

Policy Stakeholders Conference

EU – Eastern Partnership STI cooperation in Addressing Energy Research & Innovation

Minsk, Belarus

12 – 13 October

CONCLUSIONS

Preface

The STI International Cooperation Network for Eastern Partnership Countries (IncoNet EaP¹) project aims to support the advancement of the bi-regional STI (Science, Technology, and Innovation) policy dialogue between the EU Member States/Associated Countries (MS&AC) and Eastern Partnership (EaP) countries, with an explicit focus on the Societal Challenges (SC) that have been identified to be of mutual interest for the two regions, namely: Climate Change, Energy and Health. In particular, the project identifies actions and stakeholders and implements innovative pilot activities to strengthen the coordination and impact of the individual actions.

Three Policy Stakeholders Conferences (PSCs) are organised under EU – Eastern Partnership STI cooperation in Addressing Energy Research & Innovation, IncoNet EaP project, which are dedicated to one of the 3 SC mentioned above and also address horizontal issues such as innovation, instruments, mobility, etc. as cross cutting topics. It brings together policy makers, representatives of the research community and representatives of the private sector to address specific problems that countries face in the region and that are of mutual interest and benefit, as well as to take stock and showcase best practices regarding the EU-EaP scientific cooperation, discuss concrete innovation cooperation projects, and promote international collaboration, networking, matchmaking.

The main aim of the Policy Stakeholders Conference is to bring together the most relevant international policies, initiatives and different programs targeting the 6 EaP countries, namely Azerbaijan, Armenia, Belarus, Georgia, Moldova and Ukraine on different levels.

Introduction

The Policy Stakeholders Conference 'Energy Research and Innovation in the Eastern Partnership' was held in Minsk, Belarus on 12-13 October. It was the second PSC organised by IncoNet EaP and the

¹ <http://www.inco-eap.net/>



seventh one in a series of similar successful forums for policy dialogue between stakeholders organized in the framework of the predecessor S&T International Cooperation Network for Eastern European and Central Asian Countries (IncoNet EECA²) project. The event was adjusted to the ENERGY EXPO – 2015, the largest expo in the energy sector in Belarus which marked this year its 20th anniversary.

The conference provided the opportunity for an in-depth exchange of views on regional and international STI policies, research programmes and projects addressing Energy – primarily energy efficiency, renewable energy – among high-level policymakers, international donors, and representatives of the research communities in the EU MS&AC and the EaP countries, as well as other key stakeholders active in the region.

The main goals of the Conference, among others, were to identify regional, international initiatives, common objectives, operational instruments (programmes), to shape future cooperative initiatives addressing Energy between the EU and the EaP countries and to formulate recommendations on the enhancement of the STI cooperation in addressing Energy. In addition the conference provides the opportunity for bringing together a good number of projects from the region as best practise examples with the aim to create synergies among them for future cooperation activities in H2020 and beyond.

The conference gathered 128 policy makers and representatives of the academic and scientific communities. They represented 81 organisations from 15 European and Eastern Partnership countries: Austria, Azerbaijan, Armenia, Belarus, Hungary, Germany, Georgia, Greece, Iceland, Moldova, Poland, France, Turkey, Switzerland, and Ukraine.

A number of international organisations, as well as European energy-related technological and innovation platforms took part in the event³. Participants represented public policy coordination bodies in the field of research, innovation, energy and international STI cooperation at national and EU level, international organisations, major international projects in the energy sector, as well as some organisations representing the civil society, the research community and the business. One third of the participants were women.

The event was jointly organised by the Belarusian Institute of System Analysis and Information Support of Scientific and Technical Sphere (BelISA / Belarus), the Centre for Regional and International STI Studies and Support (CeRISS / Greece) and the Regional Centre for Information and Scientific Development (RCISD / Hungary). The event was administratively supported by the State Committee for Science and Technology and Department for Energy Efficiency of the Republic of Belarus.

The PSC was widely covered in most local mass media.

² <http://www.inco-eap.net/en/99.php>

³ Austrian Energy Agency, Central European Initiative (CEI), the Energy Charter, the European Bank for Reconstruction and Development (EBRD), International Center for Economic Growth, National Centre for Research and Technology Hellas Orkustofnun National, Energy Authority of Iceland, Steinbeis Europa Zentrum of Steinbeis Innovation GmbH, the United Nations Development Programme (UNDP) and the United Nations Economic Commission (UNECE)



Major international policy objectives in EU and EaP – needs, opportunities

The mutually beneficial cooperation with the EaP is a key objective of the EU's foreign policy. The EU is present through several programmes and projects providing funding for research and capacity building, technical aid on Energy. A significant number of policies, initiatives and programmes addressing Energy are implemented in the EaP region. More than 73 projects funded by international programmes related to that EU-EaP STI cooperation are ongoing or recently completed in the period 2010-2014⁴.

