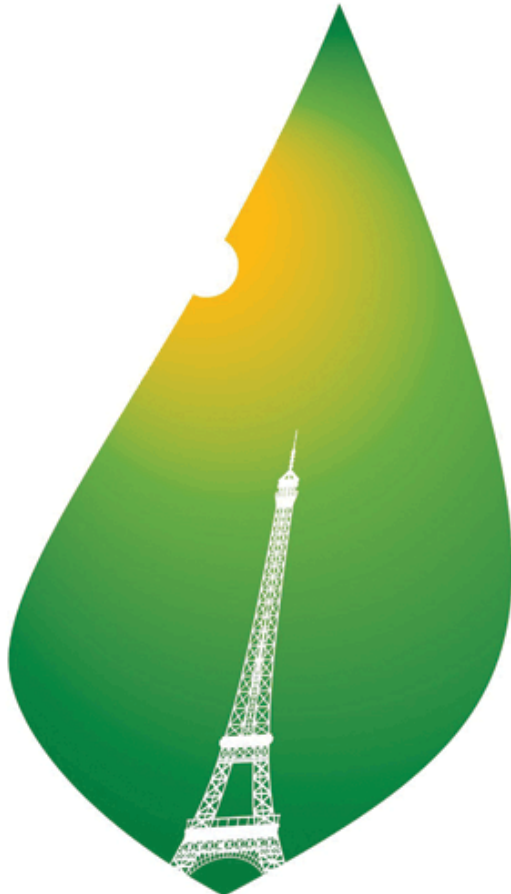


ENERGY PORTAL OF SERBIA

E- NEWSLETTER OF THE ENERGY PORTAL

30.NOVEMBAR 2015./BROJ 2



COP21 • CMP11
PARIS 2015
UN CLIMATE CHANGE CONFERENCE

*30.11 - 11.12.2015.
Paris, France,
Planet
The largest conference
dedicated to climate
change
The largest diplomatic
event
Over 40,000 delegates
195 countries
147 officials who will
address the opening day
„Leader's Day”*

1 goal
*To limit global warming
to 2°C
The overall global
agreement in the proces
of energy transition*



Christine Moro

Interlocutor Her Excellency **Mrs. Christine Moro**
Ambassador of France in the Republic of Serbia

Interview by: Vesna Vukajlović

Serbia was among the first countries to deliver its national commitments UNFCCC-*

By entering the industrial era, mankind entered in the era of climate change on the planet. Activity of people directly affected by the increase in emissions of greenhouse gasses, in addition there was a threat that will die 20 to 30 % of animal and plant species, the level of seas and oceans is increasing, and all this affects the new migration and far-reaching social and economic changes. Global warming is causing severe meteorological changes such as floods, drought, natural disasters, storms ... All of this will be discussed at the COP21 conference about which we talk with the Ambassador of France in Serbia, Mrs. Christen Moro who on behalf of the host country speaks for our special edition about organization of a conference in Paris, the significance of this event, the activities of Serbia when this topic comes and more ...

EP: The Conference Cop21 the largest diplomatic event ever that will take place in France, and there are expected delegations 195 countries and EU delegation. Do you expect that the effects of this event are grandiose like the event itself?

CHRISTINE Moro: Grandiose is not the appropriate word, we do not seek a "show off" effect but a breakthrough in negotiations which have already lasted for too long without decisive result, while the evolution of climate is rapidly deteriorating.

The negotiation in Paris has been prepared well in advance, with a close cooperation between the current presidency of the COP (Peru who presided over COP 20) and the incoming presidency, France, responsible for COP 21. We have used every methodological means to make the positions converge towards our target: a universal, though differentiated, agreement, a binding agreement, a regular monitoring and upward revising mechanism.

On the way to COP21, the preparation already produced very good and encouraging results: to date, 167 countries have submitted national commitments ("INDCs"), covering 91% of global greenhouse gas emissions by 2011. This high number is in a way a plebiscite showing that the purpose of this negotiation is understood and shared worldwide. Serbia has contributed to this successful

preparation: it was among the first countries to deliver, last June, its national commitments to UNFCCC.

With the collected commitments, we are on the right track: the INDCs are already making a significant shift in trajectory even though they are not sufficient to limit the rise in average temperature below 1.5 to 2 degrees Celsius - which is the target.

A good progress has been made in recent weeks, just ahead of the Conference, to find convergence in the remaining causes of dissent. The most important is that the political leaders be aware that decisions must be taken NOW, and we count on them to give the necessary impulse. The declaration of the G20 meeting in Antalya is contributing to this political impulse.

The involvement of civil society ahead of and during the Conference is also very important. In spite of the recent dramatic events in Paris we have decided to maintain the Conference itself - which will be a moment of hope and confidence in the future- including the events with civil society - as long as they take place in spaces in which security can be guaranteed.



COP21 - CMP11
PARIS 2015
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EP: France wants to play an exemplary role in this process. EU member states have committed to a 40 % cut emissions of greenhouse gases by 2030., and France goes a step further by seeking to reduce to 60 % mentioned effect until 2040. What are the resources and potentials necessary to make realized what the French actually be practical to take?

CHRISTINE Moro: Climate change is a priority of French government since the early 1990s. By representing only 1.2% of global emissions, while it accounts for 4.2% of global GDP (gross domestic product), France is among industrialized countries that emit less greenhouse gases. Between 2008-2012, France has reduced by more than 10% its emissions of greenhouse gases thanks to "low carbon" technologies in the areas of transport, land use and agriculture.

Recently we adopted the law on the energy transition, which paves the way to a more sober economy in energy consumption, while renewable energy is increasing its share in energy production. We are convinced that it is possible to develop a green economy without sacrificing growth, and avoiding huge expenses for damage caused by global warming. We plan that the energy transition will create around 100,000 new jobs in various fields including renovation of buildings, renewable energy, recycling economy, etc.

Industries and companies used to wait for incentives or coercive policies to act. Today, they show their voluntarism: they have become aware that their own economic interest is to commit themselves in low-carbon practices. And they have understood that the fight against climate change is a source innovation and competitiveness. More than 1500 French companies already published their quantified commitments to climate change.

EP: The French Embassy in Serbia is active, and has launched a series of exhibitions, debates, seminars that included the local community on the topic Cop 21. What are the results of these activities?

