

Position paper accompanying answers provided in online form for Public stakeholder consultation- Interim evaluation of Horizon 2020

General comments

The fact that the legal entity EUREC EEIG is itself a HORIZON 2020 beneficiary is incidental for Part II of questionnaire onwards. Our answers to those parts is given from the perspective of the combined views of our 40 members.

Very often the question is answered with “to large extent”, never “fully”. Often “fully” would imply a position that is unimaginably extreme.

Take one of the options for question 9, asking whether Horizon 2020 “helps to foster excellent science”. It manifestly can’t be said that all of HORIZON 2020 is put towards “fostering excellent science” when some activities are CSAs for supporting market uptake. So “fully” does not apply in that sense. Neither can it be said that HORIZON 2020 accomplishes the task of “fostering excellent science” on its own – the other possible sense of “fully”. The ambiguity of “fully” is another reason to reach for “to large extent”, to hedge against inadvertent misinterpretation.

Q9 contains a word, “help”, that also makes it hard with good conscience answer with “fully”. “Help” used here is a weasel-word that lets in notions of effort and intention. One might think that Horizon 2020 “fully helps” in the sense that it helps as best it can. But what is relevant is Horizon 2020’s effect. “helping to” should have been deleted from the question “Do you think that Horizon 2020 is helping to...”.

Part III – Relevance and implementation of Horizon 2020

Q 10. Do you think that

Horizon 2020 is stimulating disruptive and market-creating innovation (a new process, product or service that upsets existing business models and serves new set of customers)?

We answered “To some extent”. Horizon 2020 could do this more if it set up a European Innovation Council (EIC), particularly one that in its operation resembles the ERC, and funds collaborations of excellent applied researchers with companies looking for specific solutions.

Horizon 2020 thematic coverage is flexible enough to cope with changing circumstances? We answered “To some extent”. We are opposed to three-year Work Programmes, like we will see for the last three years of Horizon 2020. Two-year programmes strike the balance between visibility of the near-future funding opportunities and responsiveness to changing circumstances.

Later questions, e.g. Q25 / option: “Bottom-up calls also probe” vs option: “Better defined priorities for research and innovation activities” are arguably better at probing the trade-off between flexible coverage and HORIZON 2020’s ability to pursue a strategy for a particular technology.

Q 11. Are the forms of funding provided through Horizon 2020 relevant to your needs?

Some EUREC members, from time to time, win money as a single beneficiary, but grants for collaborative projects are by far what mainly attracts them to the programme.

EUREC will follow with interest the progress of the three prizes launched this year in the Energy Work Programme. They account for a minute share of the Work Programme’s budget. To allow the prizes time to have an “inducement” effect, they will close in 2019. The winners should be asked if they changed their plans or schedule in any way to try to win the prize, i.e. to see if there is evidence for an inducement effect.

Financial instruments are only suitable for projects whose end-product is a cash-flow generating asset. This implies they are suitable for those who would own the asset (EUREC’s members do not fall into this category). It also implies that the technology benefiting from financial instrument support is mature (EUREC’s members are focused on technology in the middle of the TRL range). Potentially, researchers (including EUREC members) could nonetheless be involved in such projects to the extent that they use data from the functioning project to design an improved version or to optimise the operation of the built plant.

COFUNDS and their drawbacks are discussed in Q19. Despite their drawbacks, the kind of research they fund is of specific interest to our members (it is collaborative and at or near the middle of the TRL range).

Q12 – Implementation of HORIZON 2020

Work Programme and calls

Transparency in the process of formulating the Work Programme

This could be much improved. Considering the preparation WP 2018-2020, the Commission declares only some of the external sources that it uses. We are aware of two: the [‘Strategic foresight: Towards the 3rd Strategic Programme of Horizon 2020’](#) led by DG RTD.A.6, and the [Advisory Group on Energy’s advice](#).

