

**EERA**
European Energy Research Alliance**The European Energy Research Alliance**www.eera-set.eu**Content:****EERA Chairperson New Year Wishes****EERA: Brief update****EERA Secretariat, 3 years of running**

EERA has taken great steps during the first three year of its existence. The EERA research community has grown into 150 members from 22 different countries and includes almost all the major players in the European energy research field. We are engaged in creating a 'Virtual European Institute on Energy Research', serving as a research arm of the SET-Plan. Joint Programmes reached the number of 13 and we can see in the future more tangible and visible results from these activities. In 2012 EERA was visible at the European Energy conference (E2C), EU Sustainable Energy Week and the SET-Plan conference among others. The year ended with successful submission of 6 joint EERA IRP proposals. The journey towards integration and streamlining our activities in order to "do more with less" is well on the way.

Being a novel initiative, EERA has been constantly evolving. And so we can expect it to do this year. In 2013 we will see a continuation in the process of streamlining our efforts for a more harmonised European energy research system. The common strategies and the division of tasks are still under continuous refinement, but a signal of the success of our approach is demonstrated by the increasing number of organisations willing to share duties and knowledge. This requires coordinated actions at the national and European level as well as a strong dialogue with the industry for EERA to be fully integrated with all SET-Plan stakeholders. To achieve this, the guidance of the European Commission and active involvement of Member States is also crucial. In the end, trying to make different positions converge to widely shared ones is of high added value to Europe.

I wish everybody a successful year for the 2013. Let's continue to move EERA forward together.

Erkki KM Leppävuori

Chairman of the European Energy Research Alliance

President and CEO of VTT Technical Research Centre of Finland

EERA: ideas for Horizon 2020

“Secure, clean and efficient energy” is one of the societal challenges which will be tackled by the next framework programme for research (“Horizon 2020”). Within such challenge the preparatory documents of Horizon 2020 explicitly mention the role the SET Plan will play. As one of the main SET-Plan pillars, there is no doubt about the strategic contribution EERA may provide in addressing energy research in all three pillars of Horizon2020.

The SET-Plan greatly contributed in shaping the framework for supporting, facilitating and boosting the research efforts put in place by the different stakeholders. The strategic alignment of energy research with SET-Plan strategy and priorities started convincingly during FP7 and we look forward to see it reach new heights in Horizon2020.

Renewable energies still need further investments to be developed and deployed in a cost-effective way. Production costs must decrease and efficiency increase. This calls for further research and demonstration activities. As envisioned in Europe 2020, stronger efforts are required to foster the integration of R&D capacities and resources at a European level. Ways are needed to leverage resources available at Member State level, thus leading to a higher critical mass, better streamlining and less duplication of research efforts. EERA was able to anticipate this trend by focusing its activities on the integration of national funds with European ones.

Innovation – bringing products to the market - will play an important role in H2020. Therefore a stronger dialogue with industry is needed to cut time-to-market and accelerate demonstration and take-up activities. At the same time, links between different technological areas should be exploited and valorised.

The SET-PLAN represents an important contribution in this direction. EERA and the EIIIs, as well as the KIC InnoEnergy, are complementary instruments that have been conceived in order to cover the various stages of the innovation chain.

Strengthening the ties between these initiatives will surely contribute to overcoming bottle necks in the funding and support of research and innovation initiatives. EERAs key contribution to this is to create a sort of “Virtual European Institute on Energy Research”, serving as research arm of the SET-PLAN initiative, in an open collaboration mode with innovation and industrial initiatives and stakeholders (EIIIs, ETPs, EIPs, industry associations, companies etc.).

The impact of research on energy topics will benefit from intensified efforts on international cooperation activities, which will contribute to tackle challenges at a global level.

Last but not the least, information about energy technology (i.e. overview of technology options and priorities – current as well as forward looking ones, monitoring implementation progress, assessing impact on policy etc.) should be timely collected, analysed and disseminated to targeted audience, as well as to the general public, in order to properly plan activities and implement the SET-Plan. In this regard, SETIS will represent an important source of information and supporting tool for the SET-Plan.

EERA Annual Congress 2013

The 3rd EERA Annual Congress will take place on 18th - 19th April at the Renaissance Hotel, Brussels.

