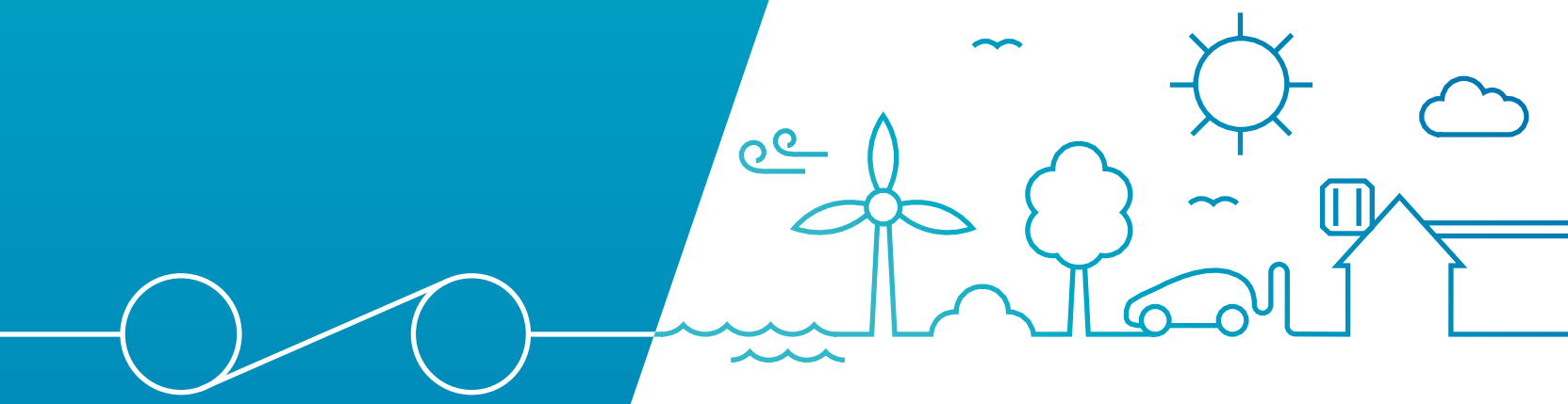
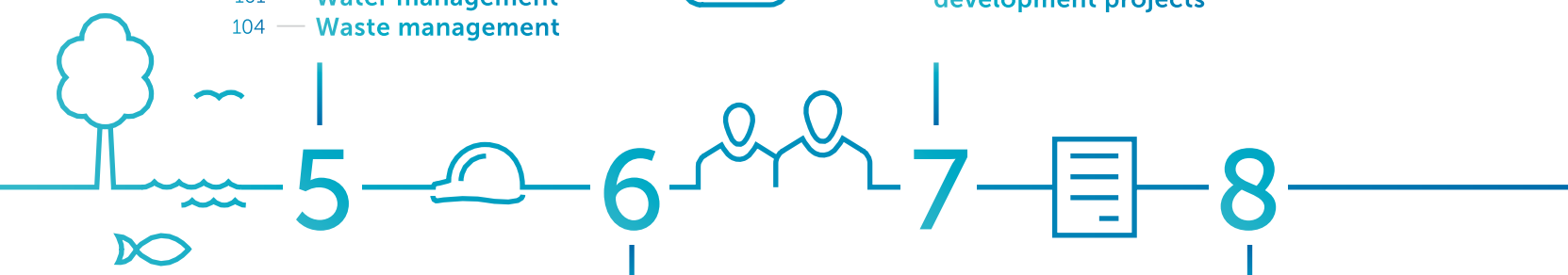
HEP



OPEN WAY FOR
SUSTAINABILITY

2018
Sustainability Report
HEP Group

Contents



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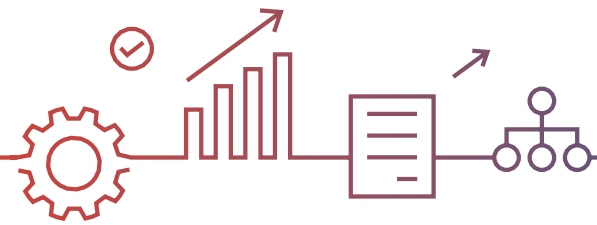
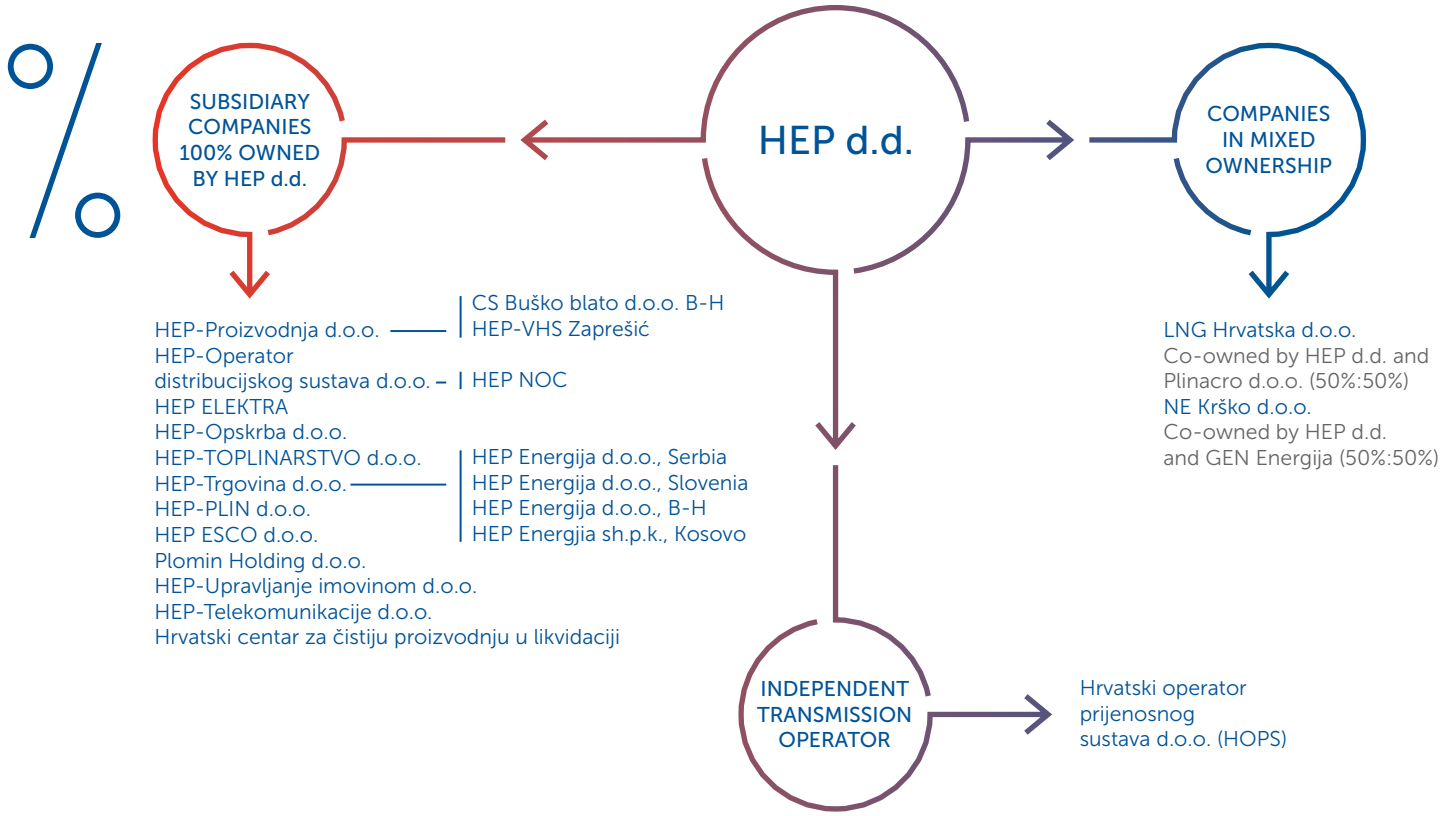
OVERVIEW 2018

On HEP Group



HEP d.d. (Hrvatska elektroprivreda d.d., with a seat in Zagreb) is a fully state-owned parent company of HEP Group. It manages HEP daughter companies and is the owner of assets which are contractually transferred to subsidiaries or daughter companies. The major business segments of HEP Group are generation, transmission, distribution, supply and trade of electricity. Additionally, HEP Group generates, distributes and supplies heat, supplies gas in retail and wholesale markets and provides services in energy system and other energy and non-energy sectors.



Status on December 31, 2018

Subsidiary companies owned by HEP d.d.	Country	Proportion in ownership (%)	Core business
HEP-Proizvodnja d.o.o.	Croatia	100	Electricity generation and heat production
Hrvatski operator prijenosnog sustava d.o.o.[1]	Croatia	100	Electricity transmission
HEP - Operator distribucijskog sustava d.o.o.	Croatia	100	Electricity distribution
HEP ELEKTRA d.o.o.	Croatia	100	Electricity supply of customers as public service
HEP-Opskrba d.o.o.	Croatia	100	Electricity supply
HEP-TOPLINARSTVO d.o.o.	Croatia	100	Production, generation and distribution of heat
HEP-Trgovina d.o.o.	Croatia	100	Trading in electricity, gas, and optimization of plants
HEP-PLIN d.o.o.	Croatia	100	Gas distribution and supply
HEP-ESCO d.o.o.	Croatia	100	Management and funding of energy efficiency projects
Plomin Holding d.o.o.	Croatia	100	Development of local infrastructure near TPP Plomin
CS Buško Blato d.o.o.	Bosnia and Herzegovina	100	Management and maintenance of HPP
HEP - Upravljanje imovinom d.o.o.	Croatia	100	Management of non-operating assets and tourism
HEP NOC	Croatia	100	Education, training and accommodation services
Program Sava d.o.o.[2]	Croatia	100	Preparation of multipurpose real estate projects
HEP Energija d.o.o.	Serbia	100	Electricity trading
HEP Energija d.o.o.	Slovenia	100	Electricity trading
HEP Energija d.o.o.	Bosnia and Herzegovina	100	Electricity trading

HEP Magyarorszag Energia kft[3]	Hungary	100	Electricity trading
HEP Energjia sh.p.k.	Kosovo	100	Electricity trading
HEP Telekomunikacije d.o.o.	Croatia	100	Telecommunication services
HEP Opskrba plinom d.o.o. [4]	Croatia	100	Wholesale gas market supply
Hrvatski centar za čistiju proizvodnju u likvidaciji	Croatia	100	Institution for the promotion of cleaner industrial practice
Nuklearna elektrana Krško d.o.o.[5]	Slovenia	50	Electricity production
LNG Hrvatska d.o.o.[6]	Croatia	50	Gas pipeline construction and operation
Novenerg d.o.o.[7]	Croatia	50	Analysis of investment in RES capacities and consulting services
HEP-VHS Zaprešić d.o.o.[8]	Croatia	100	Design and construction of multi-purpose hydrotechnical system

[1] As of July 1, 2013, it operates under the Independent Transmission Operator model (ITO)

[2] Merged into HEP d.d. as of December 31, 2018

[3] As of March 22, 2018, the company was deregistered from the Court Registry

[4] Merged to HEP Trgovina as of December 30, 2018

[5] In consolidated financial statements, the share in NE Krško d.o.o. is shown by the method of joint asset and liabilities

[6] The joint venture with Plinacro d.o.o. (50%:50%) on the construction and the operation of gas pipelines for evacuating liquid natural gas from the island of Krk to mainland and further to final destinations

[7] HEP exited the co-ownership since of November 2018

[8] In 2018 Program Sava d.o.o. established the company HEP-VHS Zaprešić d.o.o., which was merged to HEP Proizvodnja d.o.o. as of December 31, 2018

BASIC INDICATORS*

	2018	2017	%2017
Electricity sales** / TWh	17.5	17.4	+0.6%
Electricity generation / TWh	12.9	12.0	+7.1%
Heat sales / TWh	1.8	1.9	-4.7%
Gas retail / TWh	1.4	1.4	-1.1%
Gas wholesale / TWh	5.9	6.2	-4.5%
Operating income / HRK m	15,198.3	14,969.3	+1.5%
EBITDA / HRK m	3,876.5	3,749.5	+3.4%
Net profit of HEP Group / HRK m	1,364.8	1,300.3	+5.0%
Total assets / HRK m	40,349.6	38,851.6	+3.9%
Investments / HRK m	2,376.1	2,431.9	-2.3%
Employees / number	11,011	11,894	-7.4%

* consolidated data include HOPS
** in domestic and foreign markets

Generation facilities and distribution network

GENERATION FACILITIES AND DISTRIBUTION NETWORK

2.163 MW* **HPP AND RES**
installed capacity

2.410 MW **TPP AND 50% NPP KRŠKO**
installed capacity

26.421 **TS MID AND LOW VOLTAGE**
(35-20-10 kV)

138.789 km **OF LINES OF MID AND LOW VOLTAGE**
(overhead and cable)

* without HPP Dubrovnik B plant, which operates for B-H

LENGTH AND CATEGORY OF DISTRIBUTION LINES

Voltage level	Overhead power lines [km]	Cables [km]	Submarine cables [km]	Total [km]
Power lines(30) kV	2,981.1	1,365.3	141.6	4,488.0
Power lines 20 kV	4,520.9	5,217.5		9,738.4
Power lines 10 kV	15,968.5	11,288.9	247.4	27,504.9
Network 0.4 kV	44,142.4	17,443.3		61,585.7
Residential connections (0.4 kV)	22,796.4	12,676.0		35,472.4
Total	**90,409.3**	**47,991.0**	**389.1**	**138,789.4**

Corporate governance

Mission

Sustainable, reliable and competitive generation, distribution and supply of energy in line with the customers' needs and with a high degree of social responsibility.

Vision

HEP is a regional energy leader, who develops technologies, competitive advantage and innovative business models focused on the future customer needs and collaborates with the national and international institutions and companies.

Vision and mission support the strategic areas of HEP Group business operations in four directions: sustainable and flexible energy portfolio, optimization and development of business processes, adapting to markets and stakeholder collaboration.

Fundamental values

Competence and innovation

Our employees are the most valuable resource and support in achieving the company's mission and vision and in creating values. With openness to new ideas and creativity, we develop skills and competencies.

Quality and business excellence

Following the requirements and expectations of all stakeholders, we improve the quality of our products and services. Our goal is the company's business excellence.

Integrity

We act professionally and conscientiously in our relations towards customers, business partners, employees and assets. We affirm zero-tolerance for corruption. Our Code of Ethics defines the principles of business behavior.

Environmental responsibility

We produce, transmit and distribute energy in an environmentally friendly manner. We promote efficient use of energy among our customers as well as the development and use of renewable energy sources.

Fundamental principles in stakeholder relations

To realize our mission and fulfill our vision, we align our business with the expectations of our stakeholders, by respecting the following principles:

Owner: Realize optimal business outcomes and adequate profit for the owner.
Customers: Meet the needs and fulfil the requirements of our customers by providing adequate value for their money. Act professionally and correctly, in compliance with the good business practice and generally accepted values, by building trust in our actions.
Employees: Respect interests and capabilities of employees and develop the system of remuneration and promotions. Ensure and constantly implement advanced measures of health and safety at work, support life-long learning, team spirit and professionalism.
Business partners: Build and maintain relations with business partners, respecting their quality and professionalism. Conduct procurement processes fairly and prevent any potential irregularity.
Society, local communities: Respect cultural, religious and all other material and non-material diversities in our cooperation with local communities in which we operate, creating friendly environment.

HEP Group conducts its business in compliance with the law and ethical norms, based on the principles of sustainable development and social responsibility. As the corporate bond issuer, the company also applies provisions of Corporate Governance Code by Zagreb Stock Exchange and Croatian Financial Services Supervisory Agency. All HEP managers and Management Board members are Croatian citizens, local experts from various Croatian regions.

