

SOCIAL RESEARCH ON FUSION

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WHY SOCIAL RESEARCH ON FUSION?

Collecting scientific evidence on the human, social and ethical dimensions in energy systems is a fundamental tool for understanding (and intervening in) the acceptance of energy technologies, the siting of energy generation facilities, and the promotion of measures for risk mitigation and safety. The key role of social research in energy fully aligns contemporary EU-wide policy discourses on 'Science with and for society' and 'Responsible Research and Innovation'. In the fusion domain, and since 1996, a specific research program- currently known as SES (Socio-economic Studies) has been dealing with the social and economic dimension of fusion. SES social research has focussed on generating evidence regarding the conditions for social acceptance of fusion, as a research endeavour and as a future energy source – as well as the barriers and constraints for acceptance and suitable energy governance. Lay attitudes, stakeholder engagement, and media analysis are our three main fields of research.

WHAT DOES SES-SOCIAL RESEARCH DO?

(A) Lay Attitudes

(B) Stakeholder Engagement

(C) Media Analysis & Framing

SOME KEY FINDINGS

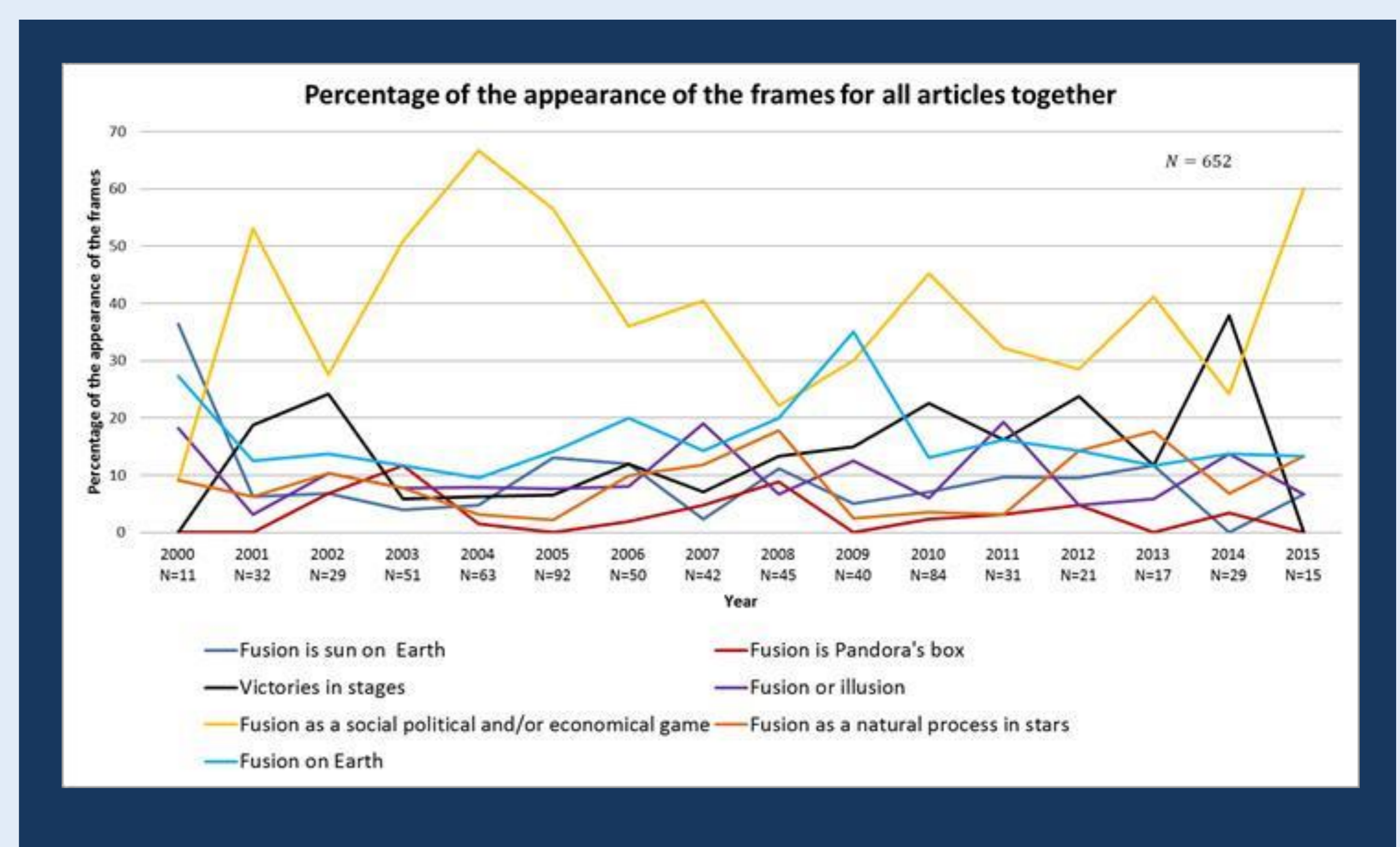
A. **Qualitative Research** (Reconvened Focus Groups in the UK and Spain, 2010) illustrates that lay perceptions of fusion change as citizens learn more, but changes are not consistent. Knowledge does not necessarily lead to more support for fusion. There is a need to engage citizens with multiple sources of knowledge and uncertainty (just good news is not good). The most recent **Quantitative Research** (Section dedicated to fusion in a large scale survey (N>1000) with a representative sample of the Belgian population, 2015) shows that lay people see fusion mostly in scientific/technical terms, even if the dominant frame in the Belgian printed media (main information source) presented fusion mostly as a 'social or political game'.



B. **Dialogues with informed civil society**, an essential SES research practice, focuses on aspects of energy foresight research that are relevant to all technologies. Recently, societal dialogues deals with the use of scenario modelling and storylines.

Fusion Communicators are uneven across Research Units in terms of number and profiles. Most envisage their role as providing information and education, not as promoting dialogue or engagement between scientists and citizens. On-going work aims to provide evidence-based support to more efficient communication tools: web, exhibitions, etc.

C. **Print media coverage** of fusion energy (Germany, Spain, Portugal and international press, 2008-2012) showed that fusion is portrayed as safe, clean and unlimited. It is clearly disassociated from traditional nuclear (fission) with a dominant positive approach. **Media framing** (Belgium, 2000-2015) shows fusion mostly as an event, not as a process. Most articles deals with policy behind fusion, although it is getting prominence as a scientific enterprise.



WHAT ARE THE PRACTICAL IMPLICATIONS FOR THE FUSION COMMUNITY

Social Research generates scientific evidence on the conditions for the social acceptance of fusion as a research endeavour and as a future energy source. Thus, our evidence suggests, for instance, that communication is better if it involves dialogue rather than just teaching; that the media emphasis on fusion as a socio-political game is not necessarily reflected in public opinion (support for energy supply), and that the most negative perceptions towards fusion relate to taking money away from renewables. This evidence provide the basis for promoting suitable engagement of the fusion community with stakeholders and the public; enhancing the communication strategies of fusion research; and making fusion research more responsive to societal concerns.



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