

Protection and Sustainable Use of Transboundary Waters
in Southeastern Europe

***International Roundtable on
Water and Energy Nexus
in Transboundary Basins in Southeastern Europe***

6-8 November 2013
Sarajevo, Bosnia and Herzegovina

Report

In the framework of
Petersberg Phase II / Athens Declaration Process
GEF IWLEARN Activity 1b
MED EUWI

Organized and supported by the
German Ministry for Environment, Nature Conservation and Nuclear Safety
Regional Cooperation Council
Global Water Partnership – Mediterranean (GWP-Med)
GEF IWLEARN

Prepared by:



Athens, Beirut, Tunis
Web: www.gwpmmed.org

Headquarters:
12, Kyrristou str., 10556 Athens, Greece
T: +30210-3247490, -3247267, F: +30210-3317127
E-mail: secretariat@gwpmmed.org

BACKGROUND

The 'Petersberg Phase II / Athens Declaration Process'

The 'Petersberg Process' was initiated in 1998 and its on-going Phase II aims to provide support for translating into action the current developments and opportunities for future cooperation on transboundary river, lake and groundwater management in the Southeastern Europe (SEE). It is supported by the German Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), the Hellenic Ministry of Foreign Affairs and the World Bank.

The 'Athens Declaration' Process concerning *Shared Water, Shared Future and Shared Knowledge* was launched in 2003 at the Vouliagmeni International Conference (as part of the activities of the Greek Presidency of the European Union) with the primary aim to assist development of Integrated Water Resources Management Plans and related actions in SEE; it is jointly supported by the Hellenic Ministry of Foreign Affairs and the World Bank.

The 'Petersberg Phase II Process' works in synergy since 2005 with the 'Athens Declaration Process' under the joint Petersberg Phase II / Athens Declaration Process (Process) to facilitate the enhancement of cooperation in transboundary basins in the SEE region.

The Global Water Partnership – Mediterranean (GWP-Med) provides administrative support and is the technical facilitator of related activities under the Process.

The Process is strategically linked to the Global Environment Facility International Waters: Learning Exchange and Resources Network (IWLEARN) on capacity building and sharing of experiences.

The GEF IWLEARN

The GEF supported IWLEARN programme (2005 -) represents a cooperative effort of the UN Development Programme (UNDP) and UN Environment Programme (UNEP), with the involvement of all GEF Agencies.

The IWLEARN activities in Southeastern Europe aim to demonstrate innovative and feasible approaches to transboundary water resources management, by deepening multi-stakeholder dialogue and experience-sharing.

Activities since 2005

Since 2005 a variety of activities including regional roundtables, multi-stakeholders dialogues, targeted capacity building workshops and study visits, preparation of assessments, surveys and policy documents (on issues such as shared lakes basin management; multipurpose water management; shared groundwater management; climate change; stakeholders involvement; etc.), have been implemented aiming at enhancing cooperation among SEE countries and stakeholders for the management of transboundary water resources. More than 150 stakeholder organizations, governments and other entities have been engaged in these activities.

Overall, the Process has been catalytic in facilitating coordination among key international and national players in the areas of focus and has attracted the interest of beneficiary countries and donors.

The Regional Cooperation Council

The Regional Cooperation Council (RCC) was officially launched at the meeting of the Ministers of Foreign Affairs of the South-East European Cooperation Process (SEECP) in Sofia, on 27 February 2008, as the successor of the Stability Pact for South Eastern Europe. Through a regionally owned and led

framework, the RCC focuses on promotion and enhancement of regional cooperation in South East Europe (SEE) and supports European and Euro-Atlantic integration of the aspiring countries. The RCC provides operational capacities to and works under the political guidance of the South-East European Cooperation Process (SEECP).

In line with its Statute and guided by the principles of all-inclusiveness, the main tasks of the RCC are to represent the region, assist the SEECP, monitor regional activities, exert leadership in regional cooperation, provide a regional perspective in donor assistance – notably the EU's Instrument for Pre-accession Assistance (IPA) programme – and support increased involvement of civil society in regional activities. The RCC functions as a focal point for regional cooperation in SEE and its key role is to generate and coordinate developmental projects of a wider, regional character, to the benefit of each individual participant, and create an appropriate political climate susceptible to their implementation.

Background

In SEE, hydropower is important for energy production; it represents 23%¹ of the total installed electricity generation capacity. The high hydropower potential of the rivers in SEE constitute hydroelectricity production an increasingly preferable solution for countries to use in their effort to achieve energy autonomy.

Overall, the same water resources used for energy production are used for agriculture production, industry, to sustain ecosystems etc. Sustainability of hydropower is closely linked to achieving efficient energy production through a renewable source without compromising availability of water for the society and communities as well as for the ecosystems that these water resources support. An extensive dialogue globally has focused on sustainable hydropower including what the latter entails, the factors to be taken into consideration, the protocols to be designed and followed, etc.