Inconsistency between published documents purporting to indicate the Commission’s thinking create the impression that the process by which it selects priorities is rather chaotic (and therefore untransparent). In two strategy documents published a few weeks apart, the lists of priorities for the Energy Work Programme 2018-2020 are different:

Strategic Programme Overarching Document (drafted before Nov 2016)	Accelerating Clean Energy Innovation Communication (adopted 30 Nov 2016)	Consistency between the priorities of each?
Boosting Europe's global leadership in renewable energy	Strengthening EU leadership on renewables	Yes
Developing a smart citizen-centred energy system, including Smart Cities and Communities	Decarbonising the EU building stock by 2050: From nearly-zero energy buildings to energy-plus districts	Partially
Strengthening the efficient use of energy in buildings and industry	Developing affordable and integrated energy storage solutions	
Decarbonising the use of fossil fuels	Electro-mobility and a more integrated urban transport system	No

The Commission could improve transparency by publishing more of the information that it shares with the Advisory Group on Energy, specifically, in the past year, the “Outline of the strategic approach for the Energy work programme 2018-2020”. This document, sent also to the Programme Committee in July 2016, contained no confidential information. By September it had been re-issued with some minor changes as a “Scoping paper” and was still not public. At the time of writing, a version very similar to the versions of June and September has been made public via NCPs, for example: https://www.nks-energie.de/lw_resource/datapool/systemfiles/elements/files/45425D309E56454AE0539A695E862523/live/document/10.sc3_energy_version_for_publication.pdf. The Commission would have had nothing to lose by releasing the July version and calling it a “living document”.

The ideal way for the Commission to plan the Work Programme would be in close collaboration with relevant European Technology and Innovation Platforms. The [Strategic Programme Overarching Document](#) says its consultation activities on the 2018-2020 Work Programme strategy “extended to the existing thematic groupings and networks like European Technology Platforms”. However, while various recent SET Plan exercises might have been used as input for the Commission’s thinking on WP 2018-2020, the SET Plan itself is not mentioned in the Document and energy-related ETIPs were never explicitly invited to input to the Work Programme strategy. It was the same for WP-2016-17. The minutes of the SC3 Programme Committee meeting of 4 Nov 2015 say, “The Commission noted that although communication channels with the stakeholder community exist, there has been no official parallel consultation process with external stakeholders.”¹ This is in stark contrast to the [approach taken in “SC2 – Food Security, sustainable agriculture and forestry, ...”](#)). **EUREC hopes that in FP9 this will change. Open, transparent ETIPs should be placed on an equal footing to their**

¹ Memo sent to Member States ENERGY-2015-76

corresponding Expert Groups (AGE in the case of Energy) and, like those Groups, should publish their recommendations (see our [Dec 2016 publication](#) for more).

Clarity of the calls for proposals description

Energy Work Programme 2016-17 was an improvement on Energy Work Programme 2014-15 in this respect: the descriptions of topics were longer. They became more targeted, cutting subscription levels to tolerable levels.

Ease of finding the right call for my proposal

Never been a problem for EUREC members.

Frequency of calls for proposals

Some in the Commission say that subscription levels spike at the start of a Framework Programme. This could be because of the long gap since the last call of the previous Framework Programme. At the same time, ERDF programmes that fund research close and restart. Research centres that apply to both are doubly exposed to the cycle of feast and famine. **Even in the transition years between Framework Programmes, the intervals between calls should be regular.**

Inclusion of Social Sciences and Humanities in calls for proposals across Horizon 2020

In the energy field, most EUREC members preferred having the Intelligent Energy Europe instrument as a standalone instrument with different management and different rules of participation, as it was in FP7.

Balance between small and large indicative project sizes in the calls for proposals

Our position is aligned with the Advisory Group on Energy's. In [its guidance for the Work Programme 2016-17](#) in May 2015, it recommended "that the balance between the type of projects supported be urgently reconsidered and that funding for research activities with medium to lower TRL levels be increased in the coming call(s)." Our analysis of the official [CORDIS 'HORIZON 2020 Projects' Excel file](#) shows that of the IA and RIA projects funded from the 2014-15 calls, 55% of the budget went to IA and 44% to RIA. But the planned distribution of budget for Work Programme 2016-17 has tipped the other way: 48% IA, 52% RIA, which we are pleased with.

Communication activities on Horizon 2020 to attract applicants

They work well. The 'Info Day' conferences provide good information. Some Info Days are more informative than others. The Info Day for the 2016 call in September 2015 contained a few valuable slides that looked back and presented 'lessons learned', particularly [this presentation](#). There was no such presentation for the Info Day for the 2017 call in September 2016. Early drafts of Energy Work Programme 2016-17 contained a section looking back at the success (or not) of the 2014-15 calls for proposals, which would have put the Commission's strategy for 2016-17 in context. It was a shame that this was stripped out the published version.

