BALKAN GREEN ENERGY NEWS

MARCH 2016

Balkan Green Energy NEWS

The most comprehensive coverage of green energy news from the Balkans

Content

INTERVIEW

Daniel Berg

Director of EBRD for Serbia

EBRD helps policy reform to stimulate energy efficiency

The European Bank for Reconstruction and Development sees large opportunities for savings in public budgets in the improvement of efficiency of municipal lighting, says Daniel Berg, the international financing institution's director in Serbia. He told Balkan Green Energy News the bank is providing technical cooperation to a number of municipalities and hopes to finance investment in energy efficiency lighting projects, including a major overhaul in the city of Belgrade.

Berg took the position in August, coming from Bulgaria, where he headed the bank's operations. Prior to that, he had equivalent positions in Albania and Kyrgizstan. Berg joined EBRD in 1995, coming from the United States Department of Treasury. The bank's office in Serbia, which he manages, is responsible for annual investments averaging EUR 480 million per year. Daniel Berg is educated in the U.S., at Rutgers College and Johns Hopkins School of Advanced International Studies.

"We hope to finance the first wind farms in Serbia, possibly by the end of this year," he announced and added the bank will continue to provide policy advice to the government. In his words, as electricity tariffs begin to reflect market costs more closely, EBRD expects a rise in investment in energy efficiency measures in all sectors of the economy.

What are the experiences of the European Bank for Reconstruction and Development in financing renewable energy and energy efficiency in the Balkans and what are the current and planned projects in Serbia?

The EBRD is strongly committed to sustainable energy and has made it a priority for investments across the EBRD region. Although 2015 did not see huge investments in renewable energy, we continue to work on key policy initiatives which will support better energy efficiency in the country.

"A large ESCO street lighting project is in the pipeline, supported by EBRD: seven municipalities in the territory of Belgrade will have as much as 65,000 streetlights switched to modern technology."

In particular, we have been working with the Government of Serbia to prepare supporting decrees for investment and financing of renewable energy – with the government and investors to ensure the legal framework is appropriate – and we do anticipate major investments in wind energy in the near future. We have also been working with a number of municipalities to review their lighting systems with the hope that they will carry out long-term contracting

with ESCO companies to improve efficiency in lighting. We also have financed a small biogas project. And, we consistently work with our corporate partners to seek opportunities to reduce their carbon and energy footprint.

The EBRD provided a EUR 200 million restructuring credit line to the Electric Power Industry of Serbia (EPS). Ultimately, our work with EPS – in production and distribution of energy – should help increase efficiency of the company and the country. Our loan to help EPS install new smart meters will allow its customers to better manage and therefore reduce their energy usage. We also are financing the modernisation and construction of small hydropower plants together with EPS.

“The Electric Power Industry of Serbia and transmission system operator Elektromreža Srbije will have an important role in ensuring the success of the initiative to boost renewable energy sources.”

Looking back, we have made a real impact with energy efficiency financing efforts. In 2009 we launched the Western Balkans Sustainable Energy Financing Facility which targets the development of financing markets for small and medium-scale renewable and energy efficiency projects via the local banking system. This programme combines approximately EUR 150 million of funding for 12 partner banks in Bosnia and Herzegovina, Croatia, FYR Macedonia and Serbia and EUR 24 million of European Union assistance funding for incentive payments for sustainable energy investments. The projects are estimated to lead to CO2 emission reductions of 250,000 tonnes annually.

Across the region, we know that it is important to involve the private sector in energy efficiency solutions. This is why we’re boosting participation of private energy service companies in the municipal sector through our policy dialogue and hopefully also in future with financing. EBRD‘s consultancy team in Serbia is supporting municipalities and public entities in their preparation of such projects.

There have been signals from circles close to the Government of Serbia that the state isn’t financially capable to support the production of energy from renewable sources. In the meantime, the activities for another electoral cycle have commenced. Since EBRD was involved in the process related to the secondary legislation, what are your expectations about the issue of power purchase agreements (PPA)?

Providing a predictable and fair regime, which should be outlined in the law and regulations regarding PPAs, is a cornerstone for renewable energy investments and can help attract foreign investors.

The bankable secondary legislation is important so that investors can finance their projects efficiently. The process has been moving more slowly than all sides would like, but we’ve been working with the Government of Serbia closely and expect progress this year.

We believe the regime the government is implementing for the first 500 MW of wind energy is a sensible way to achieve the country’s objectives and targets. We do not believe this amount of energy production would have a major impact on residential tariffs for electricity, which remain low compared to average European tariffs.

The Sustainable Energy Initiative **has become one of the pillars of EBRD’s operations. What are the achievements in Serbia?**

The Fund for ‘Delivering Resource Efficiency Investments’, or the DRIVE Fund, aims to help capture the huge potential for improved resource efficiency in the Western Balkans, Croatia and Turkey. Austria provided EUR 5 million to assist the EBRD to:

- develop a clear understanding of the opportunities in terms of existing technologies and new solutions;
- identify high-transition impact investment opportunities to improve water and materials efficiency;
- identify requirements for technical assistance in innovation, investment planning and implementation;
- identify requirements for policy dialogue to improve regulatory frameworks;

- deliver targeted technical assistance to enable expansion of resource efficiency solutions in processes, products and services.

Several projects have already been supported by the DRIVE Fund. Two examples are:

- an assignment to understand and quantify the potential effects of climate change on the power generation and transmission assets in Turkey as well as provide an initial assessment of the most technically robust and economically viable solutions for mitigating the effects; and

- a feasibility study of water efficiency opportunities in district heating in Banja Luka.

The DRIVE Fund builds upon the success of the Sustainable Energy Initiative. Since 2006, when SEI was launched, EBRD financed 31 sustainable energy and resource efficiency projects in Serbia with EUR 638 million. These projects are estimated to have led to annual CO2 emission reductions of some 1.4 million tonnes. This is equivalent to half of Montenegro's energy use–related CO2 emissions in 2013.

What are the immediate objectives and conditions in the reform programme with the loan to the Electric Power Industry of Serbia?

EBRD's loan is aimed at helping EPS restructure its balance sheet and support its recovery after the devastating floods in 2014. It also helps the company reach long-term development objectives –commercialisation, improving corporate governance, retiring least economically viable and most pollution-generating plants, improving collection and, in general, working towards market-level tariffs and increasing efficiency. The loan was developed in coordination with the International Monetary Fund and World Bank – jointly the three international financial institutions are supporting the government's efforts to restructure and improve operations in state-owned utilities.

> *"Energy intensity in the Western Balkans is around four times higher than the average for the European Union, due to aged or poorly managed energy infrastructure, especially in industry and buildings."*

Our financing will support further reforms in Serbia's energy sector and aims to contribute to energy market liberalisation, an important condition for EU accession. It will also deepen regional integration in the Western Balkans by stimulating cross-border energy distribution and trade.

As noted above, we are very much engaged to support an increase in alternative sources of energy, including renewables, and EPS and transmission system operator Elektromreža Srbije (EMS) will have an important role in ensuring the success of this initiative.

How did EBRD contribute to the adoption of the energy efficiency legislation and regulations in Serbia and the surrounding countries?

The EBRD has been active in assisting to address barriers to energy efficiency in the Western Balkans since beginning operations in the region. In 2009, with EU support, we established the Regional Energy Efficiency Programme (REEP) in the Western Balkans.

The programme has been supported by grant funds of EUR 23.35 million approved under the Western Balkans Investment Framework (WBIF), which pools grant resources in order to leverage loans for the financing of priority infrastructure and socio-economic development in the Western Balkans.

This programme is providing policy support to the governments in the Western Balkans to eliminate market barriers to energy efficiency, and accelerate the take-up of energy services.

However, more needs to be done. The energy intensity of the six Western Balkans countries (Albania, Bosnia and Herzegovina, Kosovo, FYR Macedonia, Montenegro, Serbia) is around four times higher than the average for the European Union. This is due to aged or poorly managed energy infrastructure, especially in industry and buildings. The need for improving residential energy efficiency is a particular priority in the region. Following the successful implementation of REEP in the past three years, it has been decided to extend REEP to include lending to residential sector energy efficiency investments.

It is critical that the Western Balkans countries capture the enormous energy efficiency potential. When properly supported by a solid legal and institutional framework and backed up by well designed and implemented investment programmes, increased energy efficiency delivers many cost-effective benefits for competitiveness, the environment, security of energy supply and economic development in general.

Serbia has new energy efficiency standards for public procurement of lighting and equipment, but investments still need to be prepared, contracted and financed. What are the effective mechanisms for funding?

We are working with the government to streamline the process of funding for this type of projects through attracting the private sector in delivering municipal services. Private sector participation helps introduce the innovative approaches to the delivery of municipal services, such as energy performance contracting (EnPC), improvements to the tendering process and increased participation of private energy service companies (ESCOs).

Under ESCO approach, energy efficiency projects are being implemented by experienced private sector companies, significantly raising the quality of these ventures and enabling investment in modernisation. EnPCs are the basis of this involvement. They help to minimise operational expenditures, such as heating, lighting, ventilation and the supply of drinking water funded from the company's resources and repaid from the realised savings. The ESCO contracted under the EnPC in turn guarantees a specific level of service performance, which ensures that all investments and its service delivery are covered by the savings achieved.

With the support of the EBRD, the Ministry of Mining and Energy welcomed the increased participation of ESCOs in the public sector to increase energy efficiency investments and, in order to facilitate this, it adopted an ESCO by-law which in effect includes contract templates for energy efficiency investments in street lighting and for public buildings.

In fact, together with the EU, we are supporting one the largest ESCO private sector street lighting projects, to be launched in seven municipalities in the vicinity of Belgrade: in Barajevo, Grocka, Lazarevac, Mladenovac, Obrenovac, Sopot and Surčin. It will include upgrades for up to 65,000 streetlights with new, more efficient lighting technologies. The key aspect to the project is that a private contractor will finance these energy efficiency investments in street lighting. The legal basis for this is the mentioned ESCO by-law.

Qendresa Rugova

Senior Consultant at Burg Capital

esa.rugova@burgcapital.com

Understanding Energy Efficiency Investments
A Global Perspective

This article is part of a series of two articles on energy efficiency investments covering (1) investment characteristics from a global perspective and (2) existing and emerging financing models for energy efficiency investments and their applicability in the Balkan region.

Energy efficiency is an integral part of global energy policy as it is widely recognized as an effective means of reducing greenhouse gas pollution as well as ensuring long term security of energy supply. Investments in energy efficiency have a direct effect on reducing energy consumption while also improving industrial competitiveness and driving economic growth. Investments in energy efficiency during the past 25 years have successfully managed to achieve the uncoupling of energy consumption and economic growth as evidenced by the fact that energy consumption per capita in IEA countries dropped to levels of 1980s while income per capita enjoyed a steady growth over the same period. This represents a total saving of USD 5.7 trillion on energy costs in the past 25 years. However, despite the clear economic and environmental case for energy efficiency investments, current annual investment volume is still below policy targets mostly due to unique barriers characterizing energy efficiency. This article explores such energy efficiency investment need to combat climate change as well as and the key barriers preventing such opportunities from reaching the necessary scale.

Investments in energy efficiency are driven by global energy policies which establish the framework and incentives for achieving the set goals. At the European Union level, member countries have committed to a 20% energy savings target by 2020 as compared to consumption projections for 2020. To achieve these goals, it is estimated that approximately investments of EUR 84 billion per annum are required.

Beyond 2020, the EU has greater ambitions of decarbonizing its economy. The EU Energy Roadmap 2050 explores routes towards decarbonisation of the energy system, with implications of major changes in, but not limited to, carbon prices, technology and networks. This roadmap envisages reduction of greenhouse gas emissions to 80-95% below 1990 levels by 2050. To achieve EU's 2050 decarbonisation target, it is estimated that energy efficiency investment in excess of trillions of euros is to be expected.

According to International Energy Agency's (IEA)'s 2014 Investment Outlook, global annual investments in energy efficiency in 2013 equaled USD 130 billion. To put it into perspective, the outlook reminds us that this value represents approximately 15% of global annual investments in oil and gas or about 50% of the value invested in renewable generation in the same year signifying its importance in terms of energy policy as well as investment opportunity.

The IEA outlook also estimates future trends of energy efficiency investments in the period of 2014-2035. The 450 Scenario estimates the level of energy efficiency investment required to limit future global warming to 2°C above pre-industrial levels. As per the 450 scenario the cumulative amount of investments in energy efficiency by 2035 reaches USD 13.4 trillion. It should be acknowledged, however, that the COP21 agreement reach in Paris last December targets limiting global temperature increase well below 2°C and proposes efforts to limit the increase to 1.5 degrees. This would signify an even higher level of investment required for the next two decades.

In sectoral terms the investment estimate is split as follows:

- the buildings sector accounts for 30% of investments (USD 4 trillion)
- the transport sector represents the largest share of 60% (USD 8 billion)
- the industrial sector represents only 10% (USD 1.4 trillion) of investments

Despite the clear economic and environmental reasons for energy efficiency, the ambitious global targets are failing to translate into actual investments to meet the targets. At the EU level, investment targets are still well under the required rate to be able to achieve the set 2020 goals. Investment in buildings, which represent 40% of final energy use in Europe, is estimated to be about 50% below the required rate to achieve the goals.

The reason for the sluggish progress is mostly due to investment barriers that are unique to energy efficiency. Such barriers result in a weak demand for developing a project pipeline for energy efficiency and consequently weak supply of financing, with the former being the key driver of the process.

The following section summarizes some of the most prevalent challenges and barriers to deploying energy efficiency investments.

Investment characteristics	Description	Implication for investors/financiers[1]
(A) Heterogeneous projects	Energy efficiency constitutes a very diverse nature of measures including a wide array of technologies and measures that can be undertaken to enhance energy consumption efficiency. In addition, investments also differ in terms of end users, for example investments in buildings can be in properties that are commercial, public, public rental, private rental, owner occupied - each category with own distinct characteristics.	This makes energy efficiency an extremely heterogeneous sector with varying particularities that in turn affect the investment cycle (assessment, financing and monitoring). In addition, the diverse nature of available measures affects investor's ability to understand investments in terms of technical and operational performance as well as how they compare to other projects. This creates a challenging environment for standardisation of the investment process.
(B) Small scale projects	Energy efficiency projects are typically small scale in nature.	Financiers (debt or equity) are accustomed to financing large projects. High transaction costs associated with investments do not always make it worthwhile to focus on individual small scale projects. Aggregation is necessary to reach critical mass for the projects to become attractive from a financing point of view.

Investment characteristics	Description	Implication for investors/financiers[1]
(C) Cost saving principle and limited collateral	Energy efficiency projects differ from other energy investments as they are based on the saving principle as opposed to generation of revenues from an underlying asset, for example through sale of power. In addition, energy efficiency investments often lack clear tangible assets which could be used as a collateral.	Financiers are accustomed to traditional asset based financing models and less familiar with projects which do not have a clear cash flow projection from revenues from an underlying asset. Limited understanding of energy efficiency projects in conjunction with limited collateral value of investments create a high perception of risk among investors, which translates into high financing costs.
(D) High up-front costs	Energy efficient investments require a significant up-front cost due to high costs associated with efficient equipment or systems as compared to less efficient ones. Moreover, the size of capital outlay is correlated to the scale of efficiency improvements undertaken. Deep refurbishments in buildings or installation of more efficient industrial machinery can represent a substantial upfront investment.	High up-front costs creates weaker demand for energy efficiency investments and often results in less efficient performance levels as investors opt for investments with lower capital outlays to achieve shorter pay back periods (See E).
(E) Long pay-back periods	In order for projects to capture the whole economic energy efficiency potential, optimal levels of investments should be sought. The optimal level is considered to be the level of investmetns where the marginal cost of additional investment reaches the marginal benefit of the discounted steam of future energy savings. Such optimal levels of investments however typically leads to high up-front costs with very long pay-back periods.	In practice, however, "lighter" efficiency measures with shorter pay-back periods are preferred by investors/financiers due to liquidity preferences and therefore lower energy efficiency performance levels are achieved i.e. below the theoretical opptimal level. This is a particularly sensitive area for energy efficiency as it is significantly more difficult to attract long term financing for deep refurbishments due to long pay-back periods.
(F) Technical assessments & protocol	Due to the cost savings nature (as opposed to cash-flow generation), each efficiency project needs to establish base-line measurements on consumption based on which future savings are calculated. [15] As such, measurement, reporting & verification (MRV) and quality assurance processes are required continually throughout the investment period to establish the savings acquired and essentially associated investment returns.	From a financing perspective, this aspect adds ambiguity to the investment process. Similar to the heterogeneity aspect, investors are typically not familiar with such (MRV) processes and have to rely heavily on external consultants. Standardization of such processes would significantly reduce this risk and make financiers more comfortable with the process.

Investment characteristics	Description	Implication for investors/financiers[1]
(G) Split incentives	A situation typically in commercial real estate properties between the landlord and tenant, where neither the owner nor the tenant are incentivized to undertake energy efficiency measures.	The landlord is not incentivized to fund any efficiency measures as the benefits of lower energy bills are passed on the tenant who is liable for paying the bills. In the same manner, the tenant is also not incentivized to fund the upgrade as the long term benefit (the actual investments) stays with the owner.
(H) Special expertise (know-how)	As a result of the peculiarities listed above, energy efficiency project requires extensive expertise in technical, regulatory, procurement and financing aspect. Such expertise is required during the development stage as well as during the operational period.	Project developers often lack the required in-house expertise to develop projects and may forego such projects by focusing their efforts in other more familiar ventures.

[1]Financiers implies all parties supplying the capital required for the uptake of the energy efficiency projects through debt, equity, guarantees or a mix thereof. Such parties may be government public funding, development banks, private banks, private capital through own sources, corporations, institutional investors etc.

In order to deliver on the global targets discussed above, it is of paramount importance that the highlighted barriers and challenges are addressed and discussed jointly by all stakeholders invovled. A study commissioned by the European Commission and UNEP FI published in February 2015 has identified some important cross-cutting drivers that must be in place to create the necessary conditions for energy efficiency investments. Some of the identified drivers are:

• Strong, stable and well-enforced regulatory framework

• Common regulation and certification processes for buildings/energy management systems for the industry and SMEs

• Creation of open source databases on the building stocks/ corporate energy efficiency benchmarking databases

• Standardization of and adoption of best practice for: legal contracts, underwriting processes, procurement procedures, adjudication, measurement, verification, reporting, energy performance (contracts and certificates) and insurance

• Project rating system, enabling a transparent assessment of the technical and financial risks of buildings renovation projects and their contracting structure

• Use of public funds to address specific market failures and share risks with the private sector. In addition, public funds should be used for project development assistance to help bridge the gap in terms of expertise requirements during the development stage.

As noted earlier, energy efficiency is considered to be one of the most cost-efficient method of reaching global energy policies and curbing green-house gas emission. Moreover, energy efficiency presents an immense opportunity for investors with global cumulative investment forecasts between 2014 and 2035 reaching a volume of USD 13.5 trillion. Nevertheless, despite the demonstrated economic potential and environmental benefits, energy efficiency investments are still below policy targets predominately due to barriers characterizing the sector. Removal of such barriers would allow standardisation and aggregation of small and heterogenous projects thereby creating a healthy pipeline of proejcts and thus in turn increase investor confidence and investment appetite amongst financiers.

Qendresa Rugova is a senior consultant at Burg Capital – a corporate and project finance advisory firm. She specializes in renewable energy, emerging trends in clean technologies and financing models.

References:

- *Center for Climate and Energy Solution, Outcomes of the U.N. climate change conference in Paris, December 2015*
- *Christian Hudson, Anne Schopp, Karsten Neuhoff "Financing of Energy Efficiency: Influences on European Public Banks' Actions and Ways Forward", May 2013*
- *Energy Efficiency Financial Institutions Group (EEFIG), Energy Efficiency – the first fuel for the EU Economy - How to drive new finance for energy efficiency investments, February 2015*
- *European Commission, "Energy Efficiency and its contribution to energy security and the 2030 Framework for climate and energy policy" July 2014*
- *European Commission, Energy Roadmap 2050, 2011*
- *EU Energy Efficiency Directive (2012)*
- *IEA, Energy Efficiency Market Report, Market Trends and Medium-Term Prospects, October 2015*
- *IEA. (2014). Special Report: World Energy Investment Outlook*
- *Kapur, Hiller, Langdong, Abramson, EDF Environmental Defense Fund, "Show Me the Money, Energy efficiency Financing Barriers and Opportunities", July 2011*
- *Sweatman, Peter, Climate Strategy Partners "Financing Mechanisms for Europe's Buildings Renovation", January 2012*

Vesna Bukarica

Head of Energy Efficiency Sector
Environmental Protection and Energy Efficiency Fund

Supporting energy efficiency and renewables in Croatia – The role of environmental proetction and energy efficiency fund

About the Fund

Establishment and obligations

The Environmental Protection and Energy Efficiency Fund (the Fund) was established in 2003 under the provisions of the Environmental Protection Act and the Energy Act by the special Act on the Environmental Protection and Energy Efficiency Fund. The purpose of its' establishment was to secure additional resources for the financing of projects, programmes and similar activities in the field of conservation, sustainable use, protection and improvement of the environment as well as in the field of energy efficiency and renewable energy sources.