Hydropower production, including the development of related infrastructure (that may serve additional uses, such as agriculture), has frequently served as one of the drivers for water resources management at basin level, both at national and transboundary levels. Its significance becomes bigger as it is considered to exacerbate or to contribute in the mitigation or effects of climate change in different basins. With regard to the transboundary basins, hydropower production could become a positive or a negative driver regarding cooperation among riparians depending, among others, on whether related benefits are shared.

On the other hand, transboundary cooperation increasingly affects hydropower production. This is mainly due to the trade-offs between hydropower and other water uses lying across the borders and the impact that these trade-offs have on the political and economic environment under which the hydropower schemes are being developed.

These interactions are of special importance in SEE as 90% of the area falls within shared basins. More than 50% of these basins are shared by three or more riparians. In addition, more than 50 transboundary aquifers exist and many of them are interlinked with surface water bodies.

The Water, Energy and Food Security Nexus

The Water, Energy and Food Security Nexus (Nexus) approach has become widely accepted at the International Conference “The Water Energy and Food Security Nexus – Solutions for the Green Economy” (16-18 November 2011, Bonn) organized by the German Federal Government as a contribution to the United Nations Conference on Sustainable Development “Rio + 20” (<http://www.water-energy-food.org/>).

The Nexus approach was introduced to facilitate a better integration of management and governance across sectors and scales and the transition to a greener economy.

There are interdependencies between water, energy and food security at all levels, global, regional, national and local. Failing to identify and efficiently address potential consequences of one sector on another during decision making, has undermined efforts to achieve sustainability. The Nexus aims at addressing this gap by calling for a transectoral/transdisciplinary approach in water resources management in order to enhance sectoral coordination and facilitate, to some extent, international cooperation.

¹ Information source: “Study for the identification of the state, challenges and issues of water and energy nexus in transboundary basins of Southeastern Europe (November 2013), prepared as background to the Sarajevo International Roundtable” (available in: www.twrm-med.net/nexus-study)

Furthermore, there are inherent challenges regarding Transboundary Water Resources Management (TWRM), linked among others with sovereignty issues, the identification and management of drivers of cooperation or unilateral action, the mandate and nature of joint institutions once these are set up as well as the coherence of water governance between national and transboundary level. In line with IWRM, the Nexus approach could assist in enabling enhanced TWRM by facilitating transdisciplinary approach within the basin (at national and transboundary levels) as well beyond, outside the basin (at national and regional levels).

THE INTERNATIONAL ROUNDTABLE ON WATER AND ENERGY NEXUS IN TRANSBOUNDARY BASINS IN SOUTHEASTERN EUROPE

The International Roundtable was organized in the framework of the Petersberg Phase II / Athens Declaration Process by the German Ministry of Environment, Nature Conservation and Nuclear Safety, RCC, GEF IWLEARN, MED EUWI and GWP-Med in Sarajevo, from 6 to 8 November 2013.

The Roundtable brought together for the first time in Southeastern Europe (SEE) water and energy sector representatives to discuss about hydropower production in transboundary basins and identify: (i) related challenges and priority issues; (ii) means to address these issues; (iii) possible follow up activities including interventions in the framework of the Petersberg Phase II / Athens Declaration Process and the RCC; (iv) replicable knowledge and techniques generated that could be disseminated.

More than 70 participants from within and outside SEE region, representatives of institutions, organizations and private businesses from the water and energy sectors as well as key regional and international stakeholders attended the event.

The list of participants is given in Annex I.

The Roundtable contributed in initiating a wider dialogue on Water, Energy and Food Security Nexus in SEE with a view of introducing related considerations in the river basin management frameworks.

The roundtable agenda is given in Annex II.

Roundtable recommendations

- *Plan at the national level before acting at the transboundary basin level*

The share of hydropower as part of a country energy mix is a strategic decision made at national level and is closely linked with the setting and formulation of the national developmental goals. To this respect, provisions related to hydropower production and water resources management need to be elaborated at the stage of drafting national development strategies and plans.

- *Map and assess the Nexus of inter-linkages between water and hydropower– assess related policies and institutions*

Administrative and regulatory barriers, and lack of coordination among the high number of authorities involved, result in poor planning and decision making and non-integrated approaches, undermining the sustainability of both the water resources and the hydropower production. Such barriers can be raised through a multi-disciplinary approach.

Mapping and assessing the nexus of inter-linkages between the water and energy sectors are the initial steps. Using the findings as basis to assess current policies as well as governance structures including

decision making mechanisms is a follow up step. The latter can serve to improve the way authorities and institutions interact and, later on, to enhance integration in planning. Effective involvement and coordination of key actors from both sectors from the stage of early planning for hydropower projects to the stage of energy production and dams' management, will facilitate sustainable approaches.

- *Use readily available tools to facilitate integration in planning*

Spatial planning combines and integrates information related to the man-made and nature systems allowing, among others, to determine the overall capacity of these systems to support developmental options. In this regard, spatial planning assists, in principle, in formulating decisions regarding developmental options.

In the absence of coherent policies and management practices regarding water and energy, spatial planning can be proven to be a valuable tool towards integrated planning for sustainable hydropower development, including informing decisions related to the location, type and capacity of a planned hydropower project in an administrative unit. River Basin Management (RBM) Plans, where these exist, can have an equivalent role at a different spatial unit, at the basin level; RBM plans should be used in combination with and take into consideration the spatial plans.

