



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 826025.



# A guide to the ETIPs

## Including the role of the Social Sciences and Humanities

This guide has been produced by Energy-SHIFTS – a H2020 project aimed at supporting a European Energy Union that places **societal needs** centrally.

Elena Dufour  
Valentina Lisi  
Rosie Robison

October 2019



### Energy-SHIFTS

ENERGY  
SOCIAL SCIENCES &  
HUMANITIES  
INNOVATION  
FORUM  
TARGETING THE  
SET-PLAN

# A guide to the ETIPs

Including the role of the Social Sciences and Humanities

October 2019

---

## Author



**Elena Dufour\***  
EUROPEAN ENERGY RESEARCH  
ALLIANCE, BELGIUM



**Valentina Lisi**  
EUROPEAN ENERGY RESEARCH  
ALLIANCE, BELGIUM



**Rosie Robison**  
ANGLIA RUSKIN UNIVERSITY, UK

[\\*e.dufour@eera-set.eu](mailto:e.dufour@eera-set.eu)

## Suggested citation

---

Dufour, E., Lisi, V. and Robison, R. 2019. *A guide to the ETIPs. Including the role of the Social Sciences and Humanities*. Cambridge: Energy-SHIFTS.



# Contents

Contents.....	3
List of boxes.....	3
List of figures.....	3
1. Introduction: why did we write this guide?.....	4
2. The structure of the ETIPs and sectorial fora.....	5
3. What is the current involvement of SSH in ETIP/fora activities?.....	7
4. Untapped potential for SSH.....	9
5. How can SSH researchers get more engaged?.....	11
6. Find out more!.....	12
7. Acknowledgements.....	13

# List of boxes

Box 1. What is energy-SSH?.....	7
Box 2. Community involvement 'success stories':.....	8
Quote from the European Commission call 'LC-SC3-CC-4-2018: Support to sectorial fora' via which a number of the projects described in this guide were funded (emphasis added).....	11

# List of figures

Figure 1. Five categories of current ETIP SSH-related activity.....	8
Figure 2. SSH-related challenges, as identified by the ETIPs/fora through interviews.....	9
Figure 3. SSH-related areas of expertise, as identified by the ETIPs/fora through interviews.....	10



# 1. Introduction: why did we write this guide?

This guide is aimed at introducing a set of European energy bodies – the European Technology and Innovation Platforms (ETIPs) and related sectorial fora – to new audiences. Whilst we hope it is of use to anyone wanting to learn about the ETIPs, it is in particular written for researchers working in the energy-related Social Sciences & Humanities (energy-SSH<sup>1</sup>). This is part of ongoing work developing Europe’s leadership in using and applying energy-SSH for better energy policy.

The ETIPs and sectorial fora are in most (but not all) cases focussed around particular low-carbon **energy technologies**; there is significant potential for cutting edge SSH insights on the **human and social components of energy transitions** to feed into the ETIPs’ work given the interrelated nature of technologies and the societies in which they are utilised. In this context a new sectorial forum *Energy-SHIFTS* – Europe’s Innovation Forum for the energy-related Social Sciences & Humanities –

was launched in April 2019, aimed in part at supporting the ETIPs and wider Strategic Energy Technology Plan (SET-Plan) stakeholders by providing better access to energy-SSH research.

The content of this publication is informed by interviews performed with ETIP and fora members between May and July 2019. Importantly, interview respondents’ own visions of SSH have been collected, providing their insights on how SSH could be more fully incorporated in their activities. The sections of this guide therefore: (i) describe what the European Technology and Innovation Platforms (ETIPs) and related sectorial fora are, and how they are governed, (ii) detail the current role of SSH within their activities, before exploring (iii) untapped potential for greater SSH inclusion, and (iv) how SSH researchers can further engage in their discussions.

The ETIPs represent the technology communities actively contributing to the EU’s **Strategic Energy Technology Plan** (SET-Plan). A mirroring guide on the SET-Plan is also [available](#). Together, these two guides represent meaningful steps in supporting greater understanding and dialogue between diverse SSH communities and key SET-Plan groups. Both guides will be widely distributed to, amongst others, energy-SSH related EU project holders, energy-SSH networks, and SET-Plan actors including the ETIPs and related sectorial fora and the Directorate General for Research & Innovation at the European Commission..