The Fund plays a key role in implementation of Croatian energy efficiency policy. According to the Act on Energy Efficiency, national energy efficiency policy is defined in National Energy Efficiency Action Plan (NEEAP) and the Fund is obliged to provide co-financing of measures defined in the NEEAP.

Incomes and allocation

The Fund is established as an extra-budgetary fund, which means that financial sources for the Fund's operation are not secured from the state budget. They are secured from different kinds of environmental fees, all of which are following the 'polluter-pays' principle. There are a number of environmental fees imposed of Croatia, e.g. fees for environmental emissions (SO2, NOx, greenhouse gasses), charges on burdening the environment with waste, special environmental charge for motor vehicles, etc. . Based on these environmental fees, the annual incomes of the Fund are at the level of approximately 200 million €.

The Fund allocates these incomes to environmental protection and energy efficiency projects implemented by state institutions, local and regional authorities, companies and entrepreneurs, civil society organisations and citizens. For that purpose, calls for proposals are published on annual basis, which define users and projects eligible for co-financing. Technical criteria that must be met by an individual project are carefully designed, in order to provide optimal impacts (energy efficiency improvements) in relation to incentive provided. Incentives can be awarded only for those projects that are not "business-as-usual", but that ensure better energy performance than prescribed by regulation and standards or better than what is considered to be a market average.

Financial incentives provided by the Fund may be in form of grant or interest free loan. However, although energy efficiency is gaining its momentum in the last few years in Croatia, it is still facing the usual barriers to a wider implementation – not fully recognised all the benefits resulting from improved energy efficiency and poor financial capacities of citizens and entrepreneurs. Therefore, grants remain the main form of incentives provided in Croatia for energy efficiency. Intensity rate of grants is usually up to 40% of eligible cost , however it may be even higher, up to 80%, if projects are being implemented in heavily underdeveloped areas of Croatia (e.g. areas of special state care, mountain areas, islands). This way regional cohesion policy is being implemented as well.

Investments in energy efficiency and renewables

The Fund's approach

Energy efficiency in Croatia still faces significant barriers that need to be addressed by appropriate actions. Having in mind the types of these barriers (availability of information, administrative burden and technical capacities for project development and preparation), the Fund, as policy implementer, is applying the approach that is best described with Figure 1.

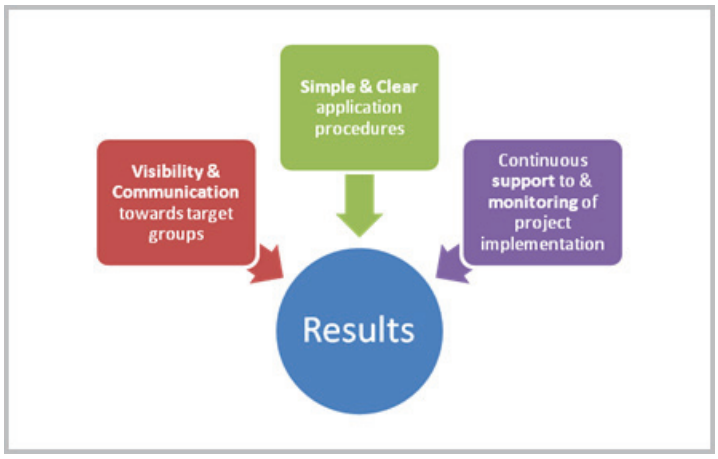


Figure 1. The Fund's approach in implementing energy efficiency programmes in Croatia

Linking strong promotional activities with easy application procedures and continuous support offered to project developers proved to be a way forward. Additionally, strict monitoring and controlling of project implementation is necessary in order to avoid possible abuse in the field.

Results

In 2015, the Fund has approved 127 million € for energy efficiency and renewables programmes. The allocation to different programmes is shown in Figure 2.

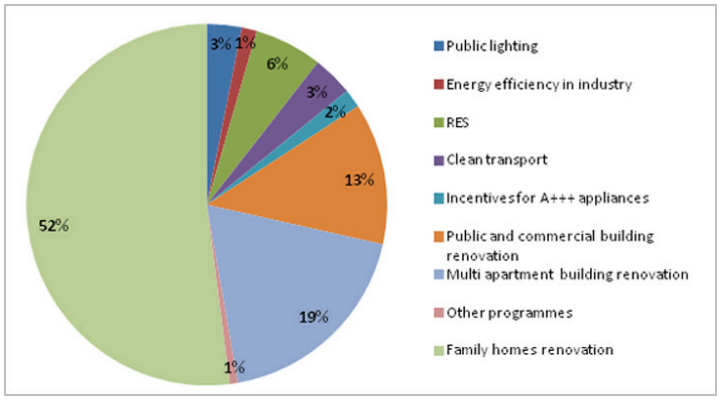


Figure 2. Allocation of the Fund's support in 2015

As can be seen from the Figure 2., the most of the Fund's support is awarded to projects in residential sector – single family houses and multi-apartment buildings. This should not come as a surprise, since residential sector is responsible for almost 1/3 of total final energy consumption in Croatia.

Figure 3. Examples on national promotion campaign for energy efficiency in residential sector

Residential energy efficiency programme is the best example for proving the effectiveness of the Funds approach; hence it will be briefly described hereafter. Before launching the subsidy scheme strong promotional activities were undertaken. First of all, a promotional video was prepared showing a motivational family story – an example of a successful renovation and aired on national television and via social media. Informative leaflets with information on energy efficiency and measures that can be financed were distributed to the citizens through different channels (building management companies, organisations of homeowners, consumer protection organisations, local authorities, regional energy agencies, etc.). More than 30 public events were organised throughout Croatia and finally, info office at the Fund's premises and toll free line for citizens were established as a form of continuous support to anyone willing to apply for subsidies or just wanting more information on possibilities for energy efficiency improvements in their homes.

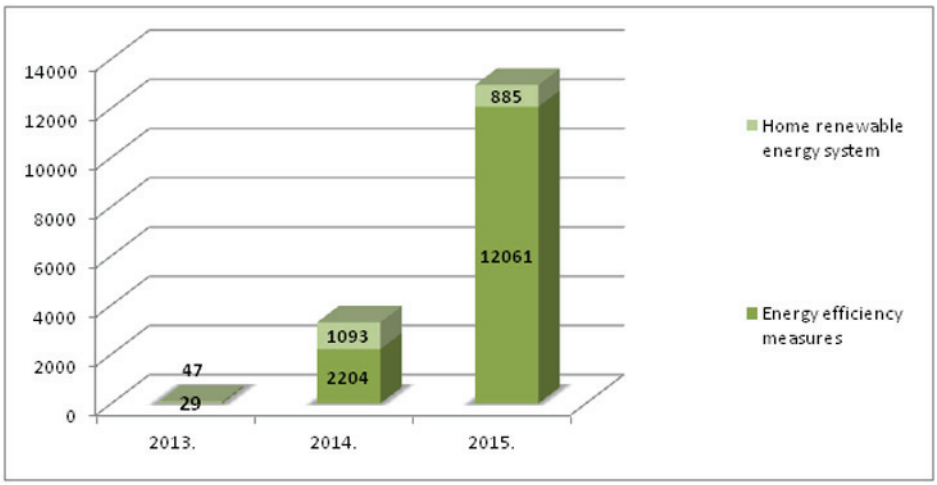


Figure 4. Increase of number of family houses included in the energy efficiency programme in the period 2013-2015

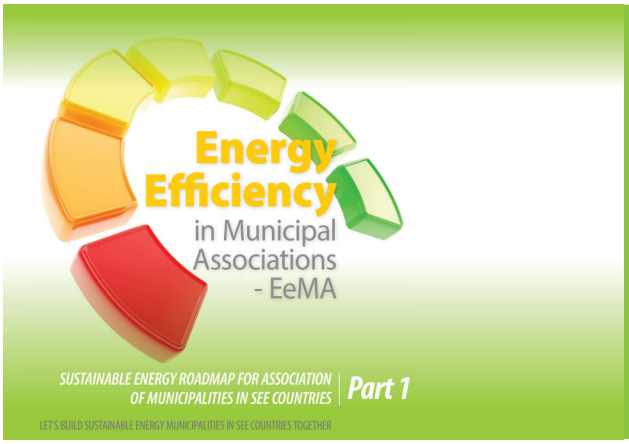
Furthermore, the design of the subsidy scheme was significantly changed in 2015. Namely, before 2015 the subsidies were available to homeowners only through local authorities (local authority would apply for subsidy to the Fund and, after the approval, it would announce call for citizens and perform the selection process). This approach has led to the situation that not all citizens of Croatia had an access to subsidies, but were dependant on

the willingness of their local authority to participate in the programme. Therefore, in 2015 it was decided that the Fund will become one-stop-shop for all citizens willing to refurbish their houses and benefit from state subsidies for that purpose. The results were exceptional – more than 9.300 citizens were awarded subsidies for energy refurbishment of their family houses. Approximately 13.000 energy efficiency and renewable energy measures are applied in those houses. The increase in the outreach of the programme, after its change, is shown in the Figure 4. Figure 5 shows an example of typical family house in Croatia before and after the implementation of energy efficiency measures. Benefits in terms of energy savings are clearly marked by energy class of the house, while economic benefits are in more than 700 € lower heating bills annually.

Figure 5. Example of a family house before and after refurbishment – hose has moved from energy class E to energy class C (160 kWh/m2 -> 54,5 kWh/m2)

Conclusion

There is no doubt that energy efficiency is a key to achieving sustainable energy development goals. However, it still needs to be heavily pushed by appropriate policy instruments. And these instruments need to be carefully designed in order to stimulate target group to action. It is often thought that financial barriers are those that need to be tackled first. However, Croatian example shows that right way forward is in comprehensive approach that will simultaneously tackle all perceived barriers – information, capacities and financing. Efforts should be especially made in providing sufficient and useful information which will serve as a basis for decision making. Information should contain information from already implemented projects in order to prove that energy efficiency really works in practice and has many “wins” to both individuals and society as a whole.



Dubravka Bošnjak
GIZ Project Manager &
Vesna Kolega
Energy Advisor

bos.dubravka@gmail.com
vesna.kolega@gmail.com

Energy Efficiency in Municipal Associations - EeMA

The Energy efficiency in Municipal Associations (EeMA) project supports the cooperation between Associations of Municipalities (AoMs) from South-East European (SEE) countries. AoMs from Bosnia and Herzegovina, Montenegro, Serbia, Macedonia (FYR) and Kosovo, have expressed their readiness and dedicated their efforts to strengthening their cooperation in the field of energy efficiency and renewable sources of energy. This also refers to their efforts to contribute to the reduction of energy consumption, increase of energy efficiency and reduction of carbon emissions.

The EeMA project is financed and supported by the German Federal Ministry for Economic Cooperation and Development (BMZ) and the Government of Switzerland, and it is implemented through the Open Regional Fund for Modernization of Municipal Services and Open Regional Fund for Energy Efficiency of the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ).

Aim of the regional cooperation is exchange of knowledge and experiences relevant for the introduction of measures for improving energy efficiency and reduction of CO2 emissions in SEE. Promotion of energy efficiency measures and the investment of efforts in increasing public awareness on energy efficiency (EE), as well as joint appearance of AoMs at regional and international events, contributes to strengthening their role.

The purpose of the project is to provide support in the organisation of the network and it is implemented through four work packages:

- Development of roadmaps for creating and increasing capacities of local governments to develop and implement their energy efficiency strategies/policies;
- Establishment of a mentoring and Peer to Peer facility between AoMs and municipalities involved in planning or implementing Energy Action Plans;
- Development of pilot-projects for municipalities with AoMs support by utilizing practical experience for implementation of local policies based on a cost-optimization model; and
- Supporting policy dialogue between AoMs and central governments.

As the final result of the joint work of all project partners and through the use of a regionally developed common methodology, development of the Sustainable Energy Roadmap for Associations of Municipalities in SEE Countries was concluded. The document is composed of two parts. The first part focuses on challenges, barriers and benefits in the complex process of development of Sustainable Energy Municipalities (SEM) in SEE countries. The

second is entirely dedicated to preconditions, requirements and advantages of joining the EU Covenant of Mayors (CoM) Initiative. The document also gives guidance on application of gender mainstreaming aspects in the energy efficiency sector.

Part 1
Challenges, barriers and benefits in the complex process of development of sustainable energy municipalities in SEE countries

Roadmaps and strategies are very often intended to guide implementation of changes, requiring support of all parties involved. The Sustainable Energy Roadmap for Associations of Municipalities in SEE Countries is a specialized type of strategic plan outlining activities that AoMs in SEE countries (Figure 1) can undertake in order to proactively support the development of Sustainable Energy Municipalities.

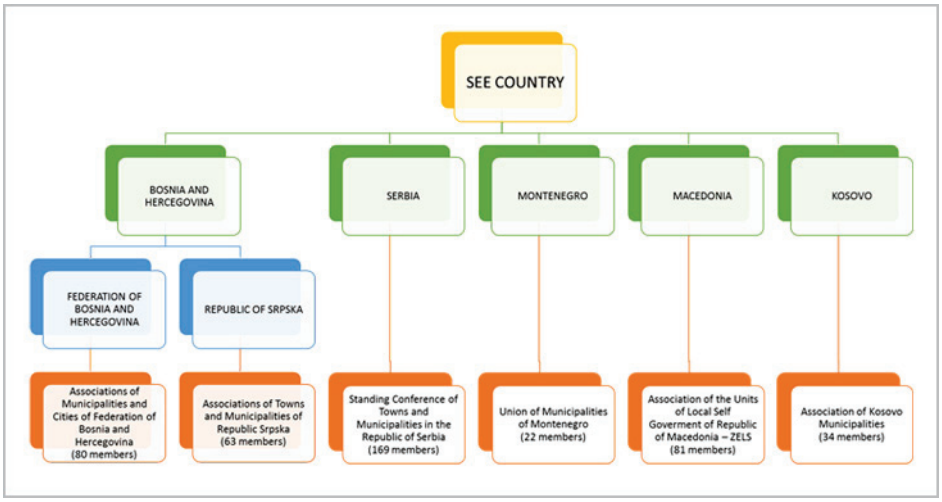


Figure 1: AoMs in SEE Countries

The Vision behind the Roadmap is development of sustainable energy local governance in SEE. This sustainability aspect also refers to the application of the Gender Equality (GE) principle understood and conveyed as paving the way to a sustainable better future. It is therefore one of the key values on which this Roadmap rests.

The Mission of the Roadmap is to provide clearer understanding of the local and regional context of the energy efficiency sector, as well as of the successful tools for developing SEM in SEE countries, based on EE, Renewable Energy Sources (RES) and environmental protection as imperatives of the 21st century.

There is a wide array of benefits that can be achieved as a result of fostering sustainable energy development of SEE municipalities. Some are tangible and readily quantifiable, while other are less so and it may be difficult to assign them a monetary value. Such are social cohesion and the sense of civic pride that comes with living in a green, successful and sustainable municipality. This, however, does not make these benefits less important in the context of development and sustainability.

Along with benefits come barriers and challenges facing sustainable energy development. Therefore it is crucial to assess the particular barriers affecting the sustainable energy progress in SEE countries. Actions to overcome these barriers should be tailor-made for different stakeholders. Accordingly, the policy mix will need to encompass a range of measures that, collectively address all interested parties (AoMs, Municipal Administrations, local authorities, State authorities, investors, owners, developers, etc.). This issue is thus suitably covered by the Roadmap.

The success of the implementation of recommendations from the Roadmap depends heavily on a coordinated commitment by a wide body of stakeholders responsible for its delivery, extending well beyond the traditional energy community. To ensure that these stakeholders make the necessary commitment, it is important that they, early on, gain an understanding of their own roles and opportunities.

Part 2
Preconditions, requirements and advantages of joining the EU Covenant of Mayors (CoM) Initiative.

Following the adoption of the EU Climate and Energy Package (2008), the European Commission (EC) took the unprecedented decision to directly involve local and regional decision-makers in the achievement of EU objectives. The local governments play a crucial role in mitigating the effects of climate change, all the more so when considering that 80% of energy consumption and CO2 emissions are associated with urban activity. After the adoption of the Climate Package, the EC launched the CoM to endorse and support the efforts deployed by local authorities in the implementation of sustainable energy policies.

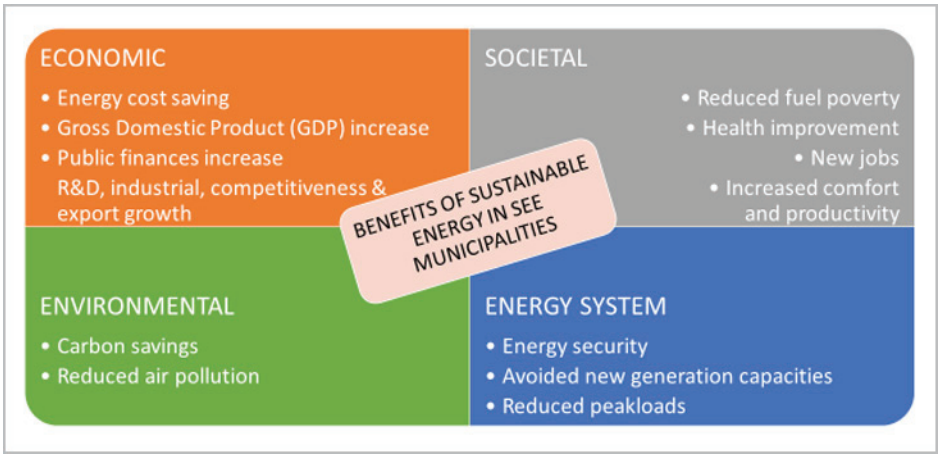


Figure 2: Benefits of Sustainable Energy Development in SEE Municipalities

CoM is a mainstream EU initiative uniting local and regional authorities in a common commitment to improve the quality of life of citizens by contributing to the European Community's "3x20" climate and energy objectives.

These are:

- A reduction in EU greenhouse gas emissions of at least 20% below 1990 levels;
- 20% of EU energy consumption to come from renewable resources;
- A 20% reduction in primary energy use compared with projected levels, to be achieved by improving energy efficiency.

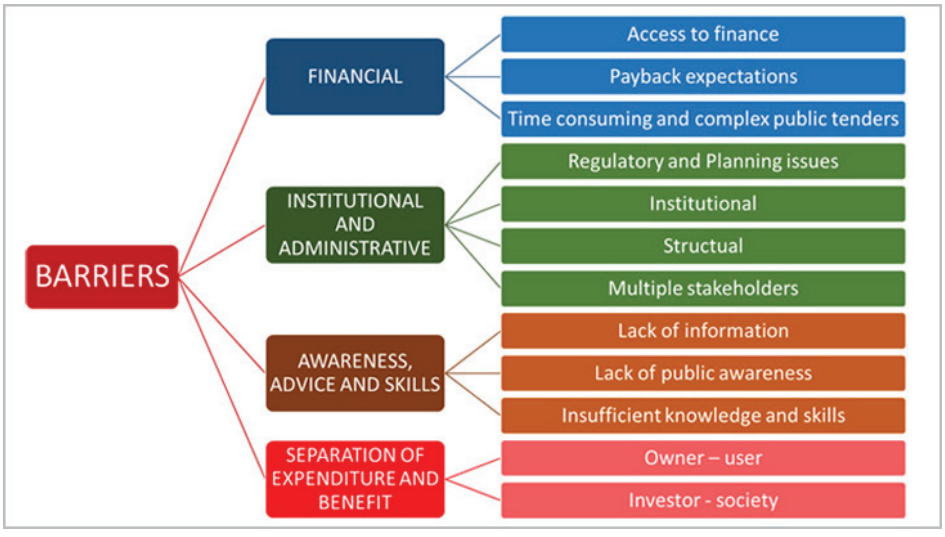


Figure 3: Barriers for SEM in SEE Countries

Signatories officially commit to submitting, within a year of joining the Initiative, a Sustainable Energy Action Plan (SEAP) in which they outline in concrete measures how they intend to reach the objectives. By joining the CoM on one side and creating Sustainable Energy Action Plans (SEAP) on the other, communities commit to base their sustainable energy development on renewable energy utilisation, energy efficiency measures and environmental protection.

By February 2016, the Covenant of Mayors was signed by 6.761 cities (number of inhabitants – 211.039.231). The interest of other cities to join the Covenant is extremely high. It is interesting to note that the Initiative spread beyond European borders and became global.

The general role of Associations of Municipalities within the CoM Initiative is to support its municipalities in several ways, i.e. by joining the CoM, finding high quality SEAP developers or supporting municipalities to develop SEAPs on their own, establishing CoM organisational structure in the municipalities, building SEM, implementing EE measures, projects and programs in public buildings owned or rented by the municipalities, implementing EE measures, projects and programs aimed at increasing energy and environmental efficiency in the city public transport sector, implementing EE measures, projects and programmes in the city public lighting sector, planning of city development based on the principle of energy-environmental sustainability, implementing continuous activities and campaigns in order to raise the awareness of citizens on the necessity of saving energy, always taking into account gender mainstreaming.

Actions that should be taken aiming at establishing SEM are divided into six main categories: strategic, legislative and regulatory, technical, fiscal/financial, communication/capacity building and research and development.

