The already traditional **International Scientific & Expert Meeting of Gas Professionals**, organized by the Croatian Gas Centre Ltd. and Croatian Gas Association was held successfully for the twenty-ninth time in a row in the Congress Centre of the Grand Hotel Adriatic, Opatija, Croatia. International gas conference and exhibition - the largest annual gas event in South-East Europe - gathered about 500 participants from 22 countries. Those were mostly gas and energy experts and managers from leading European energy companies, scientists from renowned European universities, gas transmission representatives, suppliers, producers and distributors of gas from the country and abroad. Totally 198 various gas and energy companies and organizations were present, of whom 80 from abroad and about twenty journalists from 15 media companies.

The organization of this Meeting has been supported by the long-term partner of this conference - company Siemens d.d. and numerous sponsors such as companies INA – Industrija nafte d.d., Plinacro d.o.o., Prvo plinarsko društvo d.o.o., Xperion Energy & Environment GmbH, MET Croatia Energy Trade d.o.o., Podzemno skladište plina d.o.o., RWE Hrvatska d.o.o., IP Systems Ltd. and co-organizer EVN Croatia plin d.o.o.

Mladen Klepac, Head of the business unit Energy Power Generation Oil & Gas Solutions and Director of Energy Service Croatia at Siemens d.d. presented a brief history of the development of Siemens in Croatia, the innovative products and solutions with which Siemens endeavours to improve environmental balance, the perennial partnership between Siemens and the Croatian economy, and divisions and sectors within the company based on areas of business (energy, health, industry, infrastructure & cities).

Želimir Šikonja, Executive Director of Research and Production of Oil and Gas, INA-Industrija nafte d.d., stated that despite numerous previous positive effects, the liberalisation of the gas market has slowed down significantly. He pointed out that the complete opening of the gas market would be the best solution for end customers as it would deliver the lowest prices. He also noted, after several decades of decline, Ina has succeeded in increasing oil production in Croatia, which is also due to injecting carbon dioxide into some of the old oil fields, leading to increased production in them. We hope that after conducting the tender for oil and gas exploration in the Adriatic, that a similar tender will also be announced for investigating the mainland, said Šikonja. He also asserted that Ina’s gas from the underground storage terminals at Okoli is being sold at too quick a rate and well below market prices in order to free space for new users, thereby incurring damages to Ina, as Davorka Tancer, Director or Ina’s company Prirodni plin (Natural Gas) had warned.
However, Krešimir Malec, Director of the company Podzemno skladište plina (Underground Gas Storage), said that from April 1 of this year, in line with European and Croatian regulations, they had to allow third parties access to storage terminals whereas prior to that all of the available capacity was leased by Ina’s company Prirodni plin (Natural Gas). Under the new scheme, 70% of the storage terminals were given to HEP (Croatian Electrical Utility Company) for use, which according to the decision of the Government, replaced Prirodni plin (Natural Gas) as the supplier in the wholesale gas market which is why, in accordance with European practice, they had to sell Ina’s remaining gas from the storage terminals, said Malec.

“HEP has for decades been the largest buyer of natural gas for its thermal power plants; we also have our own company for distributing and supplying gas. We are aware that we have assumed a very responsible role in the gas market and the obligation to ensure supply of this energy source. However, in terms of our organization, personnel, financial position and expertise, we are ready to do the job properly, so in a short time we have made all the necessary arrangements, and from April 1, based on the government’s decision, we have started successfully delivering gas as a new supplier on the wholesale market,” said HEP Board member, Zvonko Ercegovac.

President of the Board of Plinacro, Marin Zovko, said that the company has completed its ten-year development program and that 95% of Croatia is covered by major pipelines. Now is the time for a more intensive development of the distribution network, especially in Dalmatia, and they now have the priority of creating the new connections to the gas networks of neighbouring countries, and the getting involved in the project of constructing the Adriatic-Ionian Gas Pipeline and LNG terminal with supporting pipelines.