MANAGEMENT STRUCTURE OF HEP d.d. IN 2018

General Assembly		
Zdravko Marić	Member	From January 26, 2017 until February 14, 2018
Tomislav Ćorić	Member	Since February 15, 2018
Supervisory Board		
Goran Granić	President	Since December 7, 2017
Marko Primorac	Member	From December 7 until July 25, 2018
Jelena Zrinski Berger	Member	From December 7, 2017
Lukša Lulić	Member	From October 29, 2018
Ivo Ivančić	Member	From October 29, 2018
Dubravka Kolundžić	Member, workers' representative	From June 1, 2015 until January 10, 2018
Višnja Komnenić	Member, workers' representative	From January 11, 2018 until October 22, 2018
Meri Uvodić	Member, workers' representative	Since December 4, 2018
Management Board		
Frane Barbarić	President	Since January 1, 2018
Saša Dujmić	Member	Since December 4, 2014
Nikola Rukavina	Member	Since January 1, 2018
Marko Ćosić	Member	Since January 1, 2018
Petar Sprčić	Member	Since January 1, 2018
Tomislav Šambić	Member	Since January 1, 2018

Responsibility and ethics

Code of Ethics of HEP Group defines the principles of business behavior and underlines the importance of consistent monitoring and implementation of laws and regulations in the organization of our business operations. The Code stipulates the implementation of professional and business norms and standards and respect of ethical principles. It also underlines professionalism, expertise, conscience, objectivity, independence, clarity, impartiality and responsibility at work. The Code also defines conflict of interest in the business relations with HEP. It invokes the protection of human rights, development of transparent relations with stakeholders and condemns any kind of discrimination.

All subsidiaries have their representatives in the HEP Group Ethics Committee. Ethics commissioners receive complaints about unethical and potential corruptive conduct by employees, examine the correctness of the complaints, hold the records on the received complaints, monitor the implementation of the Code of Ethics in their company. Commissioners' duties are also to promote ethical behavior among employees and in the relations with customers and advise employees on ethical conduct. Ethics commissioners and Ethics Committee always require the accused party to provide their statement accompanied by relevant documentation. If possible, they talk with the both parties to obtain a deeper insight into the subject and form a more informed opinion.

Ethics commissioners compose written reports on the conducted procedure of validation of the complaint and inform the CEO or the subsidiary CEO, who examine the report and, if necessary, initiates the stipulated process, informs the ethics commissioner and supplies the reply to the complaint.

Depending on the complaint content, commissioners may proceed some complaints to the relevant organizational units of HEP d.d. or subsidiaries, such as compliance officer, Internal Audit, Legal Affairs, Customer Relations or other authorized departments or persons. Ethics commissioners are in constant communication with the managers whom they advise on ethical conduct and management.

ETHICAL COMPLAINTS FILED IN 2018

	Total	Justified	Unjustified
Number of received complaints	115	55	60
Number of solved complaints	115	55	60
- number of anonymous complaints	6	4	2
- number of non-anonymous complaints	109	51	58
Number of non-anonymous complaints filed by HEP employees	5	0	5
Number of non-anonymous complaints filed by energy suppliers	0	0	0
Number of non-anonymous complaints filed by other interested legal and private subjects	103	51	52

Number of complaints by type (stated potential areas of complaints)

a) labor relations	6	0	6
b) corruption and bribe	1	0	1
c) conflict of interest	2	1	1
d) public procurement	0	0	0
e) customer relations	12	8	4
f) calculation and invoicing	37	23	14
g) connection to LV network	22	6	16
h) unauthorized consumption	7	4	3
i) other	28	13	15
Total	**115**	**55**	**60**

Education on anti-corruption. In cooperation with the Ministry of Administration, the Human Resources Sector organized an in-house education for ethics commissioners of HEP Group with the content "Raising the training, ethics and integrity capacities of the commissioners for ethics of HEP Group", attended by ten employees. The purpose of this education is to raise capacities of commissioners to individually hold seminars or education programs and to acquire basic standards of behavior and ethical principles in their professional performance, raising awareness on the harms of corruption and the prevention of corruption.

Right to the access to information

Information Officer collects, evaluates and responds to about three hundred requests a year (with an increasing trend), concerning business relations with HEP, company's development projects and procurement procedures. Each request is, depending on the topic, forwarded to the relevant units and persons authorized to provide feedback. Requests are most frequently filed by non-governmental organizations and media representatives, but also other private citizens or legal entities. In 2018 there were no legal actions related to the Right to Access to Information Act.

During 2017, there were 67 requests filed related to access to information, out of which 40 were resolved within the deadlines, while 27 cases were responded to after the prescribed 15 days deadline. In 31 cases the requests were refused grounded in business confidentiality. Namely, the requests filed related to information concerning legal procedure led by judiciary bodies or the information could not be provided due to the protection of privacy regulations. 25 requests were denied because of the abuse of access to information.

HEP Group memberships

During 2018, HEP d.d. and HEP Group companies were collective members, while numerous experts are individual members of many international organizations, institutions and associations:

EURELECTRIC (Union of the Electricity Industry)

CIGRE (International Council on Large Electric Systems and CIGRE National Committee of Croatia)

ICOLD (International Commission of Large Dams)

CIRED (Congress International des Réseaux Electriques de Distribution)

LWA (Live Working Association)

EFET (European Federation of Energy Traders),

IAEA (International Atomic Energy Agency),

ENS (European Nuclear Society)

UNICHAL (International Union of Heat Distributors),

EUROHEAT & POWER (International organization focused on co-generations, long-distance heating and cooling)

IIA GLOBAL (Institute of Internal Auditors, Florida, USA), through HIIR – Institute of Internal Auditors of Croatia)

ISACA (Information Systems Audit and Control Association); via Croatian subsidiary ISACA Chapter Croatia

ECLA (European Company Lawyers Association)

CEEP (Central European Energy Partners)

Croatian Academy of Engineering

CROMA – Croatian Managers' and Entrepreneurs' Association

Electrotechnical Society

Croatian-Austrian Chamber of Commerce

Croatian Chamber of Economy

Croatian Nuclear Society

Croatian Water Pollution Control Society

Croatian Business Council for Sustainable Development

Croatia Green Building Council

Croatian Gas Association

MIPRO Croatian Society

Croatian Public Relations Association

Croatian Air Pollution Prevention Association

Croatian Standards Institute

Croatian Employers' Association

German-Croatian Chamber of Industry and Trade

Croatian Energy Alliance

Croatian Association of Experts in Environmental and Nature Protection

2

INTRODUCTION BY THE PRESIDENT OF THE MANAGEMENT BOARD

Dear readers,

Welcome to HEP Group's sustainability world. This Sustainability Report serves to give you an insight into our corporate social responsibility and sustainable development as well as how we manage our impacts on economy, society and environment. The economic position of HEP Group and its strategic importance for the Republic of Croatia impose on us a high level of responsibility to design, implement and constantly improve sustainability processes in our business operations. In the past year we initiated significant progress, especially in preparing investments in renewable energy sources, by which HEP Group continuously contributed to the development and sustainability of the Croatian economy. We are aware that the development of the energy sector is crucial for the development of all other economy sectors and that it constantly influences the growth of the society and raising living standard of our citizens.

We live in challenging times of perpetual changes, marked by technology development which creates numerous challenges, but also opportunities for an ambitious growth. Having realized the necessity of contributing to the global sustainability development goals, the energy sector not only follows the development opportunities, but is also one of their moving forces. This is especially realized in strengthened investment in renewable sources of energy, in which we initiated significant changes in 2018.

We combine the sustainability principles in environmental protection with advanced technologies in the projects by which we open new chapters of the future, such as smart networks, the latest solutions in energy efficiency or electrical mobility project. HEP Group increasingly develops with a goal to become the leader on the regional markets. We find great opportunities for our development in market liberalization and other contemporary

Having realized the necessity of contributing to the realization of global goals, the energy sector not only follows the development opportunities, but is also one of their moving forces.
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trends, using our group synergies. By harmonized acting of our subsidiary companies and strategic, operative and resource co-ordination we strengthen our competitiveness and set market trends. Building on market challenges, utilizing our internal resources and collaborating with our stakeholders we create innovation potential and develop know-how which we will need for creating the future.

As a significant employer and the group present in all Croatian regions, HEP Group has significant impact on local employment, development of workforce, learning society as well as prosperity and benefits of local communities. HEP cherishes a long tradition of deep relations with local communities and significant investment in knowledge development of young generations, and the preservation of cultural, social and natural heritage of our society.

HEP Group business operations are closely connected with businesses and initiatives of many stakeholders. By the increased complexity of our business, our business policies, investments and development we contribute to the realization of sustainable development goals. We can read more on how our business is connected to the global goals in this report. It is based on the Strategy HEP2030, by which we outlined our new business objectives and ambitious plans for their realization. By new processes of stakeholder engagement, we ensured a deeper insight into material topics in which HEP Group has significant impacts. Our new objectives and materiality confirmation enabled us to strengthen our approach to sustainability, which was presented in this report.

Our fifth Sustainability Report was composed compliant to Global Reporting Initiative Standard. Dedication of our colleagues from all HEP d.d. sectors and subsidiaries were invested in composing the report. We appreciate your interest in HEP Group business operations, your monitoring of our work and reading this report. We believe that we managed to meet your expectations and that we will continue to enjoy your trust by our future sustainable development and responsible behavior. On that path, we exceptionally value your collaboration as well as your suggestions and advice.

Frane Barbarić

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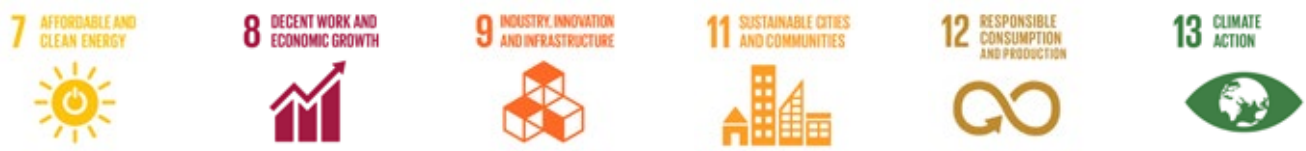
STRATEGIC APPROACH TO SUSTAINABILITY

Material topics management, strategic objectives, risks and stakeholder engagement

We, at HEP Group are aware that in these challenging times business must fully integrate the principles and processes of sustainable development and responsibility towards economy, environment and the society in which we operate. Due to our size and business diversity, our impacts are versatile and complexly interconnected. We have considered material topics in the context of strategic objectives set by the Strategy of Development of HEP Group 2030 and our potential to contribute to UN sustainable development goals. Material topics, HEP's contribution to the achievement of sustainable development goals and successful management of material topics and impacts have been checked with our key stakeholders.

HEP Group fully integrates principles and processes of sustainable development and responsibility towards the economy, environment and the society in which we operate.



MATERIAL TOPICS:

Stability and security of generation, distribution and supply of energy

Sustainable construction and development of the energy sector

A responsible, sustainable and quality employer

Successful and profitable business

Investing in sustainable environmental protection and responsible management of environmental impacts

Continuous market growth and maintained competitiveness on domestic and regional markets

Innovation and digital transition

Stakeholder dialogue, transparent communication and public education

STRATEGIC OBJECTIVES HEP2030:

Sustainable and flexible energy portfolio

Optimization and development of business processes

Market adaptability

Stakeholder collaboration

Strategic objectives HEP2030, material topics and risk management

Since material topics can be considered as reasonably significant for reporting economic, environmental and social impacts of HEP Group or having impact on stakeholder assessments and decisions, these are included in the strategic objectives of HEP Group 2030. Descriptions of management approach in relevant material topics, their connections with strategic objectives and risk management approach in each area of material importance for stakeholders and HEP Group sustainability are presented below.

Stability and security of generation, distribution and supply of energy for HEP Group means the responsibility to lead energy development in Croatia and the region and to actively contribute to the development of strategies relevant to energy sector and the creation of energy policies. Stability and security enable access to energy for our stakeholders, influencing significantly economic development, growth and development of communities and the quality of life of our customers. We see our influence in this domain primarily in the development of capital projects, advancement of corporate governance, professionalism and knowledge management in energy sector. In the time marked by digital transition, development of corporate and information security is also important. To achieve success in this material topic, we closely cooperate with the state bodies, local communities, academic institutions and other stakeholders. Our stakeholders assess this material topic as the one with the largest impact on their sustainability and their decision-making. This material topic is reflected in all our strategic objectives.

We actively manage risks in this material topic by responsibly adapting to regulatory and legal provisions and contributing to the development of strategies, regulations and other important documents. We continuously advance and modernize our business operations to ensure quality and secure distribution of energy. More than 50 percent of our generation capacities is covered by hydropower plants, making the stability of generation dependent on hydrological conditions. We manage this risk by developing diversified generation portfolio. Information system security and the security and reliability of facility operations are ensured by continuous investment in modernization and process development.

Sustainable construction and development of the energy sector are associated with the previous material topic. They are based on strengthening own generation and planning and developing new projects. By developing sustainable construction, we influence the development of local communities, encourage community investment and boost economy and connected infrastructure development. This material topic is articulated in strategic objective Sustainable and flexible energy portfolio.

Active management of this topic is reflected in HEP Group activities in constructing new facilities, adjustment and revitalization of existing ones and especially in developing generation from renewable sources of energy. Planned construction of new energy facilities always bears certain realization risks. HEP minimizes such risks by maintaining flexible planning and timely assessments.

The role of HEP Group as a responsible, sustainable and quality significant employer is reflected in the size of the organization as one of the largest employers in Croatia, employing people in all local communities. HEP Group has a significant impact on labor market, not only by numbers, but its need for versatile experts and workers. It is therefore crucial to maintain the reputation of a desirable employer, constantly invest in employee education as well as health and safety at work. In this way we enable professional development, sustainable career management and supportive and healthy workplace for our employees. In addition to continuous internal development we achieve the goals in this area by external collaboration, partnerships and investment in science and education. Our employees assess this material topic as a more important than our external stakeholders, apart from those stakeholder groups on whom this topic has a significant impact. This material topic is specifically included in our strategic objective Optimization and development of business processes, by which we strive to continuously develop competencies and innovation of our employees and efficient knowledge management on the corporate level.

Major risks in workplace segment in Croatia occur due to dynamics on the labor market, lack or drains of experts and increase of demand for specific expert profiles. In order to respond to this risk, we continuously develop the reputation of HEP Group as a desirable employer and supportive workplace and in the partnership with education institutions we develop expertise and quality of present and future employees. By providing quality and competitive conditions to our workers, we strive to keep their loyalty.

Successful and profitable business ensures responsible management of impacts and sustainability in economic segment. Successful management of this material topic includes long-term investment planning, agile responses to dynamic changes of regulatory framework and purchase prices. Furthermore, successful business reflects in responsible corporate governance and utilizing group synergies. As one of financially strongest corporations in the country, wholly owned by the state, HEP Group is aware of its strategic significance for the Republic of Croatia. This material area reflects in the strategic objective Optimization and development of business processes and specifically in creating operational efficiency by responsible governance in various areas. Additionally, it is included in the objective Stakeholder collaboration in realization of various investment or operative support such as monetary bounties, subventions, tax benefits or other forms of support. The significance of impacts in this material topics is evaluated by our stakeholders as average.

Risks to successful and profitable business operations stem mostly from the environment which is responsible for creating the framework for sustainable operations of businesses. We strive to manage our impacts in legal, regulatory and other standards, regulations and instructions by active participation in consultations during decision-making processes and by

providing our suggestions for improvements. By responsible governance and business operations we ensure positive financial results, by which, as a large corporation, we significantly contribute to the creation of profit to the owner, economic benefits and the development of local communities.

Investments in sustainable environmental protection and responsible management of environmental impacts are central to the development plans of HEP Group. This primarily includes an agile adaptation to the challenges created by climate change and activities directed at mitigation of its consequences. Sustainability in the environmental domain is implemented by use of the best available techniques and increased investment in developing renewable energy sources. We manage our impacts also by developing infrastructure such as projects of e-mobility, energy efficiency, smart grids and circular economy. Collaborating with our stakeholders we work on developing smart cities and other forms of advancing quality energy solutions. We especially take care to ensure high quality of environmental assessment projects while developing our infrastructure. System's sustainability is influenced by various increasing costs of environmental protection and trading greenhouse emission units. Management of environmental topics is specifically included in all strategic objectives of HEP Group. Our stakeholders consider this area as having average impact on their business operations and sustainability.