The final finding of the Roadmap is the definition of steps every municipality should undertake to become a SMART municipality in which process they will be supported by Associations of Municipalities.

21 steps to a smart see municipality

1. Public statement on being a SMART SEE municipality
2. Building a successful organisational structure, also by including the gender equality principle
3. Make use of international endorsement and support
4. Make use of the encouragement and best practice examples of other pioneers
5. Make use of CoM membership and SEAP development
6. Identification of measures for improvement of energy conditions in municipalities
7. Reduction of costs through energy efficiency and modern energy technologies
8. Useful tools made available for SMART SEE municipalities
9. Strengthening of municipal economic development
10. Cooperation among municipalities aiming at sustainable energy development
11. Citizen participation opportunities
12. Strengthening local economy by local engagements - local contractors
13. Savings in energy consumption and therefore costs through energy efficiency – recirculated into the local economy
14. Case studies/learning from other municipalities: Exchange of experiences and best practices
15. Tools available to help the monitoring of CO2 emissions on municipal level
16. Development of know-how in SMART SEE municipalities

17. Economic development through creation of new (green) jobs, also taking into account engagement of more women in the EE sector

18. Continuous education and public awareness campaigns: Knowledge is the power and gender equality is the only right road to sustainable future!

19. Identification of financial instruments for implementation of EE measures

20. Improvement of living standard in SMART SEE municipalities through reduction of energy costs

21. mprovement of overall quality of life in SMART SEE municipalities through SEM development, including through application of the GE principle

Roadmaps can be found at web pages of partners associations (English and local versions)

1. Association of Kosovo Municipalities
   Publikimet nga AKKAsociacioni i Komunave të Kosovës

2. Association of Cities and Municipalities FBIH
   http://www.sogfbih.ba/index.php?lang=ba&sel=56

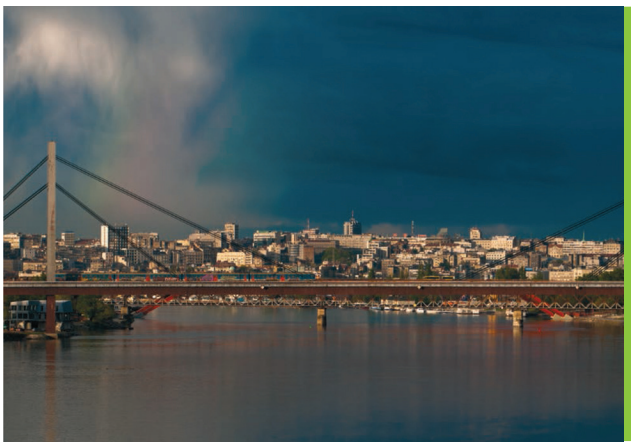
3. Association of Cities and Municipalities RS
   http://www.alvrs.com/v1/index.php/sr/usluge/usluge-savjetovanja-iz-energetske-efikasnosti

4. Union of Municipalities of Montenegro
   http://www.uom.co.me/?cat=7

5. The Union of Local Self-Governments (ZELS)
   http://www.zels.org.mk/Default.aspx?id=258715f0-12cc-4dc1-b56a-fe5c2b6196e8

6. The Standing Conference of Towns and Municipalities - National Association of Local Authorities in Serbia
   http://www.skgo.org/projects/front/Projekti

PROJECTS



Action Plan for Adaptation to Climate Change With Vulnerability Assessment for the City of Belgrade

Project: Action Plan for Adaptation to Climate Change With Vulnerability Assessment for the City of Belgrade

Component 5: Integration of adaptation to climate change into urban planning and development

Commissioned by: German Federal Ministry for Economic Cooperation and Development (BMZ)

Countries: Albania, Montenegro, Kosovo, Macedonia (FYR), Serbia

Duration: 2012–2015

Implementer

Secretariat for Environmental Protection is the implementer and organiser of project activities on behalf of the City of Belgrade.

Goal

The goal of this component of regional project was to integrate mechanism of adaptation to climate change into city management processes and urban planning in Tirana, Podgorica and Belgrade. The objective of the component was development and adoption of the Action Plan for Adaptation to Climate Change.

Context

In order to enable project implementation, the following has been established:

- Management Group, chaired by the City Manager Goran Vesić; the group comprises the following members: Secretary of the Secretariat for Environmental Protection Goran Trivan, Assistant Secretary Nataša Đokić, representative of GIZ Jakob Doetsch as Project Leader and Peter Heiland from German Consultancy Agency Infrastruktur & Umwelt;

- Working Group, composed of 31 representatives of city secretariats and public companies as well as other state and city institutions with work related to climate change.

The entire drafting process related to the action plan was implemented in a multi-departmental manner, having included active participation of all relevant departments of the city administration of Belgrade, with the support of international and national consultants. After the public hearing process and integration of the collected useful suggestions and comments, Assembly of the City of Belgrade adopted the Action Plan for Adaptation to Climate Change at its session held on October 23, 2015.

Challenges

Climate change as global challenge

Climate change is one of the greatest challenges we face nowadays. Climate on Earth is changing, so we can expect, inter alia, extreme weather conditions to become more frequent and powerful than those we faced in the past. Current forecasts for South-East Europe are already predicting greater climate variability. Increase of temperature, extreme weather conditions, floods and storms will have negative impact to life quality in cities in Serbia, and these are challenges we must face. Our cities must be well prepared to face the consequences of climate change, because they, being developed structures and presenting urban environment, are particularly vulnerable. At the same time, cities functioning successfully are a leading precondition for sustainable economic development.

If response to climate change is not systematically planned, costs for adaptation measures will be higher.

Continual development of strategic and planning documents containing forecasts of climate change is necessary to adapt urban structures in such a manner to minimise the impact of changing climate conditions and endangerment of urban environment. Being aware of that, Belgrade has developed this Action Plan for Adaptation to Climate Change with Assessment of Vulnerability.

Belgrade as a region – size of the city with regard to two other cities

A problem faced at the very beginning was to define the urban area which would be covered by the project. The concept implied focusing on city cores of three capitals, but Belgrade is different and more complex in many respects. The area of 322 hectares indicated an area of a region. When it comes to Belgrade as a city, it is actually an administrative area composed of 17 municipalities with a variety of mixed natural and spatial areas. It is only the city core that is characterised by urban structures, while the edges are characterised by rural structure of different properties. The Working Group decided that the project context should take into account different structures in parallel, and that it should observe all specificities.

Complex city structure

In administrative and organisational terms, Belgrade is also a very complex mechanism. Luckily, the city administration is very well organised and functional, regardless of its size. Well defined competences of authorities and departments have facilitated its functioning greatly. Certainly, a very important fact is that work of city administration is politically and organisationally supported by the city management. City Manager Goran Vesić, has chaired the Management Group, which provided safety and support to the process already at the very beginning.

Coordination

In the course of document drafting, the secretariat coordinated activities with the Working Group members. It was in permanent session and communication about certain issues and areas, and six joint meetings were held with representatives of GIZ, Infrastruktur & Umwelt (Germany), local experts and representatives of the Secretariat for Environmental Protection.

Developing the map and graph of all vulnerable receptors

It was particularly difficult to develop a vulnerability map. There were a lot of available maps and plans of different levels of detail, so that the scope of graphically presented locations and vulnerability was challenging. Two graphic layouts were adjusted along with defined need for further elaboration of new mapping process.

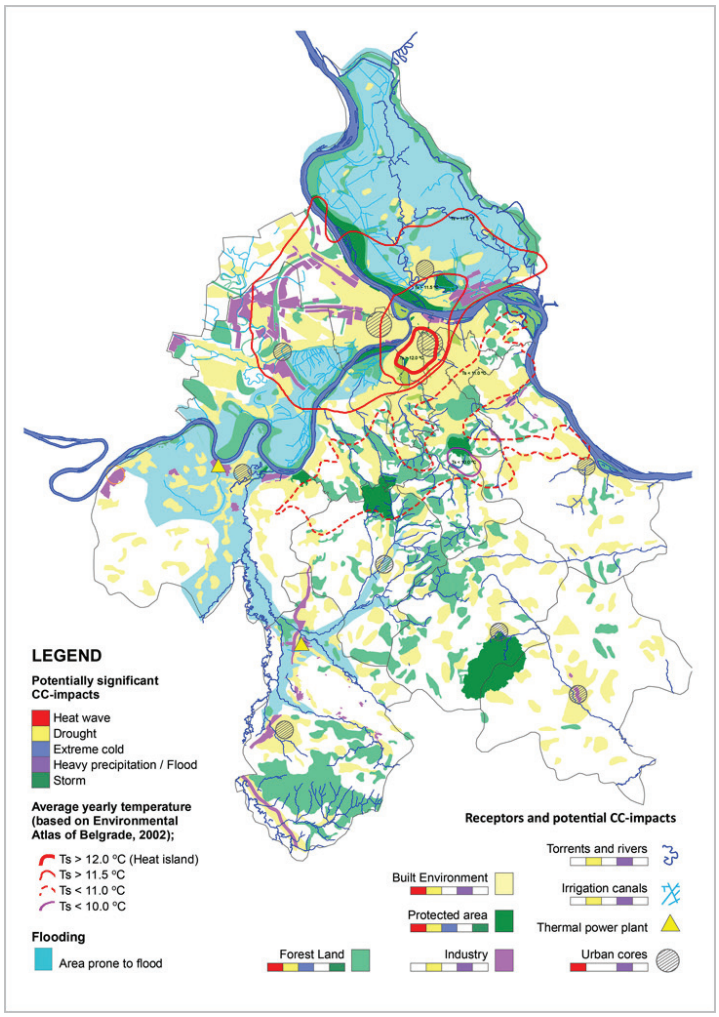


Figure 1: MP map = Spatial distribution of potential climate change impacts related to the highly vulnerable receptors within the administrative territory of Belgrade

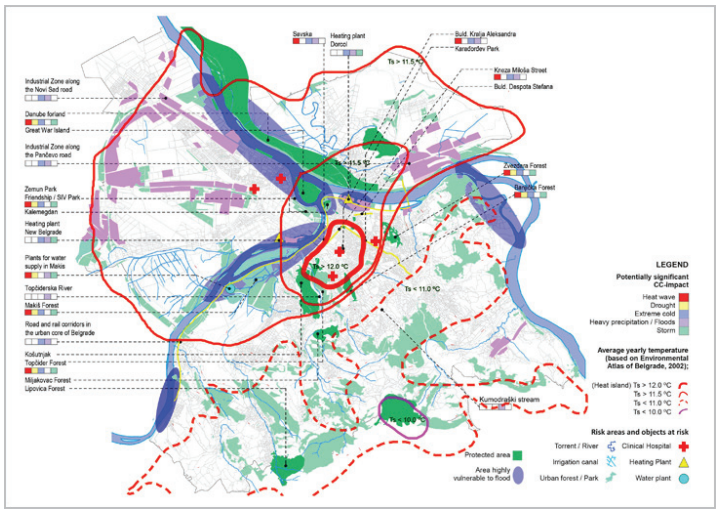


Figure 2: GUP= Spatial distribution of potential climate change impacts related to the highly vulnerable receptors within the boundaries of the area covered by the Master Plan of the City of Belgrade

The vulnerability assessment builds on the analysis of information about extreme weather events in the past and the assessment of the current vulnerability to extreme weather events in Belgrade, including spatial relevance with regard to extreme weather events, and mapping of current vulnerability in the administrative area of Belgrade.

The assesment of future risks and opportunities builds on an analysis of climate data for the city of Belgrade until now and an analysis of projections of climate change on the basis of modelling as well as on the results of the vulnerability assessment for the city of Belgrade.

The action plan includes a list of measures and activities that will be undertaken to adapt to climate change, including responsibilities, time frame, i.e. description of short–term measures and activities (until 2017); medium–term measures and activities (until 2020); long–term measures and activities (until 2025) and prioritisation of measures.

Based on the results of the vulnerability assessment, the working group explored adaptation options (fourth phase) and determined the need for action and selected measures (fifth phase) to develop an adaptation action plan for the city. The action plan contains measures and actions to adapt to climate change, including descriptions of each measure, potential locations, responsibilities, additional specifications (criteria like additional benefits or negative external effects), as well as prioritisation of measures (based on specific criteria).

The application of the multi-criteria decision analyses method, which involves the use of four criteria for defining priorities in the implementation of adaptation measures, has revealed that:

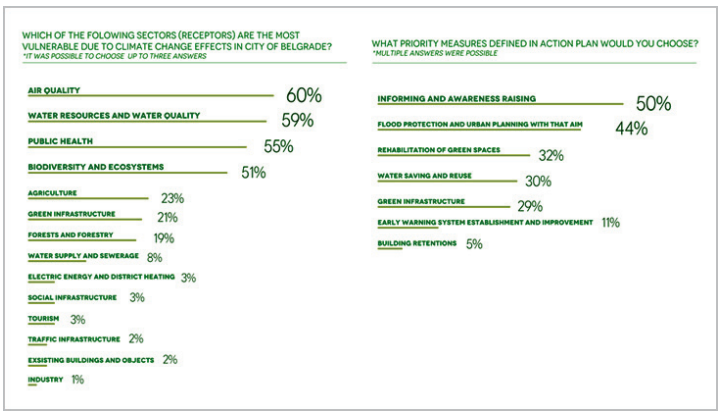
- protection from flooding and
- green infrastructure

are the two highest priority measures for the City of Belgrade. Next in order are high priority measures in different areas:

- establishment and improvement of early warning systems,
- dissemination of information and awareness raising, as well as other institutional and organisational measures,
- urban planning for flood protection,
- construction of retention basins, drainage, saving and reuse of water,
- establishment and rehabilitation of green areas and streets.

Importance of awareness-raising campaign

Towards the end of last year, using the funds provided by GIZ, an awareness-raising campaign was launched to point out the need of adaptation to climate change. In collaboration with the association Environmental Improvement Centre and company Smart Web Ltd, web page Klimatskepromenebeograd.rs was established and a public presentation of the action plan was organised at the Belgrade Youth Centre on November 19, 2015. Bilingual publication of the action plan was printed, and panel discussion 'New Horizons - Future Starts Now' was organised during international green culture festival Green Fest. Promotional materials and short animations, which are yet to be presented on television, were prepared. The content can be found on the website. A survey was developed, with more than 1,000 respondents participating so far, just to assess the level of knowledge about climate change and to hear the needs of future implementation. It is worth mentioning that more than 70% of respondents have identified the need of awareness raising as one of activities which has to be implemented.



Nataša Đokić, Assistant Secretary for Environmental Protection

The biggest challenge of projects like this one is sustainability. Unfortunately, in our region, there are plenty of examples that activities continue until such time as donors are present. When donors go activities can reduce and eventually stop. Our intention is to continue with the activities on implementation and establish a mechanism for permanent monitoring of progress.

I see great potential in the team that will continue to work on monitoring of implementation and I expect new ideas and projects as upgrade of the entire process. We are aware that even such well-developed document as this one need to be further worked on, primarily through coordination among departments, because the matter of climate change is not a matter only of relevant secretariat, but also of overall readiness of the city infrastructure as a response to challenges.

Goran Trivan, Secretary of the Secretariat for Environmental Protection

It is important to stimulate people to behave as modern societies do. Situation in the environmental area is the best indicator of regulation of a society – regulated societies deal with risk assessment and control, unregulated ones deal with consequences. It is the crossroad where we are: we want to be a regulated society, but we deal very little with assessment, although its importance is indicated by the area of environmental protection. It is care for climate change what makes the best example, and I do not expect an easy way. The Secretariat for Environmental Protection has proved through its work so far that it has quality in the development of strategic documents, but it has also proved to be consistent and persistent in implementation thereof.

Goran Vesić, City Manager

The importance of this document for Belgrade is great, taking into account that we are making the first step forward towards the establishment of a system for future events which are not too optimistic. Climate change will be ever more important in our everyday life and in the city business life. That's why it is very important that we are ready as a city for what we will encounter in the decades to come. Once inflicted, damage can put a lot of pressure on generations and generations of Belgrade citizens. It is important that we go on, that the action plan does not become a dead letter, which has often happened in the past. Everything we have done will have sense only if implemented in practice.

In order to achieve results, it is necessary that competent institutions and other stakeholders have multi-departmental approach, and we are working hard on that already. Public companies and line secretariats will develop their own plans, which will impose certain obligations.

It is difficult to change the attitude and level of our social consciousness that we first need to get rich to protect the environment, or that climate change is a problem that only rich countries can deal with. It is actually the opposite – timely assessment and forecasting and investing into prevention is a condition for development.

Peter Heiland, Consultant, Infrastruktur & Umwelt (Germany)

As we know from climate projections, Belgrade will increasingly suffer like most large cities worldwide from consequences of climate change, such as increasing heat waves, flash floods and water scarcity. Especially in rapidly growing cities, the adaptation capacities are limited due to high development pressure but there are many existing options to adapt, at least for new developments.

The principles we tried to build on in the climate change adaptation project for Belgrade, as well as in the parallel processes in Tirana and Podgorica, are the following:

- Adaptation to impacts of climate change in a city like Belgrade needs no new invention of the wheel. We can use many known actions.
- A comprehensive, trustful cooperation of many different disciplines is needed.

- It has to be done by hundreds of different actors, in their specific fields, together.
- It needs communication, communication, communication – to raise awareness.
- It has to be started with simple measures and then with more sophisticated ones. Now!

One success factor of the Belgrade process developing the adaptation strategy and action plan was the early agreement of participating actors that climate change needs to be integrated as cross-cutting issue in all urban fields of action. It tackles health, social, economic and environmental impacts. This requires awareness of the problem and a participation and cooperation culture within the city administration and stakeholder groups. A second success factor is the strong political and administrative support in all relevant departments in the City of Belgrade that has formed the ground for a sound process. Thus, straightforward adaptation options could be developed, ones that are in most cases no extra or expensive task, but shall become part of daily administration, daily planning procedures, daily public campaigns and political decision making. Mainstreaming towards all relevant stakeholder groups is the most important, to make the approach sustainable, to implement all measures in time and to create the intended adaptation effects.

SERBIA

EPS, KfW developing green energy together

January 27

Electric Power Industry of Serbia (EPS) is an important partner of KfW Development Bank in the frame of cooperation with the country, said Arne Gooss, Director of Belgrade office of the German financial institution. He added projects with the company have been ongoing for a decade. In an interview to magazine EPS Energija, he stated the utility is improving performance on market basis.

The bank plans to invest EUR 126 million in environmental protection and renewable energy sources, Gooss stressed. The main project in the pipeline is for the transport of ash in thermal power plant Nikola Tesla A near Belgrade, KfW's official explained. He said 60,000 residents in the vicinity will be protected from serious pollution. The funding volume extended by KfW amounts to EUR 45 million, with loan contracts in preparation and the aim to start implementation this year, in the words of Arne Gooss.

In renewable energy segment, KfW's chief in Serbia underscored the rehabilitation of the hydropower plant in Zvornik is planned to be finished in 2019. KfW provided EUR 70 million for the project. Also, Construction of wind farm Kostolac should be launched this year. The assessment is done and the bank funds the endeavour with EUR 81 million.

"The focus of the cooperation for KfW, which acts under the auspices of the Federal Ministry for Economic Cooperation and Development of Germany, is in the area of environmental protection and on promoting sustainable economic development. In the segment of promotion of sustainable economic development, KfW provides local banks the credit lines for municipalities, enterprises and citizens to invest in increasing energy efficiency and renewables as well as general investments in agriculture and in the community. One of the new projects concerns credit lines for eco-loans, intended particularly for small and mid-sized enterprises in Serbia to invest in boosting energy efficiency," Goos stated.

Works on roads to wind projects in Alibunar underway

February 4

The Municipality of Alibunar in Serbia's northern province of Vojvodina has signed an agreement with Belgian-based company WindVision SA/NV for funding and conducting preparatory works for the construction of two wind farms, Dnevnik newspaper's portal reported. The project is for the construction and renewal of unclassified roads of 60 kilometres in order to transport equipment and turbines.

The document was signed by municipality chief Predrag Belić and the company's project manager Lazar Lazendić, who said the agreement includes issue of all necessary permits. Belić said the upgrade of the secondary roads network is interpreted as a donation by the investor.

WindVision said earlier it plans to construct wind farms with a capacity of 99 MW and 75 MW near the town of Alibunar, one 220/35 kV power substation and a transmission line. The European Investment Bank and the European Bank for Reconstruction and Development said that they are considering the possibility to fund the bigger of the two projects, alongside different investors. The plant will be operated by WindVision Windfarm A, registered in Serbia and owned by WindVision Holding BV. WindVision was founded in 2002 and it operates in eight countries in Europe and Africa, according to information on its website.

Draft law produced on cut in greenhouse gas emissions

February 9

Minister of agriculture and environmental protection Snežana Bogosavljević Bošković said obligatory monitoring and reporting on industrial emissions of greenhouse gases is included in the new bill on the reduction of emissions. The draft law was created within a project from 2012 funded by the European Union through Instruments for Pre-Accession. The bill, planned for adoption in Serbia's parliament this year, is the first in the area of climate change, she said at the session of the National Council on Climate Change.

