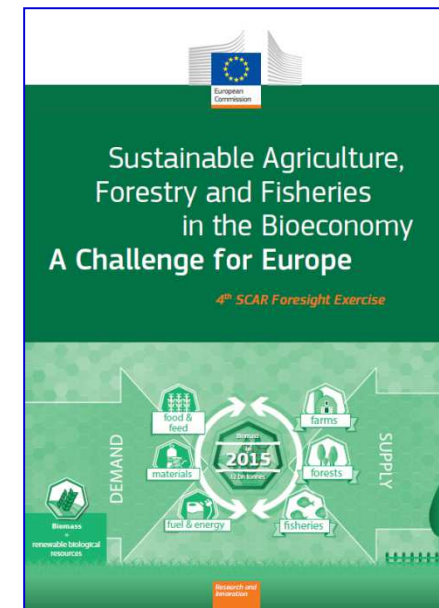
2009

Resource Scarcities Efficiency vs Sufficiency



2011

Sustainable Bioeconomy



2015

2019: „Towards the 5th SCAR Foresight“

Foresight #1 (2007)

The future of agriculture in a 20 years perspective based on a **challenge approach** allowing the **identification of innovation needs** based on **scenarios**

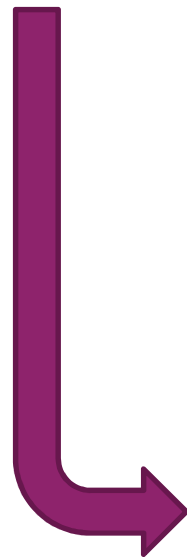


Towards Future Challenges of Agricultural Research in Europe: key messages for research and priority settings



Climate
Environment
Trade
Energy

Demography
Food
KIS
Research



CWG Agriculture & Climate Change

Foresight #2 (2009)



https://ec.europa.eu/research/scar/pdf/scar_2nd-foresight_2009.pdf

Focused on **resilience and crisis**

- Complexity
- Underestimation of Climate Change impact
- Vulnerability of the food system
- The challenge of sustainable development
- Inadequacy of AKS

SWG AKIS

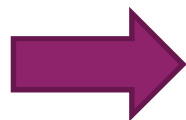


Agriculture,
Food Security
and Climate Change

http://ec.europa.eu/research/bioeconomy/pdf/ki3211999enc_002.pdf



Foresight #2 outcome



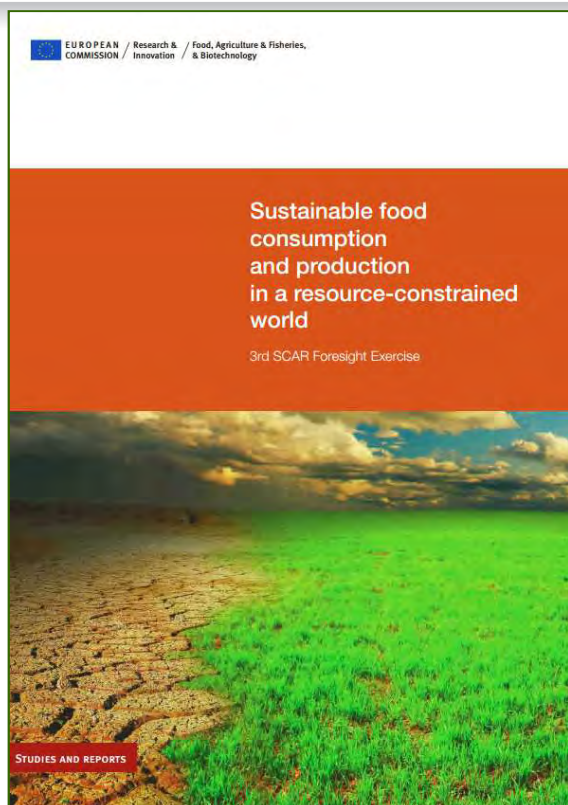
Multi-Actor Approach
in Societal Challenge 2
since the WP 2014-2015

Rural Renaissance:
*Fostering innovation and
business opportunities,
in SC2 WP 2016-2017*



European Innovation
Partnership
'Agricultural
Productivity and
Sustainability'