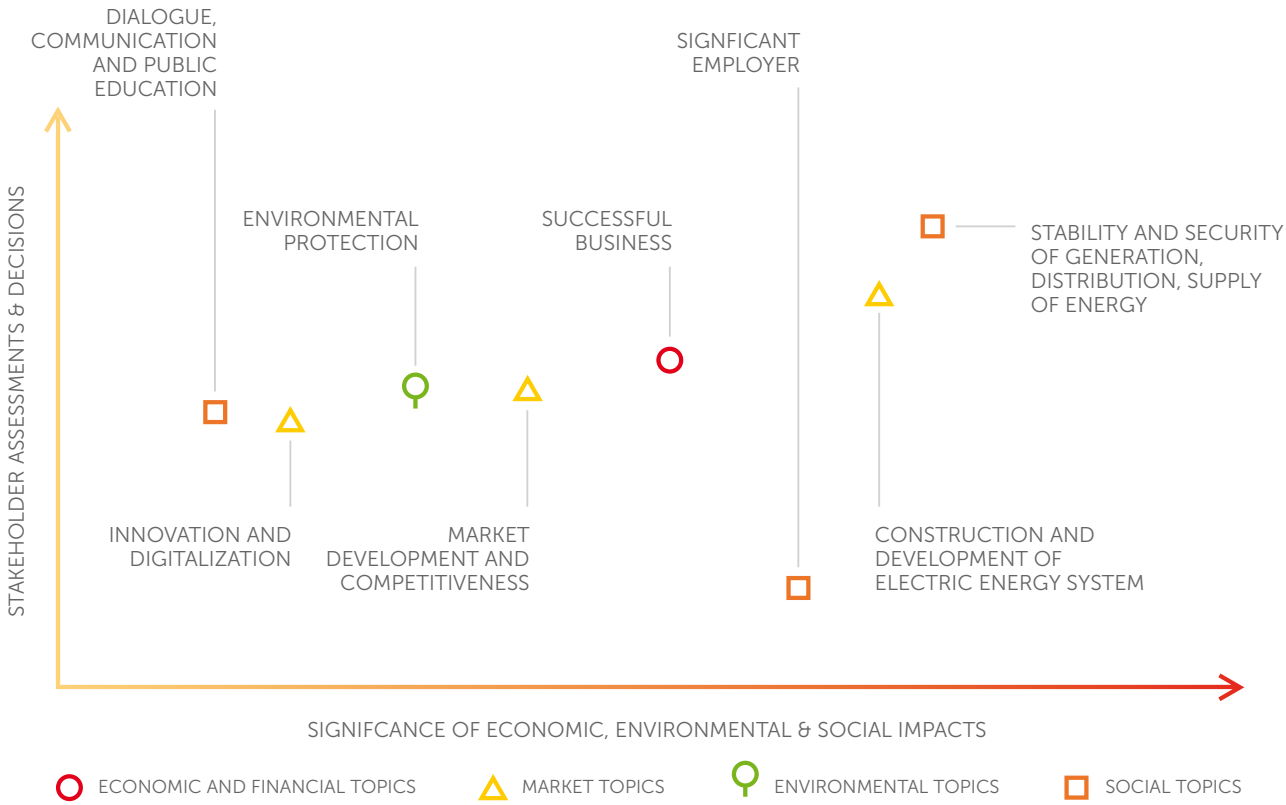
Various risks emerge in the domain of environmental impacts. They are partially generated from the environment and relate to regulatory and legal provisions as well as various regulations and standards. HEP Group fully adapts to all new requirements and by sharing our experience and recommendations we actively contribute to various phases of consultations in relation to such regulations. Risks relating facilities development are mitigated by timely and quality communication with our stakeholders during various development processes. By providing various public content, we strive to contribute to public awareness in environmental protections and managing impacts in environmental protection. Environmental risks are actively managed by continuous upgrading standards and certificates.

Continuous market growth and maintained competitiveness on domestic and regional markets are essentially important to HEP Group, because they enable our market and economic sustainability. Energy markets undergo fast changes due to technological, industrial and infrastructure development, changes in social trends and customer habits. Liberalized market requires efforts to earn and maintain customers' trust, timely adaptation to new trends and responsible approach to pricing policies. This material topic is included in our strategic objective Market adaptability. We base our market development on the continuous development of new products and services in all market segments. Our stakeholders assess this material topic as having a moderate impact on their sustainability.

HEP Group can manage market risks not only by adapting to new regulations and market trends, but also by quality response to changes and trends. Having in mind that HEP Group is present in all households and businesses in various ways, it is essentially important to continuously upgrade customer relations, especially relating to educating the market on responsible consumption, energy efficiency and potential savings. HEP Group faces risks in maintaining market shares, which we manage by creating new products and services, strengthening our brand, marketing communications and advancing customer relations. A special risk is emerging from energy poverty, which we manage by passing adequate measures by which we mitigate this negative trend. We respond to liberalized market challenges by exploring options of business expansion as well as positioning HEP Group as a regional energy leader and expansion of our business operations in the region.

Investing in innovation and utilizing the advantages of digital transition is today a precondition of sustainability in all economic sectors. It is exceptionally important that energy industry utilizes advantage of new technologies and solutions, develops new forms of managing energy systems, products and services. We can contribute by developing entrepreneurial and innovation culture, increased investment in technology as well as creating partnerships with scientific institutions. Innovation and utilizing the advantages of digital transition are included in our strategic objective Market adaptability, especially in the segment of development of smart grids and new products and services. It is also included in our objective Optimization and development of business processes in realizing internal innovation potential. Our stakeholders do not assess this area as very important for their decisions and sustainability. In the segment of innovation and digitalization the most prominent risks can occur in our capability for adequate adaptation to technological trends and access to the relevant experts on the market. These risks are minimized by agile planning of investment and projects.

Stakeholder dialogue, transparent communication and public education is a topic relevant to HEP Group business operations, important for the management of other material topics. It comprises various types of partnerships with institutions and associations as well as with local communities, stakeholder engagement in issues vital for HEP Group business operations, participation in shaping policies, responsibility of marketing communication and reporting on impacts. Our stakeholders do not recognize this material topic as vitally important for their assessments and decisions. However, it is very important for HEP Group and its development relates to the strategic objective Stakeholder collaboration. Risk management in this area is performed by timely and transparent communication, customer education and initiating various stakeholder partnerships.



Having in mind the specific characteristics of energy sector and stable trends in the environment, material topics of HEP Group did not change compared to the previous reporting period. Comparative materiality indicators, such as significance of economic, environmental and social impacts and influence on stakeholder assessments and decisions is presented in materiality matrix. The matrix was designed following stakeholder engagement with the participation of 75 representatives of all key HEP Group stakeholders.

According to stakeholders' opinions, the significance of some economic, environmental and social material topics partially differs from their influence on stakeholder assessments and decisions. Materiality matrix helped us in determining report aspects and boundaries. Relevant data and explanations are presented according to the relevant indicators within boundaries in the following topical chapters. We also presented some efforts we invest in developing sustainable processes and practice through descriptions of HEP Group activities in 2018 in the relevant topical chapters.

Materiality in the context of sustainable development goals

In specialized workshops, HEP sustainable reporting working group discussed the assessments of potential HEP Group contribution to the realization of the UN sustainable development goals. The focus remains on previously selected goals, with the additional attention dedicated to the assessments on to which targets HEP Group contributes in respective segments of its business operations and in which ways these contributions can be measured. The potentials of contribution to SDG's relate to material topics and strategic objectives of HEP Group 2030, which is presented at the beginning of each topical chapter in this report. Besides self-evaluation, stakeholders also contributed with their evaluation and comments on their perceptions of HEP Group impacts on the selected SDG's, in two assessments: how do they evaluate the potential of HEP Group to contribute to SDG's today and what will be the potential of contribution in five years. Stakeholders assess that in five years HEP Group will have a larger impact on the realization of SDG's than today, but that the potential of HEP Group impacts on individual SDG's would also change. Interestingly, stakeholders assess that, among the selected SDG's, HEP Group has the least impact on the realization of SDG 13 Climate action. This is unusual for an energy group but can be explained that stakeholders are aware of the overall size of Croatia in the global context and our stake in greenhouse emissions in the total global emissions. Stakeholders assess that HEP Group has the largest level of responsibility and can play a significant role in securing accessible and clean energy.

HEP Group, operating in various energy segments, specifically contributes to the realization of the following targets of sustainable development. The ways and projects by which we contribute to the realization of sustainable development goals are described in the subsequent thematic chapters of this report.

Affordable and clean energy:

ensure access to affordable, reliable, sustainable and modern energy for all

7.1 ensure universal access to affordable, reliable and modern energy services

7.2 increase substantially the share of renewable energy in the global energy mix

7.3 double the global rate of improvement in energy efficiency

7A enhance international cooperation to facilitate access to clean energy research and technology

Decent work and economic growth:

promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

8.2 achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high value added and labor-intensive sectors

8.5 achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value

8.8 protect labor rights and promote safe and secure working environments for all workers

Industry, innovation and infrastructure:

build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

9.1 develop quality, reliable, sustainable and resilient infrastructure, including regional and transborder infrastructure, to support economic development and human well-being, with a focus on affordable and equitable access for all

9.4 upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries acting in accordance with their respective capabilities

9.5 enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including encouraging innovation and substantially increasing the number of research and development workers

Sustainable cities and communities:

make cities and human settlements inclusive, safe, resilient and sustainable

11.3 enhance inclusive and sustainable urbanization and capacity for participatory, integrated and sustainable human settlement planning and management in all countries

11.4 strengthen efforts to protect and safeguard the world's cultural and natural heritage

11 A support positive economic, social and environmental links between urban, per-urban and rural areas by strengthening national and regional development planning

11 B substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, resilience to disasters, and develop and implement holistic disaster risk management at all levels

Responsible consumption and production:

ensure sustainable consumption and production patterns

12.2 achieve the sustainable management and efficient use of natural resources

12.4 achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment

12.5 substantially reduce waste generation through prevention, reduction, recycling and reuse

12.6 encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle

12.7 promote public procurement practices that are sustainable, in accordance with national policies and priorities

Climate action:

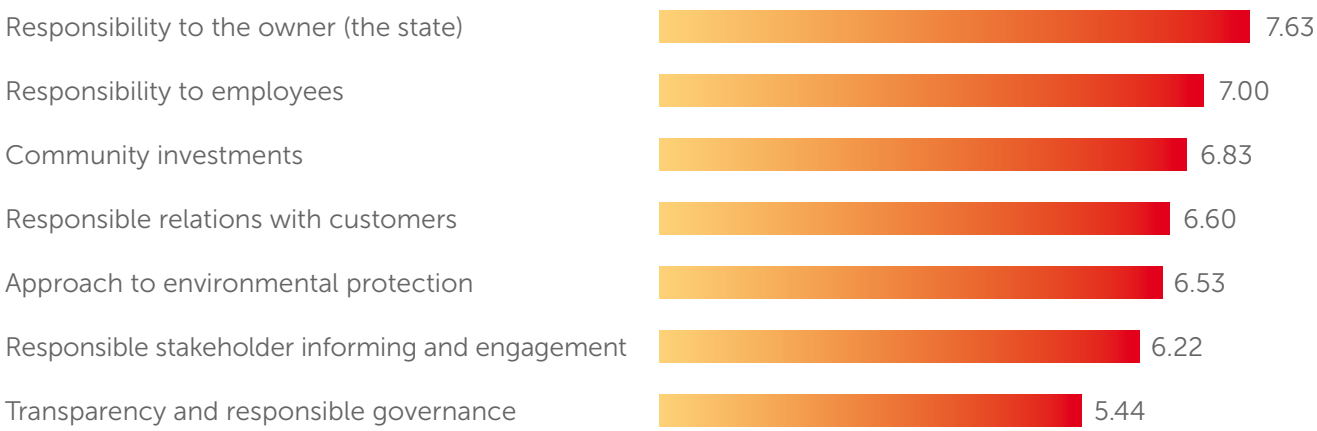
take urgent action to combat climate change and its impacts

13.1 strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries

13.3 improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning

Stakeholder engagement

HEP Group engages stakeholders is various ways in its business processes in various sectors. Stakeholders are invited to share their opinions in legally provisioned formats by public engagement in the processes of impact assessments on environment, ecological networks or environmental permits. Additionally, customers are invited to share their opinions on satisfaction with products and services and suggestions how HEP Group can advance its practices. Employees of HEP d.d. participate in the employee satisfaction survey. We engaged our stakeholders during the assessment of sustainability, material topics and potential contribution of HEP Group to the SDG's and the progress of implementation of strategic objectives by two methods: anonymous survey conducted electronically and individual meetings and discussions with key stakeholders. The engagement process covered topics of sustainable development and HEP impacts and included the representatives of state and regulatory bodies, local communities, academic and education institutions, various categories of customers, suppliers, media, interest and expert associations, civil society organizations as well as internal stakeholders of HEP Group. In individual meetings we gathered opinions from the representatives of state departments, regulatory agency, civil society organizations specialized for environmental protection and interest associations.



Stakeholders' perception of how successfully HEP Group realizes its strategic objectives is evaluated by the grade good (3). HEP Group efforts in realizing strategic objective Sustainable and flexible energy portfolio deserved the best grade, followed by the achievements in the strategic objective Stakeholder collaboration. Efforts in realizing the objective Market adaptability was also evaluated as good, while the largest space of improvement is reported related to the strategic objective Optimization and development of governance processes.

Stakeholders were invited to evaluate the present state of HEP Group responsible behavior towards stakeholders or in key areas. Their assessments are quite like those of the previous reporting period. Responsibility to the owner and employees is graded with the highest marks. Progress is expected in the area of responsible informing and engaging stakeholders, and transparent and responsible governance. Such assessment is reflected in the comments of respective stakeholder groups, collected in individual meetings and in the survey.

Stakeholders' opinions on HEP Group sustainability progress and recommendations

HEP Group stakeholders notice that the topics of sustainable development and corporate responsibility are increasingly present in public discourse. They assess that all segments of society are responsible for strengthening social and economic sustainability and that sustainable framework must be set in national and sectoral strategies. Nevertheless, they expect from companies to take active leadership in sustainability and responsibility. According to stakeholders' opinions, business sector has direct interests to increasingly invest in their sustainable and responsible management of economic, environmental and social impacts, because their long-term business success and sustainability depends on it. In this context, stakeholders expect from HEP Group, as a corporation of strategic strength in Croatia to assume a leading role.

Comments on sustainable and responsible business operations of HEP Group and on the areas in which stakeholders expect progress in future can be grouped in several areas, also matching material topics and strategic objectives HEP2030. This fully confirms that the strategic objectives of HEP Group are fully aligned with stakeholder expectations and are set in the right direction.

„...we respect increased investment in RES, but expect from HEP to lead the energy transition..."

Stakeholders noticed and evaluate as exceptionally positive increased investment by HEP Group in development of renewable energy sources, e-mobility and energy efficiency. However, stakeholders hold that HEP Group had to initiate such development earlier and expect even stronger investment and development in this area. In this context, they mention that in order to enable RES development, HEP Group should actively engage relevant stakeholder groups and especially develop RES projects in collaboration with local communities. Stakeholders recognize the potential of cooperation in development of energy sustainable communities and investment in prosumer projects. Stronger investment in all formats of renewable energy sources are essential, state all stakeholders. They expect from HEP to strengthen its position of a regional leader but also to remain a state-owned company with significant investment in solar and wind energy.

„...HEP Group can and should play a significant role in market and public education..."

Technological development and new solutions in energy sector bring various challenges in understanding the role of energy sector and its potentials. According to stakeholders' evaluations, due to the fast development, citizens should be provided intensive information and education campaigns on versatile energy topics, responsible behavior in natural resources management, and responsible management of energy and energy consumption. Stakeholders recognize HEP Group as a leading driver which can utilize its resources and significant market positions in educating all social segments, especially relating to topics of customer protection and responsible management of environmental impacts. HEP Group experts can substantially contribute to knowledge sharing by their public appearances and promoting sustainable practice in energy sector.