- *Involve all stakeholders at the earliest appropriate stage*

Water and energy stakeholders need to be engaged at an early stage in the planning process in order for efforts to redound to mutually beneficial outcomes. Among others, involving civil society at the earliest appropriate stage and at the appropriate level contributes towards democratization of the - inherent in a decision for hydropower development- risk and ensures that the interests and anticipations of local communities will be taken into account. An inclusive participatory approach early in the hydropower planning process will prevent conflicts at future stages where little can be done to change the course of the project development.

- *Assess different scenarios to decide upon hydropower projects - Hydropower Potential vs Feasibility in using the Hydropower Potential*

To ensure balanced trade-offs, decision makers need to review alternative scenarios regarding hydropower schemes –including large dams, small hydropower plants or even no action- depicting options with differentiated weight among environmental, societal, economic and developmental aspects. Other prime uses of rivers need to be examined in this regard and taken into consideration, such as tourism and navigation.

Hydropower potential needs to be “redefined” or in other words, it needs to be evaluated within the “concept” of “feasible hydropower potential”: feasibility in using the hydropower potential in a given basin, taking into consideration factors which (should) weigh in the decision for hydropower development e.g. social parameters, sustainability of ecosystems (including values and services), sustainability of the investment, etc. In this respect, the desired level in terms of quality of human and natural systems in the entire basin should be defined; these, in combination with the carrying capacities, will define the factors to be taken into consideration and their specific weight hence, the threshold of acceptable changes due to the usage of hydropower potential. Appropriate information is necessary to be brought in the process in this regard. To this respect, applicable instruments in terms of collection and generation of information to assess carrying capacity of systems and prepare scenarios as well as appropriate instruments in terms of management and decision making are also needed.

Environmental Impacts Assessments and Strategic Environmental Assessments are useful tools in this regard.

- *Built institutional capacities*

Institutional capacities should be strengthened to support integrated policy development and implementation.

- *Joint Bodies for the management of the River Basins should be used to enable coordination between water and energy sectors across basins*

Often, national projects in transboundary basins are being developed without taking into consideration projects across borders on the same river. In transboundary basins that lack cooperation mechanisms, project developers should pursue formal or, at least, ad hoc cooperation with projects across national borders. Joint structures and bodies can enable communication between countries and among institutions and private sector.

Furthermore, joint structures and bodies can assist in the coordination of policy in the water and energy sectors at the transboundary level, creating the enabling conditions for sustainable water management and sustainability of hydropower production schemes.

- *Exchange of information is important*

It is of critical importance to enhance collection, and exchange of information and data across countries. This would allow the incorporation of information related to e.g. water, biodiversity, flood risk etc. in the decisions regarding the development of hydropower schemes. Existing joint structures and bodies such as Joint River Basin Commissions can assist in this regard; riparians should consider providing the related mandate to the existing bodies or create joint structures with such a mandate.

- *Identify potential benefits stemming from the development of hydropower schemes and establish benefit sharing mechanisms*

Hydropower generation can produce various benefits which are directly linked to basin economy at national and transboundary levels; among its positive aspects, hydropower is a low polluting and affordable energy source, it may assist in flood control, it contributes to water storage etc.

A major condition for sustainable hydropower and water resources management is the fair sharing of benefits between stakeholders at national level and countries at transboundary level.

The first is linked with effective planning at national level and needs to incorporate clear benefits for the local communities that are directly or indirectly affected, in positive and negative ways, by the hydropower schemes.

The use of comprehensive decision support tools, and negotiations at higher governance levels are necessary for the identification and sharing of benefits between up-stream and down-stream countries. Once more, the existence of joint bodies can greatly facilitate such developments.

- *Plan for Multipurpose use*

Multi-purpose projects where hydropower infrastructure can also serve other uses such as agriculture and flood management increase the cost-effectiveness of a project and create additional enabling conditions for benefit-sharing. Such projects should be planned and materialized, as feasible.

- *Continue the Dialogue across sectors and among stakeholders at the national, transboundary and regional levels*

Water is a resource which is being “valued” differently by the different sectors using it. There is need for further dialogue between the water and energy sectors at various levels to identify the tools that will enable water-energy policy coherence and integrated planning facilitating the Southeastern European countries in achieving their renewable energy sources goals without undermining security of water resources.

- *Introduce good practices from outside the SEE area*

Hydropower projects at transboundary level are often viewed as a cause of conflict among stakeholders and among countries rather than an investment which can create benefits for the entire shared basin. This is, among others, due to the lack of legal and operational frameworks at national and transboundary levels. In this context, good practices from outside Southeastern Europe need to be introduced and replicated.

- *Make use of all available institutions and tools*

Several institutions and tools related to the agenda are currently in place. Although these are not functioning in an integrated framework, they can serve as a useful basis for achieving hydropower sustainability and Water and Energy security at national and transboundary levels.