International organisations are providing support to Eastern Partnership in fields of energy through their dedicated initiatives and programmes. Representatives from the Central European Initiative (CEI), the Energy Charter, the European Bank for Reconstruction and Development (EBRD), the United Nations Development Programme (UNDP) and the United Nations Economic Commission (UNECE) presented their contribution to international policies and funding mechanism on Energy and their initiatives, roles in the promotion of the energy efficiency and in the sustainable, renewable energy in EaP. Energy themes that international organisations are working on in EaP and regional energy cooperation examples were also presented.

The first session of the conference was started with a report on the main directions of research funded by the EU and the tools to support them. The Strategic Energy Technology Plan (SET Plan) is an integrated R&I and competitiveness strategy with new features, such as the more targeted focus, more integrated approach, new management and increased accountability. The main pillars of the Energy Union are the energy security (solidarity and trust), a fully integrated European energy market, and energy efficiency which is contributing to the moderation of the demands and the decarbonising of the economy. The Horizon Prizes in Energy that contributes to the Energy Union and the updated SET Plan, is a new instrument to generate breakthroughs and induce innovation in low carbon energy technologies. Besides the COST that is the longest-running European framework supporting trans-national cooperation among researchers, engineers and scholars across Europe, also provides a good opportunity to EaP countries to STI international cooperation in field of Energy.

The international organisations presented the current international strategies, initiatives and programmes operating in the EU member states, associated countries and in the Eastern Partnership region.

The **UNDP** has shown the principles of achieving a sustainable and reliable energy infrastructure through increased support for cooperation. The main targets are solving the lack of sufficient reliable energy; ensuring access for affordable, reliable, sustainable and modern energy for all, double the rate of improvement of energy in energy efficiency. It is also important to encourage the innovation, substantially increase the number of public and private research and building resilient infrastructure, promoting inclusive and sustainable industrialization.

⁴ http://www.inco-eap.net/_media/INCONET_EAP_D1-01-V02.pdf



UNECE introduced the best policy practices for promoting energy efficiency. Key attributes of what makes a policy practise a best policy practice are among others significant outcomes, complementary to other efforts, political alignment, marketability and market impact. The implementation of best policy practises have many barriers. In many countries the capacity to execute policies effectively is overestimated, institutional commitment and capacity is critical (poor governance, unwillingness to commit) and also marketing efforts are underestimated (consumers are quite indifferent to energy efficiency).

Energy Charter Secretariat presented the Energy Charter Protocol on Energy Efficiency and Related Environmental Aspects (PEEREA) with the main scopes of promotion of energy efficiency policies, cooperation in energy efficiency field and development of energy efficient markets. Regarding the assessment of EaP country performances and the level of energy efficiency implementation main challenges are that national policy goals and objectives do not reflect the potential for energy efficiency. The legal framework is underdeveloped, monitoring and review of implementation, cost-reflective pricing policies are not fully implemented. Consequently, EaP countries highly need inter-administrative cooperation, institutional capacity building and investment in human and financial capacity.

EBRD invests in several EaP countries projects, supports the private investors in fields of power and energy sector by loans, equity, experiences. EBRD finances renewable energy, power transmission distribution, power generation and hydro sector. Besides it provides advises on privatization and attracts the foreign investors to the countries of operation.

Good practice examples and lessons learnt

The second part of the Conference was devoted to discuss the challenges of innovation activity in the EaP countries and the promising areas of cooperation with the European Union.

Several institutions and energy related projects presented their initiatives, programmes and good practises in the field of energy efficiency, renewable energy sources during the Policy Stakeholder Conference in Minsk, such as: KIC InnoEnergy, European Biofuels Technology Platform by Central Europe Initiative (CEI), Orkustofnun (the National Energy Authority of Iceland, coordinator of Geothermal ERA NET), German National Contact Point for Energy in H2020, Centre for Research & Technology Hellas (SMARTCATS), INNOVER-EAST project and Ener2i project.

The afore-mentioned institutions and projects develop **best options regarding the future EU-EaP scientific cooperation.**

International institutions such as the KIC InnoEnergy European company organizes educational trainings in the field of energy efficiency and also supports ventures, start-ups, industry partners that invest in smart ideas in energy. Participating at these trainings is a good opportunities for researchers & innovators from the EU Eastern Partnership region for learning of the best European experience in energy and for networking, development of contacts, searching for partners and technology transfer. Most of these institutions also offers opportunities for EaP countries to fund projects in the field of Energy, including energy resources, generation, transmission, distribution and consumption.