„...responsible customer relations are crucial for market and social development..."

Stakeholders perceive HEP as a key player on the energy market. Digital transition and technological progress bring new market challenges, along with different customer needs and habits. Market development and progress greatly depends on new ways of forming and maintaining customer relations and communication, including market education, transparent communication and sustainable managing prices as well as development of new products and services. Stakeholders appreciate the breakthrough by HEP Group in these areas, but they also expect HEP to utilize group synergies and all available advanced technological solutions such as development of smart grids.

„...long-term system success depends on sustainable governance processes..."

Large and strategically important systems can be sustainable only if they are flexible and responsibly governed. HEP Group can be a leader on the regional energy market if it develops an organization capable to attract and maintain the highest quality experts and if it adapts timely to market demands relating to innovation, implementing the latest solutions and ensures the continuity of an organization which advances its know-how and capabilities.

„...community responsibility is reflected in partnerships with stakeholders..."

Stakeholders recognize and appreciate versatile community investments, but they accentuate that even more than social investment is systematical stakeholder partnership and engagement. Stakeholders recognize HEP Group as one of the strategically most important companies in Croatia and assess that the future sustainability will reflect more in successful implementation of projects that bring direct benefits to local communities and less in corporate brand visibility investment.

HEP Group stakeholders

HEP Group

SHAREHOLDERS REPRESENTATIVES
General Assembly, Supervisory Board

STATE BODIES
Croatian Government, Ministry of Environmental Protection and Energy, Ministry of State Property, Ministry of Finance, Ministry of Economy, Entrepreneurship and Crafts, Ministry of Construction and Physical Planning, Environmental Protection and Energy Efficiency Fund, Croatian Environment and Nature Agency, Croatian Water Management Company, Croatian Parliament

REGULATORY BODIES
Croatian Energy Regulatory Agency (HERA), Croatian Competition Agency (AZTN), Croatian Financial Services Supervisory Agency (HANFA)

CAPITAL MARKETS
investors, creditors, investment partners, rating agencies, Zagreb Stock Exchange

MARKET
commercial customers, residential customers, competition, business partners, suppliers, energy exchange and emissions trading exchange

LOCAL COMMUNITIES
counties, cities, municipalities

INTERNAL STAKEHOLDERS
employees, managers, unions, workers' councils, HEP war veteran association, HEP pensioners association

ACADEMIC AND SCIENTIFIC INSTITUTIONS
universities, scientific institutes, secondary schools

ASSOCIATIONS AND SCIENTIFIC INSTITUTIONS
expert associations, interest associations, Croatian Chamber of Economy, Croatian Employers' Association

CIVIL SECTOR
consumer protection associations, environmental NGO's

MEDIA
national, local, expert

4

MARKET APPROACH: ADAPTABILITY AND INVESTMENTS

Compliant to our vision and mission based on competitive market participation, long-term sustainable and responsible business and significant position of energy group strategically important to the Republic of Croatia, most of our Strategy 2030 Goals relate to various segments of market development. HEP Group can contribute to sustainable development goals which refer to economic growth and development, construction of resilient infrastructure, ensuring accessible, sustainable and reliable energy, enabling sustainable production and consumption patterns and contributing to sustainable cities development. We do this continuously and intend to undertake actions in the forthcoming development period, primarily by realizing our objectives in development of sustainable and flexible energy portfolio, introducing new products and services, focusing on customer experience development. Additionally, we see our opportunities for market growth and competitiveness development in utilizing benefits of digital transition, smart solutions and grids development, diversification of our generation portfolio, especially in developing generation from renewable energy sources. As a large state-owned group, we are aware of our influence on economic development and our responsibility to realize profit and operate successfully. Besides the mentioned objectives, we constantly explore opportunities of other models to expand our business and restructure our group in order to utilize corporate and business development and continuously upgrade quality. We strive to upgrade quality by continuous communication with our market stakeholders, especially customers and suppliers. As economically significant group, by managing our supply chain we influence sustainability and business development of numerous companies and thus impact the economic growth and development in Croatia. Besides own financial resources, in 2018 we actively explored investment and operative support from all available resources. Our sustainability approach on the market is reflected in our financial results, realized revenue and profit as well as the indicators relating to market shares and the realization of investment plans.

We recognize our market development opportunities in digital transition, development of smart soultions and smart grids, diversification of generation portfolio and especially in renewable energy sources.

CONTRIBUTION TO SDGs

- SDG 7 Affordable and clean energy
- SDG 8 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- SDG 9 Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
- SDG 11 Make cities and human settlements inclusive, safe, resilient and sustainable
- SDG 12 Ensure sustainable consumption and production patterns

MATERIAL TOPICS IN THIS AREA

Ensure stability and security of generation, distribution and supply of energy

Develop sustainable construction and development of the energy sector

Realize profitability and successful business operations

Realize continuous market growth and maintained competitiveness on domestic and regional markets

Invest in innovation and digital transition

STRATEGY 2030 OBJECTIVES

Sustainable and flexible energy portfolio development

Define and design of new products and servies in all market segments

Explore opportunities of other business expansion models

GOALS IN THIS AREA

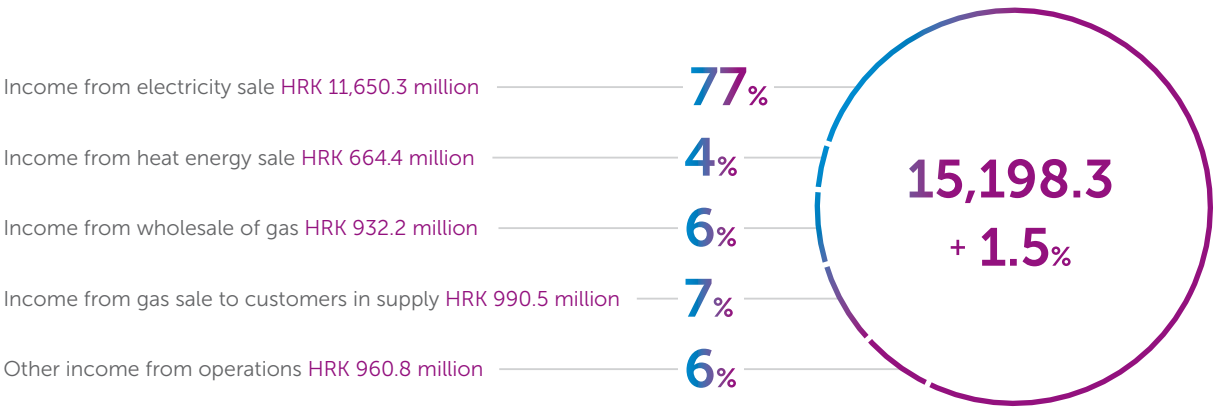
Development of versatile sources of electricity, especially RES

Strengthen efficient and customer oriented business

Increase market competitiveness by innovation and business expansion

Successful business operations

BUSINESS INCOME (IN HRK M) AND STRUCTURE IN TOTAL INCOME (%) IN 2018



HEP Group realized operating profit amounting to HRK 1,658.5million in 2018, which is HRK 636.4 million less (27.7%) than in 2017, due to the increase of operating costs. Profit from financial activities recorded HRK 24.7 million, compared to 2017 loss of HRK 704.1 million. This influenced the increase of net profit of HEP Group, amounting to HRK 1,364.8 million in 2018, which is by 64.5 million more than net profit in 2017.

Business income amounted to HRK 15,198.3 million, HRK 229 million more than in the previous year, primarily due to increase of sales by HRK 780.1 million (5.8%), while other business income decreased by HRK 87.1 million (6.1%).

Business expenditures amounted to HRK 13.539,8 million and increased by HRK 865.4 million compared to 2017. The increase was influenced by bigger costs of purchase of the sold gas (61.4%), mostly due to the sale of gas to the domestic customer, which had not occurred in the previous years as well as the purchase price of gas, carbon dioxide emission trading units (119%), bigger prices of purchased electricity (1.6%) and increased cost of purchase from renewable energy sources and cogeneration due to larger quantities of electricity taken over from HROTE.

The increase in electricity consumption in the last year in Croatia was influenced largely by the favorable economic trends, such as a successful tourist season, increase in net salaries, recovery of personal consumption, increase of employment and favorable weather circumstances. HEP Group business operations is influenced by trends in prices of energy and greenhouse emissions trading prices. Price of oil has steadily increased throughout the year. Average forward electricity price rose by 18.8% compared to the previous year. Price of greenhouse trading emission units marked a dramatic rise by even 189% having reached 23.4 EUR/t in 2018.

BUSINESS RESULT IN 2018

Business result (in HRK million)

	electricity			heat			gas		
	2017	2018	%2017	2017	2018	%2017	2017	2018	%2017
Business income	12,903.6	12,529.0	-2.9%	753.3	722.0	-4.1%	1,312.4	1,947.2	+48.4%
Operating costs	10,520.5	10,262.9	-2.4%	819.2	962.0	+17.4%	1,334.8	2,314.9	+73.4%
Operating result	2,383.1	2,266.1	-4.9%	-65.9	-240.0	264.1%	-22.4	-367.7	

The biggest share of operating income (86.2%) and total profit from group operations were realized from electricity segment. Decrease in business result in this segment, compared to 2017, was influenced by the decrease of other business income, because in 2017 income was influenced by realized income from the abolition of the impairment of the long-lived assets of block L in TE-TO Zagreb, and in 2018 the change in accounting policy decreased the income from the connection services. Heat business had a stake of 4.8% in the total income and realized the loss of HRK 240.0 million. The result decreased due to the increased costs of energy fuel stemming from increased price of natural gas and increase in value adjustment of activated investments in thermal power plants. The share of gas wholesale and retail in business income takes the share of 12.8% and marked the loss of HRK 367.7 million, while in 2017 the loss amounted to HRK 22.4 million. Such result was caused by the increase of losses in gas wholesale and the revaluation of reprogrammed receivables from the domestic buyer.

Intensive investment to realize goals

HEP Group realized investments amounting to HRK 2,376.1 million. Most investment was allocated to renovation and modernization of generating facilities and energy system plants, construction of electricity generation facilities and the reconstruction and construction of new transmission and distribution network infrastructure.

Conditions were enabled for the construction of the first HEP wind farm and non-integrated solar power plant to be realized in 2019. An independent development of several renewable energy sources projects was continued with an objective to finalize them within the next two years. Additionally, it was invested in heat energy systems, gas distribution and upgrade of information and telecommunication infrastructure as well as the development and expansion of public infrastructure for electric cars charging in cities and on highways in Croatia.

Continued investment in maintenance and modernization of the existing facilities and construction of new generation capacities and network systems, enables HEP to realize the following objectives: security of energy supply, competitiveness of HEP energy system, development of HEP group business system, contribution to sustainability and continuity of energy sector development in Croatia, by respecting increased presence of other participants in the open market, especially in electricity supply and generation from renewable energy sources.

By ensuring investments, HEP Group realized preconditions for future realization of the appropriate level of energy independence in electric energy sector, having in mind present electricity consumption and the forecasts predicting the rise in consumption as well as the necessary termination of generation from thermal plants, which cannot comply to the environmental protection requirements due to technological obsolescence.

Year 2018 was marked by many significant investment projects in all HEP sectors. In renewable energy sources contracts were signed on takeover of project companies for the construction of two wind parks and contracts on takeover of project documentation for the construction of solar power plants SE Cres and SE Vrlika Jug.

The construction of biomass fired power plants in Osijek and Sisak (BE-TO Osijek and BE-TO Sisak) was completed and they were granted operating permits. Both plants have concluded a contract with HROTE for the offtake of incentivized electricity and long-term contracts were concluded for

biomass purchase. Investments in hydropower plants were continued, by reconstruction of hydropower plants Zakučac, Ozalj, Gojak and Fužine, and the planned ones by obtaining positive environmental impact assessment decisions for HES Kosinj and HE Senj 2. By mid-2018, a contract was signed for the construction of the replacement KKE block L in EL-TO Zagreb and the preparatory works were initiated for its construction to begin in 2019.

In terms of distribution, the construction, reconstruction, transformation upgrade or the construction of additional MV plants in several 110/10(20) kV, 35/10(20)kV electric power facilities and the MV network was completed. The recovery of voltage conditions and the increase of the security of supply in distribution network continued as well as investments into the replacement and the regulation of metering points and connections.

Conditions were enabled for the construction of the first HEP wind farm and non-integrated solar power plant to be realized in 2019. An independent development of several renewable energy sources projects was continued with an objective to finalize them within the next two years.

In terms of district heating, activities were continued on the revitalization of hot water and steam pipeline network in Zagreb, connecting Zagreb district of Dubrava onto the central heating system (CTS), the revitalization of warm-water network in Velika Gorica, the revitalization of the hot water and steam pipeline network in Osijek, the preparation of the remote operation and reading of heating stations, as well as the revitalization of the hot water network and the remote control systems in Sisak.

In gas distribution segment, the construction of the gas network in Osijek-Baranja County (Klisa, Velika, Gajić, Draž, Vučjak Feričanački and Beketinci) was continued.

The project of e-Mobility within which HEP develops and expands public EV charging infrastructure was increasingly developed. This project creates a future platform for customer acquisition and the facilitation of the smart grid concept as a support to the entire electric power system.

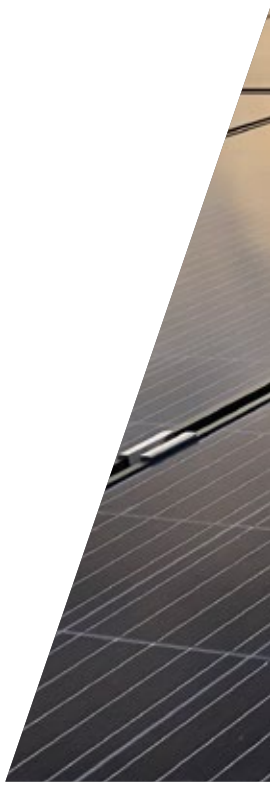
Initialization of RES scenario of HEP Group development compliant to HEP2030 Strategy

By 2030 HEP will increase its share of renewable energy sources from 35 to 50 percent. This objective will be reached by revitalization, i.e. increase of capacity and generation of hydropower plants, the construction of new hydropower plants and investments in other renewable energy sources. HEP plans to invest a total of HRK 3.6 billion, out of which HRK 1.4 billion was invested up to date. The remaining HRK 2.2 billion is planned to be invested until the revitalization is completed in 2028. The result of this investment cycle will be additional 160 MW new capacity in hydropower plants, a figure comparable to one large hydropower plant which would be the sixth biggest among the existing HEP hydropower plants. During 2018 investments were initiated in other renewable energy sources.

Investments in solar power plants

Mid 2018, within the cycle of construction and acquisition of solar power plants, HEP took over the project of solar power plant on the island of Cres. The project had been developed by Primorje-Gorski Kotar County until the location permit, while the cooperation was realized based on the public invitation that HEP published for the local administration units. SE Cres with 6.5 MW, on the location Trinket, close to the village of Orles on the island of Cres, will be the largest solar power plant in Croatia. It will generate about 8.5 GWh annually, which covers the consumption of about 2,500 households. The development of this project respected numerous environmental protection requirements, for example, enabling sheep grazing within the fenced area where the panels will be located and the unhindered passage for small animals inside the plant fences. The construction works on SE Cres should be initiated in the autumn of 2019, while the completion is expected in April 2020. HRK 39 million will be invested in its construction.

In December 2018, HEP purchased the project of solar power plan on the island of Vis from the company Končar-Obnovljivi izvori energije. The purchase included all costs of equipment procurement, delivery, construction, project design, supervision and obtaining the permit by HEP ODS to the complete functionality and obtaining the operation permit as well as the permit for permanent plant. SE Vis will be located on the hill Grizova glavica, close to the village of Žena Glava, about 3.6 kilometers SW from the city of Vis and about 4.8 kilometers east of Komiža. The installed capacity will be 2.2 MW and the connected 2 MW. Expected annual generation is 3.1 GWh, covering the consumption of 1,000 households. Construction works are planned for 2019.



