

## Societal challenges in Horizon 2020

Comments from a civil society perspective

Dr. Claudia Neubauer

Fondation Sciences Citoyennes a NGO think tank on science & democracy

#### Informal alliance of NGOs on CSF and Horizon 2020

## CSF: Open letter *Public Research should benefit Society, not big business*, June 2011

The **pervasive focus** in research governance and research agendas on **competitiveness**, **technological innovation and the contribution of research to growth** (rather than referring to prosperity), as an overarching principle of EU policies (Europe 2020, the Innovation Union Flagship Initiative and the CSF), **seriously narrows down** the options and possibilities of inclusive governance and of sustainable innovation responding to social, ecological and economic demands.

The CSF portrays R&I as a race, for which the only alternative is to go faster or slower, but with **no choice over direction**.

"Papers, products and patents" is a good summary of the trends in R&I.

Addressing adequately poverty, social, economic and ecological injustice, loss of biodiversity, climate change, resource scarcity, the need to move towards a low-carbon society, public health issues, democratic deficits, etc. would need a **significant shift of current European R&I policies** away from competitiveness and corporate influence towards more democratic processes of governance and a review of the prioritisation of R&I activities.

## **Three points**

**A)** General view on part III - Societal challenges

**B)** Two thematic examples

**C)** Participation of civil society

# A) Societal challenges in general: If words mean something

Semantic analysis: a) frequency of terms; b) meanings of terms

Term	Societal challenges	Industrial leadership	Excellent science
competit*	37	16	1
market	46	21	3
industry/enterprise/ SME	22	61 (38 SME)	14
consumer	23	1	0
citizen	13	2	0
civil society	1	0	0
sustainable	46	10	0
growth	12	9	0
well-being	5	0	0

Sustain environment / sustain research infrastructures; inform the (passive, ignorant) citizens/ cooperate with (active, creative) citizens

**❖**Societal challenges have a lot to do with competitiveness and industry and much less with citizens.

**❖**Societal challenges have a lot to do with competitiveness and industry and much less with citizens.

Societal challenges have almost nothing to do with civil society.

- Societal challenges have a lot to do with competitiveness and industry and much less with citizens.
- Societal challenges have almost nothing to do with civil society.
- Citizens have mainly a role to play as consumers.

- Societal challenges have a lot to do with competitiveness and industry and much less with citizens.
- Societal challenges have almost nothing to do with civil society.
- Citizens have mainly a role to play as consumers.
- **❖**Societal challenges have a lot to do with growth and much less with solidarity and social and ecological justice.

#### In general it seems that

- Societal challenges have a lot to do with competitiveness and industry and much less with citizens.
- Societal challenges have nothing to do with civil society.
- Citizens have mainly a role to play as consumers.
- Societal challenges have a lot to do with growth and much less with solidarity and social and ecological justice.
- **Excellent science can be done with industry but not with civil society.**

### B) Two examples for thematic priorities:

#### Agriculture

### a) priorisation / budget share

	Budget for research on OA in M€	FPs in M€	% of budget spent on OA research
FP3 (1990-1994)	5	6600	0.08
FP4 (1994-1998)	11	13215	0.22
FP5 (1998-2002)	33	14960	0.20
FP6 (2002-2006)	41	17500	0.23

Under FP3, research for organic agriculture counts for less than 0,1% of the total budget. Since then, European funding in total amount of money for organic agriculture research is constantly growing. However, since total FP budgets raised constantly as well, the relative support of the European Commission to research for organic agriculture did not grow since 1994 and stays stable at a very low level under FP4, 5 and 6.

## b) Priorisation of different approaches in agriculture

		Biotechnological agriculture in €
FP6	41.141.000	133.922.000
FP6-Food	32.293.000	126.767.000
% of FP6-Food budget	4,71	18,51

Support to projects for biotechnological agriculture was more than three times as high as support to those on organic agriculture: BT/OA = 3.25.

Horizon 2020 mentions conventional, organic, and BT agriculture -> what budget share?!

### **Energy**

FP	Euratom budget in M€	budget in M€	% FP Energy/ Euratom budgets	Renewable energies budget in M€	% renewable energies/FP energy budgets	% renewable energies/ Euratom budgets
FP4 (1994-1998)	1235	1030	83.4	400-450	38.8 -43.7	32.4-36.4
FP5 (1998-2002)	1260	1042	82.7	400-450	38.4-43.2	31.7-35.7
FP6 (2002-2006	1350	890	65,9	380-410	42.7-46.1	28.1-30.4
FP7 (2007-2013)	2750 (2007- 2011) (550/year)		85.4 (61.0/year)	?	?	?

In comparison to FP4 to FP7 budgets, the research budget for the Euratom programme has been significantly more important than the total budget for all other research issues concerning energy (energy efficiency, clean energy systems, renewable energies, etc.) Research funding for renewable energies was almost only one third of the support attributed to nuclear energy research, and with the tendency from FP4 to FP6 to decrease from around 34% to 29%.

Horizon 2020	M€	
Euratom (2014-2018)*		Fusion, fission, safety & radiation protection
Secure, clean and efficient energy		Efficient energy use, wind, solar, carbon capture and storage (CCS), bio-fuels,

- •Costs for ITER construction are not included neither in Euratom neither under Secure energy => global costs for EU at least 6 billion € (ITER website)
- •For this money, how many decentralised, locally implanted energy supply stations which create local jobs?

Horizon 2020 mentions multiples options -> what budget share?!