CEI promotes regional cooperation for European integration and it is committed to support the implementation of macro-regional strategies as well as the neighbourhood dialogue and enlargement. It offers know-how exchange programmes, cooperation fund for small activities, trust fund at EBRD. The CEI Plan of Action 2014-2016 prioritizes energy efficiency and renewable energy, with a focus on advanced biofuels and the bio-economy, like the European Biofuels Technology Platform that promotes a range of activities to support advanced biofuels stakeholders or S2BIOM Sustainable supply of non-food biomass to support a “resource-efficient” Bio-economy in Europe.

Iceland actively and successfully developed the geothermal energy, that is the least expensive district heating system in the world and considerably reduce the CO₂ emission. The experience of Iceland on using the geothermal energy could be applied for Eastern Partnership countries as well. However having the resource is not sufficient, more awareness needs to be raised at policy-making level and a better coordination of the stakeholders is needed. Furthermore an important observation is learning the opportunity for Eastern Partnership countries to take participation in Geothermal ERA NET project and future calls in the field.

Smart energy carriers for smart energy technologies is a potential for EU-EaP cooperation. In order to achieve the cooperation on that field there is a need for common goals shared by EU-EaP countries in energy policy; safe, secure and environmentally-friendly energy supply; sustainable combustion of conventional and renewable fuels.

The INNOVER-EAST project’s main objective is to build up a more effective pathway from research to innovation through cooperation between the European Union and Eastern Partnership countries in the field of energy efficiency. It provides among others, national studies on energy efficiency and innovation, training, twinning coaching. The project contributes to well-established contacts with stakeholders in the energy sector, specific knowledge on bilateral and multilateral cooperation with the EU in the energy sector and specific knowledge gained about the EaP energy sector.

The Ener2i project reinforces cooperation with EaP countries on bridging the gap between energy research and energy innovation. The project offers analytical reports on the research and innovation landscape and on players in EE/Renewable Energy Sources in the participating EaP countries, participation of the EaP countries brokerage events, training workshops, study visits, innovation vouchers.



National policies on energy research and local solutions

Representatives of various organizations⁵ from all EaP countries – universities, international organizations, professional associations, state agencies and NGOs – presented their national energy sector with a special focus on renewable energy and energy efficiency. The topics covered general overview of RES sector in Armenia and Azerbaijan, UNDP projects on RES/EE in Belarus, perspectives of exploitation of geothermal sites in Georgia, state policy in RES/EE in Moldova and the role of civil society in energy policy making in Ukraine.

As a conclusion of the presentations, all EaP countries are showing some positive tendencies regarding national energy policies. Renewable energy sources and energy efficiency are prioritized in all EaP countries regardless the availability of mineral resources. In all EaP countries have been created adequate legal framework and agencies. Furthermore energy projects are supported by international donor organizations. Last but not least, action plans are in place towards increasing renewable energy sources in energy mix in near and far perspectives.

There are still some issues for which special focus is needed, such as the following:

- Legislation related to the development of EE/RES innovations is insufficient, however in Georgia the First National Energy Efficiency Action Plan will be completed by the end of 2015.
- Recommendations and suggestions for legal interventions included in strategic documents have not been considered or implemented in several cases.
- Additional policy measures are needed to stimulate RES/EE (i.e. more attractive tariff setting, decentralization, “smart grid”, etc.)
- The lack of intermediary organizations - such as technology transfer centres, business incubators and technoparks aiming to foster cooperation between public RTD and business communities as well as to support knowledge commercialization activities – one of the major bottlenecks of the Armenian innovation system.
- Low level of financial support for R&D in terms of gross expenditures on R&D (UA: 0.8%, BY: 0.7%, MD: 0.4% while AM, AZ and GE: 0.2% in 2015 according to Global Innovation Index). Governmental financial support is insufficient to research institutions for developing EE/RES innovations. Funding is also problematic, support for private sector (business, SMEs) should be provided. The access to finance is incomplete, but there are good examples, too, e.g. in Georgia, where local banks recently started financing EE in newly constructed buildings. Besides green loans for customers, who are willing to introduce EE/RES technologies in their homes or businesses are also available.
- Human resources development and adequate education as important preconditions for increasing EE/RES.
- There is a lack of tradition of research and university and an absence of university start-ups, spin-offs.
- More active awareness raising is needed of population on EE measures.

⁵ American University of Armenia, Azerbaijan State University of Economics, Energy Efficiency Agency of the Republic of Moldova, Georgian Geothermal Association, NGO "Ecoclub", UNDP Office in Belarus,



Recommendations for a stronger EU-EaP cooperation in Energy

In order to achieve a more fruitful cooperation system between the European Union and the Eastern Partnership region in the field of Energy, a critical condition seems to be the further **development and implementation of energy efficiency policy in the EaP countries, such as:**

- the improvement of the communication and coordination mechanisms among the countries;
- the establishment of the necessary regulatory environment;
- the development and implementation of joint projects;
- the methodological support of energy efficiency;
- the development and implementation of R&D programmes;
- the information exchange and knowledge based creation.