In December 2018, contracts were signed for the realization of the solar power plant Vrlika Jug: the contract on the takeover of the first phase of the project SE Kosore-Vrlika between HEP Proizvodnja and the city of Vrlika and the contract on the real estate purchase between HEP and the city of Vrlika. Solar power plant Vrlika Jug marks the realization of the first phase of the planned construction in the southern part of the Working zone Kosore in the city of Vrlika. Investment value amounts to HRK 14.7 million. The connected capacity of the plant will be 2.1 MW, while the expected annual consumption will reach about 2.9 GWh. The entire construction should be realized during the second half of 2019.

HES Kosinj/HE Senj 2

By the realization of the hydro energy system project (HES) Kosinj and HE Senj 2, that is the second phase of the construction of HES Senj, HEP intends to utilize the remaining hydro potential on the rivers of Lika and Gacka by upgrading the existing HES Senj. The existing system has used the hydro potential of these two rivers for the past 52 years by operations in two HPP: HE Sklope (22.5 MW) and HE Senj (216 MW). The realization of the second phase of the unified system will enable the additional generation of electricity, complete protection from flood waters in the Kosinj field, increase of the water supply security of the southern part of the Croatian coastal water system and improvement of the road and other communal infrastructure in the wider area. Presently the hydro energy system of Lika-Gacka has the capacity of 238.5 MW with the average annual generation of 1.15 TWh. The construction of the second phase, HES Kosinj and HE Senj 2 envisages additional capacity of 412 MW and additional generation of 320 GWh annually, the most of which is the peak energy. The realization of the second phase of HES Senj construction will realize the total installed capacity of 656 MW in the basin and the average annual generation of 1.5 TWh.

The activities conducted during 2018 comprised the feasibility study which confirmed investment rationale, conducted processes of environmental impact assessment for HES Kosinj and HE Senj 2 and the development of project design. Additionally, the environmental impact assessment was conducted for the connection of HE Kosinj to electric energy system, i.e. the transmission line 2x110kV route. It is planned to finalize the rest of the documentation for construction permits, to regulate legal and ownership rights and to start constructing traffic infrastructure.

Combined-cycle cogeneration plant KKE EL-TO Zagreb

The new highly efficient combined-cycle cogeneration unit KKE EL-TO Zagreb, with electrical output of 150 MWe and heat output of 114 MWt will replace two generation units on the existing location in order to ensure long-term supply of heat for more than 80 thousand citizens of the western and the northern parts of Zagreb and the supply of heat to industrial consumers. Additionally, KKE EL-To Zagreb will be a reliable source of electricity for the electrical energy system. Besides the larger capacity, it will enable a more flexible operation of the existing units and their longer utilization, i.e. bigger generation on the location with less impact on the environment. The latest energy solutions will decrease the carbon dioxide emissions by 150,000 tons per year. Project KKE EL-TO Zagreb, with the total usability coefficient of 90 percent and the savings in primary energy by more than 25 percent in the combined process of electricity and heat generation, is also feasible for its effects on climate impact decrease, which was confirmed by the European Bank for Reconstruction and Development, having marked it as the highest quality level project from the environmental aspect.

For this investment, in July 2018, HEP signed the Construction Contract and the Long-Term Maintenance Agreement with FATA S.p.A. (member of Danieli Group) from Italy and the loan agreement with the European Bank for Reconstruction and Development (EBRD) and the European Investment Bank (EIB). Through EIB the project was listed in the Investment Plan for Europe (the so-called Juncker Plan).

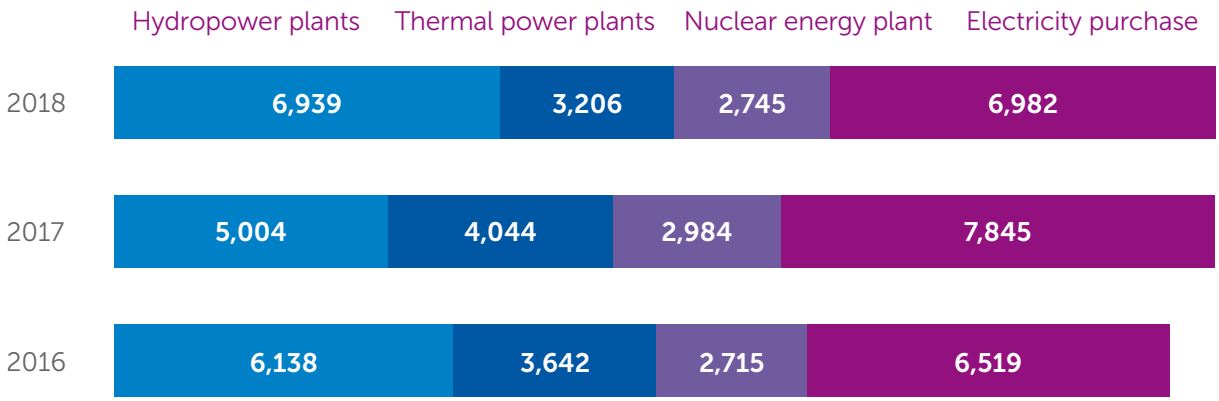
During 2018, works began on the preparation of the location for the new block, comprising the removal of old facilities and the functional infrastructure, so that the construction site could be handed over to the construction management company. The construction is planned to start in 2019 and will last for three years.

The construction of such highly efficient combined-cycle cogeneration facilities supports the development and maintenance of diversified and flexible electricity generation portfolio, which includes versatile sources of electricity generation. Besides serving heat systems in Zagreb, Osijek and Sisak, HEP large cogeneration plants proved to be very important for the electric energy system. In hydrologically unfavorable years, during large hydrological oscillations and in the conditions of significant stake of fluctuating renewable sources, such plants minimize interruptions in electric and heat energy supply, in the case of serious failures in the electrical energy system. The realization of this project is compliant to the Industrial Emissions Directive and the emissions limit values provided by the environmental permit. Besides, the natural gas, although a fossil fuel, is an acceptable transition fuel and due to its smaller environmental impact than in other fossil fuels represents an important energy fuel in the long-term transition towards low-carbon economy.

Generation, purchase and sales of electricity

HEP Group operates generation, transmission, distribution and supply of electricity in the entire territory of Croatia. It is the largest electricity supplier in Croatia with 14.6 TWh of sold electricity, while it sold 2,859 GWh of electricity in Slovenia, Serbia and Bosnia and Herzegovina in 2018. A total of HRK 2,266.1 million in operating profit was realized in 2018, which is 4.9% less than in the previous period. Income from electricity sale in 2018 amounted to HRK 11,650.3 million, out of which HRK 10,687.4 million or 91.7% was realized by the sales in Croatia, and HRK 963 million or 8.3% by international sales.

GENERATION AND PURCHASE OF ELECTRICITY (GWH)



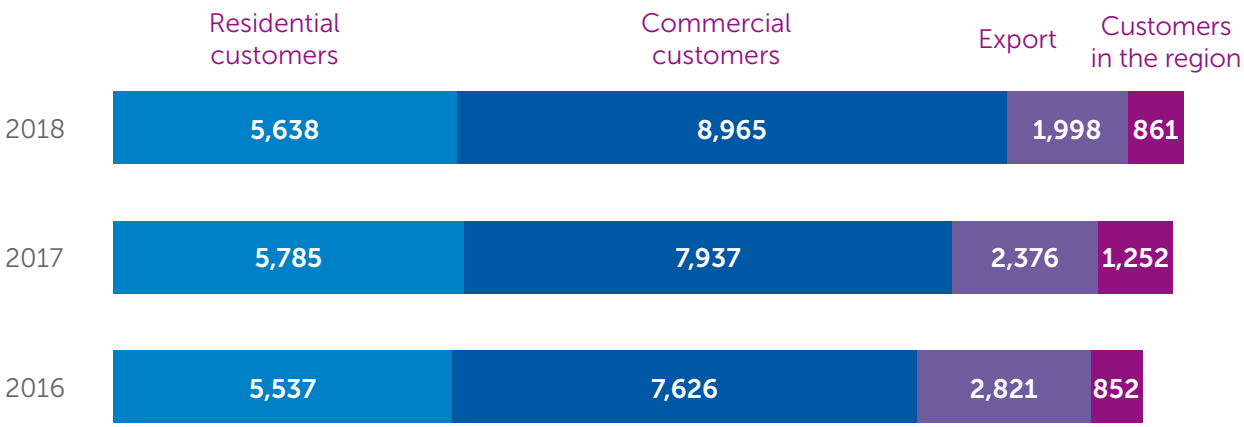
Note: in 2018, generation of electricity in hydropower plants, cogeneration plants and bio-energy plants in subsidized system amounted to 460 GWh (2017: 564 GWh; 2016: 244 GWh)

Power plants owned or co-owned by HEP Group generated 12.9 TWh of electricity, 865 GWh more than in 2017, which made 65% of electricity turnover realized by the group in 2018. In favorable hydrological conditions in 2018, hydropower plants generated 6,939 GWh of electricity or 1,935 GWh more than the generation in 2017 and making 35% of needed

electricity. In thermal power plants and thermal power plants for heat energy generation, which generated 3,206 GWh, electricity generation was decreased by 838 GWh and their share in 2018 was at 16% of necessary energy. Nuclear power plant Krško delivered 2,745 GWh or 239 GWh less than in 2017, due to the regular repairs in April, which is conducted every 18 months.

Due to the improved hydrological circumstances, but also simultaneously larger supply to customers in Croatia and the region, a total of 6,982 GWh of electricity was acquired outside of HEP system (35% of necessary energy), which is 863 GWh less than in 2017. Out of the total purchased electricity, 4,592 GWh was imported for customer supply. Additional 2,209 GWh pertains to HEP Group's purchase of energy from HROTE for generation from the existing renewable sources of energy in subsidized system, while 31 GWh was purchased from producers outside HEP Group and traders in Croatia. A total of 151 GWh was purchased for the coverage of losses in the transmission network.

ELECTRICITY SALES (GWh)



GENERATION CAPACITIES ON DECEMBER 31, 2018

Hydropower plants	Available capacity (MW) / (-MW pumping regime)	Hydropower plants	Available capacity (MW)
Storage HPP		**Run-of-river HPP**	
GHE Zakučac	539.15*	HE Varaždin	92.65
RHE Velebit	270 (-240)	HE Dubrava	79.78
GHE Orlovac	237.0	HE Čakovec	77.44
HE Senj	216.0	GHE Gojak	55.5
HE Dubrovnik	126/115	HE Rijeka	36.8
GHE Vinodol	90.0	GHE Miljacka	20
HE Peruća	60.0	HE Jaruga	7.2
HE Kraljevac	46.4	HE Golubić	6.5
HE Đale	40.8	HE Ozalj	5.5
HE Sklope	22.5	MHE Krčić	0.3
CS Buško blato	7.5/4.2/(-10.2/-4.8)	HE Lešće	41.2
CHE Fužine	4,6/(-5.7)	HE Lešće ABM	1.1
HE Zavrelje	2		
RHE Lepenica	0.8 (-1.2)		
HE Zeleni vir	1.7		

CS: pumping storage CHE: pumped storage HE: hydropower plant RHE: reverzibilna HE: reversible HPP

* Included MHE Prančevići maximum capacity 1.15 MWh

Thermal power plants	Net available capacity (MW, MWt, t/h)	Fuel
TE-TO Sisak	623 / 0 / 161	natural gas / oil
TE-TO Zagreb	422 / 743 / 360	natural gas / oil
TE Rijeka	303	oil
EL-TO Zagreb	88,8 / 384 / 416	natural gas / fuel oil
TE-TO Osijek	89 / 184 / 150	natural gas / fuel oil
KTE Jertovec	74	natural gas / fuel oil
TE Plomin	105 + 199	hard coal

Nuclear power plant	Net available capacity (MW, MWt, t/h)	Fuel
NE Krško*	348	nuclear

*HEP owns 50% of the total capacity of NE Krško

IIntegrated photovoltaic power plants (14)	Net available capacity (MW)	Fuel
	0.2	solar energy

Bioenergy plants	Net available capacity (MWe,MWt,t/h)	Fuel
BE-TO Sisak	3/10/18	untreated wood pellets
BE-TO Osijek	3/10/18	untreated wood pellets

The total work availability of hydropower plants in 2018 amounted to 84.7%, while total work availability of thermal plants amounted to 57.9%. By preventive maintenance of electricity and heat generation facilities, HEP Proizvodnja has kept a high level of availability of the most of its generation units. With certain difficulties in contracting and timely finalization of some repair activities, the planned annual maintenance repairs of generation units were realized, while corrective repairs due to failures and removal of plant defects were completed in the acceptable timeframe.

Electricity generated in HEP Proizvodnja power plants

The power plants owned by HEP Proizvodnja generated a total of 10,146 GWh electricity (without bioenergy plants generation). Hydropower plants generated 6,939.5 GWh or 68.4%, thermal power plants 3,206.3 GWh or 31.6%, while solar power plants generated 0.2 GWh.

The total generation exceeded the planned one by 10.7% or 978.8 GWh, whereas hydropower plants generation exceeded the planned by 1,348.8 GWh, i.e. 24.1%, while thermal power plant generation decreased by 370.7 GWh, i.e. 10.3%, compared to plans.

Compared to the previous year, total electricity generation from own sources increased by 19.8% or 1,680.3 GWh, while the realized hydropower plants generation increased by 1,935.2 GWh or 38.7%, while thermal power plant generation decreased by 255.1 GWh or 7.4%. From the totally generated electricity in 2018, plants with the status of privileged producer generated the total of 445.6 GWh or 4.4%, while other hydropower and thermal power plants generated the total of 9,700.5 GWh or 95.6% of electricity.

Generation and sales of heat energy

Generation, distribution and supply of heat energy are conducted in Zagreb, Osijek, Velika Gorica, Zaprešić, Samobor and Sisak. The total of 2,255 GWh of heat energy was generated in 2018, which was 47 GWh or 2.1% less than in 2017, and 26 GWh or 1.1% less compared to planned. HEP Toplinarstvo plants generated a total of 134 GWh, while cogeneration plants of HEP Proizvodnja generated 2,121 GWh. Out of the totally generated heat, 22.99% or 620,000 tons relate to the production of industrial heat, while 77.1% or 1,738 GWh to residential heat.

Sales of heat energy in 2018 decreased by 4.7% or 91 GWh compared to the previous year, amounting to 1,823 GWh. Breakdown according to customer group was 57.4 % to residential customers (1,046 GWh) and 42.6% to commercial customers (777 GWh). The total sales to residential customers dropped by 5.7% and to commercial customers by 3.4% in 2018, mostly due to the warmer weather during the heating season.

Gas distribution and supply

HEP Group distributes and supplies customers with gas on retail market and supplies gas on the wholesale market. Sales of gas in distribution and supply on the retail market decreased in 2018 by 1.1%. Sales to residential customers decreased by 4.3%, while the sales to commercial customers increased by 1.9%. Sales by HEP Plin to the customers in own distribution areas decreased by 4.3%, while sales to the customers in other distribution areas in Croatia increased by 19.6%. Despite the decreased sales, HEP Plin income from gas distribution and supply increased due to the rise by 6.6% of the average sales price.

In 2018, HEP Plin sold gas to the domestic customer and together with the income of HEP Plin, the total income from gas supply amounts to HRK 990.5 million and increased by HRK 673.9 million. Gas wholesale realized the income of HRK 932.2 million, which makes 6.1% of the total income of HEP Group. The realized income was by HRK 31.6 million less than in 2017 due to the decreased gas sales by 4.5%.

Since April 1, 2014, HEP d.d. acts as supplier on the wholesale gas market, which comprises sales to the suppliers to the residential segment in the public service regime. For the period until March 31, 2018, this business segment was provisioned by the Decision by the Government of the Republic of Croatia and afterwards by the Law on Gas Market from February 2018. This law stipulated that HEP d.d. would perform this role until July 31, 2018 until the Croatian Energy Regulatory Agency (HERA) would be obliged to conduct a public tender and determine the wholesale market supplier from August 1, 2018 until March 31, 2021. Since HERA did not receive any offer in the repeated public tender, the regulator determined HEP d.d. as the supplier for that period. From this activity, the group realized income of HRK 932.2 million or 6% of the total income. This is a decrease by HRK 31.6 million compared to the previous year, conditioned by the decrease in gas sales by 4.5%.