.....  
1 For a definition of energy-SSH, see Box in Section 3.



## 2. The structure of the ETIPs and sectorial fora

The European Technology and Innovation Platforms (ETIPs) are industry-led stakeholder fora which promote the market uptake of key energy technologies (with an emphasis on renewables or carbon emission reducing technologies) by pooling together funding, skills, and research facilities. They also define strategic research directions for the various sectors they represent, and project ideas for implementation. A number of additional ‘sectorial fora’ exist which play essentially the same role. It is important to note that some of the platforms/fora exist for cross-cutting themes rather than specific technologies (for example, private sector funding of low-carbon energy technologies, or indeed the energy-related social sciences and humanities). These ETIPs/fora were established at various times by the European Commission over the past decade to support the **Strategic Energy Technology Plan (SET-Plan)**<sup>2</sup>, the pillar of the Energy Union aimed at achieving “Research, Innovation and Competitiveness” priorities for a low-carbon energy system<sup>3</sup>.

The ETIPs and sectorial fora vary in terms of scale and scope of activities, depending on the maturity of the technology or field they support, lifespan, and the number of stakeholders involved. Their activities are typically funded by a combination of membership fees, in-kind contributions, and EU grants. For some of the ETIPs/fora the related European industrial association plays a central role in coordination. The governance of most of the ETIPs/fora follows a fairly standard model including a Steering Committee, General Assembly, Secretariat, and in some cases an Advisory Board.

Similarities in these working structures are in part due to their being designed in response to priorities identified through the SET-Plan<sup>4</sup>, and their shared em-

phasis on involving a wide range of stakeholders along the value chain (industry, research, utilities, NGOs, civil society, etc). These stakeholders’ expertise is generally integrated via working groups, the purpose of which is usually to draft sectorial Technology Roadmaps or Strategic Research Agendas, in view of providing the technical background needed to progress parts of the SET-Plan Implementation Plans, or simply to inform the scientific or industry community of the state-of-the-art in research and innovation. However the official roles of the working groups vary with some playing a permanent advisory role to the European Commission (or a SET-Plan Implementation Working Group) and others being more temporary (e.g. created to address a specific issue). Working groups can therefore be created, modified or ended. Whilst they are part of the core structure of the ETIPs, they are changeable – if not dictated by a contractual EU grant – and can follow energy trends.

The ETIPs and fora constitute the ‘industry/innovation’ community of the SET-Plan, with the European Energy Research Alliance (EERA) representing the ‘research’ community. However since the ETIPs and fora aim to represent the whole innovation value chain, they also include those from the research community (often via EERA). These two groups (the ETIPs and EERA) are the core actors implementing the SET-Plan and working hand-in-hand with the SET-Plan Implementation Working Groups (sectorial groups made of Member State representatives of a technology or theme). The ETIPs/fora therefore, due to their direct links into on-the-ground stakeholder groups, are intended to help implement the SET-Plan and bring its objectives towards reality through mobilising the private sector and creating a critical mass across the whole value chain, to promote innovation and to achieve significant cost reductions and efficiency of the various technologies.

Details of the current 10 ETIPs and 4 sectorial fora can be found in Section 6.

There are many connections between the different activities within and across the ETIPs, as well as between the ETIPs and the Implementation Working Groups of the SET-Plan. Numerous experts participate in multiple group activities in parallel. This fosters coordination and synergies between actions and events, which is of course one of the main purposes of these groupings. ETIP SNET, ETIP PV, ETIP RHC, ETIP Wind, ETIP DG are good examples of cross-ETIP collaboration, as they share technical knowledge to align their views and increase their impact in the setup of technical priorities. However, this close-knit working also

2 Previous incarnations were also known as European Technology Platforms and European Innovation Initiatives (ETPs / EIIs).

