

# Polish Hydropower Conference

## RENEXPO® Poland 2016

EXPO XXI Center, Warsaw, October 19-20<sup>th</sup>, 2016

### BULLETIN no 2

### Conference Programme

Towarzystwo Elektrowni Wodnych



Polish Hydropower Association (TEW)

The Szwedzki  
Institute of Fluid-Flow Machinery  
of the Polish Academy of Sciences  
(IMP PAN)



Polish Association for Development of  
Small Hydropower Plants (TRMEW)



REECO Poland Sp. z O.O.



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Norway

### Vith Polish Hydropower Conference RENEXPO Poland

For 6 years already the annual RENEXPO Poland hydropower conferences have been a platform of hot discussion on challenges encountered by the hydropower sector in Poland and other European countries in view of changes in its legal & administrative constraints, but also capabilities resulting from the hydropower potential, available technology and environmental requirements. Our events provide a unique opportunity in the region for exchange of opinions and information on observed trends and prospects for the sector, as well as experience on erection and operation of hydropower installations, new solutions to technical problems and the results of R&D efforts.

This year conference is a two-day event of regional international character. The honorary patronage of the conference has been taken over by Mr **Mariusz Gajda**, Undersecretary in the Polish Ministry of Environment and Mr **Karsten Klepsvik**, Ambassador of the Kingdom of Norway to Poland.

The first day debate will be dealing with issues of strategic significance for the hydropower sector, non-technical constraints for hydropower functioning and hydropower structures interrelations with natural environment and links with water management. The central event will be the Panel Debate "What future for the hydropower?". The second day will be largely devoted to selected projects, technical problems and results of R&D efforts. In this context the session of the Lower Vistula Cascade deserves surely special attention. Following the example of previous years the debate will be carried out in Polish and English with simultaneous interpretation support.

Presentations delivered to the Organising Committee by October 12<sup>th</sup> will be loaded to flash disks delivered to the delegates together with Conference bags, provided the author consent is given. Other presentations will be made available - on the same basis - from the REECO and TEW websites. The papers prepared basing on selected contributions will be recommended for publication in the *Acta Energetica* and *Transactions of the Institute of Fluid-Flow Machinery* scientific quarterlies. The papers addressed to a broader circle of readers will be still published in the *Energetyka Wodna* basing on the recommendation issued by the Organising Committee. The conference package will comprise the annual subscription of *Energetyka Wodna*, access to the electronic version of presentations and printed proceedings with extended abstracts of conference contributions (up to two pages of Times Roman 10 pt print).

The Sixth International Fair for Renewable Energy and Energy Effectiveness

## RENEXPO® Poland

EXPO XXI Center, Warsaw, 19-21/10/2016, ul. Gen. I. Prądzyńskiego 12/14, Warsaw, Poland

## Conference venue

The Conference will debate in room **B** of the Warsaw **EXPO XXI Center**, situated in the neighbourhood of the Warsaw West (Warszawa Zachodnia) Railway Station, at Gen. I. Prądzyńskiego St., 12/14. You can reach this site by car by turning from Prymasa Tysiąclecia Avenue into the M. Kasprzaka and J. Bema streets. The nearest bus stops are located at M. Kasprzaka and Tunelowa streets (ca 13 minutes by foot). Ca 23 minutes of walk are needed to reach the Conference venue from the Warsaw West Railway Station via the tunnel and the Tunelowa street

## Joining the Conference

Participation in the Conference requires registration and payment of the conference fee. You can register to the Conference using the [www.renexpo-warsaw.com](http://www.renexpo-warsaw.com) website or by sending the completed registration form at the following address: **Biuro Towarzystwa Elektrowni Wodnych, ul. Piaszkowa 18, 84-240 Reda**, phone/fax: +48 58 678 79 51, e-mail: [biuro@tew.pl](mailto:biuro@tew.pl). The completed registration form will be the basis for issuing an invoice for participation in the Conference. The following fees apply (net values, €):