Distribution of electricity

Electricity service reliability

Security and stability of energy distribution is articulated in HEP's mission and is a material topic evaluated by all stakeholders as the area of the utmost importance and impact on economy and society, thus crucial for sustainability and sound business operations of stakeholders. Therefore, secure and stable distribution of electricity is included in all strategic objectives of HEP Group 2030. The realization of objectives is reflected in responsible management of reliable service and continuous efforts invested in decreasing occurrences and duration of power supply interruptions and decrease of losses in distribution.

Electricity losses are indicators of efficiency and quality of operations in electricity distribution. Decrease of losses is one of the most important business goals. In order to achieve it, HEP ODS implements a series of investment and operating measures. The implementation of these measures resulted in the trend of losses decrease over years. Two kinds of losses are recorded: technical losses because of plant status in the distribution network and technical characteristics of network elements, as well as heat losses due to line and transformer overloads. Non-technical losses are a consequence of unmeasured and uncalculated energy consumed by the customers. Losses in distribution network in 2018 amounted to 1,288 GWh or 7.68%, out of which technical losses make 51 and non-technical 49%. Losses are decreased compared to 2017, when they amounted to 1,343 GWh or 8.04%.

Investments in distribution network

Continuous upgrade of distribution of electricity are enabled by construction, reconstruction and revitalization of significant transformer stations and other facilities in the distribution network. The most significant investment activities in 2018 comprised the continuation and finalization of several long-term investment projects and the launch of some capital investments. An investment cycle in reconstruction of submarine cables was initiated, with over HRK 15.7 million invested. Ten capital investments in connecting points (HV/LV) and backbone mid voltage lines were finalized. Activities of construction, revitalization and modernization of remote management systems were completed in 91 locations. Especially important are investments in distribution system: in metering equipment and infrastructure by reconstruction of metering points and connections. This directly influences decrease of non-technical losses.

Since the utilization of innovation and development of digital transitions are one of the material topics of HEP Group, special attention is paid to the

projects implementing technological solutions aimed at the modernization of distribution system, increase of energy efficiency and supply reliability and smart grid development.

Investments in coastal and island network

HEP ODS will invest about HRK 800 million in the development of distribution network in coastal areas and on the islands, between 2018 and 2021. This was announced by HEP representatives to the Prime Minister and his associates during their visit to the reconstruction site of substation in Stari Grad on the island of Hvar in October 2018. These investments will directly contribute to the continued success of Croatian tourism and the creation of quality life conditions, increasing working capacities and encouraging the local population to remain living on islands. This contribution follows the strategic plans of the Croatian Government aimed at creating conditions for sustainable development of the Croatian islands.

Smart grids pilot project

HEP ODS received the grant of HRK 149.95 million at the tender by the Ministry of Environmental Protection and Energy for the pilot project of smart grids development. The pilot will be implemented in five distribution areas between 2018 and 2022. The remaining HRK 26.86 million will be provided by HEP ODS. In addition, HEP ODS will independently invest additional HRK 52 million in the introduction of smart grids, so the total value of the investment into smart grids will reach almost HRK 230 million. The project will introduce advanced measuring infrastructure, enabling a more precise loss calculation as well as locating areas with increased losses in distribution network, monitoring electricity consumption and active consumption management by end customers. For that purpose, 6,125 substations will have summative meters installed, and end customers' 24,000 existing meters will be replaced by smart meters, while 499 transformers will be replaced by new energy efficient ones.

HEP ODS uses own means to implement projects of advanced technologies in distribution network development. During 2018, HEP ODS introduced the first self-healing network in Croatia. The new network is based on decentralized approach and wireless technology and can detect a failure itself within 0.3 seconds, repair it and reconfigure the network. Speed of recovery is so fast that the customers cannot perceive it.

HEP ODS participates in SINCRO.GRID, project implementing smart grids, which will contribute to the security of supply and voltage quality in electrical energy systems of Croatia and Slovenia.

Market presence and customer-oriented business

Distribution network customers - HEP ODS

During 2018, HEP ODS performed regulated operations of electricity distribution and secured reliable electricity supply within these operations, in line with obligations and responsibilities.

HEP ODS continuously implements assessments in improving impacts on health and safety of customers, in the following areas: criteria of technical regularity of distribution network and electric energy facilities, continuous monitoring, purchase and installation of higher quality materials and equipment. Compliant to safety evaluations and the quality of distribution network, various investments are planned, network is developed and reconstructed.

HEP ODS informs customers via its web site which offers information on tariff models, planned works, directions for establishing network connections and change of supplier, advice for rational energy use and others. Web site also holds information on all legislature and regulation in HEP ODS. Web site mojamreza.hep.hr contains all information for customers' metering points. Also, HEP ODS uses its web site to inform customers on irregularities and failures contact point, regularity of electrical installation, safe energy use, energy efficiency, recommendations on safe use of electric appliances and their rational use. Communication with customers is conducted via web site, in My network application, contact center (phone and e-mail) and in direct contact.

In 2018 there were no legal actions for anti-competitive behavior, anti-trust, and monopoly practices. HEP ODS does not implement any marketing activities, because distribution is regulated as a public service and can only conduct stakeholder communication, but not marketing. During 2018, HEP ODS did not receive any substantiated complaints concerning breaches of customer privacy and losses of customer data.

In 2018, there were 16,566 customer disconnections due to irregular payments, upon the request by the suppliers and compliant to the General conditions for use of network and electricity supply. Distribution network operator is obliged to act upon the request by the supplier and re-establish the supply of electricity to the customer within 24 hours.

The evaluation of voltage in distribution network relies on the number of justified complaints by network users. Based on the written complaints about voltage quality on the metering point, additional measurements of voltage quality are done, and justifiability of complaint is evaluated. In 2018, the customer complaints commission received a total of 226 complaints related to billing, meter regularity, connection or disconnection, voltage conditions and other issues. Out of that, 86 complaints were accepted and 140 refused.

CUSTOMERS BY CATEGORIES IN 2018

Voltage level/TM	Total	Voltage level/TM	Total	Voltage level/TM	Total
HV - 110 kV	**4**	LV -commercial (blue)	43,048	LV -residential (blue)	724,842
MV - 35 kV	97	LV -commercial (white)	128,505	LV -residential (white)	1,491,004
MV - 10 kV	2,266	LV -commercial (red)	27,749	LV -residential (red)	1,339
Total MV	**2,363**	**Total LV commercial**	**199,302**	LV -residential (black)	2,995
		LV public lighting	**21,730**	**Total LV residential**	**2,220,180**
Total HV and MV	**2,367**	**Total low voltage**	**2,441,212**		
Grand total					**2,443,579**

Supply reliability

In compliance with the Conditions of quality of electricity supply, HEP ODS leads electronic database on planned and unplanned interruptions and on their frequency (SAIFI - average number of interruptions per customer, annually). The frequency of power interruptions in 2018 was 1.18 for planned and 2.33 for unplanned interruptions (with or without force majeure). The average duration of interruption per customer annually (SAIDI), amounted to 180 minutes for planned, 100 minutes for unplanned without force majeure, and 188 minutes for unplanned with force majeure, i.e. the total of 368 minutes in 2018.

Market presence and customer relations

HEP Elektra

HEP Elektra is the only energy subject authorized to provide universal service of electricity supply in the Republic of Croatia, obliging it to provide public service of electricity supply within the universal service and guaranteed supply. Universal service is a unique way of selling electricity, securing the right of residential customers to electricity supply of regulated quality on the entire territory of Croatia, at real, comparable and transparent pricing. Guaranteed supply pertains to service to end customers, at certain and regulated conditions, which lost their suppliers.

HEP Elektra bases its operations on customer relations, and is regionally organized company, with organization units in Zagreb, Split, Rijeka and Osijek. HEP Elektra customer communication is organized by a free info line, e-mail and four customer counters enabling personal contact. center enables telephone and e-mail communication with the customers. In 2018, the most relevant project in HEP Elektra was the introduction of a new IT system for operational support. The system had to be adapted to the legal framework and operational processes. In 2018, education of customer center employees was conducted strengthening efficient customer communication and enhancing the quality of customer support.

NUMBER OF METERING POINTS OF HEP ELEKTRA CUSTOMERS ACCORDING TO VOLTAGE LEVELS

Customer category	2017	2018	%17/18
High voltage	**0**	**1**	
Medium voltage	**276**	**304**	**10.1%**
Low voltage - commercial	77,220	81,295	5.3%
Low voltage – public lighting	1,425	2,084	46.2%
Low voltage – residential	2,002,828	2,008,848	0.3%
Total low voltage	**2,081,473**	**2,092,227**	**0.5%**
Total	**2,081,749**	**2,092,532**	**0.5%**

NUMBER OF METERING POINTS OF HEP ELEKTRA CUSTOMERS

Customer category	2017	2018	%18/17
Residential	2,002,828	2,008,848	0.3%
Commercial	78,921	83,684	6.0%
Total	**2,081,749**	**2,092,532**	**0.5%**

In 2018, the consumption of customers within universal guaranteed supply service was similar to the previous year. HEP Elektra delivered 6,283 GWh of electricity, which was a decrease of 0.18% compared to the previous year. In 2018, the number of metering points in commercial customers category supplied within the universal service increased by 6% compared to the previous year.

In 2018, HEP Elektra received and reviewed 274,758 inquiries via e-mail and 319,090 telephone calls. Customers address HEP Elektra also in writing, related to all issues of supply service. As universal service provider, HEP Elektra is legally obliged to intermediate between customers and system operator, which offers two points of communication to customers. The content of customers' inquiries is versatile, most frequently relating to metering submissions, issues related to My account (Moj račun) application, questions on debt state, options to pay bills in installments, various complaints and requests for extraordinary billing, changes in customer identity, receipts and other issues. Furthermore, in order to assist customers to service their billing obligations, HEP Elektra offers options of installment payments or debt reprogramming, compliant to the Conditions of electricity suppliers.

HEP Elektra is one of the suppliers on the electricity market, but as the provider of universal service does not contract customer services freely. HEP Elektra tariffs are publicly published on the company web page and is universal for all customers. Information on the change of supplier are also clearly publicized and no legal actions for anti-competitive behavior, anti-trust, and monopoly practices were recorded in 2018. The use of electricity contains hazards and dangers of electric shock due to faulty electrical installations or appliances. Therefore, HEP Elektra, in the capacity of the supplier, publishes on its web site advice to customers for responsible and safe use of appliances and installations. Recommendations for safe and rational use of electric appliances are also published on the web page and

regularly updated. There were no breaches of codes related to products and services, related to marketing communications or customer complaints related to privacy infringements or loss of personal dana in the reporting period.

HEP Opskrba

In 2018, HEP Opskrba successfully maintained its market share in Croatia and the region and responded to all market challenges, especially the rise of electricity prices by offering new solutions and products for its customers, especially HEPI Trader, HEPI Partner and Udružimo se! („Let's join!"). In 2018 HEP Opskrba realized the sales of 8,320 GWh to 87,974 customers, which is an increase of 12% compared to the previous year (7,429 GWh). A total of 861 GWh electricity was sold on international markets, which is an increase of 22.5 percent compared to the previous year (702 GWh). HEP Opskrba has a very active communication with customers using versatile channels: web pages (HEP Opskrba, Hepi, ZelEN, HEP Energija Slovenia, HEP Energija Bosnia and Herzegovina and HEP Energija Serbia), social networks (Facebook fan page Hepi, LinkedIn profile of HEP Opskrba, YouTube channel of HEP Opskrba), application Moj račun („My account"), Moj Hepi račun („My Hepi account") and m-hepi, newsletter of HEP Opskrba, organizing customer events, through customer service and personal contacts with account managers for large customers.

NUMBER OF HEP OPSKRBA CUSTOMERS ON DECEMBER 31, 2018

Customer category	2018
Number of customers – commercial	36,328
Number of customers – residential	51,646
Total number of customers	**87,974**

In December 2018 a customer satisfaction survey was conducted in the category of residential customers (Hepi customers). Even 76% of the surveyed customers expressed their satisfaction with HEP Opskrba, while

almost half of the respondents would recommend HEP Opskrba to their friends and acquaintances, which is a very high evaluation. An independent research by Energy Alliance of Croatia indicated that most respondents consider that HEP Opskrba offers the best ratio of price and quality of provided services, compared to the alternative suppliers. Almost one third would recommend HEP Opskrba as the electricity supplier. In late 2018, ISO 9001:2015 certificate was renewed for the Customer service, which confirmed high quality of services, especially in terms of customer relations.

We organized consultations for commercial customers and offered them concreate measuring and products aimed at savings and energy efficiency. In the residential segment, all Hepi buyers receive additional advice for household savings on their bills. During 2018, we communicated advice on lighting savings, household appliances savings and advantages they can use as Hepi customers. Hepi web page also publishes advice for energy savings. In the reporting period there were no violations of regulations and voluntary codes on product and services or marketing communications as well as violations of customer privacy or legal provisions relating to business and market operations. There were 267 timely filed requests for reconnections to the end customers, after the expiration of reasons for temporary disconnections, out of which 265 or 99.5% were resolved within a day. There were 122 complaints filed in 2018, all of them resolved within 15 days. Customer service recorded a total of 145,999 incoming calls, out of which 54% were residential customers (Hepi tariff models). More than 98% of calls were resolved during the first contact.

NUMBER OF METERING POINTS OF HEP OPSKRBA CUSTOMERS ACCORDING TO VOLTAGE LEVELS ON DECEMBER 31, 2018

Customer category	2018
High voltage	**139**
Medium voltage	**1,795**
Low voltage - commercial	94,426
Low voltage – public lighting	15,667
Low voltage – residential	51,646
Low voltage total	**161,739**
Total	**163,673**

E-bill for commercial customers

To contribute to the development of Croatian economy, we enabled HEP Opskrba commercial customers to receive e-bill. The introduction of e-bills for the supplied electricity enabled simpler receiving, control and monitoring of bills and easier operations for our commercial customers. The recipient can take over the same e-bill unlimited number of times and it is not possible to displace it. It is possible to attach various documents, digital or scanned, like letters, attachments, forms, contracts etc. with e-bill. E-bill helps us to jointly preserve forests and environment and additionally reduce paper consumption.

HEPI TRADER – smart solutions for commercial customers

HEPI Trader enables HEP Opskrba customers to autonomously manage electricity procurement, provides them an insight into the state of electricity market and use of various products for closing their positions, such as fixed price, indices, installment purchase and spot. In this way, customers can timely protect their companies from price changes on the market. In 2018 two HEPI Trader workshops were held for over 100 key customers of HEP Opskrba.

The development of this model of energy portfolio management enables the customers to choose among four models of products: fixed price, buy per tranches, indices and spot prices. The initiative is a response to the increased customer demands, and was implemented to maintain and raise customer satisfaction, connect more business subjects in various markets, enable central procurement which strengthens market competitiveness.

HEP Toplinarstvo

Compliant to the development strategy of HEP Group and the development plans of the cities where HEP Toplinarstvo operates, an investment plan is developed with capital projects. The most significant projects have continued throughout 2018. Among others, the realization of connecting the city section Dubrava to the central heating network of Zagreb, reconstruction of heating network in Velika Gorica and Samobor, revitalization of heating and steam network in Osijek, heating network in the city section Brzaj in Sisak and the systems of remote management in Sisak. Each year, out of the heating season we conduct regular reconstructions of heating facilities and works on revitalization of the heating system to

ensure safe, quality and continuous supply of heat to about 127,000 end customers. The maturity of network and frequent failures are the major criteria to select parts of heating and steam network which should be reconstructed.

Planned revitalization decreases the number of urgent interventions on heating network, losses in heat energy transmission and the costs of network maintenance, prevents failures and boosts operational safety of heating systems and the reliability of supply to end customers.

