



HEP

Hrvatska elektroprivreda d.d.
November 2016

HEP Group at a Glance

Vertically Integrated Power Utility Company with Strong Presence Across Energy Value Chain



Generation

Electricity

- 4,232 MWe of installed capacity
- 26 hydro PPs (2,214 MWe)
- 8 thermal PPs (1,670 MWe)
- 1 nuclear PP¹ (348 MWe)

Heat

- 1,755 MWth of installed capacity in 4 TPPs and 335 MWth in district boiler rooms
- Partially regulated

Transmission

- HOPS, Croatian electricity transmission system operator
- Upon Croatia's accession to the EU, HEP opted for ITO² model of unbundling of the Group's transmission operations from the generation and supply
- Regulated activity with transmission tariffs approved by the Croatian Energy Regulatory Agency - HERA

Distribution

- The sole distributor of electricity to > 2.3 mn customers
- The largest distributor of thermal energy in the country
- Gas distributor in the retail market
- Regulated activity with distribution tariffs approved by HERA

Supply

- Sale of electricity, gas and thermal energy in Croatia
- Sole provider of public supply services to tariff customers
- Regulated and Unregulated Supply
- 84,6% of electricity sold in Croatia in 2015
- In April 2014 HEP was chosen as a sole supplier to the Croatian wholesale gas market for a 3-year period
- Certain tariff rates approved by HERA

Trading & Other

- Trading in electricity, gas and CO2 emissions in Croatia and abroad
- Trading platform responsible for optimisation of power plant operation and intermediation in the domestic and international markets
- Other businesses specialise in renewable energy sources, energy efficiency, environmental protection and other

Integrated business model – operating across the entire market spectrum

HEP primarily relies on low-cost hydro and nuclear power plants for electricity generation

Leading position in Croatia with a natural advantage of enhanced creditworthiness (100% state-owned)





Source: HEP

¹ Co-owned with GenE (total NPP installed capacity 696 MWe)


² Independent transmission operator, the unbundling process of HOPS has been completed and the company obtained required approval and certification from HERA in February 2016

Croatian Electricity Market

HEP Leading Across the Market Spectrum

Generation	Transmission	Distribution	Supply
 <p>HEP-Generation accounts for c. 89% of domestic electricity generation and c. 88% of installed capacity (2015)</p>	 <p>Croatian Transmission System Operator (HOPS)</p>	 <p>HEP-Distribution system operator (HEP-ODS)</p> <p>Sole distributor in Croatia</p>	 <p>HEP-Supply (Unregulated Supply), HEP Elektra (Regulated Supply): Supply c. 84.6% of all electricity sold in Croatia (2015)</p>
Privately owned power plants (wind and other renewables)			22 market suppliers ¹ : RWE, Gen-I, HT, Proenergy and other small privately owned entities
Import			

Regulatory Framework

 <p>Independent and non-profit public institution responsible for regulatory issues in the energy sector, incl. control over tariffs</p>	 <p>Under supervision of HERA, organises the electricity and gas market as a public service</p>
---	--