Foresight #3 (2011)



https://ec.europa.eu/research/scar/pdf/scar_3rd-foresight_2011.pdf

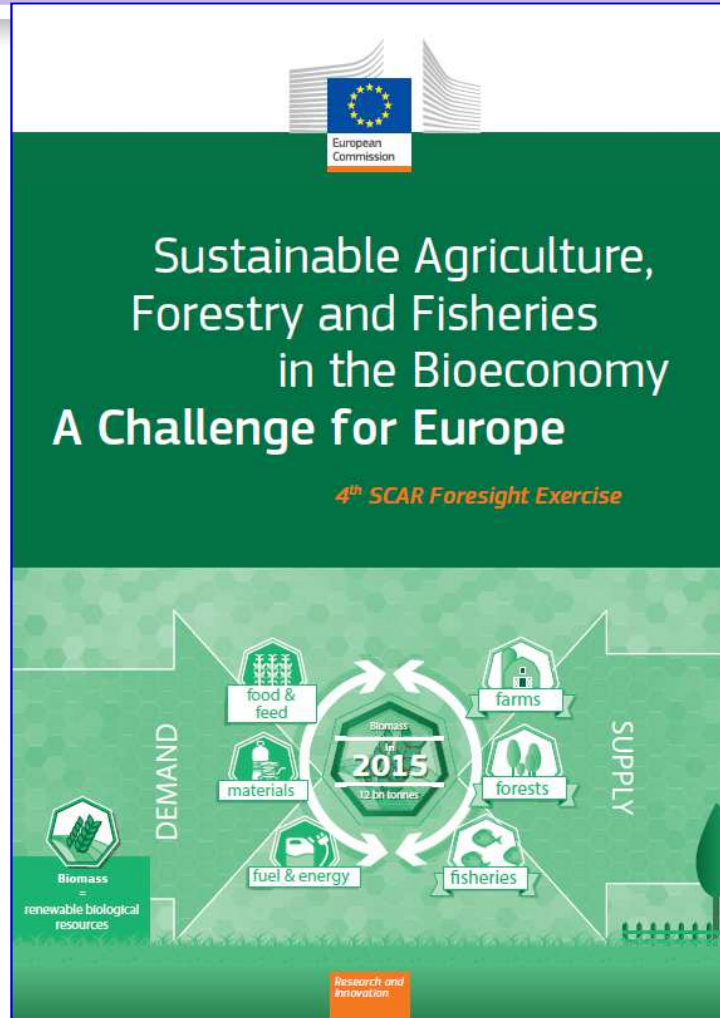
Environmental and resource issues (**resource scarcities**) that might become important in a 30-40 years perspective to provide enough food, feed, fibre and fuel in our century.

Two narratives were identified, **Productivity** and **Sufficiency**, and response to challenges examined through these "lenses".

3 SWGs:

- **Forest Research and Innovation**
- **Sustainable Bioresources for a Growing Bioeconomy**
- **Fisheries & Aquaculture**

Foresight #4 (2015)



Explored **what might happen** by developing the paradigm of the bioeconomy with the fundamental constraint of **sustainability**.

Analysed **dilemmas**, possible **conflicts**, **opportunities** and **threats** for different regions and social groups.

Anticipated future **challenges** & research questions

Identified guiding **principles** for future actions

Basis Bioeconomy Strategies in Europe

Long term view: 2050

Towards the 5th SCAR Foresight Exercise

Natural resources and Food Systems: Transitions towards a “safe and just” operating space

What is new?

PARIS CLIMATE AGREEMENT

Historical document that legally binds the whole World to participate in climate change fight.