Dalibor Pudić, who is a member of the Governing Board of the Croatian Energy Regulatory Agency (HERA), said that their task to ensure transparency, impartiality, market competition and consumer protection, is quite a difficult and thankless one. He noted that HERA following the adoption of new energy laws bringing Croatia in line with the so-called third EU energy legislative package, adopted on time numerous by-laws under its jurisdiction.

During the three days of the event a total of 41 scientific and professional papers (of which 4 invited presentations and 11 papers in poster session) and 10 technical-commercial presentations were presented covering the following current gas topics:
1. Invited Presentations
2. Gas Market Opening – Panel discussion
3. Hybrid Technics and Efficiency
4. Planned Development Projects
5. Onshore and Offshore Distributed Energy Generation
7. Security and Management
8. Problems with Buried Gas Pipelines
9. Gasification Process in Dalmatia and Regulatory Framework as per EU Directives

Marcel Kramer, representative of the International Gas Union and an advisor to the Russian Gazprom, spoke about global trends in the gas business. In Europe, consumption fell due to the economic crisis, and as a result of lower production, the need to import this fuel increased. That is why new gas pipelines including South Stream are important for Europe, which is not only a Russian project because it also involves jointly-owned companies from a number of EU countries. This project will better ensure supply to South East Europe, and the first volumes of gas could arrive in 2015, said Kramer.
According to **Prof Dr Igor Dekanic of the Faculty of Mining, Geology and Petroleum Engineering in Zagreb**, gas consumption in Croatia increased up to the year 2007 when it reached 3.3 billion cubic meters. Subsequently, it began to decrease and teeter when it fell to 2.6 billion cubic meters last year because of the economic crisis.

**Laszlo Farkas Višontai from Ina** said in a lecture on gas production in the Adriatic that central and southern Adriatic, where the company already has 33 wells and for which recently a tender for additional exploration was announced, was the future challenge. He noted that under ideal conditions, ten years is needed to the start production in this part of the Adriatic.

The company **Vaillant d.o.o. from Zagreb** presented the Vaillant experience in designing and installing solutions based on hybrid techniques including practical results of use in specific buildings in the region. The company **Viessmann d.o.o.** presented a compact device that combines production of electricity and heat and reduces consumption of primary energy and CO₂ emissions, thereby contributing to achieving the goals for 2020.

At a **panel discussion on the opening up the gas market** and after a presentation of the Austrian and German practices, **Paul Vujnovac, director of the company Prvo plinarsko društvo**, which is the largest importer and second largest supplier of natural gas in Croatia, followed with a presentation on the current state and further development of the Croatian market. He pointed out that, following the adoption of new energy legislation in line with European legislation, all by-laws pertaining to gas were amended, with a great part of the job successfully carried out by the HERA. Vujnovac warned that, prices in the European market could rise in the event of an escalation of the conflict in Ukraine which in turn would cause problems with importing Russian gas. He believes that, in the future, among other things, gas regulations should be harmonised with current state of affairs and market requirements, to allow economically viable transit through Croatia, carry out planned training of participants in the market, to develop storage capacities and new supply routes, to resolve the issue of ambiguity in the public procurement of natural gas and implement other necessary measures.

In the discussion, **Miroslav Jerković, director of Gradska plinara Zagreb-Opskrba (Zagreb City Gasworks)**, warned of the big problems all suppliers and distributors of natural gas in Croatia have been facing for a longer time. Numerous households and businesses pay for the consumption of gas on an irregular basis, which is difficult to solve through slow courts, and in addition, the granted margins are not sufficient for normal operations under such harsh conditions. Due to the defaulting in payments, for example, the company has initiated 13,000 forced payments and filed 5,000 claims for disconnecting gas to non-payers because last year they aggregated 46 million kuna in unpaid claims. However, disconnecting someone requires a court order so everything gets stuck in the slow courts. All this calls into question the future business operations of suppliers and distributors of natural gas, which was confirmed also by other leaders in similar companies, and such problems, according to information from the German RWE, deters foreign companies from entering the gas supply business to households. That is why Jerković suggested that HERA should also keep in mind these kinds of major problems when determining margins.