CHRISTINE Moro: Serbia has understood where its interests lie, and is aware of the constraints and damages caused by the effects of climate change: natural catastrophes such as droughts and floods, consequences of global warming on agriculture, public health ... For several years France has had a good cooperation with Serbia in those fields and we understand each other. We have found in that preparation of COP 21 common grounds for joint actions with the government, local authorities, schools and universities... We have also worked together with researchers and innovation stakeholders, NGOs and citizens.

A broad involvement is essential, not only having COP 21 in view, but more broadly having in view the period after COP 21: the success of the commitments taken will not be possible without participation and support from all levels and fields within the country. The actions taken have raised the awareness of the public, which understands better what is at stake, what is the cost of inaction, what are the benefits of action and what can be done at individual and collective level.

*United Nations Framework Convention on Climate Change



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RÉPUBLIQUE FRANÇAISE

AMBASSADE DE FRANCE EN SERBIE

What is COP21 / CMP11?

France will chair and host the 21st Conference of the Parties to the United Nations Framework Convention on Climate Change (COP21/CMP11), from 30 November to 11 December 2015. The conference is crucial because the expected outcome is a new international agreement on climate change, applicable to all, to keep global warming below 2°C. At the international level, the role of France will be essential. France will work on bringing the positions of participants of the conference and to find a consensus within the United Nations, and also within the European Union, which occupies an important position in the climate negotiations.

At this crucial conference participants will try to offer adequate answers to the challenges and threats that our planet is exposed to global warming



COP21 - CMP11
PARIS 2015
UN CLIMATE CHANGE CONFERENCE

Climate change timeline

- 1681. - green-house concept - French physicist Edme Mariotte noticed that light and heat from the Sun passes easily through the glass while the other light sources do not
- 1824. - French physicist and mathematician Joseph Fourier, explained the principle of heat and sunlight's passing through the atmosphere; and also some gases on the way of their return to the atmosphere can retain the heat even after the reflection from the Earth's surface
- 1861. - Irish scientist John Tyndall established hypothesis that the molecules of water and carbon dioxide absorb rebound heat
- 1869. - Swedish physicist Svante Arrhenius came to the conclusion that the development of industry, combustion of oil and gas relieve the increasing amount of carbon dioxide that will lead to an increase in temperature
- 1958 - first accurate measurement of the concentration of CO2 in Hawaii
- 1970 - Beginning of period of atmospheric warming known as "global warming"
- 1979 - The First World Climate Conference in Geneva
The aim of the conference was to assess the level of knowledge of climate, to consider the consequences of climate change and its impact on human society.
World Climate Programme (WCP) was established as a joint responsibility of the World Meteorological Organization (WMO), the United Nations Environment Programme (UNEP) and the International Council of Scientific Unions (ICSU)
- 1988 - UNEP and the WTO establish a panel on climate change, the science of climate change is formed
- 1990. - The Intergovernmental Panel on Climate Change (IPCC) published the first evaluation report
. This year will be adopted as the starting year of future goals

- 1992. - United Nations Framework Convention on Climate Change was signed; Convention was signed by 154 countries in Rio de Janeiro.
- 1995 - INC has been dissolved, COP - Conference of the Parties is established
- 28. march– 7. april 1995. COP1 - The first session was held in Berlin
- 1995. december - IFCC has released second evaluation report with the conclusion that there is a large impact of human activities on the global climate and the greenhouse effect
- 1997. december - The Kyoto Protocol was adopted at COP 3. The Kyoto Protocol obliges industrialized countries to stabilize GHG emissions based on the principles of the Convention. The first implementation period 2008 - 2012 years
- 1998. - Warmest year in warmest decade in warmest century for at least a thousand years
- 2001. The third assessment report with detailed guidelines implementing the Kyoto Protocol has been published
- 2005. - The Kyoto Protocol came into force in January 2005, drought temporarily turns Amazon rainforest from the scrubber carbon dioxide to the source of carbon dioxide
- 2007. - Massive summer ice loss in the Arctic brings fears of an ice-free north; IPCC Fourth Assessment warns of faster and irreversible climate change; Bali Climate Conference lays out timetable for agreeing successor to Kyoto Protocol
- 2009. Copenhagen, final document agreed by 27 countries, while others will inform about the upcoming accession period
- 2012. december - The second binding protocol, Doha, Qatar. The Parties undertake to reduce emissions of greenhouse gases by at least 18 percent below the level of 1990 in the period 2013-2020
- 2014. - Agreement establishing the platform for a global climate deal in Paris in 2015 was achieved in Lima, Peru



COP - What is it?

The international political response to climate change began at the Rio Earth Summit in 1992, where the 'Rio Convention' included the adoption of the UN Framework on Climate Change (UNFCCC). This convention set out a framework for action aimed for stabilizing atmospheric concentrations of greenhouse gases (GHGs) to avoid "dangerous anthropogenic interference with the climate system." The UNFCCC which entered into force on 21 March 1994, now has a near-universal membership of 195 parties.

The main objective of the annual Conference of Parties (COP) is to review the Convention's implementation. The first COP took place in Berlin in 1995 and significant meetings since then have included COP3 where the Kyoto Protocol was adopted, COP11 where the Montreal Action Plan was produced, COP15 in Copenhagen where an agreement to success Kyoto Protocol was unfortunately not realized and COP17 in Durban where the Green Climate Fund was created.

In 2015 COP21, also known as the 2015 Paris Climate Conference, will, for the first time in over 20 years of UN negotiations, aim to achieve a legally binding and universal agreement on climate, with the aim of keeping global warming below 2°C.

France will play a leading international role in hosting this seminal conference, and COP21 will be one of the largest international conferences ever held in the country. The conference is expected to attract close to 50,000 participants including 25,000 official delegates from government, intergovernmental organizations, UN agencies, NGOs and civil society.



Climate change

The phenomenon of climate change is reflected in global warming which the country is exposed since the mankind entered the industrial era. In 2012, the global average temperature was higher by 0.89 ° C above the average temperature values in the nineteenth century. The phenomenon is all the more pronounced because of the increase in emissions of greenhouse gases, which is directly linked to human activities. Between 1750 and 2011, CO2 concentrations in the atmosphere have risen by 40% or 150% when it comes to the concentration of CH4. If this trend continues, in the summer the global average temperature may rise to values of 1.3 to 5.3 ° C by the end of the XXI century.





Belgrade has regional significance and the duty to be the leader

Interlocutor: Mr. Goran Trivan

Secretary for environmental protection of Belgrade

Interview led by: Svetlana Jovanović and Vesna Vukajlović

EP: COP 21 is the most ambitious and biggest conference ever organized, which will gather more than 50,000 participants and over 25,000 official delegates with the ambition to bring acts will be enforced in order to reduce global climate warming for 2 degrees Celsius. How is our county preparing for this conference and why is it important for Serbia and Belgrade as the capital to participate in this event? With which projects is Serbia planning to contribute to the reduction of climate changes?