3 For additional information on the SET-Plan and its Implementation Working Groups see the Energy-SHIFTS publication: “A guide to the SET-Plan: Including the role of the Social Sciences and Humanities” <https://energy-shifts.eu/set-plan-scoping-guide/>.

4 The priorities put forward in ‘Towards a SET-Plan Integrated Roadmap: Research & Innovation Challenges and Needs of the EU Energy System’ (published December 2014)

[https://setis.ec.europa.eu/system/files/Towards%20an%20Integrated%20Roadmap\\_0.pdf](https://setis.ec.europa.eu/system/files/Towards%20an%20Integrated%20Roadmap_0.pdf)



means efforts to involve newer actors (such as SSH experts) are particularly important, and indeed this is one of the purposes of this present guide.

The ETIPs have evolved in the past and will do so in the future, to meet changing needs. Each ETIP has a different framework with some being EU funded (either through one grant, or having had their funding renewed one or more times), others mainly membership

based (thus with in theory a more permanent financial footing), others being pilot projects exploring set up of more permanent platforms or serving a specific (possibly time limited) purpose of the European Commission. Given this landscape, and the upcoming Horizon Europe programme which will again alter the funding landscape, their futures are not entirely predictable.



### 3. What is the current involvement of SSH in ETIP/fora activities?

As highlighted earlier, Energy-SHIFTS undertook short interviews with representatives of 12 of the ETIPs and sectorial fora<sup>5</sup> in May-July 2019; in particular we explored with them the current and future role they see for the Social Sciences and Humanities (SSH) in their activities.

At the start of the interviews, a definition of energy-SSH was informally talked through (see Box 1. for a detailed description) to help situate the discussion and

introduce the broad range of social sciences and humanities research.

Within the interviews, almost all the ETIPs/fora reported a very high relevance of SSH-related issues in their respective sector, for example acknowledging that human behaviour constitutes the most important triggering factor for energy transitions. But, despite the relevance of SSH being well recognised, only two ETIPs – SNETP and ETIP Deep Geothermal – were aware of having specific SSH practitioners in their current ETIP networks (although in some cases certain organisations involved in the ETIPs also had SSH-related streams of work). This gap between the perceived relevance of SSH and yet low level of practical implementation creates a great opportunity to start integrating the societal dimension as a disruptive approach to the state-of-the-art in technology debates, and it is in this context that Energy-SHIFTS is working to encourage more energy-SSH researchers, and from a broader range of disciplines, to engage with the ETIPs.

**Box 1. What is energy-SSH?**

The energy-related Social Sciences & Humanities (energy-SSH) involve:

- Integration of the socio-economic dimension into the design, development and implementation of energy research itself, and of new technologies that can help find solutions to societal issues.
- Seeking to better understand essential human and social components of implementing shifts to a low-carbon energy system.

Energy-SSH thus covers a wide range of disciplines that either:

- Study the social phenomena (e.g. norms, values, perceptions, institutions, practices, etc.) that organise how humans interact with the energy system.
  - *These energy-related Social Sciences include Psychology, Sociology, Political Science, Human Geography, etc.;*
- or, study fundamental issues of equity, fairness, duty, faith, ethics, attribution, etc. in the context of the energy system.
  - *These energy-related Humanities include Philosophy, Law, Theology, History, etc.*

Different energy-SSH research may therefore explore a variety of areas, from how policies are made, to how users respond to novel technologies in their everyday life, to how best to engage citizens and different stakeholder groups in decision-making processes, to lessons from similar past experiences in history, to what visions society have of the future and what that could mean for planning for the energy transition, etc.

.....  
5 These were: ETIP SNETP, ETIP PV, RHC-ETIP, ETIP Wind, ETIP DG, Hydropower Europe, Smartspend, ETIP Ocean, ETIP Bioenergy, ETIP SNET, ECTP



Interviewees were also asked to describe any specific activities they were aware of in their ETIP/forum which they felt contained SSH aspects. These tended to fall into the following five categories (see Figure 1).