Opening the meeting, the minister said the aim of the gathering is to analyze activities and results from 2015 and to discuss plans for this year. Work in the area of climate change should be improved and made more transparent and efficient; it should be created so that it meets the needs, from the aspect of the demands from the international community, for the process of harmonization of the national legislation with that of the European Union, but also for a sustainable and competitive development of Serbia›s economy, Bogosavljević Bošković underscored. She stressed that the authorities produced the first updated biannual report and the second national communication of the country›s obligations towards the United Nations Framework Convention on Climate Change (UNFCCC). The minister said the documents give an assessment of the situation in greenhouse gas emissions, the expected trends from 2020 to 2030, and the options to reduce the emissions.

Snežana Bogosavljević Bošković reminded Serbia published its Intended Nationally Determined Contributions (INDCs) for reductions in greenhouse gas emissions and delivered them to UNFCCC as the first state in the region and one of the first ten in the world.

Brodarevo hydro projects study back in procedure

February 15

Ministry of Agriculture and Environmental Pr otection of Serbia renewed the procedure for the permit to Canadian company Renewable Energy Ventures d. o. o. (REV) for hydroelectric power plant projects close to the border with Montenegro. Non-governmental organization Euromost said both governments are obligated under the Espoo Environmental Impact Assessment Convention to exchange information and monitor whether any cross-border project can cause damage for the environment in the other country. Euromost said it asked the Municipality of Bijelo Polje in Montenegro, as well as the state authorities, if they were informed on the developments, according to a report on CdM portal.

In September, the Administrative Court of Serbia abolished the Serbian government's decision from 2013 to give consent in relation to the environmental impact assessment study. The Serbian ministry said on February 4 the investor filed an application to get consent for the study for the projects of Brodarevo 1 and Brodarevo 2 on Lim river in southwestern Serbia. Public consultation and presentation of the study is scheduled for March 4 in the Serbian border town of Prijepolje. REV is a subsidiary of Reservoir Capital Corp., traded on the TSX Venture Exchange in Toronto.

Inventor designs hydraulic ram irrigation pump

February 16

An innovator from Belgrade, capital of Serbia, created his own environmentally friendly water pump which he says consumes no energy, has no engine and works without electricity. The system is intended for irrigation, Miloš Jakovljević told Tanjug agency, adding only 3% of agricultural land in the country is covered, while advanced states have 68%.

The inventor said the problem is how to direct the water flow. In his words, one of the best solutions are hydraulic ram water pumps. He designed several types – two-stroke systems use water from springs, while large ones, with six strokes, are run by river water.

In Jakovljević's words, his irrigation systems are especially suitable for the hillside, such as in east and west Serbia. He based the solution after his prototype which is located in Sanski Most in Bosnia and Herzegovina, where for the last 25 years it transports water 185 metres up and 2.5 kilometres away.

SEEPEX launches Serbian Day-Ahead market

February 17

The South East European Power Exchange said it started the Serbian Day-Ahead market, with 1,925 MWh being traded on the first day. Baseload, the average price of all hourly prices of the day, came out at EUR 23.83 per MWh.

The settlement was slightly below neighboring power markets with market operators OTE, OKTE and HUPX settling Czech, Slovakian and Hungarian day-ahead baseload power, respectively, at EUR 25.51, while OPCOM cleared its Romanian equivalent at EUR 24.78

per MWh, Platts reported. In comparison, the recently launched Croatian power exchange CROPEX settled baseload power for next-day delivery in Croatia at EUR 29.21 per MWh, according to exchange data.

The bourse, known as SEEPEX, is part of a regional power trading solution for the region. "The smooth launch of the Serbian Day-Ahead market is a cherry on the top of the liberalized power market in Serbia. At the same time, this is an important signal for the electricity market in South Eastern Europe as SEEPEX is the first organized market place in the region that provides a high level standard both in terms of trading and clearing infrastructures", says Miloš Mladenović, its managing director.

"Clearing and settlement is performed by European Commodity Clearing (ECC)."

SEEPEX is a joint venture of the Serbian transmission system operator Elektromreža Srbije (EMS) and the European Power Exchange EPEX Spot. Operations rely on the trading system ETS, used by EPEX Spot for operating its own markets in Central-Western Europe. SEEPEX organizes markets that are optional, anonymous and accessible to all companies satisfying admission requirements, the press release said. Clearing and settlement is performed by European Commodity Clearing (ECC). This also allows for an efficient and fast adherence to existing market coupling initiatives such as the 4M Market Coupling or the Multi-Regional Coupling, already covering 85% of European electricity consumption, the press release said.

EMS is a public company fully owned by the state, established under Serbian law in 2005. EPEX Spot SE and its affiliates operate organised short-term electricity markets for Germany, France, United Kingdom, the Netherlands, Belgium, Austria, Switzerland and Luxembourg; markets representing 50% of European electricity consumption, the statement adds. EPEX Spot is a European company (Societas Europaea) in corporate structure and staff, based in Paris with offices or affiliates in Amsterdam, Bern, Brussels, Leipzig, London and Vienna. More than 280 companies have traded 566 TWh of electricity on EPEX Spot and its affiliates in 2015. EPEX Spot is member of EEX Group, part of Deutsche Börse.

With the fully-fledged trading and clearing solutions distilled from best practice in Central Western European power markets, Serbia will be at the forefront of the region providing the SEEPEX as an efficient role model for all future cooperation between transmission system operators and power exchanges, in the words of Nikola Petrović, EMS general manager, and Jean-François Conil-Lacoste, chairman of the Management Board of EPEX Spot.

Interenergo d. o. o., Ezpada s. r. o., Electric Power Industry of Serbia (JP Elektroprivreda Srbije), EFT AG, and GEN-I d. o. o., signed the agreements to become members of the market.

Lawmakers pass environmental set, introduce Green Fund

February 19

The National Assembly of Serbia adopted a legislation package regulating the sectors of environmental protection and agriculture, the responsible ministry said on its website. The changes to the Law on Environmental Protection envisage the formation of a budgetary Green Fund, among other solutions. The Law on Waste Management was also amended with the aim to help economic development, provide continuity in the operation of facilities eligible for integrated permit and in the system of waste management financing. Control over special waste streams and the circular or green economy foundations were also included, the statement said.

The mentioned facilities will be able to operate from the end of the test phase until integrated permit is obtained. The Law on Nature Protection was amended to authorize the Ministry of Agriculture and Environmental Protection to give consent on sectoral plans and programmes for the use of natural resources in protected and ecological network areas. The concept of geopark was introduced as a clearly defined territory where geoheritage structures are protected, secured, presented and promoted.

Amendments to the Convention on Environmental Impact Assessment in a Transboundary Context, or Espoo Convention, were ratified, the press release adds.

Serbia has 970 buildings with energy passport

February 22

Central Register of Energy Passports (CREP), created according to best European practice, is the firs step of certification of buildings and a significant segment of energy efficiency improvement, according to participants of a thematic event in the Serbian Chamber of Commerce and Industry. There are 970 buildings with an energy passport in the country, while less than 200 are listed in CREP. Although it is still not a legal obligation, the aim is to make the register mandatory in order to enable Serbia to build a clear database of the residential sector, estimates on energy expenditure and the possibilities for savings, participants at this month's second workshop stated.

Jasminka Pavlović, head of the energy efficiency and construction department in the Ministry of Construction, Transport and Infrastructure, said CREP is the basis for decision making about energy refurbishment of existing buildings. They are rated between A+, as the most efficient category, and G.

Zumtobel moving project bureau to Serbia

February 23

Prime minister Aleksandar Vučić met Ulrich Schumacher, chief executive of Zumtobel Group AG, supplier of integral lighting solutions, to discuss further successful cooperation and investment prospects. The Austrian company decided to move its project centre for Central and Eastern Europe from Poland to Serbia. After the first meeting with Schumacher in November, Zumtobel donated advanced street lighting to Niš and the capital city, the government in Belgrade said.

"There are plans for expansion of operations of the regional centre to entire Europe, Austrian group's chief Ulrich Schumacher said."

The premier pointed out the government aims to improve economic relations with Germany, and expressed confidence that the structural reforms will contribute to the arrival of new German investments. Thanks to economic reforms, but also companies such as Siemens, Tönnies, Zumtobel and many others, Serbia is on the right path to economic recovery, he concluded.

The Austrian group's head said the reasons for the decision were Serbia›s favourable geographic position, tax system, highly-skilled and well-educated workforce, capable of becoming part of big companies. There are plans for expansion of operations of the regional centre to entire Europe, Schumacher said. An ad for jobs in the company is open until March 4 for 15 electrical engineers and architects. In the second phase of development, the company plans to hire another 50 Serbian university graduates, according to the statement.

BioRES to hold training at RENEXPO in Belgrade

February 25

RENEXPO Western Balkans published an invitation for training conference Sustainable Regional Supply Chains for Woody Bioenergy, which is part of BioRES project activities funded by the European Union's Horizon 2020 research and innovation programme.

During the course trainers will transfer knowledge and experiences on biomass potentials, methodology of different approaches to stakeholders, and development possibilities. Also, attendants will learn about quality assurance and verification of sustainability requirements. The training conference will take place on Thursday, April 21, from 9:30 to 13:00 as part of the programme of international two-day trade fair RENEXPO Western Balkans in Belexpocentrar, Belgrade.

KOSOVO

No news

MONTENEGRO

CGES invested EUR 42 million in electricity grid

February 8

The interest of regional and international companies in Montenegrin Power Transmission System (CGES) is an important indicator of the company's quality and its position in the overall market, the Ministry of Economy told Dnevne novine newspaper. The company has so far invested over EUR 42 million in the local grid, Mina-Business reported. Ministry adds great interest in the company may be attributed to the strong investment cycle which began in 2011, and especially the project of electricity interconnection between Montenegro and Italy via submarine power cable.

The project will connect the national grid with the Western European electricity market and provide more reliable distribution to consumers and many other benefits, explained the ministry. The 400 kV power line Lastva–Pljevlja and substation Lastva is part of the project. One of the most demanding

projects was the construction of 400 kV transmission line Podgorica–Tirana to improve the connection with Albania, and also within the second zone of the Union for the Co-ordination of Transmission of Electricity (UCTE), the article said. CGES invested EUR 11 million, accompanied by construction of substation Podgorica 5, worth almost EUR 2 million.

"The project will connect the national grid with the Western European electricity market and provide more reliable distribution to consumers and many other benefits, explained the ministry."

The Virpazar waterworks was supplied with a 110/35 kV facility of 2x20 megavolt-amperes, fit into transmission network by connecting to the 110 kV power line Podgorica–Bar. The project improved power supply in Virpazar and Zeta. The investment was EUR 2.77 million, the ministry said. CGES expanded the substation in Andrijevica, in the country's north, with an investment of EUR 1.78 million.

Submarine interconnection helps set energy hub

February 12

Peter Sanfey, deputy director of the European Bank for Reconstruction and Development, said investors demand reforms in Montenegro aimed at the rule of law, real estate development and tax policy, with privatization as one of priorities, according to a report by agency Mina-Business.

Giulio Moreno, head of the institution's office in the country, said he believes Montenegro will become an energy hub of the region within two years. „Installing the power cable between Montenegro and Italy, which is to be completed by the end of next year or in early 2018, is very important in this regard," said Moreno.

Last year EBRD launched 13 projects in the country, funded by a total of EUR 99 million, bringing total investment to EUR 538 million. Since the bank operates on the basis of co-financing, it mobilized more than EUR 1 billion, according to Moreno. He added the portfolio includes the energy sector, as well as financial institutions and infrastructure. "Last year we invested more than it was planned by the budget. The focus was on energy with two important projects. One of them is the first wind power plant in Montenegro, the project on Krnovo hill worth more than EUR 130 million," Moreno said. The second endeavour is the construction of a small hydropower unit on the Bistrica river, worth EUR 5 million.

Several energy projects are in the pipeline in cooperation with the Electric Power Company of Montenegro – EPCG and the Montenegrin Power Transmission System – CGES, EBRD's official said. The completion of the smart electricity meters installation is planned with the main utility. He stressed the bank's strategy for the next four years won't differ much from the current document for Montenegro. In his words, the main pillars are the expansion of the economic base, improving competitiveness and security of power supply and energy efficiency.

Programme Energy Wood 2 continues

February 12

Ministry of Economy said it is implementing a project aimed at establishing a financial mechanism for providing interest free loans for households for purchase and installation of modern biomass heating systems.

Citizens have an additional opportunity to apply for interest free loans in following banks: Atlas, Hipotekarna, Hypo Alpe-Adria, NLB Montenegrobanka and Prva banka, according to a statement on the ministry's Directorate for Energy Efficiency. Individual loans range up to EUR 3,500 euros for households, with a maximum repayment period of five years and zero interest rate. Under the Energy Wood 2 programme, 284 heating systems were installed. Around 300 interest-free loans are expected to be used for the purchase and installation of additional number of modern biomass heating systems.

The ministry said in October it received a grant from the Government of Norway in the amount of EUR 240.000 with the aim of implementing project Energy Wood 2, which will provide interest-free loans for purchase and installation of modern biomass heating systems for pellet and briquettes.

CROATIA

Electrifying refugee households with solar panels

January 27

Five families in Karlovac county in central Croatia got electricity, but not from national power utility HEP Group, but thanks to a pilot project by the Environmental Protection and Energy Efficiency Fund (FZOEU), the United Nations Development Programme and the regional authority, which hosted the presentation. Novosti, Croatian weekly magazine and portal published by the Serb National Council, reported solar systems were financed with HRK 303,000 (EUR 39,800), from which **78% was provided by the fund.** The county funded 15% of the project and UNDP gave the rest. Practice showed connecting the isolated households to the grid isn't profitable, but that this way they can produce their own power. The area was devastated during the war and villages remained isolated from infrastructural systems for two decades since the cessation of hostilities.

This way another 60 families throughout the country will get electricity by the end of the year. „It may not seem as big investment, but for the people who were without power it surely means a lot. We are ready for similar projects to come, as unfortunately there are still households out of reach of electricity supply," head of Karlovac County Ivan Vučić said.

Sven Müller, chief of FZOEU, said he hopes the 60 other families will opt not to leave the areas where so far they didn't have basic living conditions. People who are secluded from the power grid got the opportunity for the first time to reach a minimum standard of life with a modern and available technology, to finally have electricity at home, he stressed. „I wish HEP can open its eyes and understand it should, actually, continue these activities. From its basic earnings it is able to, much easier than the county and the fund, and I believe HEP will change its stance on renewable energy sources, which is necessary. We also expect a cadastre of such households to be produced so that these activities can be continued," Müller said.

„The people are the centre of development and the centre of our profession, and the people who live in rural areas are in several times more unfavourable position than the rest of the population, because they don't have access to electrical energy," said Sandra Vlašić, who leads UNDP's office in Croatia. „New technologies make it possible much cheaper than by a classical extension of the power grid, and such a solution is, environmentally, several times more favourable, as it reduces carbon dioxide emissions to the atmosphere. By utilizing domestic technology we simultaneously stimulate maintaining green jobs in Croatia."

> *„We believe everyone in Croatia who still lives without access to power in the areas where the grid was destroyed in the war will soon get solar systems enabling access to electricity just like for all other citizens and that this way we will contribute to the reduction of regional and social inequality in Croatia," said Sandra Vlašić, who is heading UNDP's office in Croatia.*

UNDP's Mislav Kirac, who oversaw operations on a daily basis, said the people are thrilled they can finally own a refrigerator, to listen to the radio and watch television, to use a washing machine, and for free. The solar systems include batteries with storage for three days for the events of fog or other bad weather. The equipment will for the time being remain in county's ownership so that the people wouldn't need to maintain it by themselves. For the objects several kilometers away from the power grid, solar systems are up to 25 times cheaper than building power grid close to the facility, taking into account the total cost of ownership in 25 years, the lifetime of the equipment and system maintenance, according to UNDP. „We believe everyone in Croatia who still lives without access to power in the areas where the grid was destroyed in the war will soon get solar systems enabling access to electricity just like for all other citizens and that this way we will contribute to the reduction of regional and social inequality in Croatia," Vlašić added.

Life without electrical energy, refrigerator and television is a reality for several thousand houses of former refugees in Bosnia and Herzegovina. Returnees to the village of Očijevo near Martin Brod in the country's west lived without power for 14 years after the civil war ended and they came home! The grid had been destroyed, and the electric power company couldn't break even in the project to install a line and substation for just 30 households 20 kilometres away from the town of Drvar. So the people relied on lanterns and candles, until the United Nations Development Programme secured solar panels to be installed through its Green Economic Development project.

Israel's Enlight invests in wind power plant

January 28

Eurocom Group's subsidiary Enlight Renewable Energy acquired 90% of the construction project for the wind power plant Lukovac, located nearby the Adriatic port of Split. The Israeli investor will take over for a total of USD 8.3 million (EUR 7.42 million), said a report by Seebiz.eu. The plant has the capacity of 49 MW.

Eurocom is one of the biggest private holdings in Israel, operating in communication and real estate and other segments, the article said. The wind power project was developed by WPD Enersys, registered in Dubrovnik and owned by Željko Samardžić. Bloomberg learned from the Israeli investors they estimate the future project at EUR 63 million and that they are in search for partners. The wind power facility is being developed for several years in the municipality of Cista Provo. Domestic media said the impact assessment study got the green light and that an agreement was made with market operator Hrote about power purchase for 14 years. The Israeli company said the project planning phase should be complete in the first half of this year.

EU funds development of hybrid solar cells

January 28

A team of scientists from the Ruđer Bošković Institute presented the project 'Titanium Dioxide Nanostructures for Photovoltaic Cell, the Professional Development of Young Researchers / Postdocs'. The activities are financed by the European Social Fund with HRK 1.9 million (EUR 250,000) from the seven-year period through 2013. The 15-month project lasts until the end of September.

> *"The young scientists will be contacting potential users in the manufacturing sector, said project lead Davor Gracin and added mentors will especially focus on education in creating and running projects and knowledge commercialization."*

The group of five researchers is creating hybrid organic-inorganic photovoltaics which may be applied, inter alia, in production of sensors and catalyzers. The young scientists will be contacting potential users in the manufacturing sector, said project lead Davor Gracin and added mentors will especially focus on education in creating and running projects and knowledge commercialization. Also, team members will be coached in soft skills, human resources management, intellectual property, and process of innovation, the institute's article said. The basic aim besides seeking innovation is to create preconditions to include young scientists into the European Research Area.

Čakovec waste utility acquires third hybrid truck

January 29

The Environmental Protection and Energy Efficiency Fund (FZOEU) granted 40% of the funds for the purchase of a hybrid vehicle for the transport of urban waste in Čakovec, town in Croatia's north. This is the third such truck in Čakom, the local utility company, and it was payed HRK 737,200 (EUR 96,800). Equipped with automatic identification of load transport and tracking system, it will be used for mixed and biodegradable waste.

The fund's chief Sven Müller said it supports projects and programmes aimed at environmental protection, sustainable business, and the introduction of green technologies. Čakovec and Čakom are among the

leaders in this area, and with this example they showed that, besides the fact they responsibly manage waste, they also care about the reduction of air pollution, he added.

Mayor Stjepan Kovač expressed confidence that the investment will prove to be profitable and that the company will soon renew its fleet with environmentally friendly vehicles.

HERA issues permit for wind power plant Rudine

January 29

Vjetroelektrana Rudine d. o. o., operator of 34.2 MW wind power plant at Lisačke Rudine near the Croatian coastal city of Dubrovnik, received a five-year power generation permit from the Croatian Energy Regulatory Agency (HERA) together with a decision to be granted the status of eligible producer for a period of 25 years. The facility was completed in October and underwent technical review.

> *"Company Strateški plan – energetski projekti d. o. o. saw its two applications for the extension of the status approved for the duration of 24 months."*

The regulators extended the preliminary decision to grant statuses of eligible producers of electrical energy to operators of solid biomass–fuelled cogeneration units in Fužine and Slunj in western and central parts of Croatia, respectively. The case of the former was decided on according to rules for facilities between 2 MW and 5 MW, while the latter is in the class with more than 300 kW. Pilana Krasno d. o. o., a sawmill operator registered in the nearby coastal town of Senj, was granted the status of eligible producer after it applied for the planned cogeneration facility with a capacity of 500 kW of power and 2 MW of heat. Company Strateški plan – energetski projekti d. o. o. saw its two applications for the extension of the status approved for the duration of 24 months. It provided evidence for heat and power plants in Županja and Benkovac that more than half of the planned investment was spent.

The status was also granted to developers of small combined heat and power plants Vital Energo and Energo Virje. Six operators of small photovoltaic units had their status extended.

According to the Law on Renewable Energy Sources and Highly Efficient Cogeneration, the preliminary status of eligible producer is abolished and HERA is rejecting related applications received after January 1.

Geothermal plant will have at least 10 MW in power

February 8

Croatia's first geothermal power plant project, with the choice of Turboden as the provider, is planned for the launch of construction in March. The site is located near Bjelovar in the country's north at the hottest spring in Croatia, which was discovered 25 years ago. The expected temperature is higher than 170 degrees Celsius, state-controlled television HRT said.