Source: HEP, HERA website

¹ Including three market suppliers that are part of HEP Group

Croatian Energy Development Strategy

HEP as the Pillar of Strategy Execution

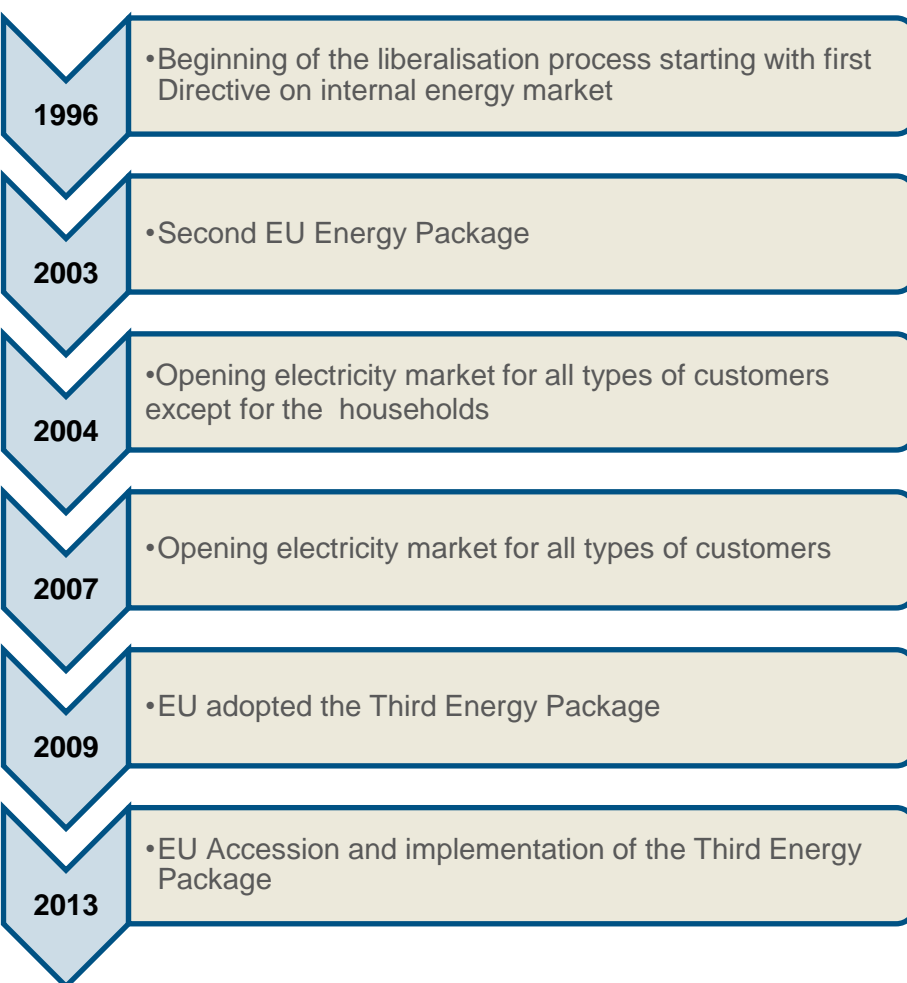
Key goals by 2020

- Security of energy supply, the establishment of a competitive energy sector and sustainable development of the energy sector
- Maintain the share of generation from large hydro power and renewable energy sources in total electricity consumption at its present level (35%) up to 2020

HEP's mission to meet Croatian energy strategy

- Provide top quality public services by providing secure supply of electricity, heat energy and natural gas to customers
- Apply sustainable development concept in all business activities and ensure long-term competitive advantage
- Revitalise existing generating capacities by implementing new technologies and increasing capacity
- Optimise the utilisation rate of the existing locations by modernising/upgrading new capacities
- Balance generation portfolio by repurposing the existing capacities into peak load generating plants and by constructing 'band' and 'peak load' power plants