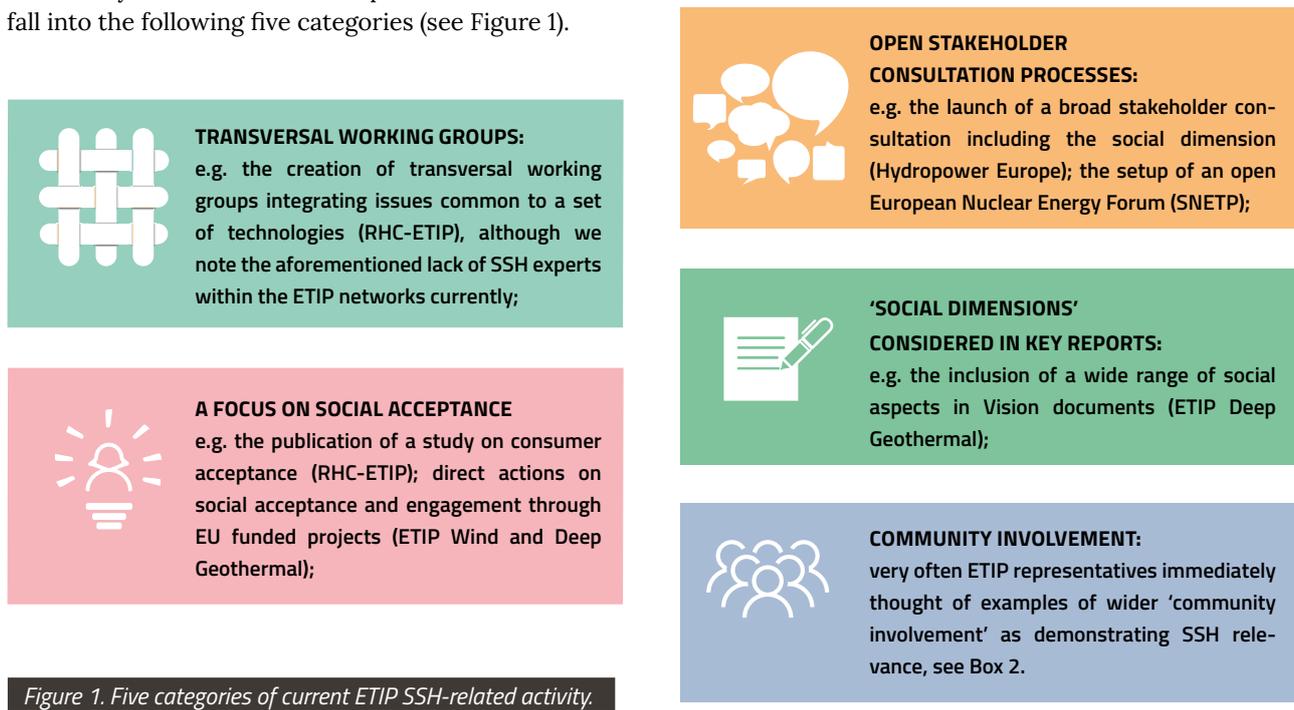


Figure 1. Five categories of current ETIP SSH-related activity.

Box 2. Community involvement 'success stories':

Here we describe three examples given by the ETIPs when asked about existing SSH-related activities. These did not necessarily utilise SSH research but rather were clear examples of where 'society' was involved.

1. In 2017, the pioneering *United Downs Geothermal Project* in Cornwall (UK) successfully concluded a £4.4m fundraising campaign, using a renewable energy focused **crowdfunding platform** overseen by the main City regulator. Investors can expect a 12% return on the bond, which has an 18-month term, and will have their investment refunded if the geothermal plan does not go ahead.
2. In Tuscany (Italy), geothermal energy is an important enabler of two of the main excellences of the region: food and tourism. Since 2009, a **community of food producers** base their production processes on the use of local geothermal heating. Tourist guides and books promote geothermal tourism, which currently accounts for about 120,000 annual tourists in the region.
3. Inspired by a conversation between two mothers (a Polish wind advocate and a British journalist) and a young Iranian artist, the **comic book** '*Let the Wind Blow*' tells a story of how renewable energies, like wind, lead to transformation towards a cleaner and healthier world for everyone. To raise the renewable energy awareness of children all over the world, the initiative calls for participative actions to translate the book in more languages than the nine already available.