Institutions

- The European Union has set a legislative framework which covers important aspects of hydropower issues related to environmental protection and sustainable energy production. In addition to EU countries in Southeastern Europe, steps are being taken by non EU countries in the region towards convergence with EU standards.
- The Energy Community is extending the EU internal energy market and the renewable energy *acquis communautaire* to Southeastern Europe. Through the Energy Community, the SEE countries² have adopted renewable Energy Sources (RES) targets to be achieved by the year 2020.
- There is a number of River Basin Commissions - two of the most eminent are the International Commission on the Protection of the Danube River (ICPDR) and the International Sava River Basin Commission (ISRBC). Though the size, structure and mandate of the commissions vary significantly, these are functioning as platforms for cooperation between countries on river basin management tackling directly or indirectly hydropower generation related issues. More recent schemes of transboundary cooperation, like for the Drin River Basin, have the potential to early take up and integrate related approaches and opportunities towards shared benefits.

Tools

- The newly adopted ICPDR Guiding Principles on Sustainable Hydropower Development in the Danube Basin³ have been developed to provide a holistic approach to hydropower development by introducing specific steps to plan for new and upgrade existing hydropower projects, mitigate negative aspects linked with hydropower production and ensure sustainability in the Danube River Basin. The guidelines have introduced an integrated methodology which can be used for sustainable hydropower production and could be replicated after adaptation in other basins.
- Financing Institutions have developed comprehensive tools which reckon with environmental and social aspects of planned hydropower projects. Subsequently, new projects are generally introducing environmental protection measures such as building infrastructure with special provisions for protecting biodiversity.
- Studies make use of advanced mapping and modelling tools to diagnose operational conditions and capacity fluctuations to assist in deciding on the type and location of planned hydropower projects. In the cases of shared waters the advancement of such tools taking into consideration factors linked with the transboundary character of the water bodies would significantly minimize future implications.

² All SEE countries are members of the Energy Community either as members of the EU or as contracting parties.

³ More information can be obtained in: <https://www.icpdr.org/>

- **The Sarajevo International Roundtable indicated the Nexus approach as an appropriate instrument to foster IWRM and achieve water and energy security at the national and transboundary levels.** Furthermore, the Nexus approach could assist in enabling enhanced TWRM by facilitating the interdisciplinary approach within a river basin and/or aquifer. The United Nations Economic Commission for Europe (UNECE) is developing a Water-Food-Energy-Ecosystems Nexus assessment methodology⁴ for transboundary basins that can be used for the practical implementation of the Nexus approach.

- *Make use of Regional Structures and Initiatives*

Following the request and the related mandate given by the SEE countries, the RCC has developed and coordinates the implementation of the South East Europe 2020 Strategy “Jobs and Prosperity in a European Perspective”⁵. The Strategy is a cross-sectoral instrument incorporating elements related to energy and environment –including water resources management at the national and transboundary level- under the Sustainable Growth Pillar. It among others specifically asks to “*Put in place measures to achieve national share of renewable energy in gross final energy consumption by 2020, in line with the targets adopted in 2012, through the Renewable Energy Directive*” and “*Complement the ongoing regional energy cooperation*” as well as “*Identify steps and measures necessary for advancing the Water, Energy and Food nexus approach at national and transboundary levels and investigate opportunities of launching a political process under the RCC for the enhancement of cooperation in the SEE in the field of TWRM*”.

Being translated into practice through the Regional Action Plan and National Action Plans the SEE 2020 Strategy can be instrumental in introducing and putting in motion a more integrated approach in planning for hydropower production and water resources management at national and transboundary levels.

The Petersberg Phase II /Athens Declaration Process in partnership with GEF IWLEARN and MED EUWI has been facilitating enhancement of transboundary cooperation in SEE since 2004 through dialogue and exchange of experience on specific issues of importance for SEE as well as on issues of importance in specific basins.

Acting in synergy, the two initiatives will use the available strategic means and tools, among others the SEE 2020 Strategy and the Nexus approach, to promote integration and policy coherence among sectors aiming Water and Energy security as part of a process for the transition to a greener economy and achieving sustainable growth.

⁴ More information on the Task Force on the Water-Food-Energy-Ecosystems Nexus is available in: http://www.unece.org/env/water/task_force_nexus.html . The methodology is prepared in the framework of the Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention), in cooperation with the Royal Institute of Technology (KTH, Stockholm) and the Food Agriculture Organization (FAO).

⁵ The Strategy pursues a holistic pattern of development for the region and seeks to stimulate the key long-term drivers of growth such as innovation, skills and the integration of trade. Like the Europe 2020 Strategy, it is centred on a set of interlinked development pillars: (i) Integrated Growth, (ii) Smart Growth, (iii) Sustainable Growth, (iv) Inclusive Growth, (v) Governance for Growth.