Goran Trivan: Serbia is a state member of United Nations Framework Convention on Climate Change (UNFCCC), which obliges it to regularly report on the status of climate change policies' implementation. Accordingly, Serbia prepares reports for the UNFCCC, which are national reports (of communication) and biennial update reports. We are currently working on the Second National Communication (SNC) and the First Biennial Update Report (BuR) of the Republic of Serbia, which should be adopted by the Government in November 2015, before holding of the Conference COP 21, while the adoption of the Second National Communication is expected at the beginning of 2016.

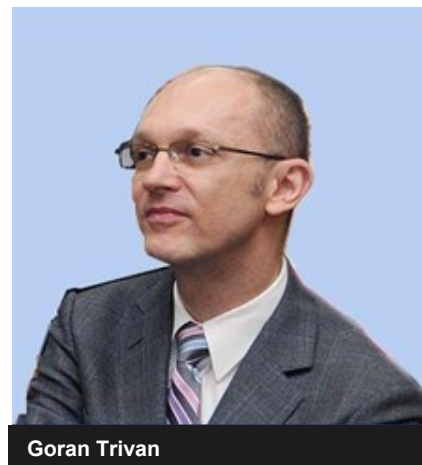
These reports include climate scenarios, inventory of greenhouse gas emissions (GHG), adaptation measures (adaptation) for changed measures climate conditions of key economic sectors, mitigation measures (mitigation), as well as capacity building needs, financial needs and technological needs, and also monitoring system, reporting and

verification of greenhouse gas emissions. Until the adoption of Strategy for fighting against climate changes (which is the project that should be financed from IPA funds), these reports are at the same time the key strategic documents in this area.

Serbia is currently working on the development of the first law on the reduction of GHG emissions, which should get into procedure by the end of the year.

In addition, we provided a number of publications on the impact of climate changes on agriculture, and National dialogue on the climate in Serbia was held just in the light of forthcoming conference in Paris. All mentioned activities will be presented at the Conference COP 21.

As for the city of Belgrade, we have an active and very good cooperation with the Ministry of Agriculture and Environmental Protection, which is in charge of taking care of climate change on the state level. The city of Belgrade, which has a greater significance for the region, that has a significance of a region rather than a city, and according to all facts it has the obligation to be the leader in Serbia, recognises the importance of fighting against climate changes, which is why it is seriously engaged in this issue. The Action Plan on Adaptation to Climate Changes with the assessment of vulnerability, which represents a strategic document of the City in this field, was developed in accordance with this commitment.



Goran Trivan

Secretary for environmental protection of Belgrade

„Climate change is one of the biggest challenges we face. The Earth's climate is changing, so that, among other things, extreme weather conditions occur more often and be more intense than those we have encountered in the past. Extreme weather conditions, which we are witnessing, in the future will be common, and Belgrade must become aware of it in order to timely prepare for renovation.“

Quote from the Preface

The Action Plan on Adaptation to Climate Changes with the assessment of vulnerability



EP: The Action Plan on Adaptation to Climate Changes of the City of Belgrade was adopted in October this year. Can you tell us what specific goals of the Action plan are and how it is planned to implement measures or their adaptation?

Will Belgrade's experience for the development of this Plan help other cities in Serbia to obtain or improve their plans and is this a step towards the creation of Sustainable cities' systems?

Goran Trivan: High quality Working Group, consisted of thirtyish representatives of City Departments, Public Enterprises, Ministries, Medical Institutions responsible for public health, Republic Weather Biro and Non-governmental sector has been working on the Action Plan on Adaptation to Climate Changes with the assessment of vulnerability for more than a year. The Plan was adopted by the City Assembly of Belgrade. Precisely this multisectoral approach enabled the insight into needs for adaptation from the perspective of a large number of interested parties, whereby it was provided a high professional level of documents, to which foreign and domestic consultants contributed greatly. Secretariat for Environmental Protection, as a principal body in preparation of this document, is very proud of the fact that the City of Belgrade was the first in Serbia to adopt such document. We are also proud of the fact that next year we intend to start the implementation of adaptation measures that are envisaged by the Action Plan.

The document was developed within the project "Adaptation to Climate Change in the Western Balkans", which was simultaneously implemented, in cooperation with German Society for International Cooperation GIZ, in Belgrade, Podgorica and Tirana.

The core of the Action Plan is the list of adaptation measures which need to be undertaken in the following 2, 5 or 10 years in the city of Belgrade. These measures are listed by priority, based on 4 criteria which include effects, urgency and territorial coverage.

The measures of highest priority on the territory of Belgrade are flood protection and construction of green infrastructure. Immediately after these measures are the following: advancement of the warning system, public awareness and information, urban planning due to flood protection, construction of retention basins,

drainage, saving and reuse of water, as well as the creation and rehabilitation of green areas and streets.

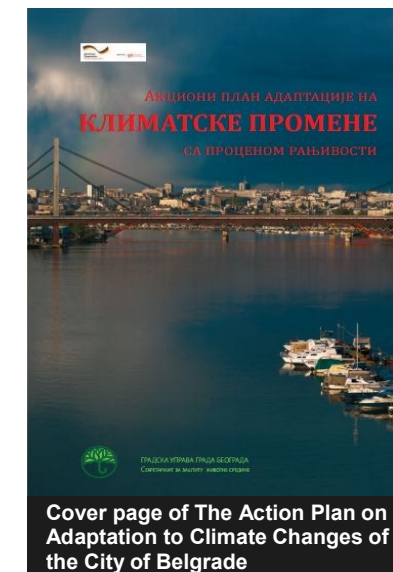
It is important to note that the Action Plan refers to the entire administrative territory of the city of Belgrade, therefore all 17 municipalities. Having in mind previously expressed interest of the other cities and regions in Serbia for the development of their own Action Plans, it is important to underline that these documents should optimally be developed on regional level, in other words a few municipalities of cities, which are mutually dependant and share the same problems related to flood defence systems, water supply, infrastructure etc., should develop joint Action Plan. This is actually the recommendation of the city of Belgrade to the other units of local government and we are ready to pass on our experience.

Development and also implementation of the adaptation action plans across Serbia would significantly contribute to the development of systems of sustainable cities, and it would also achieve an enviable level of safety of citizens, nature and infrastructure. This naturally, requires significant funds, but the floods in 2014 showed us that the price of eliminating the consequence is much higher.