Frequency of use of 2-stage procedure in evaluating proposals

The majority view in EUREC is that 1-stage targeted calls are better than 2-stage calls, because 2-stage application processes take too long to complete.

Two-stage calls would find more favour if the first stage filters out sufficiently many proposals to ensure a good chance of success at the second stage. However, even first stage proposals take a lot of work to prepare.

Proposal Evaluation

Our feeling is that evaluators need more time to read proposals in the remote evaluation stage. For the rest, we defer to the opinion of 'Observers' who write an 'Observer Report' for each evaluation session.

Evaluation Summary Reports have no use outside of the HORIZON 2020 process: they are not, for example, sufficient to unlock funding from European Structural and Investment Funds (exception: [Seal of Excellence](#)). This is in contrast to the Technical and Financial Due Diligence reports produced by the EIB for NER300 projects (which also cost far more and took far longer to produce). These reports were weighty enough, and written by an authoritative enough body, to be used to convince potential investors to back NER300 projects.

In two-stage calls, the Evaluation Summary Report of the first stage should be made available to the consortium behind the proposal.

EUREC presented a zero-cost way to improve (potentially) HORIZON 2020 evaluations to staff in DG RTD.A.3 on 20 April 2016. The idea involves allowing one anonymous feedback cycle between the evaluator and the leader of the consortium. This and other ideas (still current) are contained in this position paper: http://www.eurec.be/en/upload/docs/pdf/weeklynews/HORIZON_2020_Energy_experiences_EUREC_v1_pdf.pdf.

Time taken to sign a grant agreement

There is no grant agreement negotiation step in Horizon 2020. This is a sacrifice worth making for quicker time-to-grant.

In two-stage calls, it might be worthwhile to introduce a way for the great experience of Commission and INEA staff be brought to bear on projects. The mechanism we propose is in this position paper: http://www.eurec.be/en/upload/docs/pdf/weeklynews/HORIZON_2020_Energy_experiences_WP2014.pdf.

Grant-agreement negotiation is particularly important for the ARPA-E-style projects to be piloted in the Energy Work Programme 2018-2020. Here the Commission will need to agree with winning consortia on the achievements that will trigger follow-on funding.

Grants

Support provided by the Commission services (including agencies) during grant preparation and implementation

Changes of project officer are disruptive but probably unavoidable. Every effort should be made to limit them to once per project contract.

Acceptance of organisations' usual accounting practices

We expect EARTO to have provided good input on this point.

Mechanisms for project monitoring and reporting

The online systems for financial reporting work better in Horizon 2020 than in FP7.

Balance between control and trust of beneficiaries

This was debated intensely by the legislator in the adoption of Horizon 2020's legal basis. The balance is good. Time-sheets are generally necessary.

Q15 As a result of the simplification measures, the costs of participating in Horizon 2020 compared to the 7th Framework Programme are:

The phrasing of this question doesn't allow for the fact that the costs might be higher, even though reduced by simplification. Oversubscription is not directly related to HORIZON 2020's simplification measures, but adds to HORIZON 2020 global "participation cost".

Q17 How do you rate the overall added value of Horizon 2020 compared to national and/or regional level research and innovation programmes in EU Member States?

If the same funding were available under the same conditions for a research centre to perform its work as part of a national consortium rather than a European one, EUREC would not be surprised if the research centre would choose national funding. Coordination is likely to be less of an effort with all partners speaking the same language, working relatively close to each other to and the ministry or agency monitoring the project.

Other factors could play a role in shaping a researcher's preference for European or national programmes, such as the efficiency with which calls for proposals are managed.

Horizon 2020's defining feature is that it allows teams to work cross-border and for the best team across Europe to be put together for the job (subject to the rule of representation of partners from a minimum number of countries in the consortium). We need look no further than that for its added value.

Q19 What would be the impact for you or your organisation if the EU support to research and innovation (Horizon 2020 and its possible successor) were to be discontinued?

EUREC, as a body representing Europe's renewable energy research community to the EU institutions, would almost certainly shut, but the questioner is probably more interested in the effect on our members.

The discontinuation of Horizon 2020 funding would drive them back towards national funding schemes. Their links to other European researchers would weaken. They might still be able to stay informed of what each is doing through journals and conferences, but it will be harder to work together and for them to learn from each other in the process. The IEA and its Tasks, as well as privately organised roadmapping exercises, would serve as strategies for national funding bodies to follow. The COP21 initiative 'Mission Innovation' would contribute marginally.