It is important to note that the examples above only illustrate a part of what SSH can offer; these 'go to' areas often include: individual motivations/behaviours, social acceptance, and education/communication. As can be seen from Box 1., the breadth of SSH also in-

cludes work looking at social/political structures and histories, social justice, and visions for the future, to name but a few areas. All of this gives useful context for energy-SSH researchers looking to engage more with ETIPs, as discussed next.



## 4. Untapped potential for SSH

The ETIPs/fora all seemed to share similar understandings regarding the role of SSH in addressing

climate change and informing their own technology-focused work. These are described in this section in terms of the challenges they felt SSH could help address (Figure 2) and the processes for doing so (Figure 3). Whether looking to respond directly to these needs or propose new SSH-related areas for collaboration, Energy-SHIFTS would recommend energy-SSH researchers interested in engaging with these ETIPs bear the following in mind when reaching out to ETIP actors.

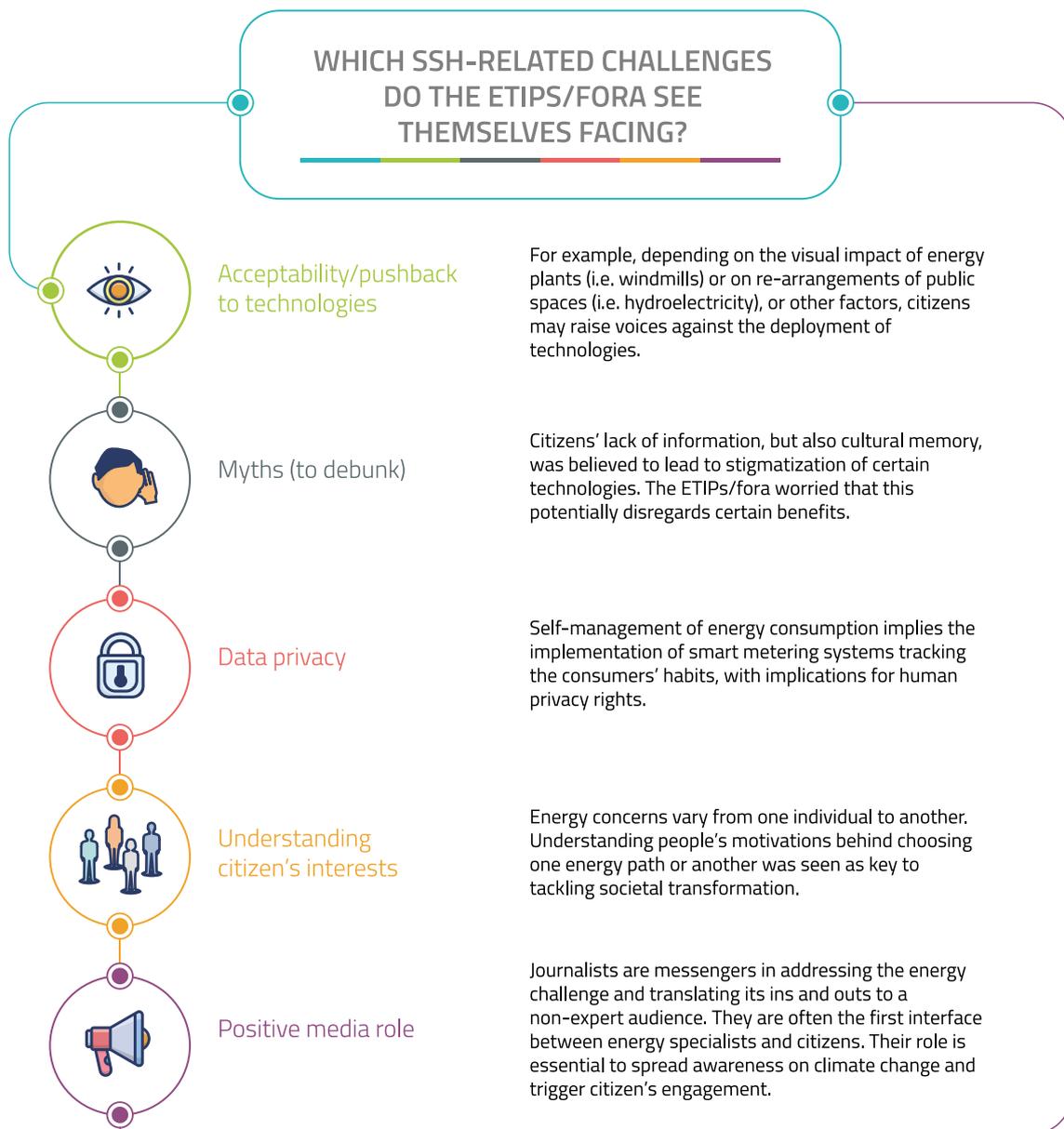


Figure 2. SSH-related challenges, as identified by the ETIPs/fora through interviews.