EP: Are the topics on global warming, energy efficiency and environmental protection sufficiently represented in public discourse, and do you think that the awareness of citizens and also the country is at the appropriate level concerning these topics?

Goran Trivan: These topics, which are mutually inseparable, have been present at great extent for more than 10 years. The need of each local home rule/self-government, public facility or households to reduce energy consumption, and thus the costs and environmental impact is immense. Energetics and transportation are areas in which negative impact on the environment is the highest, particularly on global warming and thus on climate change by releasing gases with greenhouse effects.

It is noticeable that the awareness of decision makers at the state and local level, as well as the awareness of citizens, has been changing in the direction of better understanding of the need for energy efficiency and environmental protection. Even though the considerable number of projects



Cover page of The Action Plan on Adaptation to Climate Changes of the City of Belgrade

from this area has been implemented in Serbia, with the previous adaptation of certain legislations, it seems that it still hasn't been done as much as it could have. The reasons for this partial success are lack of investment funds, the absence of a sufficient number of quality projects, absence of conventional technologies usage by public enterprises, poor standard and partial awareness of the citizens, etc. Secretariat for Environmental Protection, as the competent body for taking care of environmental quality in Belgrade, has to reduce the negative impact of energetics and transportation and to reduce it to the lowest possible level. This is the reason why every year we implement the program of shutting down the boiler rooms in which the exceeding number of harmful emissions was recorded. So far under this Program 9 schools and 1 kindergarten have been connected to the district heating for the last three years.

In addition the Secretariat has just conducted a public call for funding the construction works on energy repairs of facilities of public enterprises and facilities for physical health. The construction works will be performed on 4 city facilities in 2016 based on the public call.

When it comes to traffic, the funds for the purchase of 5 electrical buses which do not emit carbon dioxide have been provided. This suggests the possible future direction of the development of Belgrade's public transport.



Environmental protection is primary program for companies

Interlocutor **Mrs Sanja Ivanić**

Executive Manager of French-Serbian Chamber of Commerce

Interview led by: Vesna Vukajlović

Sanja Ivanić is the executive manager of French-Serbian Chamber of Commerce and for Special COP 21, she talks about the importance of environmental protection of all companies operating in Serbia. She also highlights why it is important, to political and governmental will, to raise the awareness of climate changes to high level in private and economy sector.

EP: You are at the head of the Chamber of Commerce which improves business relations between France and Serbia. Many member companies belong to the energy sector; how do they prepare for the conference COP 21, and what is the best practice in France, which should be applied in Serbia?

Sanja Ivanić: As a network of successful companies, which take into account sustainable development in their business, we believe that the model of "green economy" enables economic growth creates new workplaces and increases competitiveness. The fight against climate changes is also an opportunity for companies to introduce innovative solutions and to suggest new models of development. Several French companies, members of French-Serbian Chamber of Commerce have excellent examples of business practices that were recently

presented at the Conference held at the Embassy of France. As companies that come from countries in which green economy is an issue of paramount importance and taking into account that French experience and achievements in this field, we have special responsibility to transfer this expertise to Serbian market.

EP: In your opinion, why is it important that companies take participation in the conference COP 21 in addition to numerous participants of the conference that come from governmental sector, NGO sector and international institutions?

Sanja Ivanić: It is necessary to establish a comprehensive public-private partnership for transition toward green economy by involving all relevant stakeholders and all castes. In addition to constant presence of our member companies at relevant conferences, fairs and public debates on the issue of green economy, French companies have



Sanja Ivanić

an open cooperation with representatives of institutions and public sector on this issue. The economy is an indispensable stakeholder in environmental protection. Global companies have brought environmental protection into operation as one of the primary programmes as a part of business strategy of corporate social responsibility. We believe that the private sector plays an important role in this regard. After all, experience speaks about why it is necessary for the large private companies to be included in solving this important social issue.

French-Serbian Chamber of Commerce has expended its number of members during 2015 and now it counts 130 companies. The chamber promotes arrival of French companies to Serbia form its foundation and it improves relations with other associations and chambers in Serbia. This institution strives to increase the presence of Serbian companies in French regions. France is the utmost investor in Europe, and it has invested around 500 million euros in Serbia. These investments are not enough but they should be more significant bearing in mind that events, meetings, economic forms are held regularly.

EP: What would be your recommendation to the members of French-Serbian Chamber of Commerce for the future when it comes to the global warming, environmental protection and energy efficiency?

Sanja Ivanić: We pay special attention on raising awareness among young people, and we strive to motivate them as early as possible to make them think about the ways of implementing sustainable development in practice. The same year when the Chamber was created, we created the Student Award which is organised with the support of our companies that reward the best student's papers and action plans on sustainable development. We have seen several really interesting student's suggestions in the last five editions of the Prize, and that is the proof that our young generations are becoming increasingly aware of the importance of this issue for our economy and society in general.

SUSTAINABLE INNOVATION FORUM 2015

The 6th Sustainable Innovation Forum SIF15 will take place from 7th to 8th December 2015 within the conference COP21. For this occasion, world leaders, directors, managers, national, regional and city leaders, investors and experts in the industry will gather in one place to share ideas and accelerate the development of innovative solutions climate change, green growth and sustainable development.

This year's SIF15 points out the commitment to innovation, future cooperation with knowledge centres, universities in order to reach the platform and to improve knowledge of youth in the framework of sustainable innovation development.

Along with the presentations and discussions on current topics, the goal of the forum is to create networking through innovative partnerships among stakeholders in order to reach quality solutions of change.

Sustainable Innovation forum – SIF15 is the annual event organized by the Climate Action and UNEP (The United Nations Environment Programme).

Live broadcast from the hall is available as well as blog on Twitter .

The programme of both days can be found at the following [linku](#).