Total investments are EUR 35-40 million, said Turkish company MB Holding's chief executive Muharrem Balat. "Six months ago we started to work and we are satisfied with the results, we can build the first geothermal power plant in Croatia," he stressed. Eight years ago, the municipal authority tried to gather a project group with private oil firm INA, the national power utility and the government, but without success. From the initial investigation and planned geothermal power plant of 4.7 MW, the developer now plans output of 10 MW of electrical energy. Heat energy is still on the side, it is taken into account for adjacent activities, mayor of Bjelovar Antun Korušec said.

The company and its team not only contribute financially but also with technical knowledge, says co-owner of the Zagreb-based GEOen Dragan Jurilj. Planned start of operation is 12 months from the start of construction. Hot water could be used for heating greenhouses or farms or for drying fruits and vegetables, the report said.

First day-ahead power market starts operations

February 10

Croatian Power Exchange Ltd., CROPEX and European electricity market Nord Pool launched the first day-ahead power market in Croatia. The start follows end-to-end testing period during January, the press release said. It comes as a result of a 2015 agreement by Nord Pool to service CROPEX including implementation of systems and operations for the Croatian power market. The new CROPEX day-ahead market is operational as a part of the European Union–wide Multi Regional Coupling (MRC).

Silvio Brkić, who heads CROPEX, said the launch is historical for power market development in Croatia, providing wholesale market price as well as transparent, liberalized and competitive trading environment for benefits of Croatian, as well as EU and

Energy Community countries market participants. "This accomplishment is committing us to make our best in continuing with started activities aimed at fully integrating Croatian power markets into EU single Day Ahead and Intra-Day power markets," he added.

CROPEX was established in May 2014 by Croatian Transmission System Operator Ltd. and Croatian Energy Market Operator Ltd. as a joint venture company. In December, Croatian Energy Regulatory Agency (HERA) designated it as a nominated electricity market operator (NEMO) for performing the single day-ahead and intraday market coupling, for an initial period of four years.

Nord Pool has been at the heart of the creation of the single, integrated European power market working with other power exchanges and with transmission system operators to develop and extend the Multi-Regional Coupling (MRC), which now accommodates some 85% of Europe's electricity demand, the statement said. MRC operates on a common price coupling algorithm and calculation, Price Coupling of Regions (PCR), developed and run by a grouping of European Power Exchanges including Nord Pool.

Končar to revitalize hydropower plant in Kenya

February 10

Following a public tender Končar – Power Plant and Electric Traction Engineering (KET) signed a contract with Kenya Electricity Generating Company (KenGen) for the revitalization project of hydropower plant Kamburu (3x37 MVA) worth almost EUR 14 million. Končar said its firm will deliver electrical equipment, including the rehabilitation of the three generators, while the turbine equipment, as a consortium partner, will be delivered by Litostroj Power.

In 1975 Končar has delivered and commissioned for the Kamburu three vertical generators each rated power 37 MVA with excitation systems, equipment for automatic voltage regulation and demagnetization and three control panels for automatic start, control and stop along with other associated equipment. KenGen, which operates 14 hydropower facilities and produces 80% of total electricity generated in Kenya, had a lot of reason to be satisfied because the equipment was four decades in service, according to a press release on the Croatian company's website.

> *"KenGen, which operates 14 hydropower facilities and produces 80% of total electricity generated in Kenya, had the equipment operating for four decades."*

Aside from KET, other companies take part in this project: Generators and Motors, Instrument Transformers, Distribution & Special Transformers and Switchgear. The beginning of work on the first generating unit is expected in the first half of 2017. Moreover, KET has successfully completed the replacement of the excitation system, protection and section 0.4 kV subdistribution for Kamburu in September 2014. The power plant has a capacity of 94.2 MW. KET is conducting revitalizations of two hydropower plants in Zambia.

Rental property energy certificates to be abolished

February 17

Lovro Kuščević, new minister of construction and physical planning, said on state television HRT he decided to annul the rule rental property needs an energy certificate, after consulting the Ministry of Tourism and many experts. Energy legislation, which came into effect on January 1, obligates those who rent or lease out accommodation in Croatia to obtain the document. Immovables are rated from grade A+ (the most efficient) to G. An inspection cannot be failed; the rating is rather aimed to help long-term renters in assessing monthly utility costs.

European directives state nothing about certification of apartments for rent, according to Kuščević, who claims the legal frame was thoroughly studied. He said a team of experts is working on a decree to be signed immediately.

An energy certificate costs between between EUR 120 and 330, while fines for not possessing one range from 70 euro cents to EUR 4,000.

SLOVENIA

RWE wants bigger share in power distribution market

January 22

Austrian Kelag Group, owned by German multinational energy company RWE, signed a letter of intent with electricity distribution Elektro Celje d. d. about a strategic partnership. In the next phase it may enter its trading enterprise Elektro Celje energija (ECE), which controls 23% of Slovenian power market and supplies over 200,000 households. "We are analyzing possible models. Several options are open," Rade Knežević, Elektro Celje's departing managing director, told Dnevnik newspaper. Almost 75% of ECE is owned by the company.

RWE has been trying to grow its operations in the electricity distribution market in Slovenia. Through its Croatian subsidiary last year it entered the households segment, and it has been speculated in the media that the German company is preparing to obtain an ownership share in one of state-owned electricity traders, the article said.

> *"Almost 75% of ECE is owned by Elektro Celje."*

Kelag is already present in Slovenia through Interenergo d. o. o., which owns several hydropower plants in the region of former Yugoslavia. The chief executive of the company is Anton Papež, known for close ties with Miro Cerar, prime minister of Slovenia, Dnevnik said. The key lobbyist of Kelag in the country is Benjamin Wakounig, who heads the Slovenian Economic Association (SGZ) in Austrian Carinthia, the article said.

Project Migrate works on Europe's future power grid

January 29

Elektro-Slovenija d.o.o. (ELES) said it came together with 12 other electricity transmission companies and 12 more universities and research institutions from 13 European countries in a consortium for the Migrate project. The name is derived from the research topic: 'Massive Integration of Power Electronic Devices", and the kick-off meeting was held in Brussels on January 20. The aim is to devise various approaches to technical issues relating to grid stability, supply quality, and control and security of supply that arise owing to the challenge posed by the ever-increasing use of renewable energy feed-in sources, the statement adds. The project, which is designed to run for four years, is receiving funding of roughly EUR 17 million from the European Union, and it forms part of the Horizon 2020 framework programme for research and innovation.

"The question that has to be examined is: how much power electronics can the grid cope with?", said Mariana Stantcheva, project officer in European Commission's Innovation and Networks Executive Agency (INEA). The integrated network will at certain points face challenges at various locations due to the large amounts of electricity fed into it from wind and solar sources. Both electricity production on the one hand – due to the increasing share of renewable energy – but also consumption on the other hand – owing to the implementation of energy efficiency systems, for example – will increasingly be linked to the electricity grid through power electronics, according to the report. A power station generator, for instance, lacks the inertia that is needed to guarantee the necessary frequency stability at 50 Hertz.

In December, the government in Ljubljana backed the implementation of a Slovenian–Japanese demonstration project, estimated at EUR 80 million, for testing technologies and solutions in working smart networks.

Ljubljana becomes this year's European Green Capital

February 9


Photo: http://ec.europa.eu/

Karmenu Vella, European commissioner for the environment, maritime affairs and fisheries, handed

over the title of European Green Capital for 2016 from Bristol to Ljubljana. The award is for efforts and commitment of cities in the European Union to improve the urban environment, boosting awareness of the need for environmental change at the city level. Ljubljana will act as ambassador for sustainable urban development, sharing and promoting best practices, tried and tested in the Slovenian capital, the press release said.

"The city can act as a role model, as the European capital with the largest share of separately collected waste."

The European Commission is also developing a new voluntary tool which any city can use to benchmark and monitor its environmental performance, based on the 12 criteria used to select green capitals. The aim is to invite all European cities to improve their urban environment and quality of life. The tool is expected to be launched in June.

"The title of European Green Capital 2016 is well deserved and it's a title that brings with it great responsibility. Taking care of the urban environment means taking care of the health and well-being of the people who live in our cities," Vella said.

Ljubljana boasts a vast area of green space, 542 square metres per inhabitant, the press release said. Public transport, pedestrian access and 220 kilometres of managed cycling route are the backbone of its urban mobility system. The city can act as a role model, as the European capital with the largest share of separately collected waste. In the new circular economy package adopted in December the Commission proposed actions that will contribute to "closing the loop" of product lifecycles through greater recycling and re-use.

Eight cities have been awarded the title of European Green Capital since its inception in 2010. Stockholm won the inaugural title, followed by Hamburg, Vitoria-Gasteiz, Nantes, Copenhagen and Bristol. Ljubljana will pass the title to Essen.

Towns and cities with a population between 20,000 and 100,000 can apply for the European Green Leaf Award since last year. The title recognises a strong environmental record, with a particular emphasis on efforts that engage citizens in environmental awareness, generate green growth and new jobs. Torres Vedras in Portugal and Mollet de Vallès in Spain hold the title for 2015.

Ministry launches refurbishment programme for public buildings

February 11

Overall investment in energy efficient refurbishment from 2014 to 2020 are estimated at EUR 3.2 billion, said Klemen Potisek, state secretary in Slovenia's Ministry of Infrastructure. Presenting the project for energy renewal of public buildings, he underscored European funds for the programme amount to EUR 165 million for the period in grants and subsidized loans. The ministry set another EUR 245 million for the public environmental Eco Fund. A project bureau was established to lead and coordinate activities, Potisek added at the opening of energy strategy conference En.odmev.

The goals of the refurbishment of buildings by 2020 include reaching energy savings of 10% in heating and hot water, cutting in half the use of liquid fossil fuels in existing buildings, reducing imports of oil derivatives by 7% and greenhouse gas emissions by 60%.

"Mitja Terče, head of energy supplier ECE d. o. o., said this is not the right time to decide on the construction of the second block in the country's only nuclear power plant."

Speaking about the process of developing the national energy concept, Danijel Levičar, head of the energy directorate, said decisions will have to be sustainable and energy clean and available. Mitja Terče, head of energy supplier ECE d. o. o., said this is not the right time to decide on the construction of the second block in the country›s only nuclear power plant. Stressing there are security issues, he added economic sense is lacking for the energy source, besides the fact that people don't support it. Terče says renewables are the only way. He says goals

in the energy concept must be clearer and more detailed. In his words, the agreement must be precise about what will be done and how much the economy and households are ready to pay.

Litostroj sold to Czech investors, beating Končar

February 19

Energo-Pro a. s. is taking over Slovenian turbine manufacturer Litostroj Power d. o. o. for EUR 23.5 million, ČIA News reported, quoting spokeswoman Hana Hikelová. Litostroj Power has posted net revenues exceeding EUR 32 million for last year. It signed contracts worth more than EUR 70 million, 58% being in Europe, 20% in America, 13% in Asia and 9% in Africa. Energo-Pro is registered in Prague and operates in Turkey, Bulgaria, Georgia and Armenia. Croatian industry Končar also participated in the bid.

Litostroj said it finished refurbishment works on unit A of Dubrovnik hydroelectric power plant in Croatia in the first half of January. The refurbished facility, equipped with a Francis runner rendering maximum output power of 144.8 MW, was handed over to Hrvatska elektroprivreda (HEP), the national power company. Unit B was the first unit refurbished within the framework of the contract signed with the customer in 2011, the company said. The phase was finished in February 2013.

Beside the design and performance of the new runners, guide vanes, draft tube, shaft seal, guide vane mechanism, bottom ring, as well as the renewal of turbine shaft, head cover, turbine guide bearing and regulating ring, also spare parts and special erection devices were included in the delivery, the statement said. Through the new hydraulic design of the units and through the enlarged diameter of the runners, resulting in increased water flow, the nominal output power of the units increased by 25%, according to Litostroj.

The storage power plant, located at Plat, a village located 15 kilometres south from Dubrovnik in the country's south, is the last in the chain of hydroelectric facilities located alongside Trebišnjica river.

Germany eyes investment in renewables in BiH

January 25

Nermin Džindić, minister of energy of the Federation of Bosnia and Herzegovina, met Christian Hellbach, ambassador of Germany, and Frank Werner, first secretary and chief of the economic department of the embassy. Hellbach said his country is primarily interested in investment in renewable energy sources, energy efficiency and cogeneration. The talks ended with a conclusion that KfW Development Bank has a EUR 300 million fund which could be used, the government said on its website.

> *"Hellbach promised to request more engagement by the Energy Community in the direction of harmonization of laws in BiH with EU directives."*

Džindić said legislation in the area of energy is one of the preconditions for investment in the sector. The conclusion of the meeting was that the European Union's Third Energy Package must be implemented, including a set of obligations towards the Energy Community for further liberalization of the domestic market of electric power and gas. Hellbach promised to request more engagement by the Energy Community in the direction of harmonization of laws in BiH with EU directives. Džinić and Hellbach said they will initiate a meeting with KfW about technical support and joint projects.

Minister: Trusina wind park to go online next year

January 31

Deadlines for the first wind power facility in the Republic of Srpska, one of two entities of Bosnia and Herzegovina, have been postponed for many reasons, but local energy minister Petar Đokić said the project should be complete and connected to the grid in 2017. The project is funded by Kermas Limited, headed by Darko Končar and based in Britain, according to the schedule set out in the agreement with the government.

The minister reminded company Eol prvi d. o. o. from Nevesinje initiated the development of the wind park, portal Nezavisne.com reported. The town in the country's southeast is nearby Trusina. "Only now we reached the phase when I can say how the concessionaire is extremely serious and that it provided convincing evidence in the last several months that it is working on the implementation of the project. And according to the dynamics presented the last time in a meeting, they will complete the facility in 2017," Đokić said. Kermas stepped in as Eol's strategic partner. Eol prvi stated earlier it opted for Vestas's turbines and a domestic company would connect the power plant to the grid. The plan includes 17 units with 112 metre rotor diameters at a height of 84 metres. Works at the wind park, located at one thousand metres above sea level, should be launched in March, the article adds.

The holder of the 30-year concession for the construction of a 51 MW wind power plant worth BAM 150 million (EUR 76.7 million), has asked for extensions in the timeframe. Srpska's energy authorities earlier said 2018 is considered as the most probable completion date for the technical works.

Power trade surplus reduced by 18.9% last year

February 1

Data published by the Agency for Statistics of Bosnia and Herzegovina said 7.85% less electrical energy was supplied abroad last year than in 2014. The value amounted to BAM 284.4 million (EUR 145.4 million). The surplus fell by 18.9% on the year to EUR 91 million.

Exports held at the level from the previous year through October and then fell significantly. Exceptional hydrology drove the exports of electricity to record EUR 241.3 million in 2013. Last year power imports were increased by 19.3% to EUR 54.38 million.

First solar power plant exceeding planned output

February 2

There are 16 photovoltaic plants in the territory of the Federation of Bosnia and Herzegovina which sell power through the grid, portal Klix.ba reported. Solar power plants have proven to be an excellent project which can reduce electricity bills if used for personal purposes or which can generate profit if you sell the produced electricity, according to the article, republished by Sarajevo Times.

The first one was launched in March 2012 in Kalesija in the country's northeast, built by Sadik Fatić and his son Selmir, owner of company Eko Energija d. o. o. It is installed on the roof of the town hall in Kalesija and its construction cost BAM 800,000 (EUR 410,000). Power is sent to the system of Elektroprivreda BiH d. d.(Electric Utility of BiH). The facility has the capacity of 12 kW and solar panels cover 1,200 square meters.

"We are satisfied with the work of the solar power plant, which generates between 130,000 and 150,000 kWh annually. So far, we have achieved production higher 30% than expected, thanks to the equipment of highest quality," Selmir Fatić said. The solar power plant earns over EUR 56,000 per year. He expects

total return on invested in less than five years, which means there will be profit, after EUR 510 for renting the roof. Fatić recommends everyone interested in such projects to build a solar power plant because there is no concession to be paid.

Works on Vranduk hydro project to start in six months

February 7

Consortium of Strabag AG from Austria and Croatian company Končar – Power Plant and Electric Traction Engineering Inc. (Končar – Ket) started the design phase for the project of a dam and hydroelectric facility Vranduk in central Bosnia. After the documentation is produced, equipment can be mounted and the construction works can commence, state television's portal Federalna.ba reported. Strabag said no visible activity is possible for another half year, while the endeavour was initiated more than five years ago.

Government-controlled company Elektroprivreda Bosne i Hercegovine d. d. is the investor with BAM 22 million (EUR 11.24 million) of own funds, while the remainder in the EUR 63 million project is financed by the European Bank for Reconstruction and Development and the European Investment Bank.

Environmentalists and the local population have been opposing plans for the power plant, the report adds. The Vranduk community received a pledge for EUR 720,000 to be invested in 30 infrastructure objects in the surrounding area, before the environmental permit was issued.

> *"Environmentalists and the local population have been opposing plans for the power plant."*

The people in the village itself say they got the least from the funds and that even the promised water supply system's overhaul wasn't done. The contractor says it plans to engage local firms for some segments of the works.

Ongoing green power projects worth over EUR 600 million

February 9

The Republic of Srpska, one of two entities comprising Bosnia and Herzegovina, currently has renewable power plants endeavours in implementation amounting to over EUR 600 million, according to Petar Đokić, minister of industry, energy and mining in the government in Banja Luka. The most important hydroelectric facilities are Dabar, part of system of Gornji horizonti, worth EUR 180 million, and Mrsovo on Lim river, estimated at EUR 96 million, he told Srna news agency.

The Ulog hydropower plant and six small facilities in the same system on Neretva river are worth EUR 93 million, according to Đokić. Three hydroelectric plants on Bistrica river are estimated at EUR 47.6 million, he stated and added that from the 120 small hydro units the most important ones are on Prača river, with an overall value of EUR 30.7 million, and Bočac 2 on Vrbas river, worth EUR 9.2 million. The investment in wind parks Trusina near Nevesinje and Hrgud in Berkovići area is estimated at EUR 138 million, Đokić said.

Project design for hydropower plant may take one year

February 10

Construction works on the Buk Bijela hydroelectric plant on Drina river should commence this year, said Petar Đokić, minister of industry and energy in the Government of the Republic of Srpska. He added there was determination and that the situation will be different by the middle of the year. Numerous stories that the government does not have serious intention to build it will be denied by concrete steps, Đokić told Glas Srpske portal. In his words, hydro power plant operator Višegrad will head the project, while the Power Utility of the Republic of Srpska (ERS) will get the concession from the government.

Earlier, ERS head Branislava Milekić said construction works can be expected in a year at the latest, as the main project should be complete by then. The initial project estimated the value of the power plant at EUR 195 million and installed capacity at 93.5 MW, she told Glas Srpske. The main project takes six months, Milekić stated and added the power plant will be financed through loans. As the environmental study is already complete, paired with a solid volume of project documentation, it won't be difficult to attract financing, she said.

Capital Group from Turkey sets EUR 300 million for solar projects

February 11

Idris Fatih Şahin, owner of Capital Group AŞ from Istanbul, visited the Foreign Investment Promotion Agency (FIPA) with associates on 10 February, where he talked with director Gordan Milinić and

the regional representative of FIPA for Herzegovina Amir Kazić about investment in Bosnia and Herzegovina. Projects of solar energy are worth BAM 300 million (EUR 153.4 million) and those in the field of tourism and agriculture also have volume of a few hundred million convertibile marks, FIPA said.

"Preparations are underway for the construction of solar power plants Čapljina-Neretva 1 of 5 MW plus 5 MW, Ljubinje 1 of 2 MW, Mostar 1 of 5 MW, Mrkovići 1 of 1.5 MW."

The first phase is the implementation of 100 MW in photovoltaic plants, out of which a unitof 65 MW will be built in Bančići, Ljubinje, in the country's southeast. Preparations are underway for the construction of solar power plants Čapljina-Neretva 1 of 5 MW plus 5 MW, Ljubinje 1 of 2 MW, Mostar 1 of 5 MW, Mrkovići 1 of 1.5 MW. The company also plans to build wind farms in the first phase with up to 250 MW, the report said.

Capital Group is owner and founder of ITM Controls Ltd. Sarajevo, Sarajevo Solar IFS, IFS Solar Ljubinje, Smart Energo Sistemi Pale and Energoinvest TAT-IFS. With ITM Controls it invests in both renewable energy and in production of healthy food and tourism and it plans a chain of specialized retail stores with products from its eco villages Ekofutura Hreša, Biona Vogošća and also products from subcontractors from the project Jahorina Organic Farm, products of the Alpine goats farm Žepa and others.

ITM Controls built the first solar power plant in BiH, the Los Rosales 1 of 3.9 kW, in 2008 in Mostar, FIPA said.

Incentive for green power set to 0.05 euro cents per kWh

February 12

At a session in Mostar, the Government of the Federation of Bosnia and Herzegovina determined this year's total amount of incentives for power generation from renewables and cogeneration at BAM 8.35 million (EUR 4.27 million), while the unit before value-added tax was set to 0.05 euro cents per kWh. The incentives are payed by all final buyers of electrical energy in the entity. The amount payed is the product of multiplication of the unit and the total consumption of power, the rule states. The incentive is shown in a section of the electricity bill.