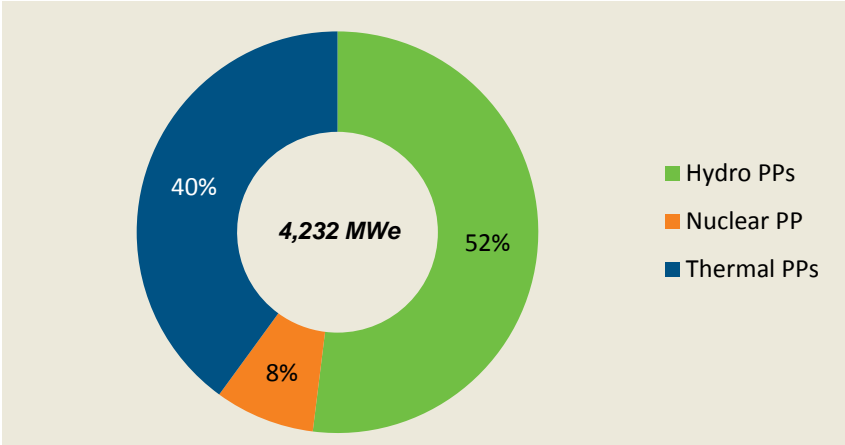
Legal framework



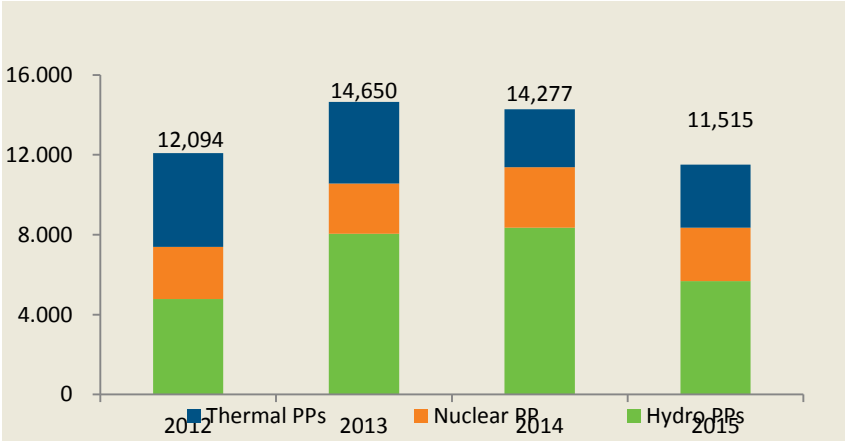
Source: The Energy Development Strategy of the Republic of Croatia (OG130/2009)

Low Cost Based Portfolio

Electricity - installed capacity 2015



Electricity generation mix, GWh



Source: HEP

Key Customers

Strong and Long Established Relationship with Customers

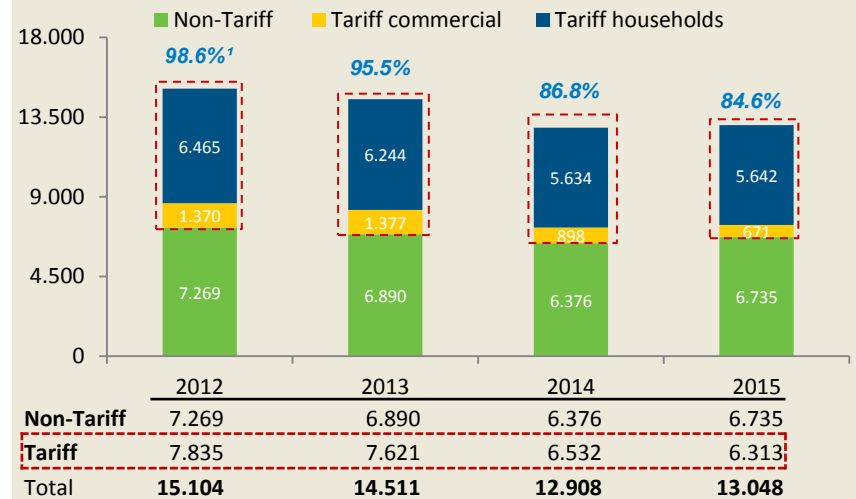
Commercial customers

- Commercial customers include commercial and industrial entities
- Commercial customers who choose a market supplier (offering non-tariff based rates) typically pay lower rates than the tariff rates under the regulated public supply system, but they may be more exposed to price fluctuations in market rates
- 2013 was marked with an emergence of alternative suppliers among commercial customers and their entrance in the residential sector during mid-2013
- In 2015 HEP entered into Slovenian electricity supply market

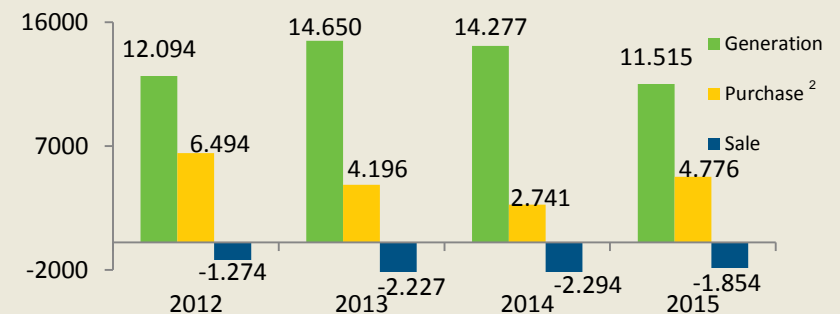
Households

- Households who choose a market supplier (offering non-tariff based rates) typically pay lower rates than the tariff rates under the regulated public supply system, but they may be more exposed to price fluctuations in market rates
- Vast majority (98.3% as of 31.12.2015) of households remain with and are supplied through the public supply system by HEP at fixed tariff rates set by HERA