SUSTAINABLE INNOVATION FORUM 2015

Join 750+ attendees for the biggest and most prestigious business forum at COP21

7-8 December 2015 Paris

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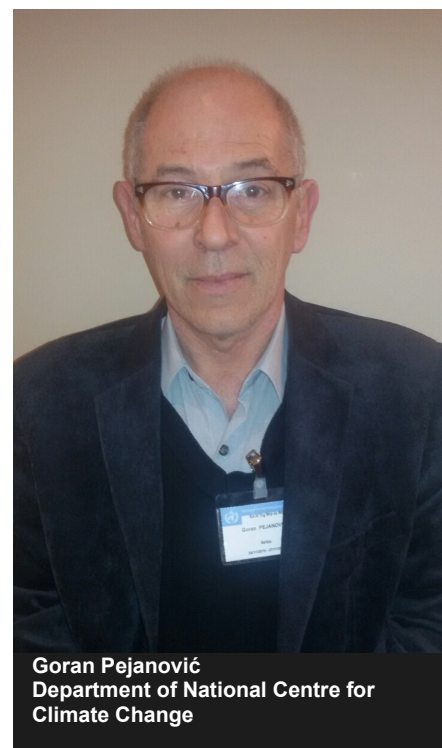
CLIMATEACTION





Climate changes in Belgrade and Serbia

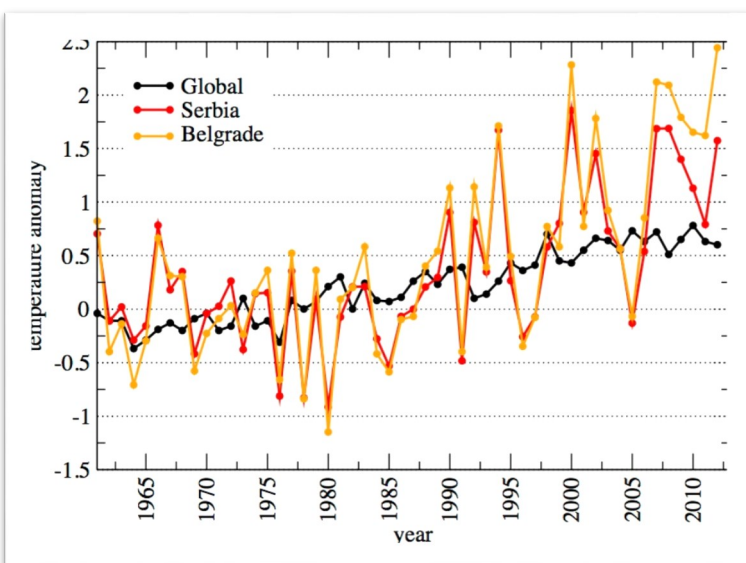
Author: Mr. Goran Pejanović
Republic Hydrometeorological Service of Serbia
Department of National Centre for Climate Change



Goran Pejanović
Department of National Centre for Climate Change

Global climate is changing which is confirmed by the large number of observations in Serbia as well.

Average global temperature has increased by 0.8°C compared to pre-industrial period, and in Belgrade since 1888, when the measurements began, by more than 1.5°C. The highest growth rate was actually recorded in 1970, and the last decade was the hottest so far (Figure 1).



Slika 1

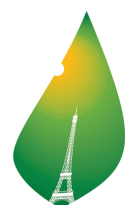
Climate changes on the territory of Belgrade is reflected in the extreme events such as heat waves, extreme cold, droughts, heavy rains and floods. In the last ten years,

there were many cases of heat waves in Belgrade. The most significant cases of the heat waves were during the summer of 2013, August of 2012, July of 2007, and June and July of 2006.

By analysing the hottest summers in Belgrade, you may come to the conclusion that eight out of ten hottest summers were after 2000 (Figure 2). The hottest summer was recorded in 2012 when a record number of tropical days and nights was registered in Belgrade. Even 62 tropical days with maximum temperature above 30°C were registered back then, which is 40 days more than the average. Also, 51 tropical nights were recorded with minimum temperature above 20°C, which is 44 days more than the average values.

The most prominent waves of extreme colds in the last few years in Belgrade were registered in January and February of 2012 (17 consecutive freezing days), the winter of 2008/09 (20 consecutive freezing days) and the winter of 2007/08 (15 consecutive freezing/ icy days).

The most prominent drought on Belgrade's territory in the last ten years was the drought in the summer of 2012, when 59.5 mm of rainfall was registered, which is 39% of the average values. Significant floods with catastrophic consequences happened in May 2014 and in April 2006.



Indicators of climate change in Serbia

The changes in intensity and frequency of climate extremes are registered as the consequence of global climate change. The situation in Serbia proved to be very sensitive to natural disasters, floods, earthquakes, landslides, forest fires, droughts, heat waves, extended winters and hail, both throughout history and in the present time.

In Serbia, major droughts happened in 2000, 2003, 2007, 2011 and 2013, and they had a very negative impact on agriculture and water resources. U Srbiji su se značajne suše dogodile 2000, 2003, 2007, 2011, 2012 i 2013. godine, koje su veoma negativno uticale na poljoprivredu i vodne resurse.

Significant floods were recorded in Serbia after 2000 and they were in 2002, 2005, 2006, 2009 and 2014. The rainiest year in Serbia was 2014. In May 2014 the three-day rainfall in Podrinski region and Kolubara region, and the areas of Macva and Tamnava exceeded the three-day rainfall of 1,000 years.

Analyses show that in the period of instrumental measurements and observation the following changes occurred in the territory of the Republic of Serbia:

- ⇒ There is a trend of increasing air temperature in most parts of Serbia
- ⇒ Increasingly frequent sudden shift of warm and cold periods
- ⇒ Increased number of summer and tropical days as well as tropical nights
- ⇒ Reduction in the number of cold days with heavy frost and snow cover
- ⇒ Reduction in the number of freezing days
- ⇒ More frequent and longer heat waves
- ⇒ Less frequent and more intense rainfall

By the middle of 2014, 16 EU member countries passed National Strategies for Adaptation to Climate Change. The concentration of greenhouse gases has significantly increased on the global level and Serbia has already felt the consequences. Serbia has to commit itself to the reduction of greenhouse gas emission. Serbia is the first country in the region that rationalised and implemented national climate contribution (INDC - intended nationally determined contribution) i.e. The Strategy on the Reducing Greenhouse Gas Emissions and Plans for Adaptation to Climate Change.

The main objective of the Republic Hydrometeorological Service of Serbia is strengthening of analytic and forecasting systems for different weather and spatial frames, starting from climate projections, seasonal, monthly, mid-term and short-term forecast, as well as envisaging of weather and hydrological conditions with the assimilation of radar, satellite and other conventional data.

South East European Virtual Climate Change Center (SEEVCCC) was established at the end of 2007 and within the Republic Hydrometeorological Service of Serbia (RHMS) based on the one of recommendations of the Minister.

SEEVCCC, as a member of the network of regional climate centres of Regional Association VI WMO (WMO RA VI RCC – Network), has a mandate to provide climate change, climate monitoring, long-term forecast, strengthening of the capacity on sub-regional level as well as to coordinate with different programmes and projects related to climate change impacts on different economy sectors. It also contributes to research and development activities within the WMO RA VI RCC-network.