## C) Participation of civil society

- a) Civil society is the « big absent » in the programme.
- b) Science in Society disappears (but tries to reappear through Responsible Research and Innovation).

#### **Surprising!**

European Union financed research projects with civil society since (at least) 12 years.

FP6, FP7, The Science and Society Action Plan (2001), programmes Science and society (2002-2006), Science in society (2007-2013), Mobilisation and Mutual Learning, new funding scheme under FP7: Research for the Benefit of specific Groups which targets CSOs = BSG-CSO

S&S and SiS programmes were pioneers and positively influenced the introduction of Participatory Research projects in universities and national public research institutions in the EU Member states.

❖ Participatory and cooperative research with civil society actors and implication of CSOs in the governance of research and innovation is a fact and a new popular paradigm for research.

- ❖ Participatory and cooperative research with civil society actors and implication of CSOs in the governance of research and innovation is a fact and a new popular paradigm for research.
- It has a **huge potential** to contribute to social, ecological and economic progress.

- ❖ Participatory and cooperative research with civil society actors and implication of CSOs in the governance of research and innovation is a fact and a new popular paradigm for research.
- It has a **huge potential** to contribute to social, ecological and economic progress.
- Civil society acts on research and technologies since a long time.

- ❖ Participatory and cooperative research with civil society actors and implication of CSOs in the governance of research and innovation is a fact and a new popular paradigm for research.
- It has a **huge potential** to contribute to social, ecological and economic progress.
- Civil society acts on research and technologies since a long time.
- ❖More and more CSOs express own research demands and become customers as well as partners of research.

- ❖ Participatory and cooperative research with civil society actors and implication of CSOs in the governance of research and innovation is a fact and a new popular paradigm for research.
- It has a **huge potential** to contribute to social, ecological and economic progress.
- Civil society acts on research and technologies since a long time.
- ❖More and more CSOs express own research demands and become customers as well as partners of research.
- ❖CSOs participate in research projects on **health**, **environment**, **agriculture**, **energy**, **transport**, **social issues**, **etc**. (FP6, FP7).

- ❖ Participatory and cooperative research with civil society actors and implication of CSOs in the governance of research and innovation is a fact and a new popular paradigm for research.
- It has a **huge potential** to contribute to social, ecological and economic progress.
- Civil society acts on research and technologies since a long time.
- ❖More and more CSOs express own research demands and become customers as well as partners of research.
- ❖CSOs participate in research projects on health, environment, agriculture, energy, transport, social issues, etc. (FP6, FP7).
- ❖The *scientific third sector* comprises alliances between scientists and CSOs, "science shops", independent research institutes, networks of naturalists, network of farmers, patients organisations, and other amateurs, participatory experiences of all kinds. It has become a major location for knowledge, innovation and expertise.

#### This is good news for science!

Participatory research explores alternative socio-technical futures and new directions for research. It goes beyond mainstream paradigms and frames which dominate public and private research institutions. This is challenging!

It contributes to rethink research, innovation, directions of progress and the underlying values (growth, competitiveness and strengthening the European industry => prosperity, cooperation and solidarity, social and environmental justice, sustainable innovation).

Not to tap into and enhance these dynamics would be counter-productive for Europe.

Including or not non for profit civil society as a full actor in research and in the governance of R&I does make a decisive difference (as it makes a difference to have industry on board or not).

#### We support the ITRE committee suggestions:

- (73) ... the continuation of the Science in Society theme as a stand-alone and for its horizontal expansion to cover the great societal challenges; ... the further development of instruments designed for Civil Society Organisations (CSOs);
- (72) Calls for consolidation of multi- and transdisciplinary research and recognition of the social dimension of research; ... grand societal challenges should be dealt with apart from technological responses by means of European research in **social** sciences and humanities and social innovation;
- (74) Calls for research priorities and objectives to be set in a more transparent and participatory way, through the balanced involvement of players, including the scientific community, researchers (also from smaller research organisations), the public sector, CSO organisations and SMEs; calls for the creation of a specific platform for dialogue between CSOs and researchers for discussing research priorities areas in specific sectors; believes that specific platforms for closer interaction of SMEs and researchers should also be promoted;
- (76) ... stresses the need to consult and work together with researchers, industry and civil society actors, in order to set the research agendas;

#### **Clearly ensure CSO participation**

## **❖** Regulation establishing Horizon 2020

#### **General principles:**

**Article 12 External advice and societal engagement (RRI)** 

**Article 13 Cross-cutting actions (RRI)** 

## Rules for Participation

RfP (10) 'legal entity' means undertakings, research centres and universities, encompassing any natural person, or any legal person created under national law, Union law or international law, ...

(10) 'legal entity' means undertakings, research centres and universities, and civil society organisations encompassing any natural person, or any legal person created under national law, Union law or international law, ...

#### **Horizon 2020 should:**

Overcome the myth that only highly complex and cost intensive technologies can create employment, sustainability, and well-being,

Seek for major non productiviste innovations, allow and support plurality in technology choice,

Support decentralised governance, decentralised energy supply, locally adapted and produced agriculture, etc.

Facilitate cooperation and knowledge exchange between civil society organisations and academia in order to realise the innovative potential of the non-profit sector in numerous research and innovation domains.

#### In the next months:

NGO alliance will work on amendments and submit them to the ITRE committee.

Please consider them seriously!

NGO conference on Horizon 2020 in June 2012

Please come and discuss with us!

Thank you for your attention.