Electricity sold by customer category, GWh



Generation, purchase and sale, GWh – 2015



Source: HEP

¹ HEP's share of electricity sold to end-consumers in Croatia

² Purchase from all producers in Croatia including renewable energy sources and import energy

Generation

Favourable and Diversified Generation Mix

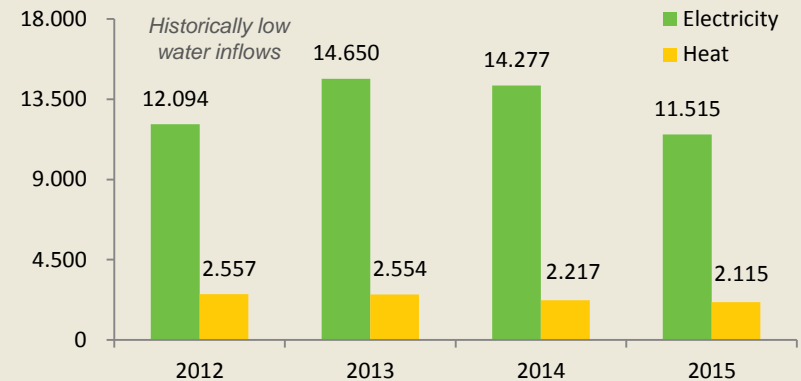
Electricity

- Large and diversified portfolio of assets with installed capacity of 4,232 MWe
- 26 hydro PPs with total installed capacity of 2,214 MWe (HEP does not hold registered ownership title with respect to certain properties, incl. real estate connected to 17 out of 26 of the hydro PPs, which it currently operates in Croatia)
- 8 thermal PPs with total installed capacity of 1,670 MWe
- 50% ownership in Krško nuclear PP (696 MWe of installed capacity)¹, together with GenE, and HEP has 50% of the output
- In May 2015 the Group assumed a 50% share in TE Plomin II from RWE, and currently holds the 100% share in TE Plomin II
- Limited CO2 footprint and reduced commodity exposure to own power generation, with generation largely based on hydro and nuclear power

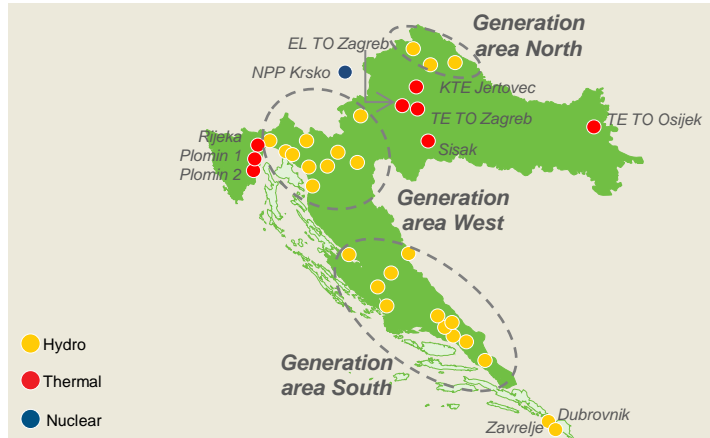
Thermal energy (Heat)

- Actively engaged in heat generation via 4 TPPs in Croatia with 1,755 MWth of installed capacity and 354 MWth of installed capacity in 29 district boiler rooms
- Generated as a by-product of electricity generation at Group's thermal power plants and district boiler rooms
- Distributed to continental cities of Zagreb, Osijek, Sisak, Zapešić, Velika Gorica and Samobor