HEP-Toplinarstvo, as the largest subject on the heat energy market, has a goal to keep the leading position in distribution and supply of heat energy to end buyers, with minimized losses of energy. We also strive to be recognized as a modern, environmentally sensitive and socially responsible company. With the market share of 80 percent in heat energy sector, HEP-Toplinarstvo is the largest heat supplier in Croatia. In 2018, sales of heat energy reached 1.8 TWh, which is by 4.7 percent less than the previous years. Our major development goals in the next period are: to prepare projects for the use of grants from EU funds, continue investment activities, construction and reconstruction of heat, steam and hot water networks, realize new connections, increase customer steam consumption as well as implement the project of remote metering of heat consumption.

There were no proceedings initiated because of the violation of market competition, anti-trust and monopoly practices in the reporting period.

The communication of HEP Toplinarstvo with end customers is organized by regular mail, customer service phone lines, customer hotline available 24/7, e-mail and through the web page www.hep.hr/toplinarstvo. Additionally, HEP Toplinarstvo has a Center for end customers in its seat in Zagreb, adapted to customers' needs and where they can find answers to all the questions they are interested in, make payment of the heat energy bill and make changes related to ownership.

During 2018, services to end customers have been additionally upgraded. Since the billing period for April 2018, a complete redesign and modernization of heating bills were implemented, which rendered the bills more user-friendly and adjusted to end customer's needs, while having kept all the legally provided elements by which the end customers can check the accuracy of the billed costs for heat energy. Besides, the segmentation of end customers was implemented. A free 0800 1003 customer service phone line was introduced since May 2018, enabling the end customers to obtain information on their debt for heat energy, heat calculation, HCA's, reporting and changing ownership of residential or business premises, technical failures, and difficulties in supplying heat energy.

By advancing customer relations, we have reached customer satisfaction with our operations, which was corroborated by anonymous survey conducted in December 2018 in Zagreb, Osijek and Sisak. End customers evaluated the quality of supplied heat energy (supply security, heating and hot water temperature), monthly bills (expenses) for heating, design and clarity of heating bills, speed of our response to their inquiries and complaints, availability of information on our services and our professionalism and expertise. End customers value our professionalism and expertise of our workers, which is the confirmation of our long-term efforts in developing quality relations with end customers.

We have not registered any cases of endangering customer health, so the assessments on health-related impacts were not necessary. The systems of long-distance heating are among the best and safest ways to provide heat in residential and commercial units and contribute to comfortable living standard.

NUMBER OF END CUSTOMERS OF HEP TOPLINARSTVO IN 2018

Category	Broj
Residential	121,081
Industry and business premises	6,333
Total	**127,414**

We continuously inform our end customers on efficient and correct use of heat energy. We advise them not to overheat their residential or business facilities and that the optimal temperature of heated spaces is 20 °C. We also advise them to install the appliances for heat regulation (thermostatic radiator valve and thermostatic head), by which they can regulate heat consumption, to seal doors and windows which cause energy losses and incite them to introduce energy efficiency measures. We have not recorded any complaints related to customer privacy or loss of personal data.

In the reporting period the Complaints Commission of HEP Toplinarstvo received a total of eight complaints, which related to the quality of supply service (metering, calculation or billing). All filed complaints were refused as unfounded.

HEP Plin

Gas distribution and supply activities on the retail market are carried out in the Osijek-Baranja, Virovitica-Podravina and Požega-Slavonia counties, but since the gas market liberalization, HEP-Plin has begun supplying customers in thirty cities in other distribution areas. In 2018 HEP Plin purchased 1,434.5 GWh of gas, which is 1.7% less than in the previous year. End customers were supplied with 1,398 GWh gas, while 223 GWh of gas was sold in other distribution areas.

During the reporting period significant investments were made in the infrastructure that enable the delivery of natural gas to new customers. By such investments, we support the quality of life of our customers, while investments are significant incentives for the local economy, which has access to new and affordable energy source. In the process of documentation development for the construction of new pipelines, opinions on the environmental impact assessment procedures and the ecological network impact assessment were requested from the environmental management administrative bodies of respective counties for 18 new facilities. We took over 15 kilometers of gas distribution network from Feričanci municipality which unified the ownership over the entire gas distribution network in that municipality, in total 26 kilometer, ensuring long-term completeness and functionality of network.

The development objectives for the next period are focused on the plans for building, developing and modernizing the system, ensuring reliable and continuous distribution and supply of gas in accordance with the principles of public service, quality assurance of distribution and supply, ensuring competitiveness and educating customers on energy efficiency measures.

HEP PLIN END CUSTOMERS IN 2018 ACCORDING TO SUPPLY AREAS

Supply area	Number of customers
Osijek - Baranja County	59,524
Požega - Slavonia County	7,575
Virovitica - Podravina County	3,200
Other counties	327
Total	**70,626**

HEP ESCO: innovations and participation in international projects

HEP adapts its market offer to the contemporary requirements, so that besides the energy supply offers more complex and modern energy services on the market. One of such services in the spectrum of energy management which is available to HEP customers is the implementation of the remote metering of electricity and the installation of the energy management system ESCO Monitor. Using ESCO Monitor system enables systematic monitoring of the energy consumption trend, i.e. gives insight to the customers into their consumption, analysis and consumption planning, supervision and management, early diagnostics and alert in the case of consumption of energy or water, e.g. in cases of poor energy efficiency, failures or unexpected events.

3Smart project is aimed at ensuring technological and legal framework for all-encompassing energy management in buildings and their interaction with smart distribution grid, within the smart cities' transformation. 3Smart project supports the revised Energy Performance of Buildings Directive adopted in April 2018. This directive is a crucial part of the legal package Clean Energy for All Europeans which incites the use of new smart technologies for the decrease and measuring of electricity consumption.

Already in 2005, HEP ESCO has implemented the first project of public lighting modernization according to ESCO model, and in 2018 continued to develop the modernization of public lighting according to the more advanced ESCO/EPC model. An agreement was signed in November 2018 with the municipality of Stupnik for implementation of energy efficiency measures in public lighting system. The project includes financing, design, modernization and measuring, monitoring and verification of measures for public lighting energy efficiency. The existing light sources will be replaced by the latest LED sources. The project envisages electricity savings over 80 percent.

By participating in the European TOUREST project (Tourism Water Management for Sustainable ADRION – Coastal Areas), HEP ESCO promotes sustainable development in tourist sector. Seven partners from four countries – Greece, Italy, Slovenia and Croatia participate in it, within the program Interreg ADRION. Its goals are sustainable development of tourism, by sustainable water management in tourist sector, development of studies and recommendations for joint strategies for local and regional administration. The program is financed from the European Fund for Regional Development, through the Adriatic – Ionian program for transnational cooperation 2014-2020. Its total value is EUR 971,861.99, while HEP ESCO has the budget of EUR 110,589, out of which 85 percent is EU funded. The introduction of surveillance system and energy management as a rule is one of the most cost-efficient measures of energy efficiency. Contemporary systems for energy management in tourism offer numerous advantages, including the decrease in energy consumption in unoccupied tourist accommodation rooms, regulation of room temperature according to the occupant's requirements, data on real presence of tourists in accommodation facilities, optimal time for cleaning and minimizing of tourist disturbance for room cleaning.

Supply chain management

HEP d.d., in the capacity of sector supplier, is obliged to establish procurement according to Public Procurement Law. The positive law on public procurement is compliant to EU public procurement regulation of subjects operating in the sectors of water management, energy and transport sector and postal services sector. During 2018, HEP Group conducted 511 procedures of public procurement, 45% of which concern commodities procurement, 17% works procurement and 38% procurement of services. The total value of the conducted procedures amounts to HRK 2,514,020,945. According to the procurement values, 30% relates to commodities procurement, 41% for works and 29% for services.

The value of simple procedures, i.e. the procurement of commodities and services with low-value procurement of commodities and services estimated up to HRK 200,000 and works value up to HRK 500,000, amounted to the total of HRK 576,095,171. The largest stake of this amount is allocated to the procurement of commodities and services, amounting to HRK 326,781,420. A total of 71 procurement procedure was conducted based on the exemption from the application of the Public Procurement Law, in the total value of HRK 614,373,080, whereas in the previous year 44 such procedures were conducted amounting to HRK 583,007,401. In 2018, HEP Group cooperated with 6470 suppliers, out of which 6264 domestic suppliers, with the contracts amounting to the total of HRK 8,209,479,340.89 and 206 international suppliers with the contracts amounting to the total of HRK 2,972,972,979.97.

During 2018 there have been no significant changes in the procurement system or the number of suppliers. HEP Group conducted 21 procedures of green procurement in 2018. The procurement is conducted, compliant to the law and internal regulations, while some companies in HEP Group are not subjects to the public procurement (such as HEP ESCO).

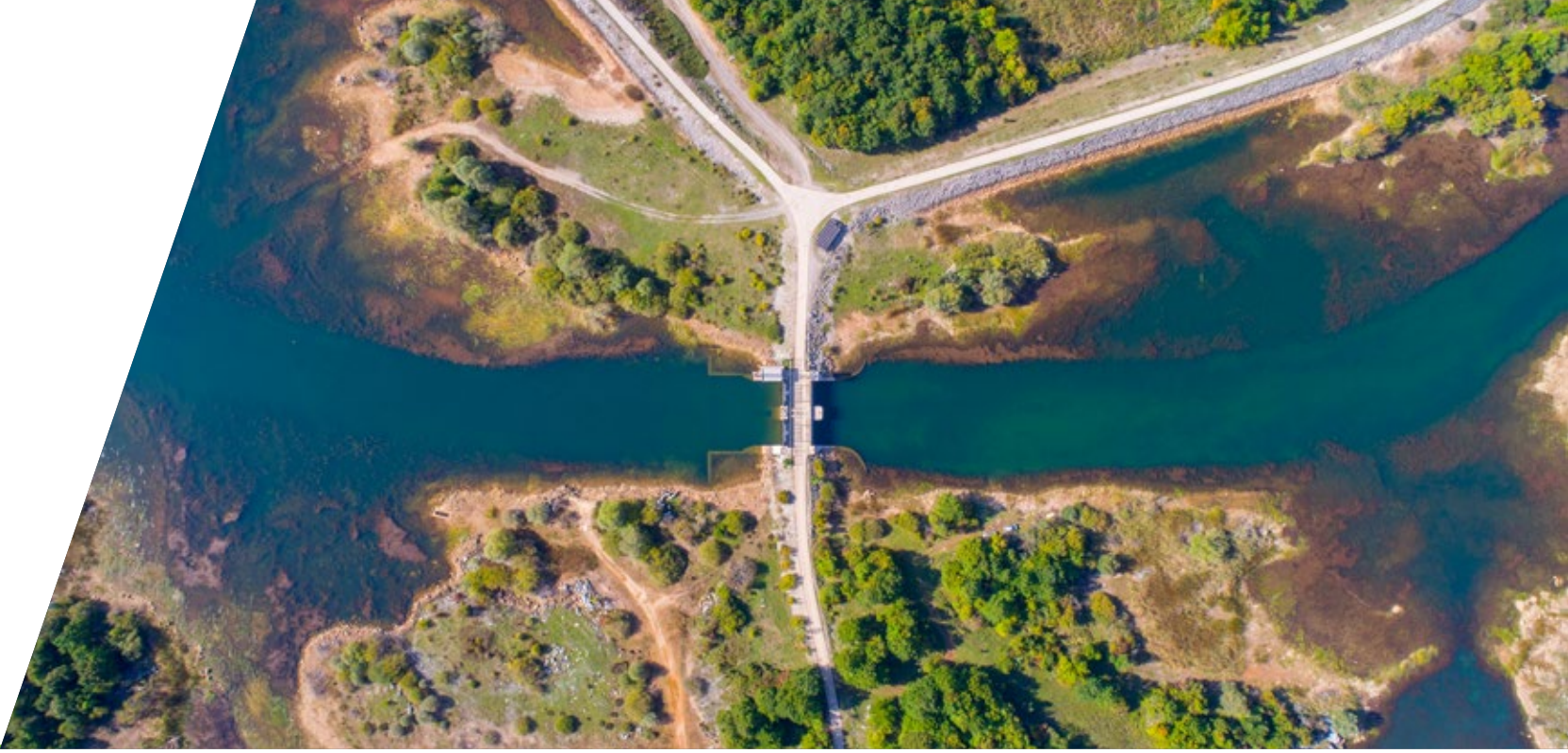
5

OUR CARE FOR ENVIRONMENT: FUNDAMENTS OF SUSTAINABILITY

Energy and environment are not just another component of sustainability for HEP; due to the nature of our operations, they are the basis and core of our business. One of the four basic pillars of group development strategy by 2030 is securing sustainable and flexible energy portfolio, which stipulates sustainable, efficient and reliable energy for customers and HEP itself. In addition, by optimizing all components of environmental impact, the company permanently works on mitigating pollution and climate change.

HEP Group reports about its enironmental impact since 1990s, when it increased efforts to improve environmental and energy footprint management. Since then, HEP standardizes its management in this segment, in the later years implementing international standards ISO 9001:2015, ISO 14001:2015 and ISO 50001:2011. Introducing ISO 50001:2011 in 2018, HEP Proizvodnja as one of the largest production companies in Croatia introduced energy management in all its production plants. This created a unique and integrated system on company level, bringing efficient management to strategic level. In 2019, HEP plans to develop new energy audit for all plants, transfer to a new version of the norm, ISO 50001:2018 and audit system documentation.

Supervisory audit by external certification company was conducted in 2018 according to new norm ISO 14001:2015, confirming the environmental management system HEP has had since 2013. At the end of the year, certification audit was successfully conducted for energy management



CONTRIBUTION TO UN SDGs

SDG 7 Ensure access to affordable, reliable, sustainable and modern energy for all

SDG 12 Ensure sustainable consumption and production patterns

SDG 13 Take urgent action to combat climate change and its impacts

MATERIAL TOPICS IN THIS AREA

Invest in sustainable environmental protection and responsible management of environmental impacts

Enable sustainable construction and development of the energy sector

STRATEGY 2030 OBJECTIVES

Increase share of production from renewable energy sources

Construct highly-efficient cogeneration thermal power plants fueled by biomass and natural gas

Increase efficiency of production plant facilities

GOALS IN THIS AREA

Increase quality of integrated quality, environment and energy management

Decrease greenhouse gas emissions

More intensive use of environmentally efficient fuels

Decrease of waste, sustainable management of producted waste and contribtion to circular economy

Protection of waters, land and biodiversity

system, for the first time certifying energy management in the entire HEP ODS according to ISO 50001.

In 2018, HEP Toplinarstvo also certified integrated system of quality and environmental management in accordance with ISO 9001:2015 and ISO 14001:2015, continuing activities pertaining to introduction of energy management system in accordance with ISO 50001.

HEP d.d. and HEP Upravljanje imovinom continued the introduction of integrated management system according to ISO 9001:2015 (quality/ business management), ISO 14001:2015 (environmental management), ISO 50001:2011 (energy management), OHSAS 18001:2007 (health & safety management) which was replaced by ISO 45001:2018 and ISO/ IEC 27001:2013 (IT security management). During 2018, the company continued education of the team in charge of setting up integrated management system and development of documentation necessary for implementation of said systems.

Certifying systems of quality, environmental and energy management, HEP joins modern, sustainable companies that thus prove their aim to discover potential for improvements and savings, decrease operating risks, increase process efficiency and decrease environmental impact and losses as well as increase energy efficiency of its buildings, plants and equipment, vehicles and all other energy consumers in regular operations.

All HEP's hydropower plants produce certified green energy and possess TÜV SÜD on generation of energy from renewable sources.