## WHAT DO THE ETIPS/FORA EXPECT FROM SOCIAL SCIENCES AND HUMANITIES?

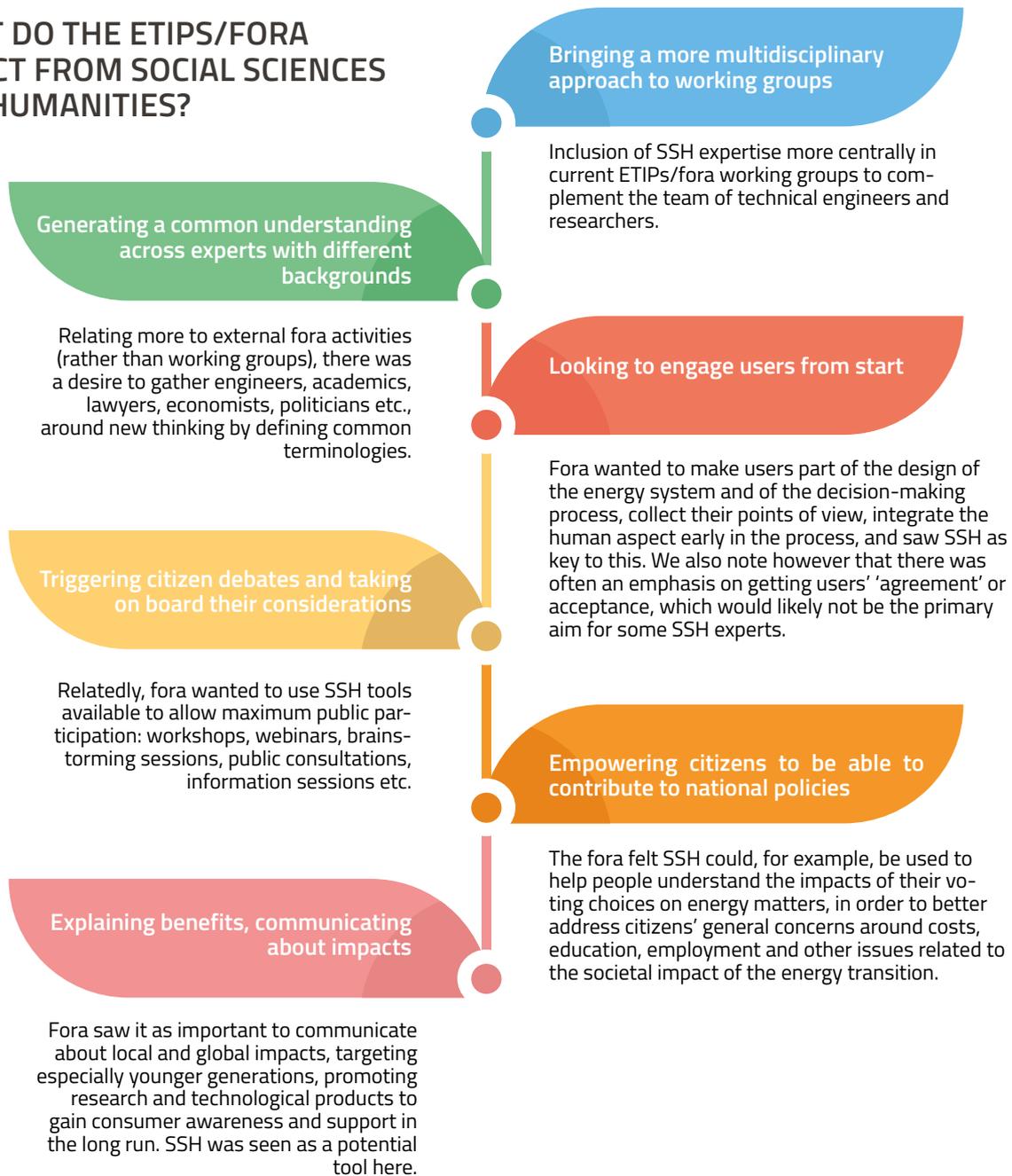


Figure 3. SSH-related areas of expertise, as identified by the ETIPs/fora through interviews.

In view of the above, the following types of activity were being planned by the ETIPs/fora, and these may be the most immediate three areas where they would welcome input from energy-SSH experts:

1. Developing the SSH dimensions in reports, such as their Strategic Research and Innovation Agendas (SRIAs), Strategic Industry Roadmaps, or Vision documents.
2. Strengthening existing collaboration with SSH practitioners, for example through greater inclusion in expert panels or working groups.

3. Improving the ETIPs/foras stakeholder engagement programmes.

Energy-SHIFTS aims at supporting ETIPs/fora to achieve a meaningful societal impact, providing appropriate tools and collaboration frameworks to leverage the interest of technical engineers and scientists related to social counterparts needed to achieve the energy transition. As such, we next turn to how interested energy-SSH researchers can get further involved in their activities and would also encourage the ETIPs/fora to undertake deliberate calls for their greater involvement.



## 5. How can SSH researchers get more engaged?

As identified in several cross-sectorial studies, the social dimension is key to a successful energy transition and technology alone is not the solution. Indeed, this is often recognised in the high-level motivations for overarching energy policy and thus arguably should be a foundation of all of the fora (see quote below). Despite this, Social Sciences and Humanities specialists are currently under-represented.



*'The transition to a low-carbon energy system poses a unique set of policy, technological and scientific challenges, changes the fundamental nature of the **interrelations between all actors in our societies** (from energy incumbents to regulators and citizens), and requires the engagement of all stakeholders.*