Annex I. List of Participants

	Title	Name	SURNAME	Position/Affiliation	Organization	Country
1.	Mr.	Enes	ALAGIC	Technical Advisor to the Director	Sava River Watershed Agency Sarajevo	BOSNIA & HERZEGOVINA
2.	Ms.	Ivana	BAJKOVIC	Senior Consultant	Water Directorate of Montenegro	MONTENEGRO
3.	Mr.	Bogdan	BARBIC	Director	Power Company (HESS, d.o.o.)	SLOVENIA
4.	Mr.	Friedrich	BARTH	General Manager	German Water Partnership	GERMANY
5.	Mr.	Hasan	BASRI YUKSEL	Deputy Head of Foreign Relations Office	State Hydraulic Works General Directorate	TURKEY
6.	Mr.	Ales	BIZJAK	Senior Scientific Collaborator	Institute for Water of the Republic of Slovenia	SLOVENIA
7.	Ms.	Merita	BOROTA	Senior Advisor	Ministry for Agriculture, Forestry and Water Management	SERBIA
8.	Mr.	Bojan	BOSNJAK	Minister	Ministry of Agriculture, Forestry and Water Management	BOSNIA & HERZEGOVINA
9.	Ms.	Razmena	CEKIC-DUROVIC	Head of Investment Energy Projects Unit	Ministry of Economy	FYR MACEDONIA
10.	Mr.	Branko	COLIC	Assistant Director	Public Institution "VODE SRPSKE"	BOSNIA & HERZEGOVINA
11.	Ms.	Gabriela	CRETU	Electricity And Renewable Energy Expert	Energy Community Secretariat	
12.	Mr.	Miodrag	DAKIC	Energy and Climate Change Program Coordinator	Center for Environment	BOSNIA & HERZEGOVINA
13.	Ms.	Lucia	DE STRASSER	Researcher	KTH Royal Institute of Technology	SWEDEN
14.	Ms.	Senada	DIZDAR	Assistant to the Minister for Water Management and Forestry	Ministry of Agriculture, Forestry and Water Management	BOSNIA & HERZEGOVINA

15.	Mr.	Nenad	DJUKIC	Senior Associate for Water Use	Ministry of Agriculture, Forestry and Water Management	BOSNIA & HERZEGOVINA
16.	Mr.	Jakob	DOETSCH	Project Manager	Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)	
17.	Mr.	Thomas	DWORAK	Director	Fresh-Thoughts Consulting GmbH	
18.	Mr.	Hajrudin	DZAFO	Head of Department for Renewable Energy Projects Implementation, Project Manager of Small Hydro / Wind Power Plants	Power Company (JP ELEKTROPRIVREDA BIH d.d.-Sarajevo)	BOSNIA & HERZEGOVINA
19.	Mr.	Dimitris	FALOUTSOS	Programme Coordinator for Southeastern Europe	Global Water Partnership Mediterranean	
20.	HE Mr.	Karolos	GADIS	Ambassador of the Hellenic Republic to Bosnia and Herzegovina	Embassy of the Hellenic Republic in Bosnia and Herzegovina	GREECE
21.	Ms.	Melita	GOCHEVSKA	Head of Unit for Concession and Public-Private Partnership and Intersectoral Cooperation	Ministry of Environment and Physical Planning	FYR MACEDONIA
22.	Ms.	Begajeta	HABOTA	Head of Department of Geology	Federal Ministry of Energy, Mining and Industry	BOSNIA & HERZEGOVINA
23.	Mr.	Mish	HAMID	Project Manager	Global Environment Facility International Waters Learning Exchange and Resource Network	
24.	Mr.	Nihad	HARBAS	Project Manager	Center for Economic, Environmental, and Technological Development Sarajevo	BOSNIA & HERZEGOVINA
25.	Ms.	Imra	HODZIC	Junior Researcher	Hydro-Engineering Institute Sarajevo	BOSNIA & HERZEGOVINA
26.	Mr.	Fritz	HOLZWARTH	Deputy Director General for Water Management	Federal Ministry of Environment, Nature Conservation and Nuclear Safety, Germany	GERMANY
27.	Mr.	Amer	HUSREMOVIC	Water Sector, Chief of Department for Development and International Obligations	Federal Ministry of Agriculture, Water Management and Forestry	BOSNIA & HERZEGOVINA
28.	Ms.	AMRA	IBRAHIMPASIC	Head of Planning Sector	Sava River Watershed Agency Sarajevo	BOSNIA & HERZEGOVINA
29.	Ms.	Ivana	IVANKOVIC	Head of Hydro-technic Department	Hep Development of Multi-Purpose Real Estate Projects Ltd.	CROATIA