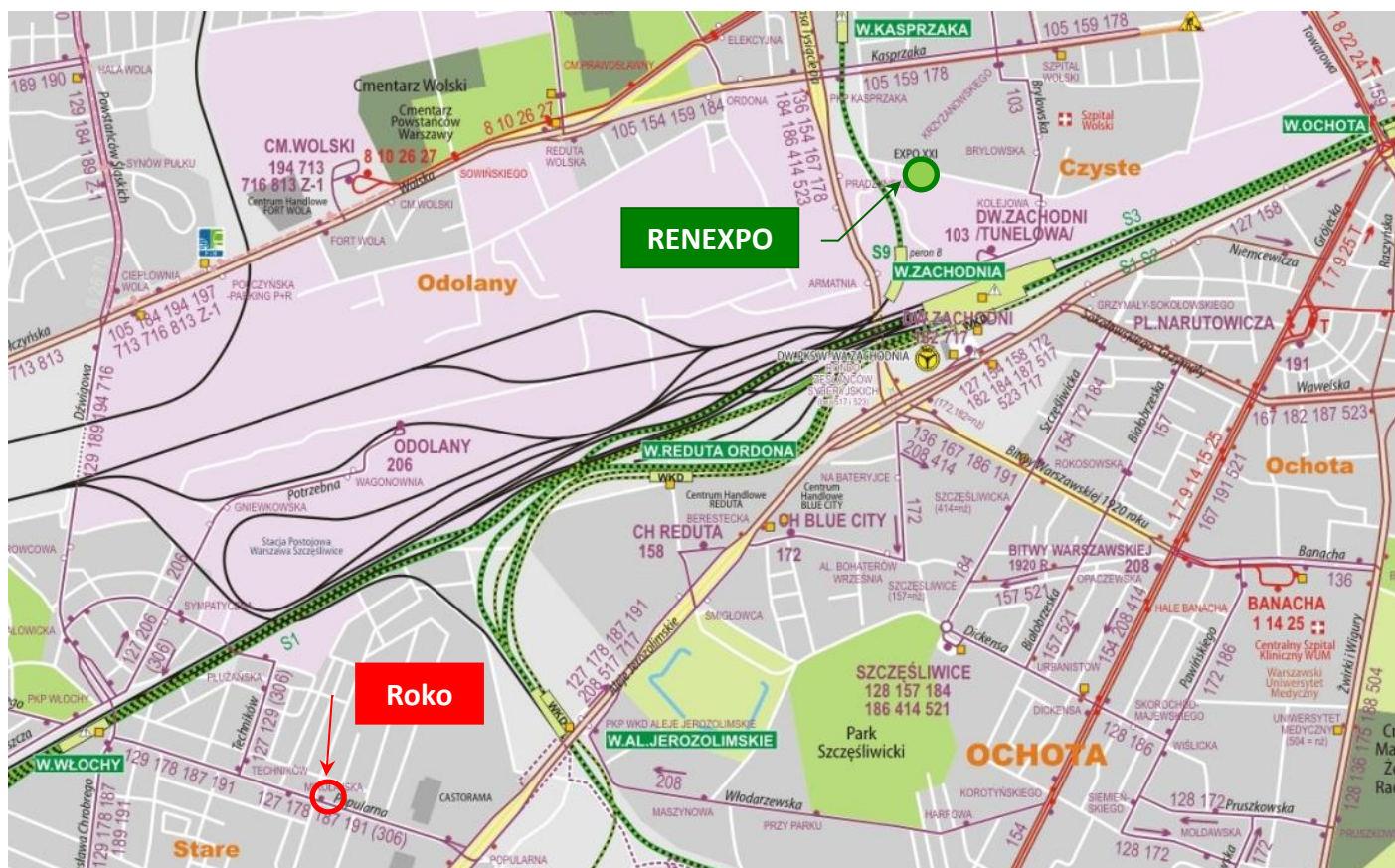
Application date	till 30.09	after 30.09
Basic fee	180	200
TEW/TRMEW members	150	180
Authors*, session chairmen, students	100	120
TEW reception	20	20

\* Only non-commercial contributions.