The EERA Annual Congress will bring together key stakeholders in the field of energy research to present the progress in EERA and discuss the challenges and opportunities in energy research and policy. The congress is open to all EERA Members and external stakeholders, representatives from ministries, funding agencies, the European Commission, industry, scientific institutes and universities as well as politicians (national and European) with an interest in energy research.

EERA is committed to share and discuss best practice on delivering results through public research partnerships. This year four sessions are dedicated for the review process of the EERA Joint Programs (Geothermal, Photovoltaic, Smart Cities and Wind). The participants are invited for an open discussion of the results of this process.

Round Table discussions will gather national and European decision-makers and other stakeholders. The discussions will address the collaboration between EERA and the industry initiative and future scenarios for EERAs role in the European Research Area.

Please visit EERA homepage (www.eera-set.eu).

EERA new JP:

- Shale Gas

The exploration of unconventional gas resources or shale gas has been a much discussed issue in the recent media. Shale gas in the US is booming and has stirred high-level political discussions in the EU. Opinions whether to follow or not the US example are heavily debated and diverging at member state level.

Following the recommendation of the EERA Executive Committee, a new JP on Shale gas is currently being established to ensure a common and independent EU knowledge and competence base to draw on for politicians and decision makers. The working group developing the exact outline of the JP is being led by René Peters, Head of Gas Technologies at Dutch Research Institute TNO. Further contributions are being provided by the UKERC (UK), GEUS (DK), SINTEF (NO), ECN (NL), IFPEN (FR), IEN (PL) and LNEG (PT).

The foreseen structure of the new JP covers the whole shale gas value chain, e.g. the assessment of the potential for Europe, exploration technologies, environmental impact & footprint, regulation & policies and public perception. An awareness event to inform and broaden participation is planned to take place in the end of February in Brussels.

The final outline of the proposed Joint Programme will be presented to the ExCo at the next meeting in April. The ExCo's decision on this programme will depend on the description of work and an assessment of whether or not the Joint Programme is in line with the European Commission's energy strategy.

- Socio-economic energy research

EERA is currently in the process of setting up a new Joint Programme on socio-economic energy research. The working title of the new Joint Programme is ***Economic, environmental and societal impacts of energy policies and technologies evaluated from a Life Cycle perspective (E3s)***

The Description of Work for the new Joint Programme is under development. Lead by Tecnalia (ES), senior researchers from SINTEF and NTNU (NO), VITO (BE), VTT (FI) and ENEA (IT) are drafting the text of the following five sub-programmes:

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| Sub-programme 1: | Public perception and engagement |
| Sub-programme 2: | Analysis of policies and RD&D choices |
| Sub-programme 3: | A life cycle approach for evaluating the sustainability performance of energy technologies |
| Sub-programme 4: | Energy models for a multidimensional assessment of a European low-carbon energy system |
| Sub-programme 5: | Sustainable low carbon platform |

Over 25 research institutions from all parts of Europa have indicated their interest in participating in this new JP and more than 200 person years per year have been committed. The new JP is expected to be launched in May 2013 after which it will be open for interested organisations.

EERA Secretariat 3years

1. A short guide to the development, launch and implementation support to the EERA Joint Programmes

Since 2010, EERA has launched 13 Joint Programmes (JPs) and by the end of 2013 another two are expected to join. From the beginning, the EERA secretariat has played an important role in assisting the responsible researchers in developing the JP Description of Work (DoW), organising the launch event and providing support for the continuous implementation of each JP.

This article outlines the process of setting up a new EERA JP and the role of the EERA secretariat in the implementation support of our JPs.

What are the criteria for EERA to launch a new Joint Programme

EERA was established to support the European Commission's [SET-plan initiative](#). Since then, EERA has also aligned its strategy with the Europe 2050 roadmap. Any new Joint Programme should therefore be supportive of the goals set in these two documents. Up until now, all JPs have covered technologies that are explicitly mentioned in the SET-plan.

