

European Energy Journal

5

Volume 2 | Issue 4 | October 2012

How could Europe overcome its energy infrastructure challenge in the era of uncertainties? | 19

MEP **András Gyürk** calls for more flexibility to cope with the increased level of unpredictability, quoting the examples of the new guidelines on trans-European energy infrastructure and the cooperation in the Danube region.

A Regional EU Energy policy? | 24

Jacques de Jong from the Clingendael Energy Programme explores pragmatic forms of "Schengenising" European energy policy to cope with the cross-border implications of national fuel mix policies.

Carbon Capture and Storage: a Bridge to Renewable Energy? | 33

Lena Sandberg-Mørch and **Peter Tuner-Kerr** demonstrate that state aids would no longer be necessary if it would become cheaper to capture CO₂ than to buy carbon allowances.

EU-Southern Mediterranean Energy Relations | 42

Kinda Mohamadieh and **Algirdas Pipikaite** analyse the political and legal possibilities and the technical and financial challenges in moving towards a green sustainable energy policy in Egypt, Tunisia, Algeria and Morocco.

Law making	State of play and perspectives of the negotiations in the European institutions on pending and forthcoming legislative proposals	3
Case law	In two judgments on the French and German market for natural gas the CJEU reviews the current case law on concerted practices	7
Book reviews	Leonardo Massai , European Climate and Clean Energy Law and Policy; Jeff D. Makhholm , The Political Economy of Pipelines	16
Country reports	Croatia : Intensive preparations for Croatia's accession to the EU in July 2013; United Kingdom : Implementation of the National Renewable Action Plan, including Wales, Scotland and Northern Ireland; Spain : Renew(able) Spain – a tragic or a happy ending for a (long time) frontrunner?	62
On the scene	Macho Drivers and Smart Cities	82



Croatia

By

Dinka Kovačević, LL.M.

Law Firm Žurić i Partneri

INTRODUCTION

On 1 July 2013 Croatia is becoming 28th EU Member Country. By that time it has an obligation of harmonising its legislation and practice in energy sector with *acquis communautaire* of EU. In pre-accession phase Croatia successfully closed the negotiations with EU regarding its 15th Chapter on Energy and undertook the obligation to implement in its national legislation EU rules on energy market liberalisation including also 3rd Energy Package. The deadline for implementation of 3rd Energy Package (3 March 2011) already elapsed and the date of adjoining of Croatia with EU is rapidly approaching. To insure successful adjoining, in February 2012 Croatian Government accepted the programme according to which, in course of 2012, the Government intends to propose to the Croatian Parliament for discussion and adoption amendments to majority of energy related laws. Croatia has intensive and hardworking year ahead that will, by implementation of EU rules, cause important and permanent changes to the Croatian energy sector.

Croatian energy market goals are set in Strategy of Energy Development issued in 2009 as security of supply (energy independence), competitiveness and sustainabil-

ity. The Strategy envisaged that Croatia would meet these goal until 2020 and it basically foresees the changes of national energy market in alignment with strategies of energy development as set by other EU countries in accordance with EU energy strategy of 20% decrease of emissions, 20% renewables in gross direct consumption and 20% decrease of total energy consumption all until 2020 (20-20-20 until 2020 goals).

One of the biggest issues that arose as the consequence of implementation of 3rd Energy Package is future structure of HEP (Hrvatska elektroprivreda d.d. – vertically integrated energy company) and HEP-OPS (Croatian transmission system operator – currently subsidiary of HEP). At the moment, the majority opinion is that HEP-OPS should undergo ITO (Independent Transmission Operator) structure and remain within HEP as vertically integrated company. By accepting this structure, instead of ownership unbundling, privatisation process would be avoided and potential public interest preserved. This issue is expected to be resolved by Government's proposal of amendment to the Electricity Market Act. The intended reorganisation of electro-energy sector would define future model of wholesale electricity market. The final goal of the regulators in attaining the competitiveness of Croatian electricity market should be that the independent bodies or agencies determine the price and tariffs for grid connection and use, while market mechanism would

define the price of energy.

Majority of Croatian energy market is still state owned. This is partly due to the heritage of state ownership arising from social ownership concept of last regime and current regulatory framework, but moreover due to the fact that certain investments in energy sector considering the calculation of cost effectiveness, potentials of profit return, carry more or less advantages for commercial competitive environment. For that reasons, "old" energy sectors and infrastructure are state owned, while renewables are in private ownership and more investment oriented.