The fee shall be paid at the TEW account, according to the invoice received. The conference fee covers participation costs, including the proceedings and the conference dinner at the end of the first day. The Organisers reserve themselves the right to apply special discounts and to issue free invitations for Conference guests. For further details and application forms please consult the TEW Office (☎ +48 58 678 79 51, [biuro@tew.pl](mailto:biuro@tew.pl)), TEW Hydropower Consulting Bureau (☎ +48 58 6995 130, [pkew@imp.gda.pl](mailto:pkew@imp.gda.pl)) and our websites [www.tew.pl](http://www.tew.pl), [www.trmew.pl](http://www.trmew.pl), [www.imp.gda.pl](http://www.imp.gda.pl), [www.renexpo-warsaw.com](http://www.renexpo-warsaw.com). Till October 15th it will be still possible to register using the RENEXPO website or by sending the completed registration form at the TEW Hydropower Consulting Bureau or TEW Office - [pkew@imp.gda.pl](mailto:pkew@imp.gda.pl) or [biuro@tew.pl](mailto:biuro@tew.pl), respectively. After this deadline joining the Conference will be possible only at the Conference registration desk, open since 8:30, on October 19th without guarantee of receiving complete Conference package.

## Conference dinner and TEW Reception

Conference Delegates are invited to the Conference Dinner taking place on the first day of Conference in **Roko** hotel at Mikołajska 2 street (convenient municipal transport till 23:12 using bus lines 127 and 191). The cost of the dinner has been included in the Conference fee. However, Delegates, will be asked to confirm their participation at the Registration Desk. Delegates staying in Warsaw one day longer are also invited to the reception of the Polish Hydropower Association. This reception is free of charge solely for delegates of TEW National Assembly and TEW guests.



8:30	Registration of the delegates
9:30	Welcome addresses and opening of the Conference
9:45	<b>M.Lis</b> (Energetyka Wodna): <i>Energetyka Wodna quarterly in service of the Polish hydropower sector</i>
<b>Session I: Hydropower in economic strategy and environmental policy of Poland</b>	
10:00	<b>A.Tersa</b> , S.Lewandowski (TEW): <i>Updated Polish RES Act - positive and negative effects for the Polish hydropower sector (PL)</i>
10:20	<b>M.Balcerowicz</b> (Polish Ministry of Environment): <i>Polish hydropower as seen from the perspective of the Ministry of Environment (PL)</i>
10:40	<b>E.Malicka</b> (TRMEW): <i>Opportunities and threats for Polish SHPs in view of changes in the Renewable Energy Act and the Water Law (PL)</i>
11:00	Opening of the RENEXPO Poland 2016 Fair
<b>Session II: Panel debate: „What future for hydropower ?”</b>	
12:00	<b>S.Lewandowski</b> (Hydroconsult/TEW), <b>J.Cieslak</b> (PGE EO/TEW): Introduction to the discussion
13:30	Lunch break
<b>Sesja III: Hydropower potential, flood protection and environmental effects</b>	
14:30	M.Fedorov, V.Elistratov, <b>V.Maslikov</b> , A.Chusov (St.Petersburg Polytechnic University), A.Savvichev (Winogradsky Institute of Microbiology, Russian Academy of Sciences, Moscow): <i>Assessment of greenhouse gases emissions from the "Sayano-Shushenskaya Hydropower Plant Complex reservoir "</i>
14:50	M.Fedorov, <b>V.Badenko</b> , V.Maslikov, A.Chusov (St.Petersburg Polytechnic University): <i>GIS technologies for selecting location of dams during development of natural-technical flood control systems with hydropower facilities</i>
15:10	<b>B.Popa</b> (University Politehnica of Bucharest), F.Popa (ISPH Project Development, Bucharest), A.Moclanda (STEINBERG Consulting, Bucharest), E.Tica (University Politehnica of Bucharest): <i>Assessment of different types of hydropower potential in Romania</i>
15:30	<b>L.Šilinis</b> , P.Punys, E.Kasiulis (A. Stulginskis University, Kaunas, Lithuania): <i>Large hydropower plant hydropeaking phenomena frequency analysis</i>
16:00	Closing of the 1st day debate
19:00	Conference dinner