30.	Ms.	Jelena	JOKANOVIC	Head of Division for Investments in new facilities	Mixed Holding Power Utility of the Republic of Srpska	BOSNIA & HERZEGOVINA
31.	Mr.	Zvezdan	KALMAR KRNAJSKI JOVIC	Coordination for Energy Programme	Center for Ecology and Sustainable Development	SERBIA
32.	Ms.	Angela	KLAUSCHEN	Senior Freshwater Policy Officer	World Wildlife Fund (WWF)	
33.	Ms.	Verena	KLINGER DERING	Desk Officer	Federal Ministry of Environment, Nature Conservation and Nuclear Safety, Germany	GERMANY
34.	Mr.	Vladimir	KOLAREVIC	Regional Sales Manager	SUPERLIT Romania S.A.	SERBIA
35.	Mr.	Dejan	KOMATINA	Secretary	International Sava River Basin Commission	
36.	Ms.	Natasa	KOVACEVIC	Program Coordinator for Environmental Protection	NGO Green Home	MONTENEGRO
37.	Mr.	Salih	KRNJIC	Technical Advisor to the Director	Sava River Watershed Agency Sarajevo	BOSNIA & HERZEGOVINA
38.	Mr.	Miroslav	KUKOBAT	Head of Infrastructure and Energy Unit	Regional Cooperation Council Secretariat	
39.	Mr.	Tarik	KUPUSOVIC	Director	Hydro-Engineering Institute Sarajevo	BOSNIA & HERZEGOVINA
40.	Ms.	Annuka	LIPPONEN	Environmental Affairs Officer	United Nations Economic Commission for Europe	
41.	Mr.	Milan	LOVRIC	Executive Manager	Jp "Elektroprivreda HZHB" D.D. Mostar	BOSNIA & HERZEGOVINA
42.	Mr.	Raimund	MAIR	Technical Expert River Basin Management	International Commission for the Protection of the Danube River	
43.	Mr.	Dzenan	MALOVIC	Associate Operations Officer	International Finance Corporation	BOSNIA & HERZEGOVINA
44.	Mr.	Dimitris	MAOS	Head of Commercial Section	Embassy of the Hellenic Republic in Bosnia and Herzegovina	GREECE
45.	Mr.	Adrian Gheorghe	MARIN	Counsellor	Romanian Department for Energy, Ministry of Economy	ROMANIA

46.	Mr.	Miroslav	MARKOVIC	New Projects Sector Manager	Montenegrin Electric Enterprise (EPCG)	MONTENEGRO
47.	Ms.	Snezana	MARTULKOVA	Head of Unit for Water Permits	Ministry of Environment and Physical Planning	FYR MACEDONIA
48.	Mr.	Peter	MATT	Head of Engineering Services	Vorarlberger Illwerke AG	AUSTRIA
49.	Mr.	Jian-hua	MENG	Lead, International Water Security Initiative	World Wildlife Fund (WWF)	
50.	Ms.	Natalija	MILICEVIC	MSc Candidate	UNESCO-IHE	
51.	Mr.	Damir	MRDEN	Advisor	Agency for Watershed of Adriatic Sea Mostar	BOSNIA & HERZEGOVINA
52.	Ms.	Anna Maria	PAPAIANOANNOU	Project Assistant	Global Water Partnership Mediterranean	
53.	Mr.	Tor Simon	PEDERSEN	Ministry of the Environment, Norway	Ministry of the Environment, Norway	NORWAY
54.	Mr.	Leo	PENOVIC	Director of Sava Zagreb Development Programme	Power Company (HEP Development of Multi-Purpose Real Estate Projects Ltd.)	CROATIA
55.	Ms.	Marija	PINTER	Head of the Department for International Cooperation	Ministry of Agriculture	CROATIA
56.	Ms.	Irma	POPOVIC DUJMOVIC	Freshwater Project Coordinator	World Wildlife Fund Mediterranean Program Office	CROATIA
57.	Mr.	Marko	PREM	Deputy Director	UNEP/MAP Priority Actions Programme Regional Activity Centre (PAP/RAC)	
58.	Mr.	Lurie	RAILEANU	Senior Adviser, Department Energy Efficiency and Renewable Energy Sources	Ministry of Economy	MOLDOVA
59.	Ms.	Tatijana	RAKOCEVIC	Chief Engineer for Water Management	JVP "Srbijavode" Public Water Management Company	SERBIA
60.	Mr.	Tobias	SALATHE	Senior Adviser - Europe	Ramsar Convention on Wetlands	

61.	Mr.	Mirza	SARAC	Senior Specialist in Water Management	Sava River Watershed Agency Sarajevo	BOSNIA & HERZEGOVINA
62.	Mr.	Karl	SCHWAIGER	Head of Unit	Federal Ministry of Agriculture and Forestry, Environment and Water Management	AUSTRIA
63.	Mr.	Michael	SCOULLOS	Chairman	Global Water Partnership Mediterranean	
64.	Mr.	Charalampos	SKOYLKARIS	Secretary of INWEB, Research Associate	UNESCO Chair/International Network of Water-Environment Centres for the Balkans (INWEB)	GREECE
65.	Mr.	Bojan	STOJANOVIC	Communications Officer	World Wildlife Fund (WWF)	
66.	Mr.	Thomas	STRATENWERTH	Head of Division	Federal Ministry for Environment, Nature Conservation and Nuclear Safety	GERMANY
67.	Mr.	Garret	TANKOSIC-KELLY	Principal	SEE Change Net Foundation	BOSNIA & HERZEGOVINA
68.	Ms.	Naida	TASO	Energy Specialist	SEE Change Net Foundation	BOSNIA & HERZEGOVINA
69.	Mr.	Gazmend	TURDIU	Head of Expert Pool	Regional Cooperation Council Secretariat	
70.	Mr.	Mico	VRHOVAC	Senior Expert Associate for Promotion and Use of Renewable Energy Sources	Ministry of Industry, Energy and Mining, Government of the Republic of Srpska	BOSNIA & HERZEGOVINA
71.	Mr.	Dragan	VUKOTIC	Senior Engineer for Climate Change	Public Enterprise Electric Power Industry of Serbia	SERBIA
72.	Mr.	Nikola	VUKOTIC	Project Supervision Specialist	Montenegrin Electric Enterprise (EPCG)	MONTENEGRO
73.	Mr.	Manuel	WELSCH	Phd Student	KTH Royal Institute of Technology	SWEDEN
74.	Mr.	Edin	ZAMETICA	Advisor to the Commission	State Electricity Regulatory Commissions	BOSNIA & HERZEGOVINA
75.	Ms.	Lia	ZORZOU	Programme Officer SEE	Global Water Partnership Mediterranean	