196 countries

Adopted the Agreement

officially recognizing human influence on climate



Finance

Rich countries will provide minimum of \$100 billion to developing ones for climate change adaptation by 2020



2020

Will come into force by 2020

If signed by 55 countries covering 55% of global emissions

Goal

Holding the increase in the global average temperature well below



5 years Ambitious

Every 5 years countries shall revise their emissions reduction targets and measures

2°C

Pursue efforts to limit the temperature increase to

1.5°C

Role of forests

The Agreement binds saving and increasing forest area in order to capture GHGs from the atmosphere



Climate neutrality 2050

The balance between emissions and sinks should be reached in the second half of XXI century



Climate damage

For the first time ever the Agreement defines climate loss and damage terms **but** liability and compensation are not mentioned



Clean technologies

The Agreement urges to speed up clean tech development and international technology transfer

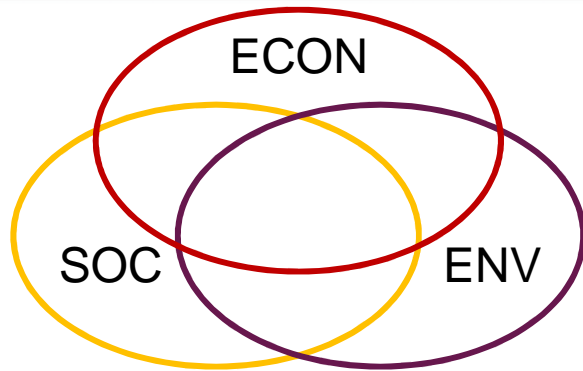


PARIS 2015
UN CLIMATE CHANGE CONFERENCE
COP21·CMP11

Sustainable Development Goals (UN Agenda 2030)



'Wedding Cake' SDG clustering

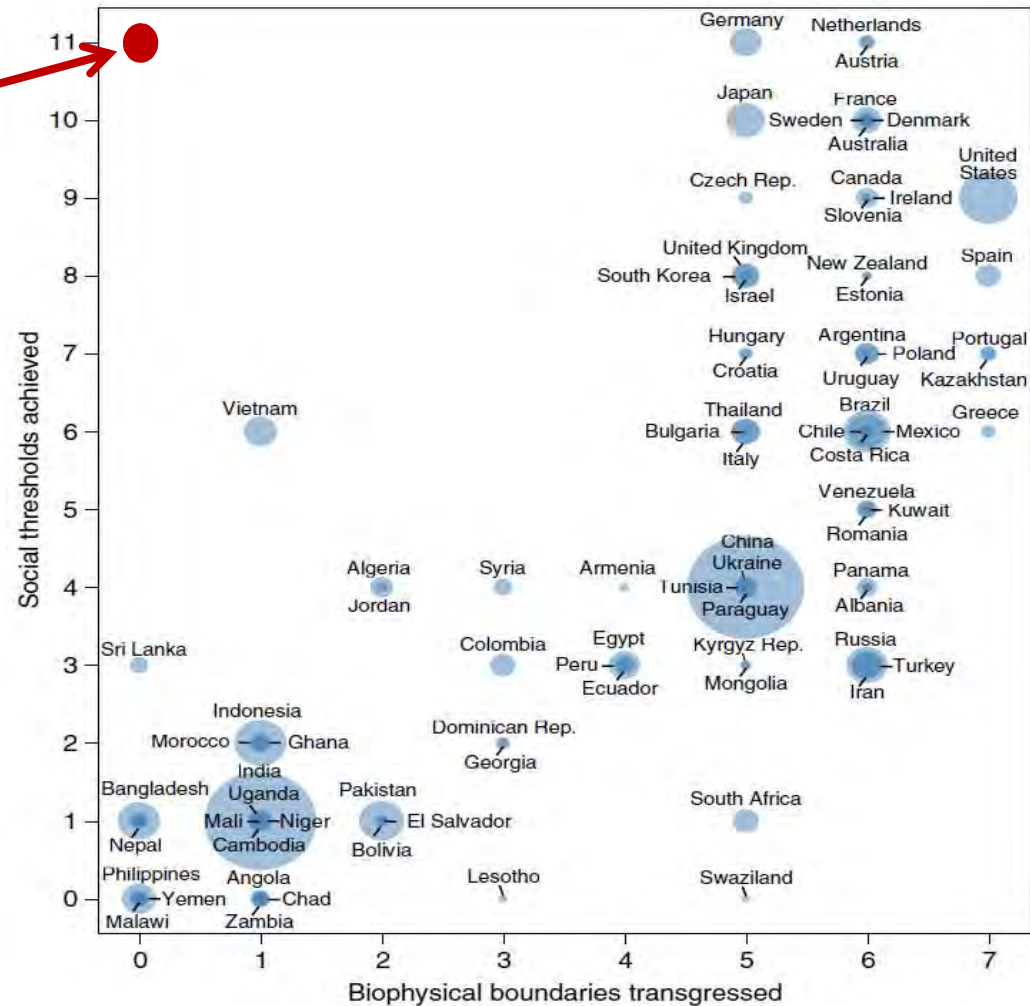


Bruntland Commission
Our Common Future, 1987



Well-being within planetary boundaries

"... a safe and just space ..."