SEEVCCC supports the activities of the National Meteorological and Hydrological Services at issuing climate warnings based on monthly climate bulletins, anomaly maps, climate indices and seasonal forecasts. In addition, SEEVCCC is the host of South East Europe Climate Outlook Forum, which supports the WMO mechanism for regional climate outlook forums of weather.

The Republic Hydrometeorological Service of Serbia in cooperation with the Institute of Public Health of Serbia "Dr Milan Jovanovic Batut" have developed the system for the early warning of the heat waves occurrence





Life is ON

Interlocutor: **Mr Dragoljub Damljanović**

General director of Schneider Electric for Serbia and Montenegro
Vice President of the Board of Directors of the French-Serbian Chamber of Commerce

Interview led by: **Svetlana Jovanović**



The company **Schneider Electric** is one of the global leaders in energy management. It operates in more than 100 countries and employs more than 170,000 people. Schneider Electric employs more than 1,000 top experts in Serbia. They design the most complex integrated solutions in the fields of energetics, infrastructure, industrial processes, automation in facilities, data centres, as well as in the sectors for housing and building, in order to achieve lower energy consumption for the same productivity or comfort. Our idea is to raise the level of technical knowledge and technical standards in the society by applying the latest technical solutions and thus make more efficient economy. Our mission is to enable more efficient use of obtained energy by less natural resources involvement, not only to save but also to reduce the pollution and to conserve resources for upcoming generations

EP: The conference in Paris COP21 represents the event that the entire planet has been preparing for in 2015. What are the expectations of your company when it comes to COP21? In which way does Schneider Electric plan to take part in the conference? One of the topics that will be initiated at the conference is carbon pricing. What is your opinion on this topic and how should the relation between the government and the private sector function?

Dragoljub Damljanović: In our company, there is a strong willingness to contribute whether collectively or through partnership with decision makers in the field of ecology and climate change. We also believe that the availability of electricity is the basic human right and that the current way of managing electricity is unsustainable. These are the reasons why we have joined the initiative which should serve as a foundation to the leaders of big world countries based on which they will make global important decisions. These decisions will determine the way of fighting against climate change on upcoming Summit in Paris. We are among 43 companies which the World Economic Forum has gathered. These companies have bound themselves to active involvement and thus they have proposed certain measures. This is one of the reasons why we joined forces with other global companies and legislators from the countries across the world for the dialog at the Summit held in Paris in may this year.

The Summit was a milestone on the way to the conference COP21.

The need for energy will double in the next forty years and at the same time it is necessary to reduce the emission of CO2 by half. This energy paradox is possible to achieve only if we become significantly more efficient. If all companies and countries have similar strategies, we will be able to achieve the level of efficiency necessary for the progress in the fight against climate change and then it will be worth the effort.

Private sector is generally considered too slow at implementing of new initiatives which would contribute to the reduction of greenhouse gases emission and which would help in reduction of effects that affect the climate change. However, today is more than clear that the business community must be guided by the recommendations of world's leading scientists in the field of climate change, and that it is necessary to limit global warming and to implement the activities planned by the government. The agreement, whose signing is expected in Paris, will be redundant without the involvement of the private sector into these activities.



Schneider Electric is a global specialist for the managing of electricity and automation. With revenues of 25 billion euros in 2014, our 170,000 employees serve clients in over 100 counties, by helping them to manage their energy and processes in a safe, reliable, efficient and sustainable way. From the simplest switch to complex operating systems, technologies, softwares and services improve the way our clients manage and automate their business. Our related technologies will shape industries, transform cities and enrich lives.

In Schneider Electric, this concept is called Life Is On.

EP: Modern way of living and the speed at which the world is evolving and changing requires the increasing use of energy and the resources are dwindling. What solutions does Schneider Electric offer?

Dragoljub Damljanović: Schneider Electric has extensive experience in energy efficiency projects: solar power plants, mini hydro power plants and biogas power plants, thus contributing to the global goal of reducing greenhouse gas emissions. The systems which we are talking about are related to water and energy systems, public services such as street lightening management and video surveillance, transportation, computer centres, but also residential and commercial buildings in which system of building management is implemented. By their integration and connection through new technology of data transmission we get a smart city. As a global company that operates in more than 100 countries, we have participated in the development of more than 200 urban projects across the world including Brasil, China, India, Europe, the USA and many others.

In the electricity sector in Italy, we have provided an integral solution and engineering services for photovoltaic solar power plant of 43 MW. The solar power plant currently supplies over 18,000 apartments and thereby saves 28,000 tonnes of CO2 that would be produced by fossil fuel power plant. In the region, there are solar power

plants in Bulgaria and the first solar power plant in Serbia of 2 MW in Merdari.

In water supply sector Schneider Electric has implemented smart system of water management in Ankara that enables efficient management of waste water and distribution of running water in the city. Similar projects have been developed in Barcelona, Abu Dhabi and the new water factory Makis 2 in Belgrade, in which were implemented the most contemporary monitoring algorithms from the standpoint of energy efficiency, was put into operation last year.

When it comes to the public transportation, the company Schneider Electric has implemented the project of complete solutions for smart managing of the city's infrastructure within the preparation for the Olympic Games in Rio de Janeiro. Eleven different control centres manage all key parts of city's infrastructure such as electricity, water, oil, gas, public transportation, air quality, airports, etc. Our modern technology and comprehensive understanding of all activities and processes for managing of each area has enabled that. The solutions on which we worked on have brought us to savings of 30 percent in energy sources, 15 percent in water loses and travel time and transportation delays have been reduced for 20 percent.

And this is the beginning.





AIR FRANCE-KLM PRIJATELJ COP21

AIR FRANCE-KLM is continuing its initiatives in terms of biofuel by operating several flights using sustainable biofuel and encouraging the industry to create a market for biofuel.

The Group has also invested in the eco-design of inflight products to reduce its CO2 emissions.

For the eleventh consecutive year, the Dow Jones Sustainability Index (DJSI)*, the main international index evaluating companies on their performance in terms of corporate social responsibility, has ranked Air France-KLM leader in the "Airlines" category.

For the seventh year, the Group is also leader of the broader "Transport" sector, including air, rail, sea and road transport as well as airport operations.

AIR FRANCE-KLM is one of the 24 most responsible groups in the world, each in their own sector of activity.