Without the possibility easily to work to together (and with less exposure to international competition), Europe will make technological progress more slowly than in the Framework Programme era. Resources risk being used inefficiently because they are not shared. The chance of similar research being unintentionally duplicated will increase.

Member States could set up bilateral or multilateral initiatives like today's ERA-NET-COFUNDS but ERA-NET-COFUNDS are piecemeal – almost ad hoc – agreements to fund an area. They are not a multilateral agreement like the Framework Programme, itself embedded in an even greater multilateral agreement. Furthermore, the forces that would drive the discontinuation of Horizon 2020 would probably drive the discontinuation of COFUND-type collaborations, too.

COFUNDs are discussed in depth in our publication "[The Future Shape of European Renewable Energy Research and Innovation](#)", where we argue that they are a less efficient way of funding European transnational research than the Framework Programme. Something not written in "Future Shape" but worth keeping in mind is that ERA-LEARN might be the place and the body to monitor the use that the EC contribution to the COFUND is put to: "The ERA-LEARN portal has recently implemented new functionality that allows users to analyse the level of cooperation between countries working together in P2P networks," say the authors of [this study](#).

Part V – INTERNAL STRUCTURE OF HORIZON 2020 AND SYNERGY WITH OTHER EU PROGRAMMES

To what extent do you agree with the following statements regarding the internal structure of Horizon 2020?

The different parts of Horizon 2020 complement each other

We agree, but the structure of FP7 was better. FP7 structured the Framework Programme logically from the point of view of the user. The Specific Programmes Excellence, Cooperation, Capacities, etc showed potential applicants where to find what kind of project. Horizon 2020, by contrast, is structured to bear out a "political story" about societal challenges and technology leadership. The burying of several research areas under the heading 'LEIT' is not logical from the users' point of view, as those collaborative projects are run identically to societal-challenge projects.

Horizon 2020's story as told through its structure and headings casts energy as a "societal challenge". This marginalises the "industrial policy" angle to energy technology development. This is a pity, as Europe ([like the Commission acknowledges](#)) has technology leadership in many renewable energy technologies.

Combining different forms of support for research and innovation under one single programme better addresses stakeholder needs than having separate programmes
We wanted Intelligent Energy Europe to remain a stand-alone funding scheme (see answer to [Q12](#))

The increased use of calls for cross cutting activities and interdisciplinary work is a positive feature in the programme

We neither agree or disagree. See comments on [Q20](#) on cross-cutting calls.

In general, there is more coherence and synergy between different parts of Horizon 2020 than in the 7th Framework Programme

We agree. One important place to find synergies is between grant instruments and non-grant financial instruments. Innovfin (specifically EDP Innovfin, which we are familiar with) is set up to take more risk than its predecessor, RSFF. While it is difficult to find the energy projects that RSFF funded², the examples that are known to us (installations of offshore wind and solar thermal electricity with heat storage) are less technologically risky by the standards of their day than the projects recently signed under EDP Innovfin (floating wind installation, manufacture of wave energy devices). This means there is better coverage of high-TRL projects (TRL 9).

² Searching the EIB's database on the keyword RSFF does not bring up all projects. For example, "Solucar Solar Thermal Power" is an RSFF loan signing of 50 M EUR in 2007, but not flagged as such in the database.

21. The European Commission implements several funding programmes. How would you describe the linkages between Horizon 2020 and the following programmes?

The question probes overlaps, and the available options to tick themselves overlap! The nebulous concept of synergy can embrace both overlap and complementarity.

European Structural and Investment Funds

No amount of pointing at the vast ESIF budget hides the fact that ESIF and the Framework Programme are independent programmes, with project-level linkages between the two, for the moment, largely accidental. The exception is the Seal of Excellence, which is awarded to unfunded above-threshold proposals in a part of the Horizon 2020 where synergies should be easiest, the SME Instrument.

It seems difficult to link ESIF and Horizon 2020 in the area of energy demonstration projects. Although these energy demos would be focused on one locality, this place is likely to be in a region with a low structural fund endowment. Furthermore, we feel that Managing Authorities lack the competence to evaluate projects with high technological risk and the ESRs resulting from Horizon 2020 evaluations will, in their current form, be too superficial to convince MAs. State Aid rules could complicate matters, too, although the Commission has prepared guidance on how State Aid rules should apply to projects with a SoE³. It would be more promising to try with NER300 projects, which have had much had a much deeper evaluation (see answer to [Q12](#)).