RENEWABLES

In last five years the renewable energy projects experienced great 'boom' in Croatia. In attempt of reaching the goals determined by the Strategy of Energy Development, as well as meeting the requirements of 3rd Energy Package, private investors entering Croatian renewables energy market received open support from the state bodies and competent agencies responsible for approving such projects.

Development

According to the Register of the renewable energy projects maintained by the Ministry of Economy, Labour and Entrepreneurship (OEIKPP), there are 640 registered renewable projects in Croatia.

In first years the emphasis was on wind power, while recently it shifted to solar. Currently there

are nine operational wind farms in Croatia (129,75MW) and several in development phase. According to the information of HEP system operator, in January 2011 Croatia had around 900 MW of potential in wind power on 26 locations. Currently in the Registry of renewable energy projects (OEIKPP) there are more registered on-going wind energy project than the possibilities for connection to the grid. The priority order is managed by the order of registration with the OEIKPP and it cannot be determined with certainty which of registered projects will eventually be finalised and operational.

Lately, the interest shifted from wind energy to solar. This change occurred due to smaller scale investments (mostly households or companies though roof mounted solar systems), cheaper inputs, less complex procedure and lesser reduction of feed-in tariff. According to OEIKPP, there are around 300 on-going solar projects registered in various phases of implementation. Total power from solar systems in Croatia is reaching 2 MW. Considering the number of registered on-going projects, it is expected that share of total power from solar energy will increase.

As to hydro energy, Croatia has more than half of its sources from hydro power plants and by that it is one of the leading countries in the region in production of electricity from renewables. Today, there are 26 hydro plants and there is still

high potential in hydro energy, especially for small size hydro plants up to 5 MW. According to the measurements of available sources conducted since 1980 and noted with the Croatian Hydro Power Cadastre, there is a potential for construction of hydro plants up to 125 MW. It is expected that new investments will be directed into hydro energy sector.

Croatia also has three operation biomass power plants (12,7 MW), six thermal biogas power plants (5,13 MW), small hydro power plant of 30 kW and three cogeneration plants with total power of 10,493 MW.

The decrease of interest of private sector for investment in renewables in Croatia was caused by recent change of feed-in tariffs in 2012.

Change of feed-in tariffs

Statutory provisions regulating the Croatian electricity market, similar to other countries, envisaged feed-in tariffs for all producers of electricity from renewables (except for the hydro plant above 10 MW). Moreover, the system operator has legal obligation of securing the takeover of electricity of all, so called, "privileged producers". The takeover of electricity and payment of feed-in tariffs is guaranteed by bilateral contracts concluded with Croatian Energy Market Operator (HROTE).

The first feed-in tariffs, passed in 2007, drew attention of many private investors and renewables

projects started to develop with rapid growth in Croatia. However, in June 2012, after long discussions and objections of on-going project holders, the new feed-in tariff was passed which significantly decreased repurchase prices for almost all renewables, except for small hydro-plants. For some categories the feed-in tariffs are decreased for almost more than 30%. As consequence, profit return period become longer and financing of projects more expensive. New Tariff tried to balance with these consequences by prolonging the guaranteed repurchase period from 12 to 14 years. Only indebt cost analysis could confirm if such prolongation of repurchase period could be seen as balance of decrease in prices. Allegedly, according to the legislator, the reasoning behind such decrease is the intention to adjust feed-in tariffs systems to the EU levels. However, if Croatia intends to fulfil its renewables energy goal set by Strategy of Energy Development until 2020, some other types of benefits or incentives will have to be reconsidered to entice more the investment in renewables energy sector.

GAS

Croatian gas market is fully opened since 2008. Total primary energy consumption from natural gas in Croatia is around 27%. More than half of natural gas production is from domestic sources. In attaining the goals of sustainability of supply for end users, in its Strategy of Energy Development, the Govern-



ment intended to support investment in construction of natural gas thermal plant and to construct such plant of at least 800 MW until 2013. Recently, the local community initiated big debate with the Government in attempt to redirect currently the biggest energy project (construction of thermal power plant Plomin C – 500 MW) from coal based thermal plant to natural gas thermal power plant. The tender procedure for construction of coal based TPP Plomin C has started. It seems that in practice the goals from the Strategy of Energy Development have changed.

Croatia-Hungary Interconnection Pipeline

In 2011 Croatian gas transport system was connected to Hungarian pipeline and by that, after 33 years of connection only through Slovenian pipeline, Croatia diversified its sources and potential export of natural gas (in case of construction of LNG terminal). This new streamline and use of infrastructure of Plinacro (Croatian gas transport system operator) could enable Croatia to carry out new international pipeline projects.

South Stream Pipeline

Such important pipeline project that would influence Croatia's role in the international gas market is the path of South Stream Pipeline. Although still discussed, the unofficial information claim that Gazprom and Plinacro have reached an agreement on the technical details of the pipeline and thus that the

pipeline route shall pass through Croatia. Until now, this information has not been confirmed. Allegedly, if the pipeline would be constructed through Croatia, the respective part of the pipeline would be 270 kilometres long. This would define Croatia as transit country with adjoining benefits of such status.

LNG Terminal

Seven years ago consortium of several largest European energy companies - Hungarian OMV, German E.ON, Slovenian Geoplin, RWE and French Total, started negotiations regarding the construction of LNG terminal on the island of Krk (Omišalj) in Croatia. Due to the economic crises and fall of gas consumption in Europe, the interest for LNG terminal decreased and the consortium postponed reaching its decision for going on with the project. In 2012, Croatian Government announced buying off the LNG terminal project from the consortium and finalising the construction by themselves. There are still uncertainties as to the economic viability of the whole project for Croatia; especially having in mind the price competitiveness of gas transported through pipelines.

ENERGY EFFICIENCY

Energy efficiency program has been initiated in Croatia in 2005 and developed in three directions: efficient energy consumption in towns and counties; introduction of efficient energy consumption in public buildings; and raising the energy awareness of end-users.

In 2009 the Government adopted the National Energy Efficiency Plan 2008-2016 which determined the national goals in accordance with the requirements of Directives on energy efficiency. Recently, number of projects have been initiated in pursue of the goals of meeting the objectives of efficient use of energy. It is planned that the direct consumption will be decreased up to 9% until 2016 and 10% until 2020. In May 2012, by the amendments to law on energy efficiency in direct consumption, Croatia met conditions of Directive 2010/31/EU introducing the energy efficiency certificates and "pay as you save" financing scheme. Except within such, so called, ESCO scheme, the incentives and specialised support for energy efficiency projects can be obtained directly from the Fund for Environment Protection and Energy Efficiency (the fund competent for energy efficiency programs and projects). Recent examples of energy efficiency projects for reconstruction and construction of public buildings (schools, sport centres, hospitals, etc.) were conducted through public private partnership scheme and financed by private investments.

EMISSION TRADING SCHEME

In April 2007 Croatia ratified Kyoto Protocol and undertook the obligation to decrease greenhouse gas emissions for 5% in period between 2008 and 2012. As future EU member, in 2008 Croatia introduced into its legislation rules by which it would harmonise with EU

emission trading schemes (EU ETS) and reach the goals as defined by Kyoto protocol. By the EU Accession Agreement Croatia undertook the obligation to limit the increase of emissions for 11% until 2020 in comparison to the levels from 2005. As the first step, in 2008 Croatia made National inventory of greenhouse gas emissions for sectors within the emission trading system, followed in 2009 by the national allocation plan and organisation of registry of greenhouse gas emissions. A scheme for greenhouse gas emission allowance trading has been established in Croatia between 2010 and 2012 in two phases of which first phase included emission monitoring and issuance of emission allowances, while the second phase will start after joining the EU and granting of emission units and their trading on international market. The Croatian Registry for Greenhouse Gas Emissions is linked to the International Transaction Log (ITL) and after connection of Croatian registry to EUTL (European Union Transaction Log) on 1 January 2013; the updated data of Croatian Registry will become available. Plants operating in the energy sector (above 20 MW), cement production and processing, petrochemical sector, iron and steel production and processing, mineral industry and other typical emission sectors, including the aircraft industry (since 2012) are subject to the emission trading scheme. After 1 January 2014, also all flights from or to the EU member states territories will be included.

In July 2012 Croatian parliament adopted new implementation legislation for greenhouse gas emissions and trading schemes by which Croatia is preparing to become part of EU ETS market after 1 January 2013.

As the consequence, Croatia is currently facing new challenges in setting up the national prerogatives to become a part of ETS market. Existing entrepreneurs in order to secure their right to emission allowances will have either to decrease pollution by reconstruction and implementation of green energy measures or face the obligation of buying additional emission units. Majority of target plants are state owned energy companies and the most of the renovation and investments for decrease of emissions should be made by these companies. However, by the Accession Treaty, Croatian Government managed to negotiate postponement for obtaining the environmental licences until 2017 for two biggest pollutants - HEP and INA. It is difficult to foresee how the "20/20/20 in 2020" goal will be achieved if the Government left only three years for fulfilment of biggest investments in energy sector.

LATEST DEVELOPMENTS

Plomin 3

In August 2012 a tender for one of the biggest energy projects – the construction of the Thermal Power Plant Plomin C was published. This project is estimated at value of roughly 800 million Euros. The foreseen power of the C-block of

TPP Plomin (so called Plomin 3) is 500 MW and the plant should cover 17,5 % of Croatia's electricity needs. Following the environment impact studies, the project got a green light. The public tender process for selection of a strategic partner is currently being conducted by HEP. The governing criteria for the selection of a strategic partner are technology (know-how), access to financial markets and conditions thereof, involvement of local industries in the project and deadline compliance. The final decision on the strategic partner is expected to be made by the end of the first quarter of 2013.

Project Kosinj-Senj

After much discussion in 2012, there is a new announcement of HEP's second largest project in Croatia next to Plomin 3, electro energy project Kosinj-Senj. This project should involve the increase of current accumulation, construction of new tunnel, increase of compensation pool, construction of hydro power plants Senj 2 and Otočac. The expected start of the project is planned for March 2013; however, there are still open issues with local community.

Ombla

Several years ago, HEP proposed the project of constructing the hydroelectric power plant Ombla in the Dubrovnik region. The foreseen power of the plant is defined at 68 MW. There are other energy projects that might come into life in the area of Dubrovnik and the Neretva



river region. However, the projects have caused many controversies in public due to their negative impact on environment and thus the future of these projects is still not clear.

CONCLUSION

The goals set in 2009 Strategy of Energy Development, as well as the new Government's Accession Programme for 2012, laid down intensive tasks list for Croatian energy sector for the upcoming period till 1 July 2013. The adoption of new legislation will result not only with the changes in existing procedures and setting up new energy law framework, but also with new practices for Croatian, still not developed and not enough competitive market, in that way creating new challenges for the investors. Frequent change of legislation and lack of practice in implementation of energy project caused failure of number of energy investments in past. Although the harmonisation should bring more common practice as tested in EU member state markets, it still represents challenge for Croatian competent state bodies and agencies, as well as energy law practitioners. Like before, Croatia will again need some time to adjust to the new framework. This would especially apply to the emissions trading on international market. For 2012, Croatian Government announced number of energy projects including the reconstruction of the grid and construction of several power plants, investments in renewables and potential privatisation of HEP. High importance is

given to energy efficiency projects of comprehensive reconstruction of public buildings, raising of public awareness and structuring incentives schemes for entrepreneurs. From Government's announcements of future action and amendments of legislation it seems that there is a persistent will of attaining the goals of security of supply and sustainability prior to opening of domestic energy market and by that creating Croatian energy market competitive to other EU member states. If fulfilled, all announced projects would indeed ensure good positioning of Croatia at the EU energy market. However, for now it is difficult to foresee the source of financing for such big investments. The energy community is of the opinion that such financing could only be obtaining from sale of part of Croatia's energy portfolio, which in past did not end up with positive consequences for the public interest. Public private partnership scheme is also seen as potential exit route for enforcing announced projects. Although natural resources of Croatia allow development of sustainable and quality energy projects, due to economic crisis in last years, there are only few market players who could support big energy investments. Foregoing year will be breaking point for Croatian energy market and its positioning in EU energy set-up.

United Kingdom

By

Lena Sandberg-Mørch,
Lawyer, Oswell & Vahida, Brussels

By

Peter Turner-Kerr,
Senior Officer in the Competition and State Aid Directorate, EFTA Surveillance Authority

Introduction

The United Kingdom (UK) has, until relatively recently, relied on the wealth of energy resources found within its shores. Essentially, it has relied on the use of its coal, oil and gas supplies. However, the depletion of the UK's domestic fossil fuel reserves, together with projected growth in global energy demand has led a push towards exploiting renewable resources.

Following referenda in Scotland and Wales in 1997, and in both parts of Ireland in 1998, the UK Parliament transferred a range of powers to national parliaments or assemblies. The Scottish Parliament, the National Assembly for Wales and the Northern Ireland Assembly were established, and took control in 1999. Many powers and responsibilities in the energy sector have been devolved to Scotland, Wales and Northern Ireland. The UK submitted its National Renewable Energy Action Plan (NAP) pursuant to the Renewable Energy Directive (2009/28/EC) on 1 July 2010. The NAP provides details of a set of measures designed to enable the UK to meet its 2020 targets. However, the UK plans to go further, with a view to securing its energy