Changing policy, legislative and institutional frameworks

Energy efficiency and renewable energy should be given further priority by the local governments. One of the key tools for the support of energy policies seems to be the detailed analysis of economic energy efficiency potentials in all sectors of the economy. The governments' energy policy should reflect on the potential contribution of energy efficiency to increase fuel exports and support economic growth as well as the environment. Inter-administration cooperation between energy and other public policy makers should be enhanced, in particular for those concerned with the environment, transport, housing and industry.

Energy market and tariffs

An additional bottleneck of the EaP countries is that the energy sector's reform is still ongoing or not even started yet and the energy pricing policy is non-cost reflective. It is recommended that the governments of the EaP states consider the introduction of market-oriented principles in the energy sector and an appropriate regulatory framework, based on international experiences. Governments should consistently peruse policies of restructuring energy prices to remove cross subsidies and achieve cost reflective levels. The independence of the national regulator needs to be guaranteed. It is crucial for the stability and for the proper functioning of the energy market.

Strategic approaches for a more effective participation in H2020 calls

Horizon 2020 opens a higher number of calls for Energy related proposals in the forthcoming period. Most of these future proposals are going to be built up by consortia together with several partners from EU/AC (at least 3, but in some cases even 15 to 20) and this opportunity shall be used by the researchers from the region. The IncoNet EaP project aims to build up constantly new, innovative tools to increase the possibilities of EaP researchers' participation in H2020 calls, such as: workshops; trainings about H2020 and the actual calls; twinning grants for clustering of scientific projects or institutions; the grant scheme for participation in H2020 brokerage and networking events.

Future ways of EU-EaP cooperation in the Energy field

One of the main results of the conference was for the EaP region the opportunity to get a quick overview about further perspectives for the cooperation with EU in the field of energy. Several factors play an important role in promoting this collaboration through technological trends, up-to-date technologies and research tendencies in Europe. The benefits of KICs and ETPs should be



promoted more in the EaP countries, too. Another successful way for a closer EU-EaP cooperation within enterprises and industry could be the Europe Enterprise Network for the benefit of both regions. The IncoNet EaP project itself is going to have a more and more crucial role in the extensive cooperation between Eastern Partnership and the EU in the framework of Horizon2020.

Conclusions

International cooperation is stimulating knowledge exchange around the world specifically through mobility of researchers. From the political point of view international cooperation is a means of boosting competitions in research communities. The IncoNet EaP Project and the current Policy Stakeholders conference are large effort for enhancing and focussing on international cooperation.

EU and EaP countries have already paved the way for joint actions on Energy. Such examples have been highlighted by projects presented at the conference. There is enough room to further expand synergies in particular by taking advantage of the current opportunities in the Horizon 2020 that is the main instrument for funding research and innovation at European level. The programme is fully open for international cooperation and it is the largest programme in the world for funding research and innovation actions. On a more operational level, the European Commission has now published the new Horizon 2020 Work Programme 2016 – 2017 that offers funding opportunities for cooperation. Activities under the new Work Programme help to mobilise Europe's research excellence in order to generate innovative solutions in this area, for example: Smart and Sustainable Cities call (€232 million), Projects funded under the Energy Efficiency call (€194 million) and The Competitive Low-carbon Energy call (€723 million). Besides new ERA-NETs published in new Horizon 2020 Work Programme 2016 – 2017 also contribute with several calls in fields of Energy to strengthening the cooperation and coordination of research activities between EU and EaP countries.

The conference gave overview, best practices of the EU-EaP STI Cooperation on the Energy, offered ideas and recommendations for a more efficient STI cooperation on Energy addressed to researchers and other stakeholders in the EaP countries. Besides the main policy related bottlenecks of innovation and potential of innovation in the energy sector in Eastern Partnership countries were also identified. During the conference several regional, international initiatives and programmes – that support to Eastern Partnership countries in fields of energy efficiency and sustainable, renewable energy – were introduced. Last but not least, the conference facilitated to the creation of new synergies for future cooperation activities in H2020 and beyond by presenting initiatives, programs and good practise examples in the field of Energy.

After closing the second Policy Stakeholders Conference of the Inco-Net EaP project it has been obvious that the STI cooperation between the European Union and Eastern Partnership in addressing Energy necessitates an integrated approach to include also cooperation with stakeholders beyond the STI sector, such as the national sectorial ministries, the civil society and the international donor organizations.