Project CB-Green bringing network for renewables and energy efficiency

February 12

Regional Development Agency for Herzegovina (Redah) joined forces with the City of Mostar and the seaside Municipality of Neum and started the development process of EE-RES-NET, network of projects in the area of energy efficiency and renewable energy sources. The endeavour is launched within cross-border project CB-Green. The goal of EE-RES-NET is to increase the number and quality of energy projects which will enable local and regional authorities and institutions they run to apply for financing from European and national funds in the period from 2014 to 2020.

CB-Green was the frame for round tables in Mostar and Neum about the creation of local action plans for energy efficiency and renewable energy sources. The activities will also be performed within the project. CB-Green is funded by the European Union's Instrument for Pre-Accession Assistance in the cross-border programme of Bosnia and Herzegovina and Croatia. The project aims to increase awareness about global environmental issues, inform on energy efficiency and cuts in greenhouse gas emissions through new technologies and sustainable development. It started in April last year and lasts through March 2017. CB-Green is worth EUR 499.1 million. Other partners are the Croatian City of Zadar, regional development agency Zadra Nova and organization Eko Zadar.

Redah will gather information on all projects in the segment regardless of the level of development and

preparedness as well as all the projects that are being implemented or are completed. Projects can be applied until the end of February.

The action plan for Mostar will include goals such as a cut in energy consumption and carbon dioxide emissions by 20% and an increase of the share of renewable sources, mayor Ljubo Bešlić said at the round table. Brian K. Schjertzer, representative of German Development Cooperation (GIZ), said the energy efficiency law has been on hold in the Parliament of BiH for over a year now, and that it is significant that the city and its population take the initiative without a legal obligation to produce an action plan. He added this way Mostar is joining the European initiative Covenant of Mayors. The document should be complete by the end of April.

Permits for 200 kW in solar applied for from Tešanj

February 16

Ministry of Energy, Mining and Industry of the Federation of Bosnia and Herzegovina published a notice with a list of nine new requests for issuance of energy permits for the construction of new and reconstruction of existing solar power plants, five of which are from Tešanj, a municipality located in the entity's north.

TIK d. o. o. Jelah-Tešanj submitted a request for the extension of the permit for the construction of photovoltaic facility TIK 1 with installed nominal capacity of 127 kW and expected annual production of 153.1 MWh. Hifa-Benz d. o. o. Tešanj submitted an application for the extension for solar power plant HB 10-1 with installed nominal capacity of 10 kW and expected annual production of 10.7 MWh. Inter d. o. o. Tešanj filed the same request for Inter In 23-1 with 20 kW and expected output of 24.3 MWh, and Kalim-Profil d. o. o. Tešanj applied for Kalim K23-1 with 22 kW and expected annual generation of 24.4 MWh. Kalim d. o. o. Tešanj asked for energy permit to be extended for the construction of Kalim K23-2, a solar facility planned for 22 kW capacity and annual production of 24.4 MWh.

Other applications came for new permits for future photovoltaic plants in Živinice, Cazin, Mostar and Čitluk with total installed capacity of 66 kW.

Constant power clause discriminates renewable sector

January 22

Penalties for green energy producers for not delivering constant power are overregulation abuse and the Renewable Energy Producers Organization in Romania (Patres) hopes the current court case will result in a favourable verdict, its vice president Martin Moise told Energynomics portal. The regulation introduced last year equals power from renewable sources like that from a classic generator, with an explanation that it outlines suitable technical parameters, he added. Patres expects a verdict by mid-year and there are different energy providers who joined the organization's initiative, as the norm favours generation from conventional sources, mostly operations of state-owned companies, Moise stressed.

> *"The organization believes a guaranteed price for renewable energy from small units stimulates unnecessary expansion of capacity."*

At the Day-Ahead Market, where green power producers must pay for the deficit, prices are higher and volatile, and the system came to cover almost half of estimated net consumption in December, he said and added this results in larger bills for consumers.

Patres is concerned because the introduction of the feed-in tariff is overdue. The organization believes a guaranteed price for renewable energy from small units stimulates unnecessary expansion of capacity. Furthermore, small capacities get positive discrimination at the expense of large producers, Moise said. He concluded investment in bigger units is risky in Romania.

Only 906 green certificates traded in January

February 4

Opcom, the energy market operator, said the Centralized Green Certificates Market (PCCV) experienced a veritable crash last month, portal Nine o'Clock reported. Only 104 sale offers and three purchase offers were registered. The number of units traded stood at just 906. The closing price was RON 131.08 (EUR 29.26) per certificate.

The volume traded dropped last year by over 73 times to 36,618, compared to 2.68 million certificates traded in 2014. According to Opcom's data, 98% of transactions were made in the first four months.

In December, the Energy Regulatory Authority (ANRE) estimated the mandatory quota for this year at 0.317 certificates per MWh. This means 12.12 million securities will be needed in 2016, compared to 18.9 million certificates that will be issued according to the ANRE estimate, thus generating a surplus of 6.79 million green certificates, which comes in addition to the already existing surplus of 4.05 million units, investors claim. The government granted 19 energy intensive companies agreements for exemption from a part of the number of green certificates in the mandatory quota in October.

Fondul Proprietatea evaluates Hidroelectrica at EUR 3 billion

February 7

Fondul Proprietatea (FP) assessed the 19.9% equity stake in Hidroelectrica SA in December to be worth RON 2.65 billion (EUR 586 million), valuing the whole company is at EUR 3 billion, up 22% from the previous estimate, The Diplomat reported. The revisions of December 2013 and 2014 were upward, but the last update had the most significant increase. Hidroelectrica is the largest energy producer in Romania, 80% owned by the government. The company is the most profitable in the state portfolio, which is why it earned the title "pearl of the crown," the article said. Last year Hidroelectrica had gross profit of EUR 221 million and turnover of EUR 704.7 million, according to administrator Remus Borza. The hydropower producer was declared insolvent in 2012.

In 2015, Hidroelectrica's output fell 2.5 TWh to 15.9 TWh. Turnover was EUR 760 million and profit stood at RON 1.1 million, according to the Hidroelectrica press release. In the past two years the company has reduced its headcount from 5,239 to 3,443 and its earnings before interest, tax, amortisation and depreciation (ebitda) was 63% of the turnover, Borza added, according to a report by the Business Review. The budget set by Hidroelectrica in 2015 for the next five years was of EUR 1.3 billion, of which EUR 75 million was allotted to the revamping of the Stejaru plant, and another EUR 240 million to the revamping of the Vidraru, Mărişelu and Râul Mare Retezat plants, with the contracts to be "attributed during this year through international auction," reports the press release.

The latest estimates are that Hidroelectrica will come out of insolvency in May or June, so the listing on the Bucharest Stock Exchange will take place next year, but Borza aims at November of this year, portal Nine o'Clock said. In 2013, the government decided to list the company on the Bucharest Stock Exchange, by increasing its capital and launching an IPO for the newly issued package of 15% of the registered capital existing prior to the increase.

The Competition Council has sanctioned Hidroelectrica and its ten contractual partners, mainly electricity traders, with fines of EUR 36.57 million in November for concluding irregular agreements.

Radu Dudău selected to coordinate energy strategy

February 8

The co-founder and head of the Energy Policy Group (EPG) thinktank agreed to assume responsibility for the process of creating Romania's energy strategy for the 15 year period through 2030, with an outlook for another 20 years, the Business Review reported. Radu Dudău is an advisor to energy minister Victor Grigorescu and was participating in the creation of the energy strategy in 2014. He is an associate professor at the Faculty of Philosophy, part of the Bucharest University. The article said Dudău will coordinate work groups and public debates.

In late January, the ministry hosted the first round of consultations. Grigorescu gathered representatives

of energy producers, processors, distributors and suppliers, as well as those of consumers' associations, portal Nine o'Clock said. The civil society, universities and research institutes will also participate, alongside representatives of the diplomatic corps. The minister is optimistic that the document will be finalized by the end of the year. The article notes Grigorescu's point of view differs fundamentally from that of his predecessor Andrei Gerea, who was on the verge of hiring, at great expense, a foreign consultant in order to finalize the document.

Transeastern acquiring hydro, wind projects

February 10

According to a letter of intent, Transeastern Power Trust from Canada will take over three operational small hydropower plants in Romania with an overall capacity of 3.65 MW. The company announced a transaction, calculated on a debt-free basis of CAD 7.5 million, or EUR 5 million. On February 1, Transeastern announced a proposed acquisition of a 17 MW wind power plant in the country from RG Renovatio Group Limited, which currently owns greater than 10% of the outstanding units of the trust. The project is operational since 2012, it generates 45 GWh annually, and has an off-take agreement in place, the press release said. The acquisition is worth CAD 30.6 million, or EUR 20.4 million, after the debt financing on the project at the closing date.

The two takeovers are expected to be executed by April 29 and May 31, respectively. The hydro projects have been active for over two decades and were refurbished in 2012 and 2014. They generate 10 GWh of electricity annually.

"The hydro projects have been active for over two decades and were refurbished in 2012 and 2014. They generate 10 GWh of electricity annually."

At the end of 2014 Transeastern had 5.1 MW of installed capacity, all from small-hydro operations, said J. Colter Eadie, chief executive of Transeastern. Next year the trust acquired 17.6 MW of solar projects. "Pro forma these acquisitions, we will have approximately 43 MW of operating renewable power generation installations. Moreover, our production will be diversified across hydro, wind and solar generation resulting in reduced volatility to our production profile, and increased stability and sustainability in our cash-flows," he said.

Transeastern is traded at the TSX Venture Exchange in Toronto. The company operates two solar and three wind power plants in Romania, according to information on its website. In July it closed the acquisition of two photovoltaic plants in the country and a CAD 5 million (EUR 3.44 million) secured debt facility provided by Sprott Resource Lending Partnership. A month earlier, Transeastern

Power capacity from renewables reaches 5.14 GW

February 11

Photo: Pixabay

Last year power production in Romania grew 7.8% to 69.37 TWh, according to data from the National Institute of Statistics. Thermal power stations generated 1.65 TWh, a 6.2% increase on the year, hydropower output fell 12.2% to 16.69 TWh, and nuclear units produced 11.64 TWh or 0.3% less than in 2014. Wind turbines contributed 7.05 TWh, advancing 2.32 TWh, while photovoltaic facilities generated 1.99 TWh or 692 GWh more than in the previous year, the report said.

Consumption rose 6% to 52.57 GWh, where public lighting accounted for 30.6% more than in 2014. The population increased consumption by 3.7%, and the volume within power stations and networks fell 3.75%. Exports of electricity rose by 28.1% to 10.5 TWh.

"The National Energy Regulatory Authority (ANRE) had by December certified renewable energy facilities with 4.66 GW in aggregate installed capacity, shows a document posted on the institution's website."

Transmission operator Transelectrica SA's data show electricity from renewable sources has grown in installed capacity to 5.14 GW by the end of last year. Wind farms in the system in Romania had 3.13 GW, photovoltaic panels accounted for 1.33 GW, small hydropower had capacity of 585 MW,

while cumulative power of 103 MW was fuelled by biomass, Romania Journal reported. The overall production capacity in the system was a little larger, 5.2 GW, according to the article.

The National Energy Regulatory Authority (ANRE) had by December certified renewable energy facilities with 4.66 GW in aggregate installed capacity, shows a document posted on the institution's website, The Diplomat portal reported. Wind farms accounted for 2.93 GW, photovoltaic – for 1.3 GW, waste-to-energy projects represented 106.5 MW and small hydropower plants with less than 10 MW accounted for 327.8 MW (new – 228.8 MW, retooled – 85.5 MW, old plants – 13.5 MW). There were 70 operators certified for the production of wind power, 514 for solar power production, 89 for hydropower and 25 for generating power from biomass and biogas.

Hidroelectrica wins court case against Alpiq

February 13

Romania's largest electricity producer Hidroelectrica SA won the trial with Swiss group Alpiq. This was one of the energy traders that had privileged purchasing power contracts with the state-owned company and whose contracts got canceled when Hidroelectrica entered insolvency, portal Romania Insider reported. The companies in the Alpiq group had contested Hidroelectrica's decision to file for insolvency in June 2012.

The Bucharest Court has rejected as unfounded the opposition presented by the companies Alpiq Romindustries, Alpiq Romenergie, Alpiq AG and Sindicatul National Petrom Energie, the article said. The court has also obliged the companies Alpiq Romindustries and Alpiq Romenergie to pay court fees worth about EUR 6,600 to both Hidroelectrica and to the Romanian investment fund Fondul Proprietatea, which supported Hidroelectrica.

> *"The companies in the Alpiq group had contested Hidroelectrica's decision to file for insolvency in June 2012."*

Last month the Competition Council sanctioned Hidroelectrica and its ten contractual partners, mainly electricity traders including Alpiq RomIndustries, with fines totalling RON 165.84 million (EUR 36.57 million) for concluding irregular agreements. The ruling will help Hidroelectrica in its law suits as it shows contracts were illegal, said Remus Borza, the company's insolvency administrator said at the time.

The opponents in the cases are small firms which bought cheap power from Hidroelectrica from 2003 to 2012, and asked for damages when contracts were terminated, he said.

Locals oppose hydropower plant projects

February 17

No to hydropower plants on Nera river – villagers of Prigor in the Romanian county of Caraș-Severin remained determined after meeting investors on February 16, Moj kraj portal from the Serbian city of Pančevo reported. The locals were supported by environmentalist associations from Serbia and Romania as well as people from the academic community. The Caraş Severin Environmental Protection Agency can't issue an impact assessment study, a condition for the building permit for the two small hydro units, without the consent from the locals.

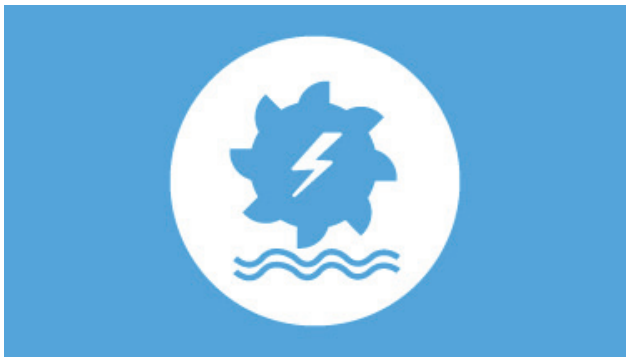
> *"The Caraş Severin Environmental Protection Agency can't issue an assessment study, a condition for the building permit for the two small hydro units, without the consent from the locals."*

The plan is for the systems to be installed near primeval forests which may be included in Unesco's World Heritage List. Half a kilometre away is the national park Semenic-Cheile Carașului, the article said. The public consultation on the environmental impact assessment study was also attended by representatives of Serbian media, associations and local authority from border Municipality of Bela Crkva, responsible for the protected area of Karaš-Nera. Municipality chief Darko Bogosavljević said no official information reached him nor the bilateral commission of Serbia and Romania for water management.

BULGARIA

VEC Energia acquired by Energo-Pro

January 31



The deal for the full acquisition of VEC Energia Holding EAD, the second in scale private hydropower plant operator in Bulgaria, was completed by Energo-Pro Bulgaria EAD. The shares were transferred on January 30 and Energo-Pro stepped in as the sole shareholder of VEC and the six hydropower plants, owned by the company directly and through its subsidiaries: Pirin HPP, Spanchevo HPP – united in Pirinska Bistritsa Cascade, Katuntsi HPP, Ogosta HPP, Samoranovo HP and Karlukovo HPP.

The total installed capacity of the newly acquired plants is 63 MW, representing a 60% increase in the existing generation capacity of Energo-Pro's subsidiary in the country. The company is reaching total installed capacity of 166 MW in Bulgaria, for an estimated annual production of over 400 GWh, it said in a press release.

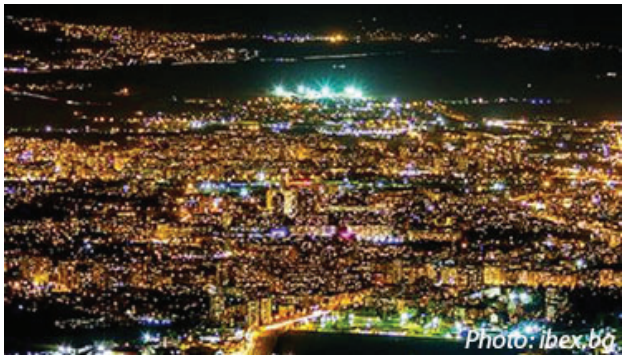
In other news the first issued guarantees of origin for green energy produced in Bulgaria were given to an owner in Hungary, and the deal has been realized by Energo-Pro Trading EAD. A local telecommunication company purchased them by a procedure consistent with the Hungarian legislation and Directive 2009/28/EO of the European Parliament.

The guarantees of origin (GO) could be purchased also by Bulgarian companies. However, taking into account the specific secondary legislation they could be traded only together with the energy for which they have been issued. In other words, the buyer has to buy the energy produced from renewable energy sources, and to obtain guarantees of its origin in its role as an end supplier.

Energo-Pro Trading EAD is part of the group of the same name founded in 1994 in the Czech Republic. The company owns 47 hydroelectric power stations with total installed capacity of 860 MW. Energo-Pro a. s. said it operates in the Czech Republic, Bulgaria, Georgia, Turkey and Armenia, employing over 8,000 people. The company realizes transmission and distribution with electric power to over two million customers on the territory of Bulgaria and Georgia.

IBEX gets first industrial consumer of power on board

February 18



Independent Bulgarian Energy Exchange (IBEX) said it admitted the first final industrial consumer of electricity among its members. The unnamed company is allowed to buy electricity for own consumption from the power exchange. The day-ahead market launched trading on January 19 and ten days later it became the 25th full member of Europex association. In accordance with the organization's rules, the decision needs to be reconfirmed at the next general assembly, in May. IBEX works on the establishment of a complementing electricity intra-day market.

> *At the beginning of February, the exchange became a nominated electricity market operator (NEMO) for the territory of Bulgaria for a period of four years.*

At the beginning of February, the exchange became a nominated electricity market operator (NEMO) for the territory of Bulgaria for a period of four years. In other news, the office of president Rosen Plevneliev initiated a public procurement for supply of 540 MWh with an estimated value of BGN 46,000 (EUR 23,500) excluding value-added tax.

IBEX is a subsidiary of the state-owned Bulgarian Energy Holding. The delay in planned launch was due to the government's stance to protect power generating companies and the local market. The cooperation agreement with power market Nord Pool Spot was signed in April with the aim to set up and run the country's first day-ahead power exchange.

Events on smart cities, green energy scheduled in Sofia

February 25

Via Expo announced regional sustainable development will be the dominating theme at exhibitions and a conference from April 5 to April 7 in Sofia's Inter Expo Center. Smart Cities and the South-East European Exhibition on Energy Efficiency and Renewable Energy (EE & RE) will focus on connecting solution providers and their customers and it will be a starting point for the launch of innovative products. The venue will also host Save the Planet, a waste management and recycling gathering, with companies from Austria, Bulgaria, Czech Republic, Germany, Denmark, Italy, Slovakia and Switzerland.

The participants at Smart Cities will present software for smart homes, offices and industrial premises, heat recovery units and vacuum insolation, the design and construction of passive houses and devices for energy storage. Visitors will have an opportunity to learn about solutions for intelligent transport.

EE & RE will be the place for innovative isolation systems, energy storage devices, energy-saving HVAC equipment, systems for renewable energy production, and cogeneration, organizers said.

Workshop on energy efficiency of municipalities held in Bitola

February 9

The Energy Agency of Macedonia and the World Bank promoted a project on energy efficiency in municipalities in the southwestern town of Bitola, agency Independent reported. The 18-month programme strengthens capacity in local self-governments to identify and apply energy efficient measures, according to Zdravko Stefanovski – the representative of the team implementing the project.

> *"Six local authorities are tasked with drafting documents on energy efficiency and sharing experiences."*

"We strive to boost the capacities of municipalities, there are action plans and feasibility studies with a set of tools allowing the municipalities to prepare documents on their own. We believe that a foundation is being laid to create an energy efficiency fund, as championed by the World Bank, which unfortunately hasn't been set up yet in our country," stated Stefanovski.

The pilot project is being implemented in eight municipalities: Radoviš, Staro Nagoričane, Novaci, Kavadarci, Pehčevo, Brvenica, Lozovo and Rosoman, which are tasked with drafting documents on energy efficiency and sharing experiences, it was noted at the workshop. In the framework of the project, the Strategic Development Consulting, in cooperation with the World Bank and the Energy Agency of Macedonia, is the organizer of eight workshops.

Karpoš municipality invests in geothermal heating

February 11

Local authority of a district in the capital city of Skopje extended the project for autonomous heating in primary schools. Stevčo Jakimovski, head of the Municipality of Karpoš, presented the sixth completed system, based on geothermal pumps, in school Vera Ciciviri – Trena. All six facilities were refurbished and got thermal shells and new windows, reducing energy consumption by 60%, he said.

The investment in the school from the local government amounts to MKD 4.5 million (EUR 73,000) and it is estimated it will be returned in three years, according to Jakimovski. "The Municipality of Karpoš, as a major power consumer, will probably have the right from June 1 to secure supply on its own on the market. In that case, the electrical energy costs in schools and all facilities the local authority has will drop by three times," he stressed.