"Every day, Air France-KLM does all it can to design the future of air transport. We want the transport we provide to be caring, innovative and responsible. I am delighted with this award and this recognition by the DJSI. Our entire Group and each of its teams can be proud. We intend to maintain our leading position in the air transport industry" declared Alexandre de Juniac, Chairman and CEO of Air France-KLM.

"The day of the launch of the UN Conference on Climate Change, COP21, of which Air France is a partner, this award highlights our longstanding commitment to corporate social responsibility. This commitment is at the heart of our corporate strategy," added Frédéric Gagey, Chairman and CEO of Air France.

"It's an exceptional achievement, succeeding in maintaining our leading position for so long. It confirms not only that we assume responsibility as an employer, but also pursue innovation and take our responsibility with regard to the environment and society seriously. KLM has an established track record proving this," declared Pieter Elbers, President and CEO of KLM Royal Dutch Airlines.

To integrate corporate social responsibility into its activities and operations, Air France-KLM is concentrating on four main issues:

- reducing its environmental impact by optimizing operations, innovating with the supply chain and by involving all staff and the entire industry ;
- taking into account the challenges of corporate social responsibility throughout the service chain to provide customers with innovative and responsible products and services ;
- promoting a responsible human resources policy and encouraging personal development to ensure the motivation and professionalism of employees ;
- contributing to the economic and social development of the territories where the Group operates.



Solutions COP21

The Renault Nissan Alliance will also participate in Solutions COP21, an international exhibition on climate-change solutions, at the Grand Palais in Paris. The exhibition, which will take place from 4 to 10 December will feature CO2 solutions from cities, businesses and other organizations around the world. In addition to an EV display, the Alliance will have more than 10 EVs available for the public to test drive.

- ⇒ Renault ZOE,
Nissan LEEF,
Nissan e-NV200
- ⇒ 200 electric vehicles
- ⇒ 400 000 km drive
- ⇒ zero emission CO2
- ⇒ 90 new fast
chargers
- ⇒ 0 - 80% capacity for
30 minutes
- ⇒ 200 Renault and
Nissan volunteer
drivers



Picture ZOE and LEEF in front of the Grand Palais Museum in Paris - © Renault /omg
Photo: Olivier Martin Gambier

Official COP21 passenger car

With great pleasure, we announce that Renault-Nissan Alliance is the official partner of COP 21 in Paris. Thanks to Alliance's fleet, consisted of 100% electric vehicles, we can contribute to our goal of providing CO2 neutral event. The technology of electric cars effectively helps to reduce greenhouse gas emissions in the transport sector.

The Renault-Nissan Alliance signed in May a partnership agreement with the General Secretary in charge of the preparation and organization of the 21st annual Conference of Parties to provide a fleet of 200 all-electric vehicles to shuttle delegates during the event from November 30 to December 11.

More than 20,000 U.N. participants from 195 countries are expected to attend the annual climate summit. This will be the first time that the UN member states will use the entire fleet of transportation vehicles with zero emission during all COP events.

The goals of the Parisian summit are the creation and implementation of new global climate-change agreement on climate change by the end of 2015 as well as the implementation of the Climate Green Fund, established to assist developing countries in adapting to climate change and emissions reduction, through fund allocation. With great pleasure, we announce that Renault-Nissan Alliance is the official partner of COP 21 in Paris. Thanks to Alliance's fleet, consisted of 100% electric vehicles, we can contribute to our goal of providing CO2 neutral event.

GROUPE RENAULT





SBERBANK



Vladimir Bošković, Head of the Department for small and medium enterprises

THE ENERGY SECTOR WILL MARK THE NEXT DECADE IN THE GLOBAL ECONOMY

Interlocutor: **Mr. Vladimir Bošković**

Head of the Department for small and medium enterprises

Interview led by: **Vesna Vukajlović**

Sberbank currently has 33 branches in Serbia, 611 employees and nearly 69,000 clients. It is a financial institution which has been doing business in Russia for 170 years and is known as one of the most successful banks in the world. Sberbank provides services for individuals, but also for small, medium and large enterprises and we talked with Vladimir Boskovic, Head of the Department for small and medium enterprises about that. We put special emphasis on the fact that this bank is one of few in Serbia which supports projects concerning energetics, environmental protection and energy efficiency. On the occasion of conference COP 21, straight from the horse's mouth we find out how one successful bank operates in Serbia and what type of projects have been supported so far.

EP: In your opinion, why Sberbank has decided to support projects concerning energy efficiency, environmental protection and thus support economic development in Serbia?

Vladimir Bošković: Serbia as a country with limited energy resources has a lot of potential for saving, and improvement of energy efficiency is one of precondition for energy stability of the country as well as the economy in general. The energy sector became the most profitable and the most attractive sector for investment long time ago, and according to estimations of international financial institutions it will

become the sector which will denote the following decades in global economy alongside with agriculture.

Given the current active experience in funding the area of energy efficiency and renewable energy resources, Sberbank Serbia in its offer has all models necessary for financing the projects in this area thus giving concrete contribution to environmental protection.

In cooperation with KfW (German Development Bank), we have invested more than 10 million EUR in more than 400 projects from earmarked credit line for the improvement of energy efficiency so far. By measuring concrete output our contribution expressed in units of measurement is nearly 20 million kWh per year of energy savings, as well as CO2 emission in the amount of 11 million tons per year.

EP: Which conditions should a private of legal person meet in order to obtain a loan from Sberbank?

Vladimir Bošković: Since this is an earmarked credit line, it represented an additional motive for us as a bank to offer far more favourable conditions than commercial, average conditions on the market to our clients. The only condition for clients was that each investment contributes to energy saving of minimum 20% accompanied by the reduction of CO2 in the same proportion.

Our focus is private sector, and credit lines are designated for the stimulation of small and medium enterprises, as well as private individuals. The biggest part of implemented projects was related to the investment in building design and construction, and slightly less to the replacement of the equipment/ machines in production processes and the purchase of vehicles for the service and transportation sector.

Bearing in mind potentials for investment, we also decided to direct our plans towards public sector and local self-government. The reason why we haven't implemented more projects in local self-government sector lies in inadequate funding models, which can be surpassed in the near future by defining PPP (Public Private Partnership) as an adequate model of financing that would be acceptable for the banks and also for other participants in partnership. Legal framework has existed for a long time ago, but the reason of higher prudence of banks is still insufficient number of implemented projects done under this model.



COP21 - CMP11
PARIS 2015
UN CLIMATE CHANGE CONFERENCE

EP: Can you find out, in direct contact with clients or potential clients from Serbia, to what extent do the clients understand the problem of global warming and climate change that are also themes of the conference COP21?