Power generation, GWh



HEP's power plant portfolio



Source: HEP

¹ Of which 50% is allocated to HEP

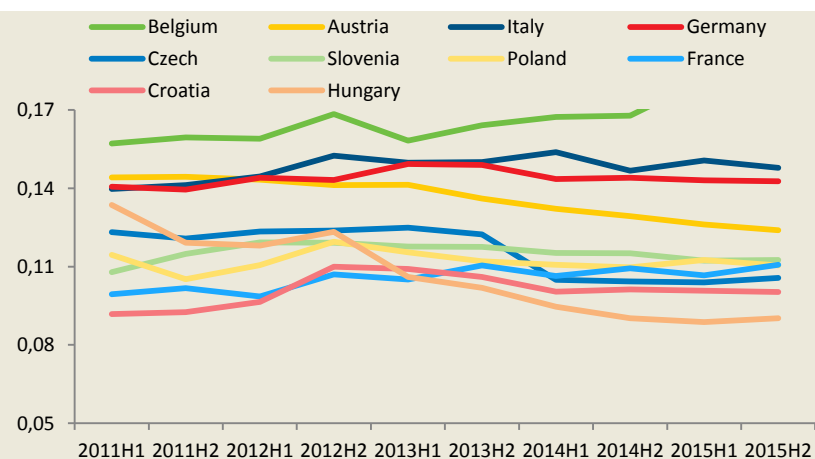
Transmission, Distribution and Sale

Sole Owner and Operator of Electricity T&D Networks in Croatia

Transmission of electricity

- In April 2013 the Company opted for the ITO¹ model of unbundling - the Group's transmission operator HOPS was restructured to ensure its legal, financial, accounting, IT and managerial independence from the Group's generation and supply activities. HOPS obtained required approval and certification from HERA in February 2016
- Regulated monopoly with transmission tariffs approved by HERA; last tariff change in 2012
- Croatian transmission network also connected to the neighboring systems of Serbia, B&H, Slovenia and Hungary

Energy prices for household consumers, EUR/kWh²



Distribution and Sale

Electricity

- Sole distributor of electricity to more than 2.3 million customers - Regulated monopoly
- Operates 136,733 kilometers of high, medium and low voltage electricity distribution lines (as of 31 December 2015)
- Largest out of 22 registered suppliers (3 market suppliers are part of the Group) of electricity in Croatia in terms of volume of electricity sold⁴

Thermal energy (Heat)

- Largest of 19 distributors of heat with c. 124,000 customers, covering approx. 80% of the total market by the number of customers in Croatia in 2015
- Loss making due to low regulated tariff rates and increased operating costs
- Focus on making the district heating business economically viable

Gas

- Wholesale market – in 2015 HEP distributed approx. 5,881 million GWh of gas
- Tariffs are set by the Croatian Government on the recommendation of HERA
- Retail market - second largest gas supplier in Croatia by volume sold to end-consumers³
- Gas sales prices to non-regulated customers are set by the Group, and prices to regulated customers are set by HERA

¹ Independent Transmission Operator

² Eurostat as of 14 April 2016, excluding taxes and levies

³ Eurostat as of 2014

Leading Position in Croatian Electricity, Gas and Thermal Energy Markets Benefitting from State Ownership

Leading position in the energy sector

- HEP continues to hold a leading position in the market
- Accounts for c. 89% of domestic electricity generation and c. 88% of installed capacity as at 31 December 2015
- Supplies 84.6% of all electricity sold in Croatia as at 31 December 2015 (as of 1 March 2016 HEP's market share of all electricity sold in Croatia is 85,3% which is reflection of new organizational changes and marketing initiatives)
- The largest distributor of thermal energy – more than 80% of the district heating market
- Sole supplier on the wholesale gas market¹ and second largest supplier on the retail gas market (among >50 suppliers)
- To compete effectively HEP offers new products and energy services to its customers

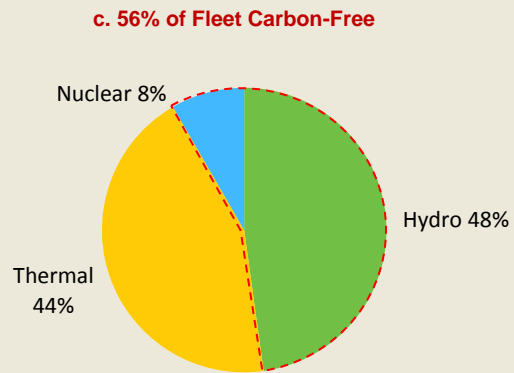
Strong government support given HEP's pivotal role in delivering Croatian Energy Strategy