*Not only is there a need to find novel approaches to the development and application of technological or **social processes** as they relate to the energy transition, but also to a better understanding of how these changes impact **people's behaviour, pervasive values, cultures of practice and modes of communication**. It also entails the need to engage all stakeholders, foster cooperation between them, align their actions to the achievement of commonly agreed goals.'*

*Quote from the European Commission call 'LC-SC3-CC-4-2018: Support to sectorial fora' via which a number of the projects described in this guide were funded (emphasis added)<sup>6</sup>.*

The ETIPs and sectorial fora aim to be highly inclusive, and – whilst there may be practical restrictions on the number of participants e.g. in particular working groups – the collection of views of the broadest range of stakeholders is the main reason for their existence. Indeed, there is no forum if there is no participation. With this aim in mind, end-users and citizens are also welcomed to participate in public consultations in the form of written inputs or physical participation to regional workshops, as it is the case for hydropower technology. However, given the histories and themes of the ETIPs/fora their emphasis has to date been on industry and STEM<sup>7</sup> research, with attention being paid to SSH only more recently in most cases.

Having SSH better accounted for in these important energy policy and technology bodies relies upon relevant experts getting more involved. Any individual or organisation interested or active in the SSH dimension of one or several technologies forms an important part of the ecosystem. Most of the fora are open and it is straightforward to get on board after a request to the website contact, whilst a few require an official procedure to take part in their working groups (punctual calls or formal applications). The types of activities one may then be able to input into could include roadmaps, position papers, or technical definitions of European priorities etc. Whilst SSH experts should be aware that there are constraints on the ETIPs/fora direction given their instrumental and technology-led foci (due to the scope and responsibilities given to them by the European Commission), new SSH dimensions cannot be better included until there is greater SSH expert involvement.