Annex II. Agenda

Chair: Mr. Miroslav Kukobat, Head of Infrastructure and Energy Unit, Regional Cooperation Council (RCC) Secretariat

Co-chair: Mr. Fritz Holzwarth, Deputy Director General for Water Management, Federal Ministry of Environment, Nature Conservation and Nuclear Safety, Germany

Rapporteur: Mr. Michael Scoullas, Chairman, Global Water Partnership Mediterranean (GWP-Med)

6 November 2013 – Wednesday

12.15 – 13.00 *Registration - light lunch*

13.00 – 14.00	OPENING SESSION
----------------------	------------------------

13.00 – 13.30 **Welcome Address**

- *Mr. Fritz Holzwarth, Deputy Director General for Water Management, Federal Ministry of Environment, Nature Conservation and Nuclear Safety, Germany*
- *Mr. Miroslav Kukobat, Head of Infrastructure and Energy Unit, RCC Secretariat*
- *Mr. Mish Hamid, Project Manager, Global Environment Facility (GEF) International Waters Learning Exchange and Resource Network (IW:LEARN)*
- *Mr. Michael Scoullas, Chairman, GWP-Med*

13.30 – 13.45 **Renewable Energy Acquis in the Energy Community – objectives for hydropower development until 2020 in Southeastern Europe**

- *Ms. Gabriela Cretu, Electricity and Renewable Energy Expert, Energy Community Secretariat*

13.45 – 14.00 **RCC Strategy and Work Programme 2014-2016 for energy and environment - importance for the SEE 2020 Strategy and links to IWRM**

- *Mr. Miroslav Kukobat, Head of Infrastructure and Energy Unit, RCC Secretariat*

14.00 – 14.15 *Coffee break*

14.15 – 17.00	SESSION 1: Water and Energy Nexus - Securing hydropower sustainability at the transboundary level
----------------------	----------------------------------------------------------------------------------------------------------

A set of presentations introduced issues related to hydropower production and sustainability. These provided the baseline for and fed the discussions that followed during the Roundtable. Presentations were followed by a panel discussion; the panel interacted with the participants.

Moderator: Mr. Ales Bizjak, Senior Scientific Collaborator, Institute for Water, Slovenia

1. Water resources management and hydropower production

- *Mr. Tarik Kupusovic, Director, Hydro-Engineering Institute Sarajevo, Bosnia and Herzegovina*

2. Opportunities for investment in hydropower in SEE

- *Mr. Dzenan Malovic, Associate Operations Officer, International Finance Corporation (IFC)*

3. Hydropower production in transboundary basins – challenges and opportunities

- *Mr. Leo Penovic, Director of Sava Zagreb Development Programme, Power Company, Croatia*
- *Mr. Bogdan Barbic, Director of Sava River Hydropower Plants, Power Company, Slovenia*
- *Mr. Hajrudin Dzafo, Head of Department for Renewable Energy Projects implementation, Project Manager of small hydro / wind power plants, Power Company, Bosnia and Herzegovina*

4. Guiding Principles on Sustainable Hydropower Development in the Danube Basin

- *Mr. Raimund Mair, Technical Expert - River Basin Management, International Commission for the Protection of the Danube River (ICPDR)*

5. Fostering environmentally sustainable hydropower production

- *Mr. Jian-hua Meng, Water Security Lead, World Wide Fund for Nature (WWF)*

Panel discussion

End of Day 1

20.00

Evening Reception

7 November 2013-Thursday

09.30 – 09.45 **Recap of Day 1**

09.45 – 18.00	SESSION 2: Mapping the Water and Energy Security Nexus
---------------	---------------------------------------------------------------

09.45 – 10.30 **Keynote Presentation: The Water and Energy Nexus in transboundary basins of Southeastern Europe**

The keynote presentation presented the findings of a recent background study for the identification of the state, challenges and issues of Water and Energy Nexus in transboundary basins of SEE.

Moderator / Keynote presentation: Mr. Thomas Dworak, Consultant, Fresh-Thoughts Consulting GmbH

Facilitated discussion

10.30 – 13.15 **Mapping the Water and Energy Security Nexus: the hydropower trade-offs** During the first part of the Water and Energy Security Nexus mapping session, the participants discussed in two working groups about different aspects of hydropower trade-offs. The working groups reported back to the plenary – a discussion followed.