However, **Nikola Vistica, director of the Sector for Oil and Gas at HERA**, said that he is quite familiar with this problem and will try to help as much as he can, but noted that the cost create by defaulting payers cannot be transferred to those who regularly pay their bills. Such matters should be resolved in other ways where the role of the courts is very important, said Vistica.

**Jako Krizan from Ina** announced that gas production at the new Izabela gas field in the Adriatic should commence in June or July initially producing about 700,000 cubic meters per day. In addition, we have come to learn that in November this year gas production will begin in the Ika southwest Adriatic field initially producing about 500,000 cubic meters per day. This will increase current production of INA’s gas fields in the Adriatic, which is now around 3.1 million cubic meters per day, with last year's total production from these fields at about 1.15 billion cubic meters. Ina up
to until now, produced about 16 billion cubic meters of the fuel in nine gas fields in the Adriatic on which it has set up 16 production and 1 compressor platforms.

Karolina Čegir from the Secretariat of the Energy Community in Vienna mentioned in her presentation on the potential of biomethane that in Croatia in the 2011, according to the Environmental Protection Agency, around 1.65 million tonnes of waste was created, of which 36.1 percent (about 594,000 tons) was biodegradable. About 15.7 million cubic meters of biogas a year could produce from it. Once the non-useable gases were extracted from it, 9.6 million cubic meters of biogas would remain that could be utilised in the existing gas network. This amount of gas, according to her, was enough to supply about ten thousand inhabitants. This kind of production of biogas would achieve multiple benefits and it would reduce the disposal of biowaste and increase the use of biofuels, which EU regulations currently demand. But noted that the problem is that this kind of produced biomethane is more expensive than natural gas extracted from gas fields.

The director of Gradska plinara Zagreb (Zagreb City Gasworks), Ante Dodig and his colleague Željka Pinjuh Ćorić in their presentation Development of a SCADA system in the Zagreb City Gasworks presented the concept of a new monitoring and management system of the distribution network, which is currently under construction. Zagreb City Gasworks, as the operator of the gas distribution system, continuously monitors the operation of the gas distribution system to ensure reliable and safe gas distribution, efficient and reliable management, balancing and maintaining the distribution system and the fulfilment of contractual obligations by users of the system and end customers.

Ten companies presented its offer through commercial-technical presentation, i.e. round table: Cason Engineering Plc., IP Systems Ltd., Kawasaki Gas Turbine Europe GmbH, Macel plin d.o.o., Magyar Foldgaztarolo Zrt., RWE Supply & Trading GmbH, Siemens AG – Oil & Gas Solutions and Xperion Energy & Environment GmbH.

As was the case in previous years, this time as well, due to the extremely large number of registered papers the poster session was organized. Total of 11 scientific & professional papers from Croatia and abroad were published and presented, showing continuous growth of interest for the participation on the Opatija gas event.

At the same time in front of the Grand Hotel Adriatic congress hall premises the largest three-day exhibition of gas equipment in South-East Europe took place where 38 exhibitors (of whom 32 gas equipment exhibitors), of which 13 from abroad, presented their products and services. The exhibition was attended by representatives of gas equipment manufacturers and traders who have actively participated as exhibitors at Opatija Meetings of gas professionals for a number of years, but also a significant number of new exhibitors, from Croatia and especially from abroad, have participated for the first time.

At the end of this year’s conference, Prof. Miljenko Sunic, D.Sc., president of Croatian Gas Association, thanked all participants who have contributed to the success and quality of the annual gas event which has once again proved its quality and size despite the challenging times we are witnessing. Prof. Sunic also announced the next conference, the jubilee 30th International Scientific & Expert Meeting of Gas Professionals, which will take place again in Opatija on 6th till 8th May, 2015.