Developing a Joint Programmes – the 5 steps

Step 1 – first draft and Executive Committee support

The initiative to launch a Joint Programme should come from one or more EERA organisations. The responsible persons from the organisation(-s) will draft a first outline of the proposed JP in collaboration with a dedicated secretariat member. This proposal will be presented to the EERA Executive Committee (ExCo) who will decide if the JP falls within the scope of EERA

Step 2 – first meeting with EERA colleagues and identification of Sub-programme coordinators

the JP initiator will normally become the Joint Programme Coordinator (JPC). In collaboration with the member of the EERA secretariat the JPC will organise a first meeting where key players are invited to participate. During this meeting the research fields and interests will be defined and a JP responsible and co-writers for the JPs Sub-programmes (SP) are nominated.

Step 3 - awareness event and questionnaire

When the JPC and co-writers, with input from the key players, have developed a first Description of Work, EERA will organise an awareness event. Here, the JP proposal will be presented to interested organisations. The awareness event will be followed up by a questionnaire which will be sent to all interested organisations. The questionnaire includes information of the interested organisations intention to commit person years per year (py/y) and areas of research interest for the new JP. The information collected through the questionnaire is used to further develop and adapt the DoW including the JP's organisations (number of Sub-programmes) and determine the research capacity that will be available from the collective body of organisations for the JP.

Step 4 - Technical workshop and finalisation of the DoW. Following the collection of the Questionnaire, all interested organisations indicating a substantial commitment of py/y will be invited to a technical workshop to finalise the DoW.

Step 5 – Executive Committee approval and JP launch event

The final DoW will be submitted to the EERA ExCo for final approval. If the DoW is approved a launch event will be organised by the secretariat. Traditionally, new EERA Joint Programmes have either been launched at the European Commission's annual SET-plan conference or at the EERA annual congress.

Implementing an EERA Joint Programme – the role of the secretariat

The EERA secretariat is the administrative heart of EERA and a support organisation which helps all Joint Programmes to ensure progress in their activities and adherence to the EERA rules of procedure. The secretariat is not, however, a Joint Programme secretariat. Organising JP meetings, sending out the agenda, minutes etc. is the responsibility of the Joint Programme or Sub-programme coordinators. The secretariat will assist the JPCs in keeping up to date on the policy development in Brussels, help ensure that the JP is run according to EERA intentions, help coordinate activities with other JPs (if needed) and other such tasks.

2. IRP statements

Comment on IRP – Energy Storage

It was a challenging experience, due to the degree of novelty of such call, the first one combining CP and CSA. It has also been the first joint participation of our JP. In particular, the group had to face different types of challenges, ranging from scientific/technical ones to more administrative ones.

As regards scientific issues, we needed to identify the R&D priorities on which the future work shall be focused. This has been done by identifying and selecting democratically the activities at the highest EU added value and sharing responsibility and roles on key RTD aspects as well as CSA types.

Industry involvement posed some issues, especially in order to figure out how to benefit at best from industry support and contributions and to establish a clear channel for a fast technology transfer to European industry. The solution we adopted foresees the involvement of industry in the so-called "Advisory Industry Committee" and a specific Work Package has been defined, which aims at creating a stable relationship with companies interested in all the products and applications of EESTORIGA activities, trying to create a "give and take" principle, beneficial for the research and for the industry.

It was also agreed that all the Sub Programme participants, as well as associated ones, should have been involved as partners in the project proposal. We collected 29 partners in all, representing 14 different countries. Such a high number of participants pose a serious challenge in terms of management and coordination of the consortium, which suggested involving a highly specialized service (non-research) organization, the only participant not member of the EERA SP. On the other hand, having the "best in class" European research performers in the electrochemical storage converged on the same R&D priorities, it is a strong indication about the relevance of the selected topics and about the potential impact of the related R&D activities: this task was achieved by focusing on breakthrough RTD activities significantly complementing national and on-going projects, better addressing call topic objectives and rationale.

The overall experience was very interesting and helped the whole JP to better focus R&D activities, detect synergies with other JPs and increasing the number of "ties" (as well as their strength) among the different JP participants. This has been a very good exercise to stimulate the operative collaboration by anticipating strong integration actions concerning e.g. advanced research infrastructure and simulation and modelling capability.

We think that IRPs may well represent a valid tool aiming at contributing to achieve the objectives of the SET Plan through a higher degree of integration of the activities, human and instrumental resources and common roadmaps, performed by research institutions and greatly supported by the industrial stakeholders.

*Mario Conte – ENEA – Coordinator of the IRP proposal,
Coordinator of the sub-programme Electrochemical Storage in JP Energy Storage*