**Experts from the energy-related Social Sciences and Humanities: do you want to take part in the design of European policies by bringing in your vision and expertise? Don't wait any longer to join these important communities within the European energy debate!**

<sup>6</sup> From H2020 Energy Work Programme: [https://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-energy\\_en.pdf](https://ec.europa.eu/research/participants/data/ref/h2020/wp/2018-2020/main/h2020-wp1820-energy_en.pdf).

<sup>7</sup> Science, Technology, Engineering, and Mathematics.



## 6. Find out more!

Who are the ETIPs and sectorial fora? To know more, start following their events and activities!

### ETIPs:

#### ETIP BatterieRles Europe

<http://batterieseurope.eu/>

#### ETIP BioEnergy

[etipbioenergy.eu/](http://etipbioenergy.eu/)

#### ETIP Deep Geothermal

[etip-dg.eu/](http://etip-dg.eu/)

#### ETIP Ocean

[etipocean.eu/](http://etipocean.eu/)

#### ETIP Photovoltaics

[etip-pv.eu/](http://etip-pv.eu/)

#### ETIP SNET (Smart Networks for Energy Transition)

[etip-snet.eu/](http://etip-snet.eu/)

#### ETIP Wind

[etipwind.eu/](http://etipwind.eu/)

#### RHC-ETIP (Renewable Heating and Cooling)

[rhc-platform.org/](http://rhc-platform.org/)

#### SNETP (Sustainable Nuclear Energy Technology Platform)

[snetp.eu/](http://snetp.eu/)

#### ZEP (Zero Emission Platform)

[zeroemissionsplatform.eu/](http://zeroemissionsplatform.eu/)

### Sectorial fora:

#### ECTP (European Construction Technology Platform)

[ectp.org/](http://ectp.org/)

#### Energy-SHIFTS (Energy Social sciences & Humanities Innovation Forum Targeting the SET-Plan)

[energy-shifts.eu/](http://energy-shifts.eu/)

#### Hydropower Europe

[hydropower-europe.eu/](http://hydropower-europe.eu/)

#### Smartspend (More and better design public support for energy technology research and innovation)

[smartspend.eu/](http://smartspend.eu/)

To know more about the SET-Plan see our accompanying guide<sup>3</sup> as well as the SETIS (Strategy Energy Technologies Information System) website which contains resources to understand the SET-Plan context, progress, and current status: <https://setis.ec.europa.eu/>

### Contact

For further details of the Energy-SHIFTS Forum please contact project co-leads Dr Chris Foulds ([chris.foulds@anglia.ac.uk](mailto:chris.foulds@anglia.ac.uk)) and Dr Rosie Robison ([rosie.robison@anglia.ac.uk](mailto:rosie.robison@anglia.ac.uk)). If you wish to be added to Energy-SHIFTS, mailing list of interested parties, which includes alerts to SSH-related events organised by the ETIPs/fora, visit our website at <https://energy-shifts.eu/>.



---

## 7. Acknowledgements

---

Many thanks to Chris Foulds, who gave valuable review comments on this guide. The Energy-SHIFTS project receives funding from the European Union's Horizon 2020 research and innovation programme under grant agreement no. 826025. This publication was supported by expert interviews performed by EERA. We warmly thank the valuable contributions of the respondents: Hamid Aït Abderrahim; Antti Arasto; Greg Arrowsmith; Rainer Bacher; Christian Breyer; Donagh Cagney; Emiliano Corá; Philippe Dumas; Jean-Jacques Fry; Nikos Hatziargyriou; Paola Mazzuchelli; Isabel Pinto-Seppä, Alexander Vandenberghe; Mark Van Stiphout.



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 826025.

energy-shifts.eu



ENERGY  
SOCIAL SCIENCES &  
HUMANITIES  
INNOVATION  
FORUM  
TARGETING THE  
SET-PLAN