Vladimir Bošković: We are one of the first banks in the market which has introduced the credit lines for these projects and our main advantages are knowledge and experience. With the help of consultant teams, who have been an integral part of the implementation of the credit line together with KfW, we obtained certain knowledge and expertise that are necessary for active approach of our employees in sales so that they could be able to properly raise the awareness level among clients about the significance of investing in these projects. Employees have undergone several levels of energy efficiency, and some of them have gained additional knowledge, thus we formed an internal consulting team for energy efficiency whose primary role was the assess compliance with the criteria for financing, as well as constantly gaining knowledge in this area.

The key factor is the implementation of legislation which will create a favourable ground for promotion and encourage further investments in this sector and that is what the experience of EU countries has indicated. We expect recent implementation of series of laws and bylaws which are in the process of implementation. I would mention only few of them: the announced amendments of the Law on Planning and Construction, full implementation of energy certification of buildings, the implementation of the Law on the Efficient Use of Energy which introduces the number of necessary measures for the increase of energy efficiency (I primarily refer to the collection of heat energy according to the consumption in the distinct heating system), establishment of the energy management at the level of companies and local self-government, as well as many others.

Continuous work on raising of the awareness on energy efficiency and the importance of these investments for environmental protection, we confirm responsible business activity through investing into these and similar projects in the energy sector. .

With renewable energy sources to the cleaner future

The use of renewable energy became one of the key components of sustainable development after developed countries had recognized the importance of reducing greenhouse gas emissions. Although Serbia has great energy potential when it comes to these sources of energy, it is insufficiently or not used at all. .

Our country obtained the biggest part of the energy by burning fossil fuels, coal, oil and gas, and in that way contributes to global climate change. On the impact of these changes in our country are mainly forests, water, agriculture, transportation and electric power.

The biggest challenge in Serbia represents a transition to cleaner technologies, along with achieving economic viability, which additionally hampers the undeveloped market and the lack of experience in Serbia.

Based on the potential of renewable resources and the client's needs, Sberbank has created a special model for financing renewable energy. Project financing refers to the construction of buildings or facilities for the production of electricity using renewable energy sources, which will be the subject of connection to the electricity grid in order to sell electricity.

In order to implement the model of project financing it is necessary to establish a new company (Special Purpose Company), which is the carrier of the project, and the founders of the newly established companies may be individuals, legal persons and in special cases, companies with proven experience in this field.

The project of construction of these facilities must be in accordance with the current Law on Planning and Construction and the Law on Energy with the participation of investors with a minimum of 30 % of the investment.

By investing in renewable energy sources we demonstrate our commitment to responsible business and together with our clients we build a healthier environment.



COP21 - CMP11
PARIS 2015
UN CLIMATE CHANGE CONFERENCE

RENEXPO® Western Balkans

The biggest international platform for energy experts **RENEXPO® Western Balkans** open the doors in Belgrade on the 20th and 21st of April 2016 again for 80 exhibiting companies, 400 conference and roundtable participants, more than 1.000 professional visitors, institutions, investors, governments, associations and project owner and representative.

In 2016 we present an extended program which will be accompanied by industry roundtables, workshops, conferences and business matching meetings.

⇒ **Small Hydro Power** - Exhibition - Conference - Roundtable - New Feed In Tariffs - Legislation - Technologies - NEW: Refurbishment - Project Developer Meetings - Introduction of available Projects in the Western Balkan Region and B2B Meetings, Hydro Power Association Serbia - first Round Table

⇒ ***Geothermal** - Roundtable - Potentials, PPP, Advantages and Risks for Municipalities in Serbia

⇒ ***Biogas** - Exhibition - Conference - New Feed In Tariffs - Technologies - Consumers - Turn Key Projects - Consumer Information - Engineering



⇒ ***Biomass** - Exhibition - Conference - BioRES Project - Training: wood chain supply

***Biomass** - Exhibition - Conference - Potentials, New Feed In Tariffs - Technologies, Projects, B2B Meetings

***Waste Management** Western Balkans - Exhibition - Conference - Hazardous Waste - Land fill - Recycling - Waste to Energy - Ministry of Agriculture and Environmental Protection Republic of Serbia - Technologies - Legislation - Potential

* **Energy Efficiency** in Public Buildings-Programme - Exhibition - Conference - Ministry of Education, Science and Technological Development of the Republic of Serbia, KfW, GIZ

* **Wind Power Serbia** - Exhibition - Roundtable - New Feed In Tariffs - First Wind park in Serbia, Potentials, Projects

* **Off Grid** - Exhibition - Conference - Decentralized Energy Supply - Demand in the Western Balkans

* **PREMIERE: ENERGIIEWENDE** - Travelling Exhibition - in the trade fair hall - The interactive exhibition gives an overview of all fields of the energy transition - Funded by Federal Ministry for Economic Affairs and Energy www.bmwi.de

The next event we announce is **the first RENEXPO® Water Management Exhibition and Conferences** on the theme of water management, which will take place from 06th to 09th June 2016 in Belexpocentar in Belgrade. Topics that will be represented at the RENEXPO® Watermanagement are:

- Disaster Risk Management
- Flood Prevention Western Balkans
- Groundwater
- Drinking Water
- Wells and Pipes - status municipalities
- Waste Water Treatment (Reclamation & Purification)
- Water & Wastewater Projects
- Management of Resources
- Serbian Ports (Danube)
- Biodiversity



The third event in the region, organized by **REECO SRB, RENEXPO® BiH**, the biggest international platform for experts in the energy sector will be held on **the 09th and 10th of November 2016** at hotel Hollywood Deluxe in Sarajevo, Bosnia and Herzegovina, where RENEXPO® platform continues its activities in the region, on the theme of renewable energy sources, energy efficiency and environmental protection. As a follow-up program of this year's RENEXPO® BiH, 05th and 06th of November 2015 was Climate Change Dialogue in BiH. The Climate Change Dialogue in Bosnia and Herzegovina is part of the EU's diplomacy leading up to Paris Conference COP21.



COP 21 CALENDAR

During the following days, from 30 November to 11 December 2015 in the within the conference COP21 will be held a series of conferences, talks, discussions, presentations, parallel events, exhibitions

Opening and addressing world leaders, states, will begin on November 30th.

On the following [linku](#) you can view and download the information to the Address.

How to follow COP21?

On the website of the United Nations, [link](#), you can read all the instructions.

Through the official website [UNFCCC](#).



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