10.30 – 12.00: Facilitated discussion in 2 Working Groups:

- **Theme 1 : Trade-offs between “Economy” and “Environment”**

The participants discussed the trade-offs between hydropower development/

management and the environment.

Moderator: Ms. Angela Klauschen, Senior Freshwater Policy Officer, WWF

- **Theme 2 Trade-offs between “Economy” and “Economy”**

The participants discussed the trade-offs between hydropower development/ management and other economic activities using water resources.

Moderator: Mr. Thomas Stratenwerth, Head of Division "General, Fundamental, International and European Aspects of Water Management", Federal Ministry of Environment, Nature Conservation and Nuclear Safety, Germany

12.00 – 12.15

Coffee break

12.15 –13.15: Plenary Discussion - Outcomes of the Working Groups

Moderators: Mr. Thomas Stratenwerth and Ms. Angela Klauschen

13.15 – 14:30

Lunch

14.30 – 16.45

Mapping the Water and Energy Security Nexus: identifying benefits and mechanisms for sharing them

During the second part of the Water and Energy Security Nexus mapping session, the participants discussed about benefits and mechanisms for sharing them.

Introductory presentation: Mr. Thomas Dworak, Consultant, Fresh-Thoughts Consulting GmbH

Moderator: Mr. Friedrich Barth, General Manager, German Water Partnership

Facilitated discussion

15.30 – 16.00

Coffee Break

Mapping the Water and Energy Security Nexus: identifying benefits and mechanisms for sharing them (continued)

16.45 – 18.00

Mapping the Nexus: identifying and characterizing the water-energy interdependencies (and beyond) in transboundary basins

In this session, the approach to assessing water-energy inter-linkages under the UNECE Water Convention — considering also linkages to agriculture and the environment — was presented for discussion. The methodology under preparation involves developing a conceptual picture of the Nexus, substantiating it with indicators and quantifying selected aspects.

Moderator: Mr. Dejan Komatina, Secretary, International Sava River Basin Commission (ISRBC)

Presentations followed by plenary discussion:

1. Introduction to the assessment under the UNECE Water Convention

- *Ms. Annuka Lipponen, Environmental Affairs Officer, UNECE*

2. Methodology for assessing the Water-Food-Energy-Ecosystems Nexus in transboundary river basins

- *Mr. Manuel Welsch, Royal Institute of Technology (KTH), Sweden*

Facilitated discussion

18.00 – 18.10 **Wrap up of Day 2**

End of Day 2

8 November 2013-Friday

09.00 – 09.10 **Recap of Day 2**

09.10 – 11.00	SESSION 3: Addressing the trade-offs from hydropower
----------------------	-------------------------------------------------------------

1. Panel Discussion

Panel discussion; the panel responded to questions from and interacted with the participants.

- *Moderator: Mr. Dimitris Faloutsos, Programme Coordinator for Southeastern Europe, GWP-Med*

- *Mr. Thomas Stratenwerth, Head of Division "General, Fundamental, International and European Aspects of Water Management", Federal Ministry of Environment, Nature Conservation and Nuclear Safety, Germany*
- *Mr. Dejan Komatina, Secretary, ISRBC*
- *Mr. Michael Scoullos, Chairman, GWP-Med*
- *Mr. Tobias Salathe, Senior Advisor for Europe, Ramsar Convention Secretariat*
- *Mr. Damir Mrden, Advisor, Agency for the Adriatic Sea Watershed Mostar, Bosnia & Herzegovina*
- *Mr. Hajrudin Dzafo, Head of Department for Renewable Energy Projects implementation, Project Manager of small hydro / wind power plants, Power Company, Bosnia and Herzegovina*

2. Experiences from the field

- *Mr. Tor Simon Pedersen, Senior Advisor, Ministry of Environment, Norway*
- *Mr. Peter Matt, Head of Engineering Services, Vorarlberger Illwerke AG*

11.00 – 11.15 *Coffee Break*

11.15 – 12.00	SESSION 4: Outcomes and the way forward
----------------------	------------------------------------------------

- *Mr. Thomas Stratenwerth, Head of Division "General, Fundamental, International and European Aspects of Water Management", Federal Ministry of Environment, Nature Conservation and Nuclear Safety, Germany*
- *Mr. Miroslav Kukobat, Head of Infrastructure and Energy Unit, RCC Secretariat*
- *Mr. Mish Hamid, Project Manager, GEF IW:LEARN*
- *Prof. Michael Scoullos, Chairman, GWP-Med*

End of the International Roundtable

12.30 – 14.00: Side Event on Water-Food-Energy-Ecosystems Nexus Assessment in the Sava River Basin

Organizers: United Nations Economic Commission for Europe (UNECE), International Sava River Basin Commission (ISRBC), Global Water Partnership - Mediterranean (GWP-Med), German Federal Ministry of Environment, Nature Conservation and Nuclear Safety (BMU)

Light lunch: 12.00 to 12.30