- Energy sector is a strategic priority for the Croatian Government
- The Government's Energy Development Strategy is focused on the development and renovation of the generation, transmission and distribution grids, with significant investment capital allocated to these programs
- Such development capabilities expected to further benefit HEP, strengthen its position in the Croatian energy market and potentially increase the Group's presence in neighboring countries
- Strong Government support through ownership commitment

Source: HEP, HERA, Eurostat
¹Until March 2017

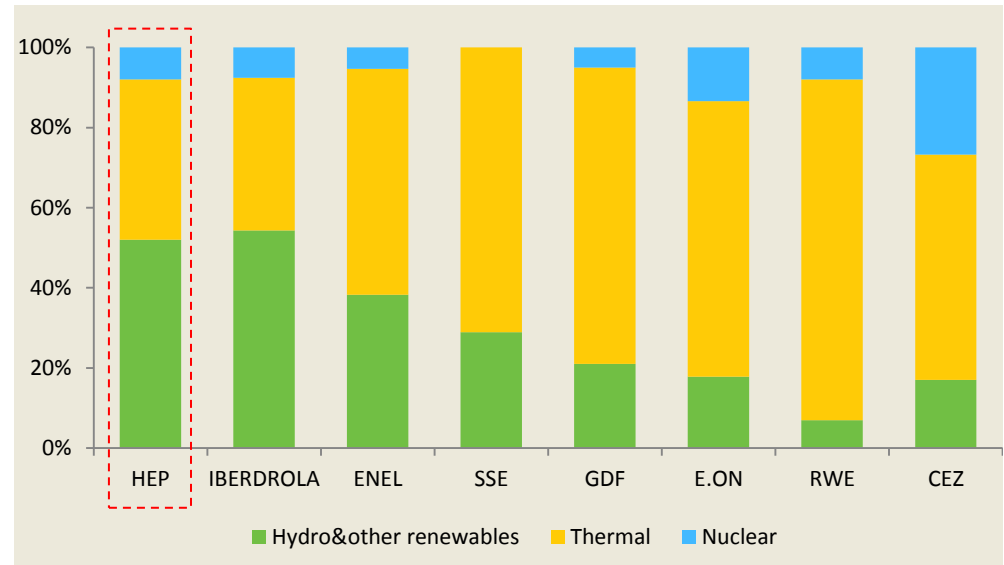
Favourable and Diversified Power Generation Mix with Access to Low Cost Generation Facilities

Flexible carbon-light generation fleet



2015 installed capacity: 4.3 GW

Fuel mix of European electricity generators¹ in 2014



- Group has diversified form of electricity generation
- Cost competitive generation mix - hydro power plants and nuclear power plant provide low cost electricity generation
- Oil-fired thermal power plants used primarily to meet high electricity demand during adverse weather conditions
- Not reliant on single fuel type with respect to the thermal power plants, operating a combination of oil, coal, natural gas and fuel oil fired thermal power plants
- Reduced exposure to commodity prices - can minimize costs, reduce price volatility and prevent supply disruptions

Source: HEP, HERA, Eurostat
¹ Installed capacity, respective companies' data

Strong Investment Program

A Number of Planned New Capacities and Revitalisations

	Expected Increase in Installed Capacity	Expected Amount of Investment (HRK bn)	Planned Construction
Revitalization of 12 HPPs and one TPP	144 MW	2,1	Until 2022
Thermal Power Plants (TPPs)			
Construction of EL-TO Zagreb (CCCGT)	130 MWe	0,8	Completed by the end of 2020
Biomass Power Plants			
BE TO Sisak	3 MWe, 11 MWt	0,144	Completed by the end of 2017
BE TO Osijek	3 MWe, 11 MWt	0,123	Completed by the end of 2017
Hydro Power Plants (HPPs)	Up to 570 MW	3,9	Project under development
Thermal Power Plants (TPPs)	Up to 500 MW	2,4	Project under development
Modernization of distribution network	—	4,9	Completed by the end of 2020
Modernization of transmission network	—	3,9	Completed by the end of 2020
Total	1,350 MW	18,3	—
TPP ¹	500	6,5	Project under development

 Key projects the Company will focus on

¹ Considered as JV with EPC contractor, off balance sheet project financing