The implementation of the energy efficiency project in the last school is expected to bring down heating costs to EUR 8,000 a year. Four more primary schools will get own heating based on renewables, according to project schedule. Jakimovski announced the launch of a makeover of 14 residential buildings' shells in September, after their tenants associations applied for funds.

Forest biomass use included in Austrian-backed projects

February 17


Photo: Pixabay

Macedonia is launching projects in the forest sector with the support of Austria, aiming at sustainable management and environmental protection, Macedonian Information Agency said.

Žarko Karadžovski, head of enterprise Makedonski šumi (Macedonian Forests), which is implementing the projects, said a strategy on the usage of forest biomass as a renewable energy source is incorporated in the plans. "Austrian experts are prepared to help us in achieving higher European standards in forestry," Karadžovski stated, adding they are leaders in forestry in Europe.

> *"Economy, environment and management – these are the main sectors in the specific approach which was developed in Austria."*

Ingwald Gschwandtl, director for forest policy and information at the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management, told the media almost 50% of Macedonia is under forests, adding there are many possibilities for cooperation. Economy, environment and management – these are the main sectors in the specific approach which was developed in Austria, he said and added forests are an important economic segment parallel to the significance for the environment and society. The sector brings EUR 4 billion a year in exports, mostly in semi-products, according to Gschwandtl. Continuous efforts are made for the protection from erosion and landslides and forests are important part of the tourism sector, he underscored.

Forestry is included in the action plan for bilateral cooperation, produced recently and signed by ministers of foreign affairs Nikola Poposki and Sebastian Kurz, the article said.

Boosting capacities for GIS, RS in forest management

February 19


Photo: Winrock International

USAID Macedonia Clean Energy Investment Project, together with the Winrock's Ecosystem Services Unit experts in geographic information systems (GIS) and remote sensing (RS), organized specialized training through series of workshops on application of GIS and RS techniques in the forestry sector to

improve national capacities for calculating reliable and up-to-date information on land changes. The capacity building effort included organization of a two-day workshop in February and a series of five training sessions, from December to February, for representatives of the Ministry of Agriculture, Forestry and Water Economy, the Faculty of Forestry and public enterprise Macedonian Forests.

Monitoring of forest cover and forest functions provides information necessary to support policies and decisions to conserve, protect and sustainably manage forests. Reliable and accurate information on land areas and area changes are also critical to developing inventories that are consistent with good practices defined in the Intergovernmental Panel on Climate Change guidelines. Quantification and monitoring of biomass, due to its importance as a renewable energy source, is a challenging task, especially in cases when up-to-date information is limited. To efficiently and effectively use biomass as a renewable energy source it is important to have reliable quantitative and qualitative data. RS and GIS offer the technology to enable assessment of biomass at a low cost, and represent a cost-effective tool for greenhouse gas inventories.

"This training enabled access to the latest international developments and trends in the RS and GIS techniques that will, in great extent, help me in my academic work and research related to possibilities for the utilization of forest biomass as renewable energy source in a sustainable manner," said Ivan Mincev, assistant professor at the Forestry Faculty.

Macedonian Forests manages state-owned forests and provides the fuelwood for households. Participants from the enterprise said the activity opened a brand new horizon to application of these techniques that will enable them to better plan and manage the forest biomass, and to assess the full potential of it as a renewable energy source.

Government aims 2.5 GW more green energy by 2020

February 2

The country's existing renewable energy sources support system is plagued by impasse situations, Mihalis Veriopoulos, the Environment and Energy Ministry's secretary general in charge of energy and mineral resources, told the Athens Energy Forum, while presenting the key parts of the upcoming support system, Energy Press reported.

He noted the government is aiming to add 2.5 GW of new units to the system by 2020, primarily wind and photovoltaics. Veriopoulos stated energy efficiency regulations for buildings would be reviewed. Commenting on the buildings energy upgrade programme Saving at Home, he informed that a new one would soon be made available to offer EUR 292 million for between 2014 to 2020, adding that a further EUR 80 million euros are still available from the existing upgrade endeavour.

The official said producers in the green energy sector will participate in the daily market and receive reasonable premiums.

CYPRUS

Draft scheme hikes solar power tariffs, cuts others

February 22

The support plan for renewable energy sources was prepared to be sent to the European Commission's Directorate-General for Competition, after which public consultation are to be launched, Energy Press reported. The scheme is based on feed-in premiums paired with tenders, along European Union's guidelines.

Upper limits are to be determined for feed-in for all segments before tendering for specific capacities. The selection will be based on the level of preparedness for prices under the limit. Quite obviously, the level of the feed-in premiums to be set will play a crucial role in the new model, the article said. Investors need incentives, but there are limits in the special account. Energy Press learned the energy ministry believes considers an Internal Rate of Return (IRR) between 8% and 12%. In this version, upper limit for wind power plants should fall to EUR 98 per MWh, while a drop to EUR 100 per MWh is expected for small hydropower plants, the article said. A rise to EUR 90 would be set for photovoltaic systems with over 500 kW while smaller ones will remain in fixed feed-in tariff regime.

Information on the plan was met with positive reactions in the sector of photovoltaics, while investors in wind and small hydropower firms don't see sustainable investments without significant power potential in their segment.

Cyprus, Israel mull models for boosting green energy

January 26

A power link between Cyprus, Israel and Greece through Eurasia interconnector would improve the potential of Cyprus and Israel to further develop renewable energy sources (RES), said Eitan Parnass, director general and founder of the Green Energy Association of Israel and secretary of Global Solar Council.

At a presentation about green energy and bilateral cooperation in Nicosia, organized by the Embassy of Israel in cooperation with the Ministry of Energy, he gave the assessment of the solar energy market, especially by developing technologies to allow storage, the Cyprus News Agency reported. He referred to renewable energy pilot projects developed by Israeli companies and how the island country could benefit from the technology. There are Israeli companies interested in investing in renewable energy in Cyprus, Parnass said. He stressed the importance of renewables for Cyprus and Israel, since the countries have isolated electricity systems, largely dependent on fossil fuels.

Institute tests feasibility of CSP cooling, heating

February 13

The Cyprus Institute will provide cooling and heating to its Novel Technologies Laboratory (NTL) with concentrated solar power (CSP) in a project scientists have been working on for three years, Cyprus Weekly reported. A linear Fresnel collector of 70 kW thermal peak capacity is housed on the 352 square metre roof of the KEPA School in Nicosia across the road from NTL. The island country's first such facility will meet up to 40% of the building's needs, said researcher Nestor Fylaktos from the Energy, Environment and Water Research Center (EEWRC).

Sun's radiation is reflected on a receiver by mirrors, heating thermal oil which is pumped to a storage block parallel to a heat exchanger. The facility in Cyprus is one of four pilot plants, and the rest are in Italy, Egypt and Jordan. Fylaktos said the local project will be ready in April. The programme – Small-scale Thermal Solar District Units for Mediterranean Communities (SMS-Med) is funded by the European Union. The partnership is orientated at technologies

for energy efficiency in public buildings. It consists of 14 organizations from Cyprus, Italy, France, Egypt, Jordan and Greece. The kick-off gathering was in Palermo, Italy, in 2013. The endeavour will last 36 months on a budget of EUR 4.9 million.

The institute has another experimental CSP and desalination plant in Pentakomo.

Ghost town from Cyprus conflict may become smart city

February 13

Famagusta's district of Varosha, also known as Kapalı Maraş, has been all but abandoned since the summer of 1974, but an ambitious plan may help its revival. In-Cyprus portal said the former tourist resort is in the focus of a bi-communal initiative, preparated in secrecy during the past year, to refurbish the crumbling hotel buildings into state-of-the-art renewable energy hubs with electronic operational systems.

"Nicos Anastasiades, president of the Republic of Cyprus, agreed with the idea for the concept to be presented at an event in May."

Phileleftheros Group, which is at the forefront of the project, said Phidias Pilides, chief of Cyprus Chamber of Commerce and Industry, untimely and unnecessary announced the details, potentially hurting the endeavour. The official was briefed about the plans as the participation of the two domestic chambers, the Greek and Cypriot one, would have been beneficial, according to a statement by the publisher.

Nicos Anastasiades, president of the Republic of Cyprus, agreed with the idea for the concept to be presented at a bi-communal event in May, the article said. The portal adds he accepted to attend, while Mustafa Akıncı, president of the self-declared Turkish Republic of Northern Cyprus, was expected to decide. The conference is sponsored by Logicom and representatives of tech giants like Cisco Systems, Microsoft and Intel are supposed to be present. The blueprint envisages for Varosha to maintain zero emissions even with the new inhabitants, and also some of the old ones.

Multiconsult hired for consulting in Devoll projects

January 27

Statkraft Albania's project Devoll Hydropower (DHP) Sh.A. signed a contract with a Norwegian engineering and design firm. Multiconsult was picked for providing contract staff and for consulting services.

Hydropower stations, Banja and Moglicë, one of which is underground, will have total capacity of 256 MW. The stations will produce an estimated 729 GWh per year, increasing Albania's electricity generation by around 17%. "We have been working on the details of the new contract for six months... We have been given the contract largely on the back of the good work of our employees who are already on site. I am particularly pleased to see that the project has given many younger members of staff the opportunity to gain extremely valuable international experience," says Multiconsult's project manager Richard Duncumb.

"The project, which will make use of a 555 metre drop in the river, involves building a 20 kilometre long tunnel, as well as two large dams: one of 90 metres for Banja and a 150 metre facility for Moglicë."

The power stations are located on the Devoll river, in the valley of the same name, around 70 kilometres southeast of capital Tirana. The project, which will make use of a 555 metre drop in the river, involves building a 20 kilometre long tunnel, as well as two large dams: one of 90 metres for Banja and a 150 metre facility for Moglicë.

Construction work started in 2013, and the two project phases are due for completion this year and in 2018. The concession contract entitles Statkraft to build, own and operate the power stations until they are transferred to Albanian authorities. Multiconsult has been working with Norconsult since the pre-project phase in 2009, with particular responsibility for Banja, as well as the underground works, Duncumb said. "When the tender phase was completed in 2011, we signed a consulting contract for the construction phase via Norconsult. That contract recently expired, and we have now signed a new contract directly with DHP and Statkraft," he added.

TURKEY

Energoinvest from BiH completes overhead power line

January 29

The inauguration of 110 kV project Albania's South Ring and the launch of an overhead power link were held in Vlora in Albania's south, Oslobođenje portal from Sarajevo reported. Energoinvest d. d. from Bosnia and Herzegovina was the contractor, and German KfW Development Bank supported the project. The power line was completed in less than three years, ahead of deadline, the article said. The company, selected at an international tender, built 249 kilometres of 110 kV power lines and expanded five substations in the country. Energoinvest said it is also constructing a 400 kV interconnection in Albania, set to be complete by the middle of the year.

"The project's aim is to eradicate power shortages in the country's south and to boost the economy and tourism."

The works are part of a chain of investments, as USD 120 million (EUR 106.7 million) in total were funded by distribution network operator Oshee sh. a., the Albanian Electrical Power Corporation (KESH) and the Transmission System Operator (TSO or OST), prime minister Edi Rama said, inaugurating substation Babica. „Only two and a half years ago losses were 52% in the entire power distribution system. A significant proportion of this 52%, the largest one, concerned energy theft," he stressed. Rama said the project will be complete with the construction of substations Orikum and Himara, with procedures already underway. He added the aim is to eradicate power shortages in the country's south and to boost the economy and tourism. The premier said Albania will be fully integrated into the European power network when interconnection projects with Kosovo and Macedonia are complete.

Albania's South Ring, covering the western and eastern part of southern Albania, is a EUR 49 million investment by the German government through KfW, the prime minister's office said. The project was expanded and strengthened the 400/110 kV substation of Zemblak.

EBRD working on geothermal energy deals through Pluto

January 25

A national financing programme brought three geothermal developers based in the western part of Turkey to talks with the European Bank for Reconstruction and Development, Anadolu Agency's Energy Terminal reported, quoting Adonai Herrera-Martinez, senior manager in the institution's energy efficiency and climate change team. He added negotiations with two more firms are expected to start by the end of the first quarter.

"Herrera-Martinez: The increase in installed capacity is due to a combination of factors, starting with regulatory improvements which spurred renewable energy investment, followed by better management of risks associated with this technology."

EBRD developed Pluto (Private Sector Early Stage Geothermal Development Framework) to finance exploration activities and to provide technical assistance in applying best global practices, hence reducing technical risks at this stage, Herrera-Martinez said. The bank supports renewable energy projects in Turkey through equity and debt financing. "Turkey has huge potential across all renewable energy sources and the EBRD stands ready to support all of them. Geothermal energy presents specific challenges in terms of early stage development, hence the development of Pluto, a dedicated facility to address this technology's specific barriers," Herrera-Martinez underlined.

He explained that once Pluto's funds of USD 125 million (EUR 112.3 million) are fully allocated, EBRD could potentially consider mobilizing additional grant-based funds to be able to look into more projects. He noted that the geothermal sector is expanding in Turkey and the installed capacity has increased sixfold since 2009. "The increase in installed capacity is due to a combination of factors, starting with regulatory improvements which spurred renewable energy investment, followed by better management of risks associated with this technology. EBRD's newest initiative to promote geothermal energy generation, Pluto, falls within these measures to mitigate risks and accelerate investments, as does the streamlining of the current renewable energy licensing regime – an endeavour in which the bank is currently working together with the Ministry of Energy and Natural Resources," Herrera-Martinez stated.

He concluded EBRD also intends to maintain its strong interest in renewables this year through direct deals using both equity and debt loans and through partner banks. Last year the bank provided a EUR 180 million loan for Turkey's largest geothermal power plant, Efeler. Previously, through Turkish commercial banks, it financed geothermal power plants Tuzla, Gümüşköy, Pamukören, Babadere, Alaşehir and Umurlu. At the end of last year, EBRD agreed to take a 20% stake through a capital increase in the renewables arm of Akfen Holding. The investment aims to help the newly created Akfen Renewable Energy to almost triple the size of its renewable portfolio to over 500 MW of installed capacity.

Banks tailor products for renewable energy projects

January 28

The number of banks choosing to finance renewable energy projects is on the rise, which is an impo rtant sign that the sector will further develop and improve, said the deputy managing director of Turkey's Şekerbank TAŞ. Speaking to Anadolu, Gökhan Ertürk underlined awareness of renewable energy in the country has gradually increased over the past years. In addition, banks and financial establishments, in accordance with the requirements of its customers, both individual and institutional, have brought out many credit and loan mechanisms formulated for a variety of needs, he adds, the agency's Energy Terminal reported.

The loans include aid in irrigation for farmers, financing solar panel installation on roofs and insulations for buildings. In the case of Şekerbank, a programme called EKOkredi was started in 2009, designed to provide financial aid for energy efficiency and renewable energy projects, he explained. Since 2009, the bank has financed over TRY 651 million (EUR 197.4 million) in the sector, Ertürk said.

> *"The loans include aid in irrigation for farmers, financing solar panel installation on roofs and insulations for buildings."*

He argued the developments are indicative of the renewable energy market's rising appeal in the eyes of financiers. "The bank follows energy efficiency projects closely and offers finance opportunities according to specific needs and requests. Solar energy is expected to be the most important field to draw attention to and the bank will evaluate these projects," Ertürk stated and added the bank aims to incorporate more biomass projects into its portfolio.

He said the bank aims to provide finance in the sum of EUR 91 million a year and plans to accelerate the insulation of houses targeting 60,000 units each year. Up to now, funds were engaged for the insulation of over 104,000 homes, saving 194 million cubic meters of unnecessary natural gas usage, Ertürk said. He added Şekerbank hopes to provide EUR 15.2 million in financial aid by the end of 2017 to assist in the construction of a 30 MW solar plant.

Armed conflict makes Statkraft write off hydro project

February 4

As fights between government forces and the rebels intensified in southeastern Turkey, Statkraft stated in its quarterly results it decided to suspend most of the construction works for the Çetin hydropower plants on the Botan river. The two facilities planned for total capacity of 517 MW are the Norwegian company's biggest project outside the home market. It is located in provinces of Siirt and Bitlis.

Statkraft said it wrote off NOK 2.09 billion (EUR 220 million) from assets due to overall uncertainty about the endeavour, with almost two thirds attributed to depreciation, and the rest to operating expences. This brought the total net loss for last year to EUR 250 million.

Kargı Kızılırmak hydropower plant of 102 MW, located in Çorum province at the Black Sea region, was inaugurated in August. Starkraft's head Christian Rynning-Tønnesen attended the ceremony with Taner Yıldız, Turkish energy minister at the time.

Most consumers don't invest in energy efficiency

February 8

Honeywell, a Fortune 100 company with operations in in energy efficiency technology sector, said many homeowners in Turkey fail to implement technologies which cut heating bills and simplify the process, domestic media said. Results of a survey in Izmir, Istanbul and Ankara revealed 53% of respondents do not invest in reducing heating costs. A quarter heats the living space under the comfortable temperature level in wintertime and 63% in the category say they decide to do so in order to save, the company said in a press release.

Only 15% of homeowners use a thermostat to automatically set a suitable temperature and 70% of users in the given segment say the technology lowers bills, by an average of 19%, Hurriyet Daily News reported. Heating accounts for 16% of costs in Turkish households on average, Honeywell said. Heating bills average TRY 268 (EUR 82.7) per month – over a fifth of the national minimum wage, which the government raised last month by 30% to EUR 400. The majority of respondents, 52%, place gas costs in the winter in the categories of high and very high.

EBRD sets EUR 500 million more for green energy

February 10

At a high-level conference in Istanbul, the European Bank for Reconstruction and Development revealed it will finance sustainable energy in Turkey with an additional EUR 500 million. Under the Mid-size Sustainable Energy Financing Facility (MidSEFF), now totalling EUR 1.5 billion, funds are provided to Turkish banks in the form of loans and capital market instruments for on-lending to private sector companies. The financing – supported by the European Union and the Turkish Ministry of Energy and Natural Resources – will benefit renewable energy and resource efficiency projects in Turkey including solar, hydropower, wind, geothermal, waste-to-energy and energy efficiency as well as water saving and waste minimization projects, EBRD said on its website. Akbank is the first to join the extension of the programme with USD 110 million (EUR 98.15 million) in financing in addition to EUR 89.23 million received in 2011. "The highly successful MidSEFF programme has already financed 43 projects through seven Turkish banks and has helped build over 800 MW of additional renewable energy capacity. This represents a major step for Turkey towards its goal of developing 30% of total installed capacity from renewable sources by 2023," said Terry McCallion, EBRD›s director for energy efficiency and climate change.

> *"The grant funding enables the EBRD to provide expert advice to its partner banks and to private sector companies seeking finance for their renewable energy and resource efficiency projects."*

The European Union is supporting the programme with a EUR 6.8 million grant for technical assistance through its Instrument for Pre-Accession in collaboration with the Turkish Treasury and the Ministry of Energy and Natural Resources. The grant funding enables the EBRD to provide expert advice to its partner banks and to private sector companies seeking finance for their renewable energy and resource efficiency projects. Almost half of the bank›s total portfolio in Turkey is in sustainable energy and since 2009 it has invested EUR 3 billion in over 70 such projects, including two of the country's largest wind farms – Bares and Rotor – and the largest geothermal power plant in Turkey (and second largest in Europe), Efeler.

The bank helped develop the country's first National Renewable Energy Action Plan to attract more investment in renewable energy projects. It is currently working on a National Energy Efficiency Action Plan to help Turkish industry become less energy intensive. EBRD operates from offices in Istanbul, Ankara and Gaziantep.

EBRD awards sustainable energy projects

February 10

In a ceremony in Istanbul, the European Bank for Reconstruction and Development and partners have awarded the best energy efficiency and renewable energy projects financed in Turkey through the Mid-size Sustainable Energy Financing Facility (MidSEFF). The programme, supported by the European Union and the European Investment Bank, provides funds to Turkish banks. EBRD is expanding the facility with an additional EUR 500 million.

Eleven companies were recognized for promoting energy efficiency and energy generation from renewable sources. Since MidSEFF was launched in 2011, 43 Turkish companies have received financing through seven local banks, all also awarded.

The Energy Efficiency Pioneer Award went to Konya Şeker, a sugar company, for implementing energy saving and waste-to-energy solutions at two of its plants. The first project under MidSEFF, it was financed through Akbank with a total loan amount of EUR 8.8 million. The Award for the First Biomass Plant went to Mutlular Grup. With a EUR 20.9 million loan from Denizbank and expert support provided through MidSEFF, Mutlular will be the country's largest biomass power plant. Koçlu, the largest hydropower plant financed under MidSEFF, received the Award for the Successful Implementation and Certification of an Environment, Health and Safety Management System (ISO 14001 and OHSAS 18001). The plant was built with a EUR 43.9 million loan from Finansbank.

The Award for the Most Proactive Implementation of Environmental and Social Standards was shared by Samurlu and Karadere wind power plants for adopting the highest environmental standards. The projects were financed through Garanti Bank, having received loans of EUR 30.3 million and EUR 6.7 million, respectively. The Award for Most Advanced Carbon Credit Project was collected by Rönesans Holding for the Sena hydroelectric power plant. This project benefited from additional carbon market support provided under MidSEFF and was subsequently registered under the Verified Carbon Standard. It now has over 20,000 carbon credits available for immediate sale. The project benefited from a loan of EUR 24.7million from Garanti Bank.