European Fund for Strategic Investments (EFSI)

EFSI provides funding to projects with TRL >9, i.e. outside Horizon 2020's domain of projects dealing with technologies of TRL 1-9.

The other programmes on the list (CAP, CEF, COSME, Erasmus+) also have little to do with R&D, so are complementary or orthogonal to Horizon 2020.

Q25 To what extent do you agree that the following issues are needed to further maximize the socio-economic impact of the EU framework programme for research and innovation?

Increased budget for financing research and innovation at EU level

More budget = more resources. More resources = more impact. But the use of "maximise" in the question implies a need to look at impact per unit of resource. We do not know at what level of resource the impact per unit resource is greatest. Whatever. We tick "strongly agree" in the hope that this leads to a big FP9 budget.

More room for bottom-up proposals

In 'Energy' there is enough room already.

Increased involvement of citizens in priority setting

Might this suggestion be a nervous attempt to react to the populist movements sweeping the West? This is not an interesting enough topic for most people. It's exactly the kind of thing they would be

³ https://ec.europa.eu/research/regions/pdf/swd2017-11_application_of_state_aid_rules_to_funding_schemes.pdf SWD(2017) 11

happy to delegate to their MEPs. But when MEPs tried to take a position on Horizon 2020's priorities in energy, by prioritising funding for some areas over others, the Commission shut them down (cf. trilogues on Horizon 2020 and FP7, and the revised proposal from the Commission FP7's Second Reading).

Increased use of cross-cutting calls (e.g. calls responding to more than one societal challenge)

The things that a "cross-cutting call" cuts across are Horizon 2020's budget headings ("societal challenges" in Horizon 2020 parlance). The fact that an area is deemed to be worth funding is irrelevant to the question of how to fund it. We expect funding agencies to find a way to fund it. "Cross-cutting" doesn't have any meaning outside the administrative discussions within the agency on how to make a correction to something that can be corrected.

Increased coordination/synergy with other EU programmes

This helps at the margin. It is not a disaster if two funding programmes fund the same kind of project. This situation might even reflect demand for that kind of research. In the search for synergies / coordination, the question should always be, "How can we boost the chance that the researcher(s) get money for their great project - from some or other source - while minimising the overall effort needed to get that money to them?"

Better access to the programme for newcomers

There should be no special treatment in the ranking of projects. What is conscionable, however, is to advertise Horizon 2020 to them more forcefully. Entities that have not yet applied to Horizon 2020 should be given priority access to Info Days (alongside multipliers like EUREC). Also, projects that are coordinated by a first-time coordinator may need extra help. This must be budgeted for in the hours that the project's overseeing officer in the executive agency or Commission may spend on that project.

Increased focus on capacity-building activities for research and innovation

If the capacity of an organisation to do research is increased, then by definition it will do better research, i.e. research with more socio-economic impact.

Increased focus on supporting closer to market activities / Increased focus on supporting demonstration / Increased focus on fundamental research

In the Energy Work Programme, the balance is about right (see answer to [Q12](#)).

Increased dissemination activities for the results of funded projects

We support the Commission's push for "Open Access" and "Open Data".

Increased dissemination activities for the results of funded projects

Information on the long-term impact of projects needs to be collected systematically. This is difficult for the Commission because it has no hold over project consortia once their work in the project is done. Yet this information is important to convince politicians of the need to fund R&D. Our members are often asked for success stories.

One approach would be to ask project coordinators to agree to be contacted two and four years after the end of the project to discuss "what happened next". The coordinator is the person best placed to keep track of the key individuals involved in the project even if they move organisation, and to comment on the project's result relative to other projects in the field. They might need to be offered a financial incentive. This and the cost of surveying them could be paid for by fractionally

reducing the maximum reimbursement rates for some classes of participant, which are on average higher than in FP7. Note that this was a conclusion from the panel discussion “Impacts at Project Level.” at the ERA-LEARN Annual Joint Programme Conference (23-23 Nov 2016, Brussels)⁴.

Increased focus on support for the exploitation of research results

The question assumes a finite budget that can be spread partly on doing research, and partly on publicising the research that’s been done. We don’t know the ratio that “maximises socio-economic impact”.

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⁴ See left-hand column of p4 of ERA-LEARN’s December newsletter: