



ENERGY SECTOR IN CROATIA

SEKTOR ZA ENERGETIKU I ZAŠTITU OKOLIŠA

ENERGY AND ENVIRONMENTAL PROTECTION SECTOR



HRVATSKA GOSPODARSKA KOMORA

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ENERGY SECTOR IN CROATIA - FIGURES

- Total income: 4,331 mil. Euro (2015)
- Number of employee: 14.693 (2015)
- 844 companies (12 large, 21 middle, 811 small)
- Primary energy production (2014): 243,78 PJ
- Total primary energy supply (2014): 402,22 PJ
- Energy import in Croatia (2014): 254,36 PJ
- Energy export from Croatia (2014): 103,67 PJ

Source: FINA, EIHP, prepared by CCE

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BUSINESS IN ENERGY SECTOR

- Long tradition in Croatia – 1st HPP in Europe (in 1895 HPP Krka near Šibenik), 2nd in the world, only 2 days after HPP Niagara Falls
- The largest Croatian company Končar Elektroindustrija d.d. – since 1921
- Number of SMEs in project design – different segments – providing all activities in the energy project
- State of the art technology – i. e. smart meters production

Suggestion how to do business in energy sector in Croatia:

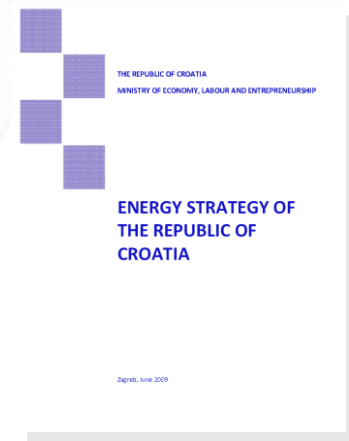
- Identify potential project
- Contract with reliable Croatian companies that may assure competitive service or product (subsuppliers or consortium partners)
- CCE may help in finding the partner, getting information...

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BASIC STRATEGIC DOCUMENT

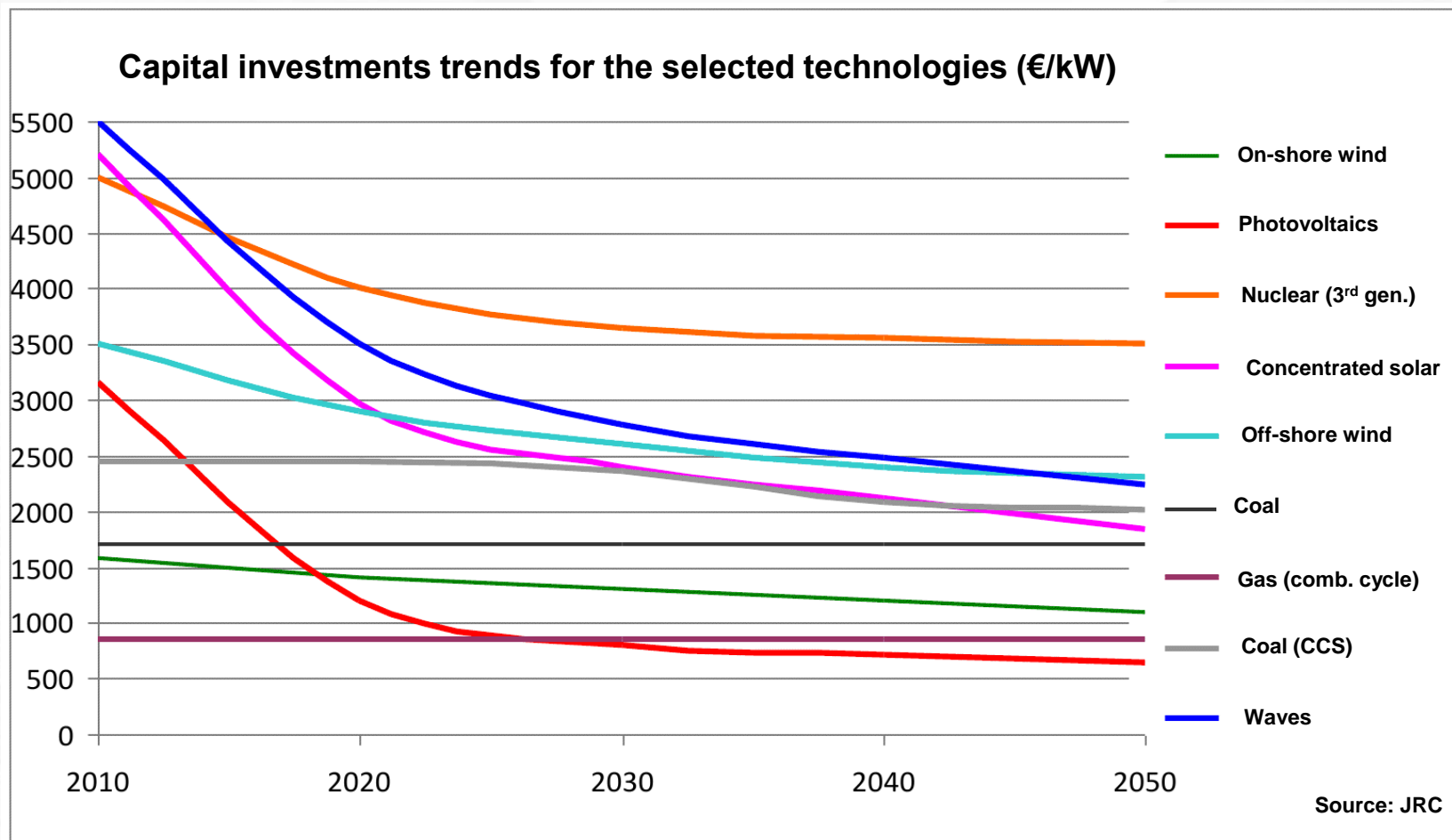
- Energy Strategy of the Republic of Croatia, published on 31 October 2009, still actual, but requires revision already announced
- More than a year of preparation, 3 public consultations, controversial opinions, the actual status far from expectations (example in electricity: predicted electrical energy consumption should have been increased from 18 TWh to 27 TWh, today actual consumption is around 17 TWh)



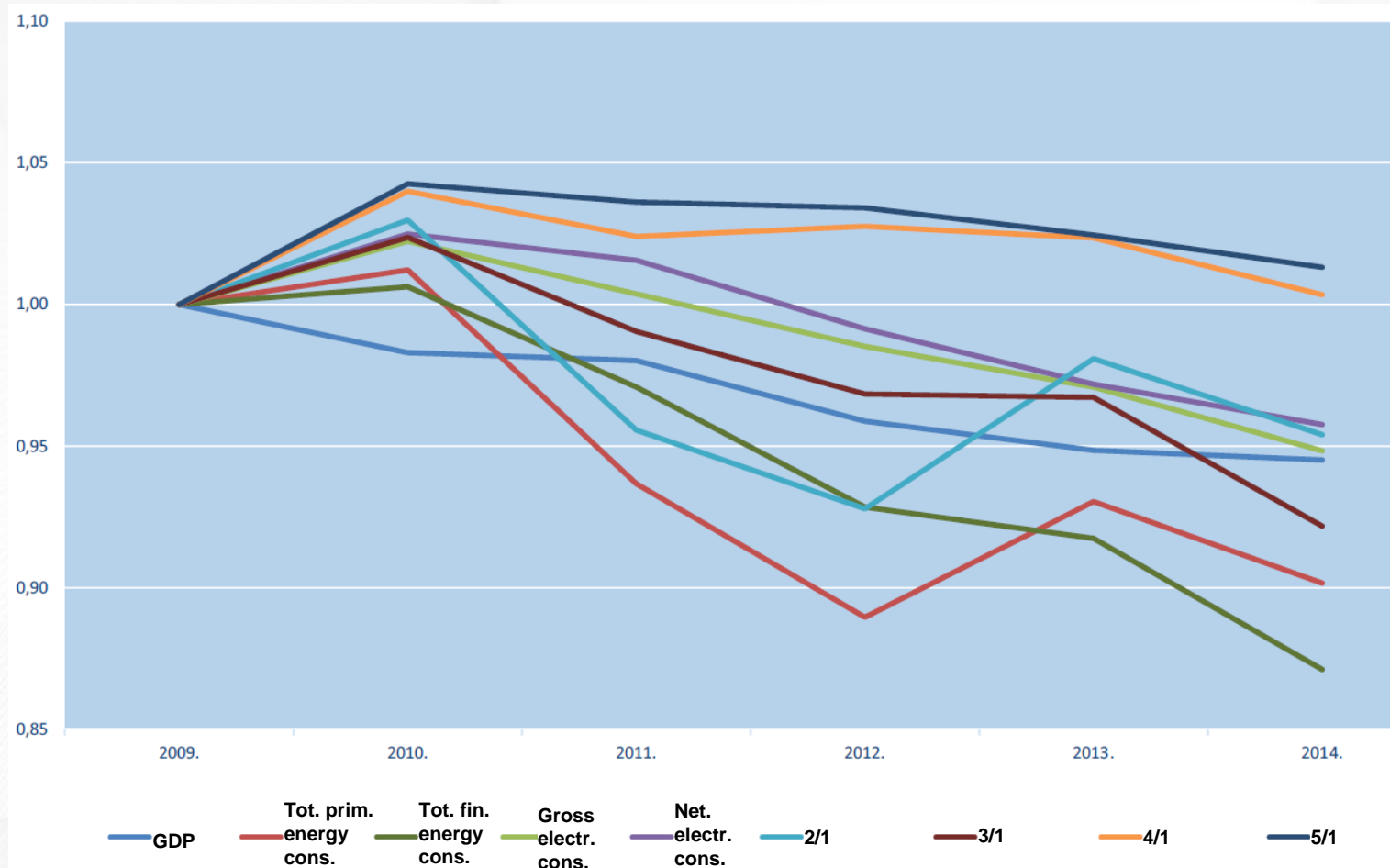
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EUROPEAN VIEW

Most important innovative potential is expected



MAIN INDICATORS OF DEVELOPMENT (2009-2014)



Source: Energy Institute „Hrvoje Požar”

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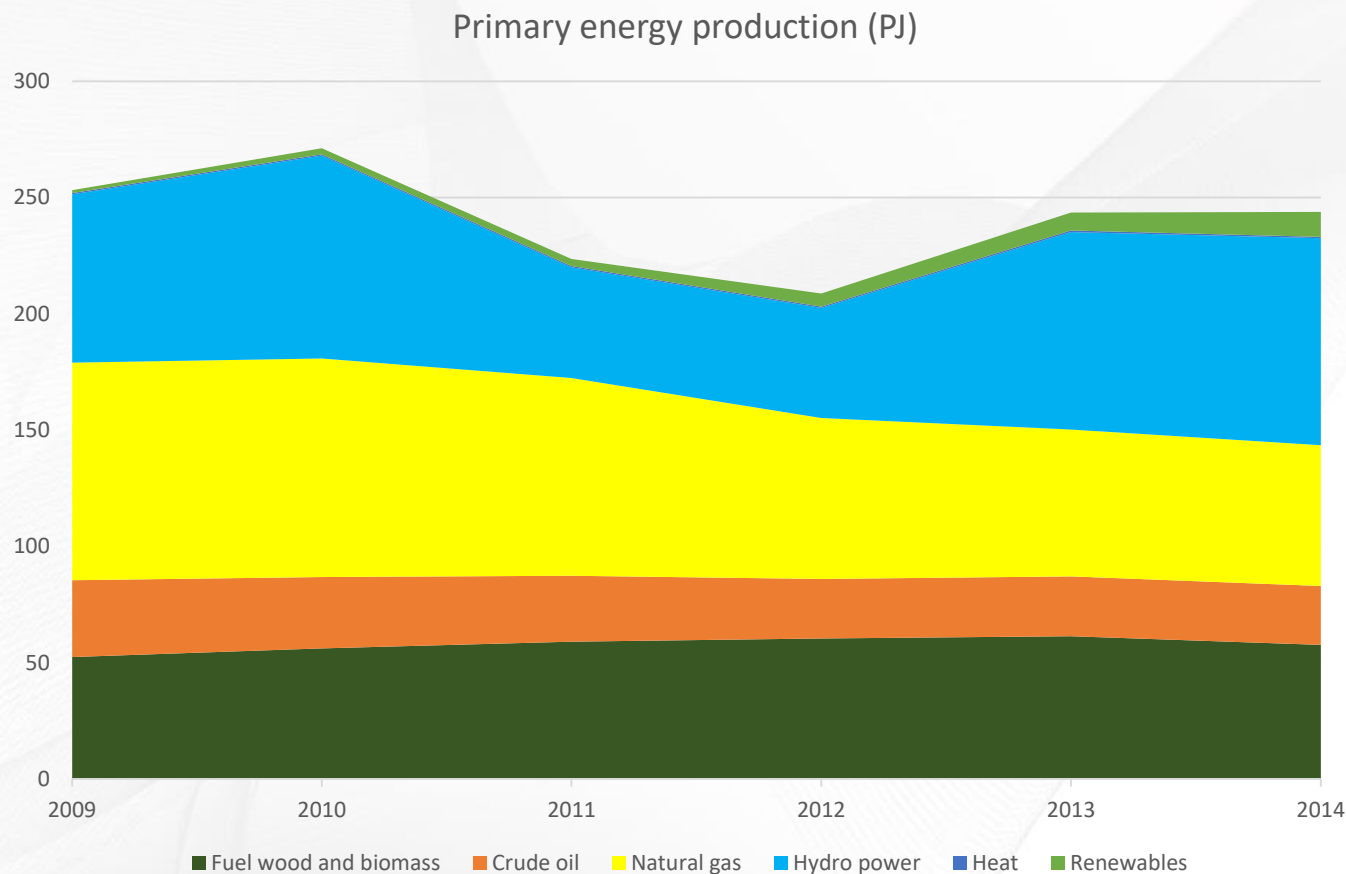
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PRIMARY ENERGY PRODUCTION



Source: Energy Institute „Hrvoje Požar”

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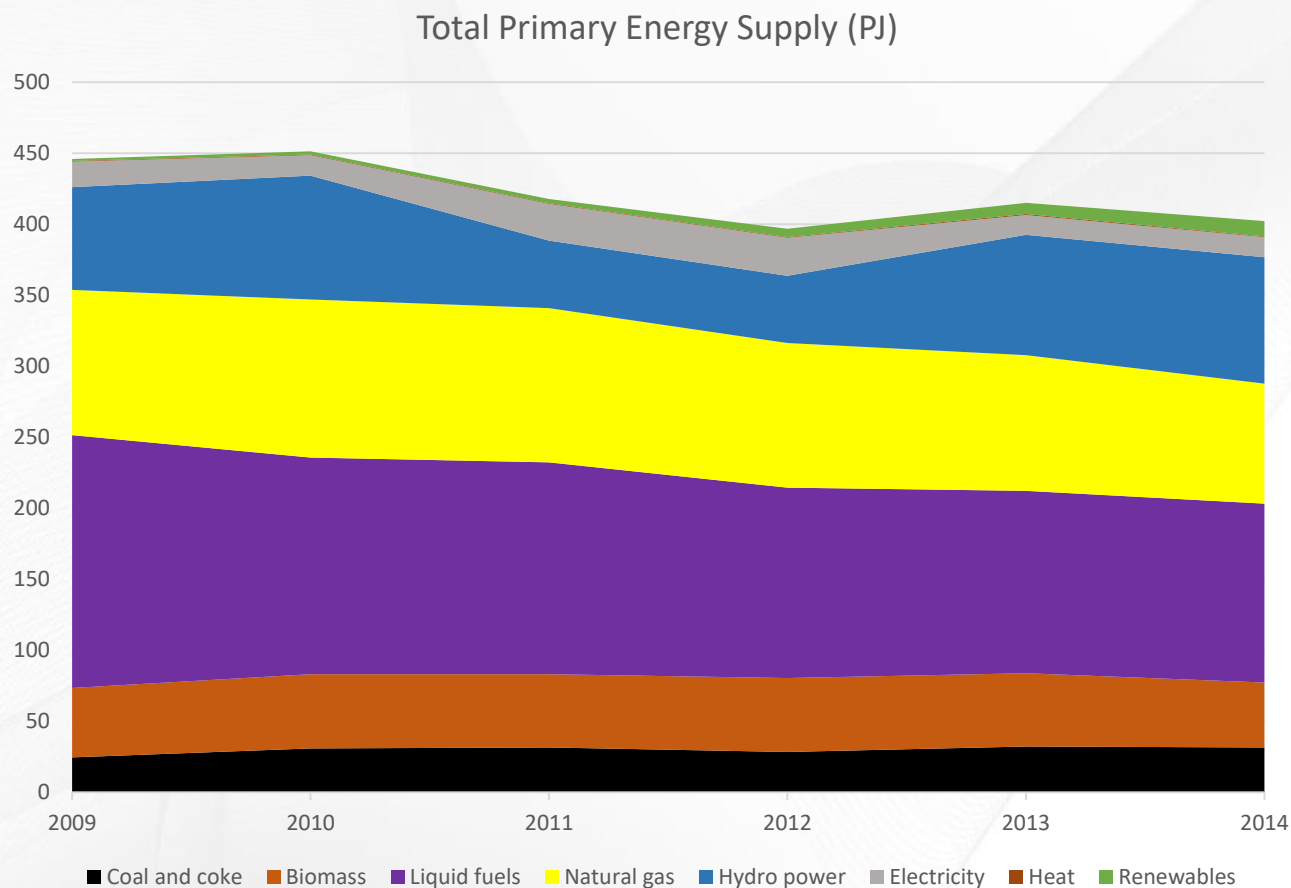
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TOTAL PRIMARY ENERGY SUPPLY



Source: Energy Institute „Hrvoje Požar”

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ELECTRICITY TRANSMISSION SYSTEM

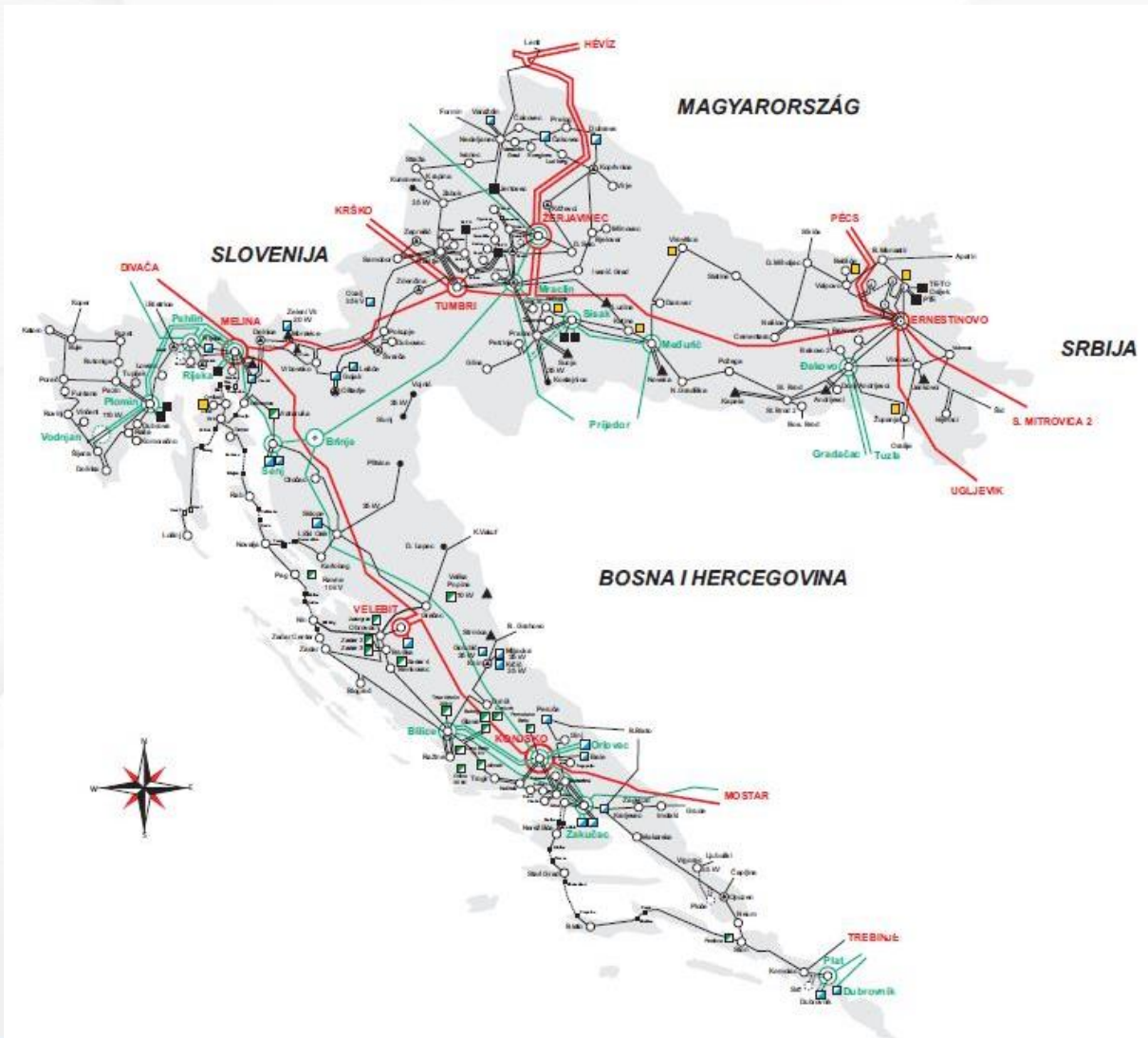
Length:

400kV 1.247 km

220 kV 1.210 km

110 kV 4.912 km

Mid. voltage 144 km



Source: HOPS

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GAS TRANSMISSION SYSTEM

Length: 2694 km

Underground storage:
PSP Okoli

Location for LNG
terminal - planned



Source: Plinacro

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OIL TRANSPORT SYSTEM

Length: 622 km

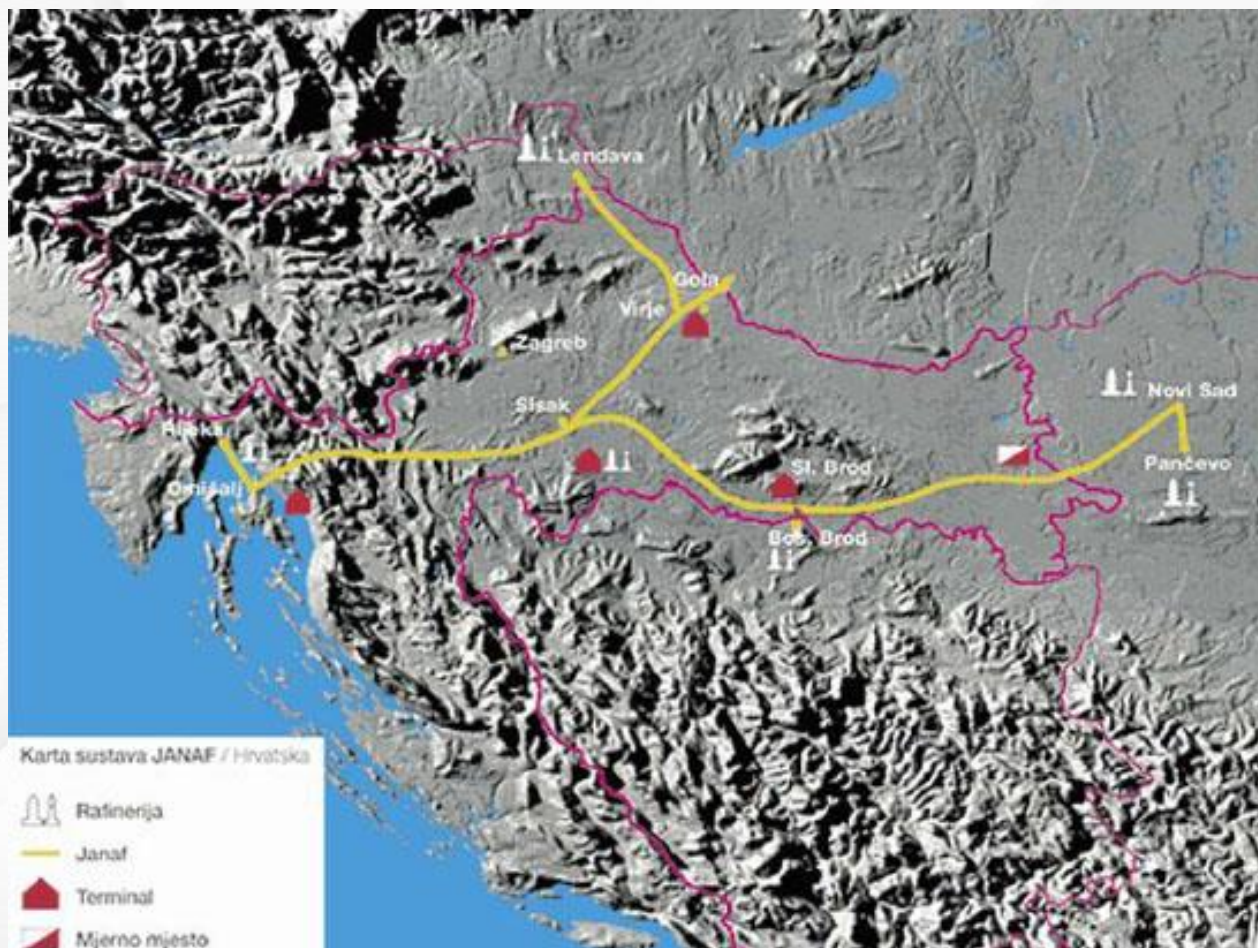
4 terminals:

Krk

Sisak

Virje

Slavonski Brod



Source: FSB

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OIL AND GAS EXPLORATION IN CROATIA

ONSHORE

- Expecting to start first oil and gas exploration in Croatia after more than 20 years of waiting
- 18th July 2014 1st ONSHORE LICENSE ROUND FOR LICENCES FOR THE EXPLORATION AND PRODUCTION OF HYDROCARBONS opened
- First Onshore License Round for exploration and exploitation of hydrocarbons closed on February 18th 2014.
- the Government of the Republic of Croatia has adopted Decisions on issuing licenses for exploration and exploitation of hydrocarbons
- 3 companies got licences for onshore exploration and exploitation

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OIL AND GAS EXPLORATION IN CROATIA

OFFSHORE

- 2nd April 2014 1st OFFSHORE LICENSE ROUND FOR LICENCES FOR THE EXPLORATION AND PRODUCTION OF HYDROCARBONS opened
- First Licensing Round for exploration and exploitation of hydrocarbons in the Adriatic closed on November 3rd 2014.
- The Government of the Republic of Croatia has adopted Decisions on issuing licenses for exploration and exploitation of hydrocarbons
- 1st OFFSHORE LICENSE ROUND FOR LICENCES FOR THE EXPLORATION AND PRODUCTION OF HYDROCARBONS canceled
- To be reopen again

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RENEWABLE HEAT PRODUCTION

- No regular incentives, only occasionally on the regional level and for small projects
- Several examples in Croatia show eligible applications

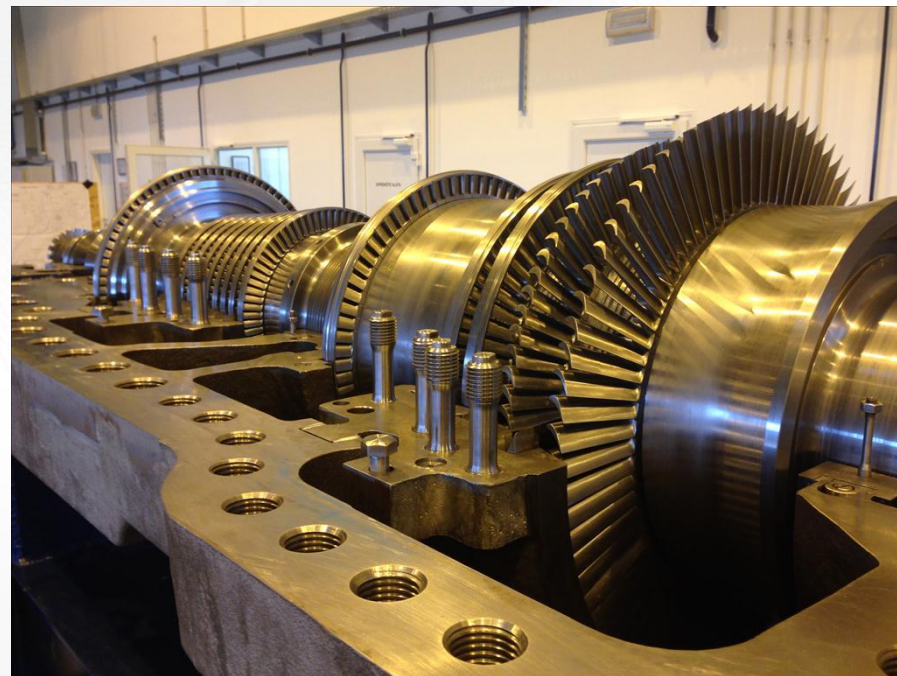


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EQUIPMENT PRODUCTION IN CROATIA

Croatian companies offers:

- Project design
- Equipment production (boilers, raw material delivery, turbine, generator...)
- Plant on-site erecting
- ...



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EU targets till 2020



eurostat

Important legal notice

v3.1.14-20151223-5608-PROD_EUROBASE
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Share of energy from renewable sources

Last update: 09-02-2016

Table Customization [show](#)

TIME

Energy indicator

Share of renewable energy in gross final energy

Date of issue:
9 February
2016

Unit of measure

Percentage

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
European Union (28 countries)	9.0	9.4	9.4	11.0	12.4	12.8	13.1	14.3	15.0	16.0
Belgium	2.3	3.4	3.4	3.8	5.1	5.5	6.2	7.2	7.5	8.0
Bulgaria	9.4	9.6	9.2	10.5	12.1	14.1	14.3	16.0	19.0	18.0
Czech Republic	6.0	6.4	7.4	7.6	8.5	9.5	9.5	11.4	12.4	13.4
Denmark	16.0	16.4	17.8	18.6	20.0	22.1	23.5	25.6	27.3	29.2
Germany (until 1990 former territory of the German Democratic Republic)	6.7	7.7	9.1	8.6	9.9	10.5	11.4	12.1	12.4	13.8
Estonia	17.5	16.1	17.1	18.9	23.0	24.6	25.5	25.8	25.6	26.5
Ireland	2.9	3.1	3.6	4.1	5.1	5.6	6.6	7.1	7.7	8.6
Greece	7.0	7.2	8.2	8.0	8.5	9.8	10.9	13.4	15.0	15.3
Spain	8.4	9.2	9.7	10.8	13.0	13.8	13.2	14.3	15.3	16.2
France	9.6	9.3	10.2	11.1	12.1	12.6	11.1	13.4	14.0	14.3
Croatia	23.8	22.7	22.2	22.0	23.6	25.1	25.4	26.8		27.9
Italy	7.5	7.4	9.8	11.5	12.8	13.0	12.9	15.4		17.1
Cyprus			4.0	5.1	5.6	6.0	6.0			6.0
Latvia		29.6	29.8	34.3	30.4	33.5				
Lithuania		16.7	18.0	20.0	19.8	20.2				
Luxembourg		2.7	2.8	2.9	2.9	2.9				
Hungary		5.9	6.5	8.0	8.6	9.1				
Malta		0.2	0.2	0.2	1.1	1.9				
Netherlands		3.6	4.3	3.9	4.5					
Austria		28.2	30.2	30.6	30.8					
Poland		7.7	8.7	9.2	10.3					
Portugal		23.0	24.4	24.2	24.7					
Romania		20.5	22.7	23.4	21.4					
Slovenia		15.0	20.0	20.5	20.2					
Slovakia		7.7	9.4	9.1	10.3					
Finland		31.4	31.4	32.4	32.8					
Sweden		44.2	45.3	48.2	47.2	49.0				
United Kingdom		1.8	2.7	3.3	3.7	4.2				
Iceland		71.5	67.5	69.7	70.4	71.6		73.2		77.1
Norway		60.2	61.8	64.9	61.2	64.8		65.9		69.2

Croatian RES
share in total
energy
consumption in
2005: **23.8%**

Croatian RES
share in total
energy
consumption in
2014: **27.9%**

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CONCLUSION – ENERGY SECTOR IN CROATIA



- Favourable climate & unpolluted natural environment:
- Over 2,700 hours of sunshine per year
- Windy regions by the Adriatic sea and east Slavonia
- Geothermal energy from natural sources on the continent
- Access to vast amount of biomass
- Substantial, mostly already engaged, hydro-power potential
- Investment possibilities: planned increase in capacity, refurbishment and construction of new power plants (hydro power plants, thermal power plants), LNG terminal; RES; environment protection & production of clean energy

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**THANK YOU FOR
YOUR ATTENTION!**

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