O'Neill, Fanning, Lamb and Steinberger, 2018
A good life for all within planetary boundaries
Nature Sustainability, 1, 88–95



CASA, Support to SCAR

Natural resources and Food Systems: Transitions towards a “safe and just” operating space

Specific questions (1):

1. What are the **key systemic transitions** that meet the objectives of COP21 and the UN SDGs that are relevant for the sectors of biological primary productions and their use also including food systems?
2. What are the **enablers and lock-ins** towards effective transitions? What are the tensions, contradictions, complexities and obstacles, and possible unexpected events, taking into account the diversity of actors and regions involved?
3. What are the **costs of transitions** and of a continuation of “business as usual” for the actors and for society, exploring the windows of opportunities for all actors and for society generally? The full range of solutions may be considered but opportunities for “win-wins” should be highlighted.

Natural resources and Food Systems: Transitions towards a “safe and just” operating space

Specific questions (2):

4. How can **R&I contribute to transitions**, including co-design and co-delivery of robust solutions in different scenarios?
5. What are initiatives to **break the silos and build bridges** between disciplines, between sectors, between sectoral policies and between science and policy, taking into account the systems approach needed to address complexity?

SCAR Foresight Expert Group „Core Group“

	NAME	Forename	Gender	COUNTRY	Comments
	BRUNORI	Gianluca	Male	IT	Chair
	HUDSON	Richard	Male	US	Rapporteur
	BÁLDI	András	Male	HU	
	KOHL	Johanna	Female	FI	
	CUHLS	Kerstin	Female	DE	
	TREYER	Sébastien	Male	FR	

Timeline – 5th SCAR Foresight Exercise

Duration 20 months

- December 2018: Expert contract signed by the Commission
- **December 2018: Start of the 5th SCAR Foresight Exercise**
- March 2019: Conclusion of **phase 1 (Definition of scope and structure)** 2 meetings
- **April 2019: Specific / sectoral experts appointed and selected (depends on the scope)**
- **April 2019 to March 2020: Working group workshop and consultations, 5 Interim meetings**
- March 2020: end of **phase 2 (Overall analysis & analysis of specific sectors)**
- April 2020: Draft report available to SCAR SG
- **June 2020: Final report delivered to SCAR Plenary**
- September-December 2020: National events (organised by MS for dissemination)
- December 2020: Stakeholders' conference and dissemination

Call for Sectoral experts for the 5th SCAR Foresight study (deadline: first week of April 2019)



The following 6 topics were identified by the 5th SCAR Foresight Experts Group:

- 1. *Chemicals in the Bioeconomy*
- 2. *Resilience of socio-ecological systems*
- 3. *Social practices related to food*
- 4. *Food technologies*
- 5. *Finance and corporate strategies*
- 6. *Life science in the Bioeconomy*

Please send your proposal for nomination of sectoral experts to elke.saggau@ble.de; Cc: RTD-SCAR@ec.europa.eu



CASA, Support to SCAR

Invitation

SCAR Foresight Task Force Workshop to SCAR members (deadline: 30 April 2019)

The first two workshops will be held in Brussels 13/14 May 2019

First Workshop (1st day):

to discuss the targets derived from SDGs and other challenges

Second Workshop (2nd day):

to discuss general trends, possible game changer, which are essential within the next 20 to 30 years

Please register using the link:

<https://docs.google.com/forms/d/e/1FAIpQLSevgpRIDuOA4SRYKyALkMV4dUiB5uApEpNh6yosglptOQcuZA/formResponse>



EUROPEAN UNION
Project co-funded by
H2020 Programme under
Grant Agreement n° 727486

THANK YOU for your attention

The SCAR Foresight Group

SCAR Foresight Vision for the future