> *"The Award for Most Advanced Carbon Credit Project was collected by Rönesans Holding for the Sena hydroelectric power plant."*

The Largest CO_2 Emission Reduction Project Award was given to the 56.4 MW Edincik wind power plant. The project also benefited from carbon market support under MidSEFF and is registered under the Gold Standard. Edincik received a EUR 15 million loan from Isbank. The Award for the Largest Geothermal Power Plant was taken by Pamukören, which had outstanding effective stakeholder engagement, EBRD said. It was financed with a EUR 37.4 million loan from VakıfBank. The Award for Best Stakeholder Engagement was taken by the Saray hydroelectric power plant though for close engagement with local residents in the Black Sea Region. The project was financed with a EUR 14.9 million loan from VakıfBank.

The Highest Energy Saving Project Award was received by cement producer Göltaş AŞ. The company is expected to reduce energy use by 75,000 MWh per year by producing electricity from waste-heat recovery and by installing a more efficient mill. Yapı Kredi provided a EUR 30.7 million loan. The Best Outreach Project Award was taken by Gümüşköy geothermal power plant for capturing its carbon dioxide emissions, using them in local greenhouses and selling them to industrial gas consumers. The plant was financed with a EUR 15.9 million loan from Yapı Kredi.

Record high installed wind capacity added last year

February 12

Ayen Enerji's Akbuk 2 RES wind power plant started production in Mugla province with 20 MW capacity in 10 turbine generators in Mugla province, Anadolu Agency's Energy Terminal said. The projected annual generation is 68,153 MWh.

Turkey added a record high 956 MW of installed capacity last year to reach 4,718 MW, according to a report by the Turkish Wind Energy Association (Tureb). Its president Mustafa Serdar Ataseven said 2015 was a good year for wind installations, and added that he expects at least 1 GW of additional installation this year. According to the report, 74% of wind farms are located in the Aegean and Marmara regions.

The Balikesir province in the Marmara Region saw the most installed wind capacity, 923 MW, while Izmir ranks second with 807 MW and Manisa in the west ranks third with 574 MW. Turkey has 61 wind farms under construction with a total of 1,868 MW, the report reads. For the first time, unlicensed wind power was also taken into consideration. According to the report, Turkey is currently operating 10.4 GW capacity from 14 unlicensed wind projects.

Turkey's installed wind capacity reached 2,958 MW in 2013. In 2014, the total wind capacity reached 3,762 MW and in 2015 an additional 956 MW installation, record high since Turkey's first installation, the country hit 4,718 MW.

Waste incineration powering 26,000 homes in Konya

February 16

Photo: https://commons.wikimedia.org/User:NorbertNagel/Industry Park Höchst

A new facility in the Anatolian province of Konya generates electricity from municipal waste and is run by the municipal authority, Tahir Akyürek, the mayor of Konya city, told the press, Daily Sabah and Anadolu Agency reported. The power is produced by burning methane gas from the solid waste landfill, and 2,850 cubic meters of waste are burnt every hour for electricity. The plant's four units have the capacity to meet the demand of 26,000 households.

The power plant has the capacity of 5.6 MW. Last year the plant produced 43 GWh. Generated heat is used in a greenhouse via heat exchangers, the article said. The city government said it will further develop methods for environmental protection.

By 2035 smart grids to be financed with EUR 10 billion

February 22

"Europe plans to invest EUR 400 billion in smart grids by 2050. In Turkey, we estimate that this volume will be around EUR 10 billion by 2035," Uğur Yüksel, secretary general of the Electricity Distribution Association (Elder) told Anadolu Agency, as reported by its Energy Terminal.

The introduction of smart grids to Turkey›s energy sector will prevent power cuts through automatic measuring systems by conducting situation analysis and providing grid reliability by controlling overloads and failures. He stated the durability of the electricity network will be increased that and the continuity of energy supplies will be combined with more energy efficiency. With the aim of introducing smart grids, out of Turkey's 21 electricity distribution companies, nine companies are preparing through a consortium to realize 'Turkey's Smart Grids Roadmap to 2020' project, Yüksel explained.

> *Yüksel: With the aim of introducing smart grids, out of Turkey's 21 electricity distribution companies, nine companies are preparing through a consortium to realize 'Turkey's Smart Grids Roadmap to 2020' project.*

"In that regard, we aim for maximum use of local technology. This project will last 16 months and methodology along with schedule to transition to smart grids will be determined during that process," Yüksel explained. The grid allows for the introduction of renewable energy resources into the system and offers many benefits to utilities and consumers – mostly seen in improvements in energy efficiency and reliability on the electricity grid and in energy conservation in users' homes and offices.

Wise Power rolls out online information-sharing tool

January 22

WE Engage, online platform for gathering public support for onshore wind power, was launched by the European Union–funded project Wise Power. Through information and advice the channel enables developers and industry stakeholders to engage with transmission system operators and local communities on permitting and planning. WE Engage tends to lean on best practice for the design of social engagement strategies for onshore wind projects.

Wise Power said the interactive tool creates a one-stop shop for information-sharing, with a focus on innovative financing through cooperatives and crowdfunding. The platform was developed following extensive research including over 200 questionnaires from industry and public stakeholders across Europe. Wise Power covers Belgium, Croatia, Denmark, France, Germany, Finland, Greece, Ireland, Italy, Poland, Romania, Spain and the United Kingdom. Partners from the UK include the Scottish Government and Comhairle nan Eilean Siar, the local government council for area Na h-Eileanan Siar.

Study identifies misuse of green energy funding

January 26

European Union member states in Central and Eastern Europe (CEE), including Romania and Croatia, misspend the bloc's funds destined to transform the carbon-intensive, inefficient energy systems of their countries, according to the authors of the study 'Climate's Enfants Terribles'. CEE Bankwatch Network and Friends of the Earth commissioned the document interpreting how the continent's clean energy transition is held back.

Regardless of the outcome of climate talks in Paris, EU funds in the covered region are spent on coal, gas and old transport systems – locking countries into fossil-fuel dependency, at the expense of renewables and energy efficiency, the study says. In CEE countries only 7% of the EUR 178 billion in European Regional Development and Cohesion Funds will be invested into renewables, energy efficiency and smart grids, according to the findings cited in the paper.

"Analyzing the spending plans and programmes of the EU funds in nine countries, this report argues that the potential of the EU funds to catalyze the clean energy transition in Central and Eastern Europe from 2014 to 2020 remains largely untapped. Current EU funds' investment plans and programmes from Central and Eastern European member states will contribute only to a limited extent to making economies cleaner, leaner and lighter. Instead of catalyzing a transition to a decarbonized, renewables-based and resource-saving economy that respects the planet's boundaries, we see an investment approach that mostly maintains the fossil fuels–based, energy-intensive economy that threatens the long-term sustainability of European societies," the study says.

The subjects of the report are the European Regional Development Fund (ERDF), the European Social Fund (ESF), and the Cohesion Fund (CF).

Following a business-as-usual scenario, Romania's energy-related strategies do include energy efficiency and the improvement of systems for supporting renewables in line with EU's 2020 targets, however nuclear energy, natural gas as a 'transition fuel' and the completion of the internal energy market prevail, the authors concluded. Alternatives for post-2020 aimed at completely phasing out fossil fuels and nuclear energy are not considered within national strategies or investments, the document adds. "Romania's climate action is, in effect, mostly EU-led, climate mitigation objectives are driven by EU targets and funded by EU funds, the government does not envision additional or complementary policies to address climate change. Transport sector plans, one third of all EU funds, do not make any reference to climate considerations," according to the findings.

Romania is on course to meet its three EU 2020 energy targets. While the cut in emissions is mostly a reflection of major economic shocks, energy consumption maintains its declining trend, the authors note. Bearing in mind the experience with the 2007–2013 EU funds, which the state had difficulty spending, it is understandable why the authorities are very much concerned to attain as high as possible absorption rates, they added. However, the previous experience has also been tainted by many examples

of projects lacking in quality that spent millions of the allocations without producing the desired results and with no longer-term impact, the study concludes.

The current trend of decreasing energy consumption and greenhouse gas emissions reduction makes Croatia's 2020 energy targets obsolete, however EU funds' spending plans are at least going beyond national ambitions, the paper notes. The national plan for green energy does not foresee new installations by 2020 for solar and wind, while planned fossil fuel installations block a clean energy development pathway, the authors concluded. "Planning documents fall short on horizontal integration of climate considerations, neglecting obligatory requirements. Funding for electricity transmission is not in line with the stated priorities" to match interest for investment in renewable energy sources from the private or business sector, the document says.

"Instead of catalyzing a transition to a decarbonized, renewables-based and resource-saving economy that respects the planet's boundaries, we see an investment approach that mostly maintains the fossil fuels–based, energy-intensive economy that threatens the long-term sustainability of European societies, according to the paper published by CEE Bankwatch Network and Friends of the Earth."

In spite of progress faster than targets, there are still obstacles to new capacities: permits for small projects are the same as for large ones and they should be awarded based on energy potential, according to the paper. Furthermore, quotas for photovoltaics are seen as too low, incorrect alignment of goals is set in the legislative framework and the national strategy, and there is technical limitation of the energy system for connection of new green power due to shortage of regulatory energy in conditions of intermittent functioning. Administrative barriers for usage of biomass were identified.

EU funds could provide assistance in solving technical limitation while technical assistance funds could provide support for easing the administrative barriers in Croatia, the study found.

Overall, EU funds' spending plans need to be embedded into longer-term greenhouse gas reduction strategies aiming at 80% to 95% cut in emissions and the construction of low-consuming, renewables-based energy systems, according to recommendations in the study.

Romania least energy dependent in the region

February 4

Following Norway, Estonia, Denmark and Iceland, Romania had the highest position by energy independence in Europe in 2014. Importing only 17% of the consumption demand, it fared the best among the markets followed by Balkan Green Energy News, Eurostat's data showed. The overall result for the EU was 53.4%, in the range of the readings for the last decade. The peak of 54.5% was recorded in 2008. Nine countries hit the lowest energy dependency level so far, including Romania and Bulgaria, with the share of imported energy of 34.5%, decreasing since it reached 51.7% in 2008. Romania is among the countries which have varying results from year to year due to changes in hydrology and thus output from hydropower facilities. However, its trend of a cut in dependence on energy imports has a decreasing trend after it reached 31.7% in 2007.

Norway was the only net energy exporter in 2014, with supply equivalent to 569.6% of its needs. The report is for EU member states, Iceland, Norway and candidate countries Montenegro, Macedonia, Albania, Serbia and Turkey. It excludes data from Bosnia and Herzegovina, Kosovo, Switzerland, the Caucasus region, Moldova, Ukraine, Belarus and Russia, as well as Andorra, Monaco, San Marino, the Vatican City, and Lichtenstein.

"Cyprus was almost at the bottom of the list with 93.4%, one percentage point above the best result, reached in 2011."

Two years ago Macedonia hit its peak of 52.9% share, crossing the first time into the half which is energy dependent for most of domestic consumption. At the same time, Cyprus was almost at the bottom of the list with 93.4%, one percentage point above the best result, reached in 2011. Greece was dependent on almost two thirds of its consumption on energy from imports in 2014, following a peak of 73.3% from

2008. Turkey imported 74.8% of energy consumed two years ago, just half a point below the peak, hit in 2012. Slovenia had a reading of 44.6%, in line with a general trend of decreasing from 1999. Croatia had a 43.8% share of imported energy in 2014, while Montenegro, Serbia and Albania were at 29.7%, 27.5% and 29.4%, respectively.

Croatia has biggest rise in wind power in Southeastern Europe

February 9

Wind power capacity in 2015 increased 22% in Croatia, the most in the region, as the country added 76.2 MW, data published by the European Wind Energy Association (EWEA) show, SeeNews reported.

Croatia's cumulative wind power capacity stood at 422.7 MW at the end of the year, EWEA said in its 2015 Wind in Power report. The countries covered by the report are Romania, Bulgaria, Croatia, Slovenia, Serbia and Macedonia. Romania remained the region's leader in terms of cumulative wind power capacity with 2,975.9 MW, up by 0.8% as compared to a year earlier.

Bulgaria came in second with a cumulative wind energy capacity of 691.2 MW, flat from a year earlier, followed by Croatia. Serbia installed its first 9.9 MW of wind energy. Slovenia and Macedonia ended the year with a cumulative wind energy capacity of 3.4 MW and 37 MW, respectively, both flat from a year earlier. During 2015, as much as 13,805.2 MW of wind power was installed across Europe, 5.4% more than in the previous year, as 12,800.2 MW of it was in the European Union.

Croatia, Romania lead region in green energy target quotas

February 10

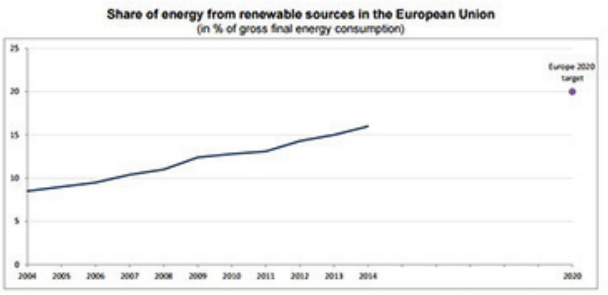


Photo: http://ec.europa.eu/

While Cyprus fared very low and Greece was just under European Union average in 2014 by the share of renewables in gross final energy consumption, Croatia reached the highest level in the bloc among the markets followed by Balkan Green Energy News. A publication released by Eurostat revealed the newest EU member exceeded the target of 20%, set for 2020, by 7.9 percentage points. Sweden was first with a 52.6% share, compared to the target 52%. Latvia, Finland, Austria and Denmark were also ahead of Croatia, all slightly above or under the level set for 2020. The target share for the EU in total is 20% and the level of 16% was reached in 2014.

> *"The target share for the EU in total is 20% and the level of 16% was reached in 2014."*

Romania and Bulgaria surpassed the target 24% and 16%, respectively, while Slovenia was 3.1 points short from reaching the planned 25%. Greece achieved 15.3% and Cyprus had a share of 9%, in comparison to the level of 18% and 13%, respectively, agreed at the EU level for 2020.

Since 2004, the share of renewable sources in gross final consumption of energy grew significantly in all member states. Compared with a year before, it has increased in 24 of the 28 in the EU. The contribution of renewable energy from heat pumps is also covered in the report. The renewable energy delivered to final consumers is the numerator. The denominator, the gross final energy consumption of all energy sources, covers total energy delivered for energy purposes to final consumers as well as the transmission and distribution losses for electricity and heat.

Bulgaria had previously agreed to produce 16% of its energy from renewable sources by 2020. This goal was achieved in 2012 and in 2013 the target was exceeded to a 19% share, which was reached that year, but in the current report one percentage point less was measured.

Consultant sought to expand REEP to residential sector

February 15

The European Bank for Reconstruction and Development issued an invitation for expressions of interest for firms or groups of firms to obtain consultancy services for the extension of theWestern Balkans Regional Energy Efficiency Programme (REEP), particularly in the residential sector. REEP Plus is expected to start in June and has an estimated overall duration of 40 months. The cost estimate for the programme and assignment is EUR 3 million, exclusive of VAT, subject to extension, the bank said. The closing date for expressions of interest is March 14.

"Following feedback from the Energy Efficiency Coordination Group (EECG) of the Energy Community, it became clear that there is an urgent need to extend the programme to the residential sector."

The programme is expected to be funded through the EBRD's donor-funded Technical Cooperation Funds Programme. However, consultant selection and contracting will be subject to availability of funding from an appropriate donor. The consultant will preferably have experience in energy efficiency sector relating to project advisory services, including development and implementation of national energy efficiency action plans, implementation of the energy efficiency obligation schemes, and provision of institutional capacity building assistance. Experience is needed in the area of supporting public administrations in providing key policy recommendations, including assisting with development of primary and secondary legislation governing energy efficiency, development and implementation of policies to support investments in residential energy efficiency, assisting countries with development and implementing of monitoring, verification and enforcement for energy efficiency policies, the invitation said.

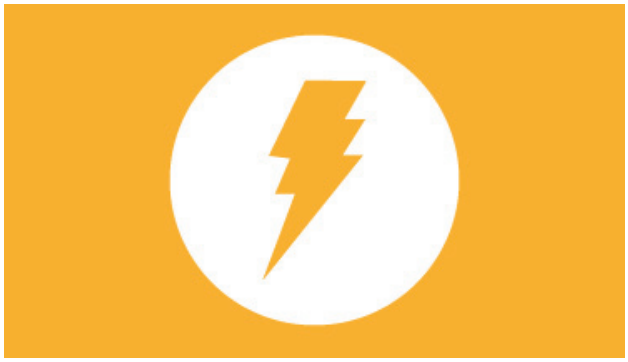
The programme supports energy efficiency investment in Albania, Bosnia and Herzegovina, Kosovo, Macedonia, Montenegro and Serbia. EBRD established REEP in 2013, with the support of the European Union and in partnership with the Energy Community Secretariat (ECS). Following feedback from the Energy Efficiency Coordination Group (EECG) of the Energy Community, it became clear that there is an urgent need to extend the programme to the residential sector, EBRD said.

Energy intensity of the six Western Balkans countries is around three times higher than the average for the EU, as a result of aged and often obsolete energy infrastructure and poorly maintained and outdated energy-using capital stock – especially in industry and buildings, the bank said and added it is critical to capture the energy efficiency potential. When properly supported by a solid legal and institutional framework and backed up by well designed and implemented investment programmes, increased energy efficiency delivers many cost-effective benefits for competitiveness, the environment, security of energy supply and economic development in general, according to the invitation.

EBRD, in cooperation with the ECS and the EECG, commissioned a regional residential energy efficiency study. The aim of the programme is to provide policy support to the governments to eliminate market barriers and accelerate the take up of energy services.

EU grants support to Albania–Macedonia power link

February 22



At the Western Balkans Investment Summit, in the presence of all regional prime ministers, the European Union confirmed its intention to provide a EUR 12 million grant to support construction of the first electricity interconnector between Albania and Macedonia, the European Bank for Reconstruction and Development said on its website. The package will also help the introduction of grid efficiency

improvements to the infrastructure of MEPSO, the electricity transmission system operator of Macedonia.

> *EBRD has already committed a EUR 37 million loan for the regional integration of energy markets in the Western Balkans.*

The project is part of the connectivity agenda for the Western Balkans with funding provided from the Instrument for Pre-Accession (IPA) through the Western Balkan Investment Framework (WBIF). EBRD has already committed a EUR 37 million loan for the regional integration of energy markets in the Western Balkans.

Supporting crucial regional cross-border infrastructure and creating larger integrated energy markets increases energy security, said Suma Chakrabarti, president of EBRD. The project signifies an important step towards establishing a regional electricity market, he said.

The European Commission supports the Western Balkans connectivity agenda and the transmission line will improve the security of supply and the stability of the two countries' power systems, said Christian Danielsson, director general for enlargement, and added waste and excess capacity will be reduced. The project is part of the European Commission's initiative to establish an East–West electricity transmission corridor between Bulgaria, Macedonia, Albania, Montenegro and Italy, including the planned submarine cable from Montenegro to Italy.

UPCOMING EVENTS

February 25, 2016

Possibilities of Renewable Energy Sources Application
Zagreb, Croatia

February 25, 2016

Romanian HydroPower Energy Summit 2016
Bucharest, Romania

March 14-15, 2016

Energy Risk Summit 2016 Balkans
Sofia, Bulgaria

March 17-18, 2016

Balkan Energy Leaders
Belgrade, Serbia

March 20-22, 2016

International Conference on District Energy
Portoroz, Slovenia

April 5-7, 2016

South-East European Exhibition on Energy Efficiency and Renewable Energy
Sofia, Bulgaria

April 15, 2016

4th Investing in Turkey Forum
London, Great Britain

April 20-21, 2016

RENEXPO Western Balkans
Belgrade, Serbia

September 3-10, 2016

Energy Community Summer School
Tirana, Albania

SUPPORTER

Schweizerische Eidgenossenschaft
Confederation suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Departement of Economic Affairs,
Education and Research EAER
State Secretariat for Economic Affairs SECO

PARTNERS

german cooperation
DEUTSCHE ZUSAMMENARBEIT

Implemented by giz Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH

SERBIO
NACIONALNA ASOCIJACIJA ZA BIOMASU

CMS
Law.Tax

MEDIA PARTNERS

SeeNews
Know how to see

ENERGY NEWS TERMINAL
aaenergyterminal.com

Contact information:
Center for Promotion of Sustainable Development
Bulevar Mihaila Pupina 133, Belgrade, Serbia
Phone: +381 63 871 28 74
E-mail: *office@balkangreenenergynews.com*
Web: *www.balkangreenenergynews.com*

Balkan Green Energy NEWS

Balkan Green Energy News is a project of the Center for Promotion of Sustainable Development, a non-profit organization from Belgrade, Serbia. It is published one a month and distributed without charge.
We encourage you to share the newsletter to persons that may be interested in its content.
Balkan Green Energy News is not responsible for the accuracy of information provided from third party media sources.