## Honorary patronage and sponsoring

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## Conference programme

October 20th, 2016

8:30	Registration of the delegates
Session IV: Investment projects within the region - Lower Vistula Cascade	
9:00	<b>W.Majewski</b> (IMGW PIB): <i>Complex development of the Lower Vistula</i> (PL)
9:20	<b>J.Granatowicz, P.Śliwiński</b> (ENERGA Invest): <i>Lower Vistula Cascade - a whim or a necessity?</i> (PL)
10:30	Coffee break
Session V: Good practices and experience on design, erection and operation of hydropower plants	
11:00	<b>A.Adamkowski, M.Lewandowski</b> (IMP PAN), <b>S.Lewandowski</b> (Hydroconsult/TEW): <i>Multi-criterion optimisation of energy generation in multiblock hydropower plants</i> (PL)
11:20	<b>A.Henke, A.Adamkowski</b> (IMP PAN): <i>Selected directions in rehabilitation of Polish SHPs</i> (PL)
11:40	<b>M.Kaniecki</b> (ZRE SA, Gdańsk), <b>Z.Krzemianowski</b> (IMP PAN): <i>From design assumptions to model tests - a complex approach to high speed Francis turbine design</i> (PL)
12:00	<b>Ł.Kalina</b> (Institute of Renewable Energy Sources, Kielce, Poland): <i>Good practices in environmental processing of small hydropower plants - succesfull project examples</i> (PL)
12:30	Coffee break
Session VI: Technical innovations	
13:00	<b>S.Gawron, R.Rossa</b> (KOMEL, Katowice): <i>Exemplary applications of PMSG generators or new PMSG equipped gensets in small hydropower plants</i> (PL)
13:20	<b>E.Opsahl</b> (CleanPower AS, Kristiansand S, Norway): <i>The CleanPower Turbinator® eco-flow solution</i>
13:40	<b>E. Kasiulis, L. Šilinis</b> (A. Stulginskis University, Kaunas): <i>Seaport breakwater as a renewable energy power plant</i>
14:00	Lunch break
Session VII: Hydropower oriented research and R&D projects	
15:00	<b>S.V.Artsiamchuk</b> (Belarusian State University, Minsk), <b>G.I.Sidorenko</b> (St. Petersburg Polytechnical University): <i>Influence of the outlet system parameters of a horizontal bulb unit with a storage pump on its performance characteristics</i>
15:20	<b>T. Krátký, J. Šoukal</b> (Hydraulics Research Centre, Ltd, Lutín, Czech Republic), <b>J. Kmec</b> (Palacký University in Olomouc, Czech Republic): <i>Multiobjective shape optimization of radial pump with respect to both pump and turbine regimes</i>
15:40	<b>V.Safonov, A.Zykova</b> (NSC Kharkov Institute of Physics & Technology, National Academy of Sciences of Ukraine), <b>A.Krella, J.Steller</b> (IMP PAN), <b>G.Gajowiec, M.Szkodo, H.Ghaemi</b> (Gdansk University of Technology): <i>Cavitation erosion resistance of thick CrC coating deposition by the Arc-PVD method</i> (PL)
16:00	Conference closure
20:00	Reception of the Polish Hydropower Association

## Publishing collaboration and media patronage



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