Following European acquis Communautaire, electricity from hydropower plants is considered energy from renewable sources and is shown in energy balance as such, decreased by the amount of energy used to pump water on higher level in reversible hydropower plants. EU Directive introduced an obligation to set up a system of origin guarantees, specifically for the purpose of publishing data on primary energy source. Regulatory frame for guarantee system implementation is defined by the Energy Act, which stipulates that this system is introduced for the benefits of end customers to prove the share of RES. Croatian Energy Market Operator (HROTE) is in charge of issuing guarantees of electricity origin, as well as setting up and managing the registry of guarantees. HEP's hydropower plants in registry of origin guarantees are HE Varaždin, HE Dubrava, HE Čakovec, HE Gojak, HE Lešće, HE Vinodol, HE Senj, HE Rijeka, HE Orlovac, HE Golubić, RHE Velebit, HE Miljacka, HE Dubrovnik and HE Zakučac.

There have been no cases of non-compliance with environmental laws and regulations in 2018.

Environmental permits.

All existing HEP's thermal energy plants with nominal heat energy exceeding 50 MWt have permits on integrated pollution prevention and control, so-called environmental permits, which are the condition for operations, i.e. production of electricity and heat energy, stipulated by the Environmental Protection Act. A series of activities was conducted in this field in 2018, while all demands for adjustments are published on the website of the Ministry of Environmental Protection and Energy.

Energy and environment are not only one of the sustainability components; in our sector they are the base and the meaning of our existence.

ENVIRONMENTAL PROTECTION INVESTMENTS IN HEP GROUP, 2018

Environmental protection area	Costs of regular operations (in HRK m)	Investments (in HRK m)
Air and climate	56.48	0.07
Waste waters	1.82	0.22
Waste	11.76	9.65
Protection of soil and underground waters	0.94	0
Protection of nature and landscape	7.69	2.34
Other (mostly fees)	77.39	1.26
Total, 2018	**146.08**	**13.54**

Energy

Consumption in HEP Proizvodnja power plants

OWN CONSUMPTION IN HYDRO AND THERMAL POWER PLANTS IN 2018

2018	kWh		kWh	kWh	kWh
		Data supplied by HOPS	Data supplied by HEP ODS	House generator	Total own consumption
Hydropower plants	without pump performance and compensation	6,772,817	12,364,223	12,035,670	31,172,710
	with pump performance and compensation	122,802,977	13,777,653	18,968,574	155,549,204
Thermal power plants	Data supplied by HOPS		Data supplied by HEP ODS	Difference in production on generators and electricity supplied into the network	Total own consumption
	75,223,338		1,830,419	195,681,892	272,735,649

Consumption in HEP HQ buildings

Energy Management Program follows energy consumption for four buildings in HEP Group's seat in Zagreb. During 2018, this program managed direct energy consumption, set up efficient energy production and determined potential for energy and water savings. ESCO Monitor was introduced on these locations, an IT system providing support for the consumption optimization within energy management system.

TOTAL CONSUMPTION OF ENERGY ON HEP GROUP SEAT LOCATION IN 2018

Energy source	2017	2018	2018/2017 %
Electricity [kWh]	2,083,146	2,210,775	+6.1%
Heat energy [kWh]	2,204,000	2,065,143	-6.3%
Natural gas [m^3]	2,123	2,128	+0.2%

During 2018, 204 priority buildings were also selected, out of which 160 had energy schemes and specifications for setting up remote system for monitoring energy and water consumption developed. Remote monitoring is conducted by installing measuring and communication equipment on the building which enables automatic and remote connection to ESCO Monitor system. Implementation of this activity will enable supervision over energy and water consumption as well as measuring and verification of savings after implementation of energy efficiency measures.

3Smart. 3Smart project (Smart Building-Smart Grid-Smart City) is aimed at securing technology and legislative framework for integral energy management in buildings, distribution networks and main infrastructures of cities in the Danube region. In cooperation with the of Electric Engineering and Computing as the leading partner, as well as many others, HEP is working on the project aimed to enable modular energy management between buildings and distribution network through a tool entitled Platform in buildings, networks and infrastructure. An 85-percent share of the costs of this project are co-financed from EU funds through Transnational Danube Program.

As a part of the project, HEP installed battery storage of 32 kWh capacity and 10 kWh transformer in its old administrative building in Zagreb (Vukovar Street 37). Soon after, works on the introduction of new central monitoring and management system began.

Introduction of ESCO Monitor application in all buildings owned and used by HEP Group will create a unique base of general and energy data as well as enable insight into consumption and cost for energy and water. A total of 60 locations were nominated for the second phase of HEP SGE Program (2019-2021), used by HEP ODS, as well as 20 locations in use by HEP-Proizvodnja. Exact number of buildings and points of measuring will be determined after cooperation with energy managers in visiting suggested locations.

Within this project, HEP ESCO organized education to raise awareness of HEP employees on the importance of rational energy and resource use on the workplace. Additionally, application of continuous energy management systems included measures of consumption optimization, for example, changes in the temperature settings, heat substations and AC working regimes, which enabled energy savings ranging between 7 and 14 percent, depending on the building and type of energy.

HEP ODS buildings

In the process of implementation and certification of energy management system, HEP ODS ran energy process audits on 148 locations that gathered all 780 registered buildings on energy audit locations.

Significant consumption on all locations and in all buildings is monitored in measuring plans for all 148 locations of energy audit. In accordance with them, 2015 was selected as the base year for comparison of energy savings, while significant consumption for each year is compared to previous and base year. All significant consumption is included in measuring plans of HEP ODS (more than 70 percent of total consumed energy in energy basis, minus losses).

CONSUMPTION IN TWO LARGEST BUILDINGS IN EVERY HEP ODS DISTRIBUTION AREA

	2015	2016	2017	2018
Energy consumption (kWh)	23,751,009	23,358,764	19,780,616	18,552,505

With the beginning of implementation of the energy management system, consumption trend in HEP ODS is on the downward trajectory, while it spent a third less funds for energy consumption in 2018 compared to 2015 according to financial data. Total consumption for two largest buildings in each HEP ODS distribution area dropped by 5,198,504 kWh in 2018, compared to the base year.

ENERGY CONSUMPTION DECREASE IN HEP ODS

Decrease of energy consumption (without losses in kWh)	2016/2015	2017/2016	2018/2017	2018/2015
Total significant energy consumption	-2,747,479	2,674,326	-2,832,117	-2,905,270
Energy consumption in two largest buildings in each DA	-1,600,026	-3,127,354	-1,228,109	-5,198,504
Fuel consumption	-199,270	-89,607	-2,097,419	-2,386,298
TOTAL HEP ODS	**-4,546,775**	**-542,635**	**-6,157,645**	**-10,490,072**

E-mobility. HEP continues to develop e-mobility project, securing filling stations for electric vehicles in Croatia and the region. During 2018, HEP launched three new fast AC filling stations and implemented communication modules to securing communication with the central management system, in order to bring e-mobility to the new level and create platform for final expansion of public infrastructure for electric vehicles.

To secure smooth implementation of the project during non-commercial, development phase, HEP implemented all necessary activities through EU financed projects (EAST-E, NEXT-E, bigdata) which will cover inter-agglomeration roads, European TEN-T corridor and city centers.

HEP has so far set up more than 50 public ELEN filling stations in cooperation with the cities and interested partners. Apart from this, HEP works on solutions for the inter-city traffic. Highways and inter-agglomeration roads will have a network of fast and superfast filling stations, and these activities are financed by EU funds. During 2019, HEP plans to further expand public infrastructure on TEN-T corridor, while high focus will be on realization of multi-standard AC/DC filling stations on main highways.

Total decrease in 2018 energy consumption was 10,490,072 kWh compared to 2015, and 6,157,945 kWh compared to 2017. Decrease of energy consumption is the result of introduction of the energy management system, as well as the decrease in the number of employees after company restructure in 2017.

Emissions

During 2018, total emissions of GHG CO_2 from HEP's sources decreased by 17 % compared to 2017. This is the result of decrease of liquid fuel use in thermal power plants and thermal power plants for heat energy production and boiler facilities for city heating, as well as decreased number of working hours of coal-fueled thermal power plants. Emissions of CO_2 from bioenergy plants in Sisak and Osijek increased by 26 % in 2018, because 2017 was the year of pilot work for both these plants. They operated in lower number of hours, so their consumption of wood biomass was lower.

CO_2 emissions intensity for produced electricity in HEP's generation mix (TPP, TPP-HP, HPP and 50 percent of NPP Krško) was 147 g CO_2/kWh in 2018.

CO_2 EMISSIONS FROM HEP SOURCES

	2017	2018	2018/2017 %
Thermal power plants and thermal power plants for heat energy production / tCO_2	2,780,074	2,274,841	82
Bioenergy plants / tCO_2	36,967	46,667	126
City heating boilers / tCO_2	33,353	30,973	93
Total	**2,850,394**	**2,352,481**	**83**

CO_2 EMISSIONS FROM HEP SOURCES IN EU-ETS (NOMINAL HEAT ENERGY > 20 MWt)

	2017	2018	2018/2017 %
Thermal power plants and thermal power plants for heat energy production / tCO_2	2,780,074	2,274,841	82
City heating boilers / tCO_2	190	64	34
Total	**2,780,264**	**2,274,905**	**82**

Methodology and emission factors defined by the approved plans for GHG emissions in HEP-Proizvodnja thermal energy plants are used in calculation of CO_2 emissions, while those proscribed by Intergovernmental Panel on Climate Change (IPCC) for HEP-Toplinarstvo plants. HEP sources in the European greenhouse gas unit trading system (EU-ETS) submit Report on Emissions and Verification Report to the Croatian Agency for Environment and Nature by March 1 of the current year for the previous one. Verification of GHG emissions is performed by an independent certified verifier.

CO_2 EMISSIONS ALLOWANCES ALLOCATED TO HEP SOURCES IN EU-ETS

	2017	2018	2018/2017%
Thermal power plants and thermal power plants for heat energy production / tCO_2	262,114	224,991	86
City heating boilers / tCO_2	296	54	34
Total	**262,410**	**225,045**	**86**

GHG emission allowances free of charge are allowed by the European Commission to HEP's sources for generation of heat energy, which have been transferred to central heating to so-called "carbon leakage" facilities, i.e. those facilities that could be outplaced to countries that are not EU ETS tributaries. Free emission units are provided based on the referent data report (NIMsBL) and plan for monitoring methodology, while allowed quantities can be changed depending on the production of heat energy for the previous year in line with reports operators submit to the Ministry of Environmental Protection and Energy by January 15 for the previous calendar year. As in the previous years since its joining EU-ETS in 2013, HEP Group submitted emission units in legal term in quantities matching verified CO_2 emissions on all nine accounts open at the EU Registry.

Considering the emissions from pollutants, during 2018 there were no cases of exceeding emission limits from HEP sources. All measures stipulated by the environmental permits in large combustion facilities have been implemented. During 2018, emissions of NO_X decreased by 50 %, SO_2 by 73 %, CO by 28 % and solid particles by 43 % compared to 2017. Similar as with CO_2 emissions, decrease of these emissions is the result of use

of natural gas as the primary fuel and decrease of working hours of coal fueled plants.

Emissions of NO_x in bioenergy plants in Osijek and Sisak remained on the same level as those from 2017. Plants recorded a decrease of SO_2 emission by 92% and solid particles by 83% as the result of acquiring better fuel. Decrease of CO_2 emissions by 83% was achieved by optimizing combustion system.

EMISSIONS OF POLLUTANTS INTO AIR - NO_x, SO_2, CO AND SOLID PARTICLES FROM THERMAL POWER PLANTS AND THERMAL POWER PLANTS FOR HEAT PRODUCTION

Year	NO_x t/y	SO_2 t/y	CO t/y	Solid particles t/god
2017	2,779	1,444	225	69
2018	1,391	386	162	39
2018/2017%	50	27	72	57

EMISSIONS OF POLLUTANTS INTO AIR – NO_X, SO_2, CO AND SOLID PARTICLES FROM BIOENERGY PLANTS – BE-TO OSIJEK AND BE-TO SISAK

Year	NO_X t/y	SO_2 t/y	CO t/y	Solid particles t/y
2017	26.74	3.56	29.7	56.77
2018	26.87	0.27	5.2	9.54
2018/2017%	100.48	7.58	17.51	16.80

In boilers for city heating during 2017 measuring has been conducted for NO_x and CO, as well as calculation of these emissions based on the results. Measured emission values are mostly lower than emission factors. In 2018 measuring has not been conducted, since it is scheduled for every other year. The calculation was done according to emission factors (EMEP/EEA method 2016). Emission factor used for extra-light oil for NO_x is 65 g/GJ, for CO 16.2 g/GJ. Emission factor used for gas for NO_x is 89 g/GJ, for CO 39 g/GJ.

EMISSIONS OF POLLUTANTS INTO AIR - NO_X, SO_2, CO AND SOLID PARTICLES FROM BOILERS FOR CITY HEATING

Year	NO_X t/y	SO_2 t/y	CO t/y	Solid particles t/y
2017	17	6	2.5	0.5
2018	43	5	5.2	N/A*
2018/2017 %	253	83	208	

* Below the level of emissions obligatory to report to the Environmental Pollution Register

CO_2 emissions are calculated according to emission factor and lower hearing value of the fuel (IPCC 2006 method), regardless of measuring. For gas, 34,800 kg/TJ is used, for extra light oil 74,100 kg/TJ. The same applies for SO_2 emissions, always calculated according to the balance of substances. There has been no major difference in the quantity of CO_2 and SO_2 emissions between 2017 and 2018 in boilers for city heating, but there are differences in NO_x and CO emissions.

Assets for two projects of central heating system have been secured within HEP ODS's program „Investments based on environmental management system" in 2018. Transfer to more acceptable energy sources (decrease of emissions) and energy efficient systems for central heating have been realized in Elektra Varaždin (Novi Marof location), but at the moment decrease of emissions or data on energy savings are not available.

HEP ODS reports on the consumption of halogen hydrocarbons and SF_6 to the Ministry of Environmental Protection and Energy. In 2018, SF_6 was added in plants recording lower quantities. Therefore, the quantity of leaked SF_6 from equipment in use was 46% higher than in 2017, but it pertained to additions for deficits in the system.

CONSUMPTION OF SULFUR HEXAFLUORIDE SF_6 – HEP ODS

		2017	2018
Facilities – high voltage switch gear and circuits	Quantities of switchgear (pieces)	10,997	11,689
	Filling switchgear, SF_6 (t)	29.61	31.33
	SF_6 leakage from equipment (kg)	32.44	60.50
	Handling of gas SF_6 and switchgear after the working life expiration (kg)	83.8	56.1

Imissions

Thermal power plants for heating energy in Zagreb has an automatic measuring station for air quality on Vrhovec, which conducts continuous monitoring of air quality according to the Rulebook on air quality monitoring. During 2018, report on the maintenance of this automatic measuring station has been made.

Istria County Public Health Institute which is authorized for monitoring the work of imission stations and providing annual report on air quality monitoring in TE Plomin network area has not delivered the report for 2018.

Materials

With the decrease of hours for coal-fueled thermal power plants, consumption of coal dropped by 17% compared to 2017. Consumption of liquid fuel in thermal power plants and thermal power plants for heat production also dropped, by 80% compared to 2017, while the use of liquid fuel in boilers for city heating dropped by 25%. Increased consumption of wood biomass by 55% was recorded in 2018 compared to a year before, since 2017 was the year of pilot work for both bioenergy plants.

QUANTITIES AND TYPES OF FUELS USED IN THERMAL POWER PLANTS, THERMAL POWER PLANTS FOR HEAT PRODUCTION AND BIOENERGY POWER PLANTS FOR HEAT PRODUCTION

Fuel type	2017	2018	2018/2017 (%)
ALL OPERATIONS			
Coal / x 10^3 tons	526	496	94
Wood biomass / x 10^3 tons	27	60.5	224
Liquid fuel / tons	35,475	7,260	20
Natural gas / x 10^3 MWh	7,233	5,598	77

QUANTITIES AND TYPES OF FUELS USED IN BOILERS FOR CITY HEATING

Fuel type	2017	2018	2018/2017 (%)
Liquid fuel / tons	3,155	2,375	75
Natural gas / m^3	14,371,398	14,328,647	99

HEP ODS: DECREASE IN THE CONSUMPTION OF DIESEL AND GASOLINE FUEL

Year	Fuel used (liters)	Fuel used (kWh)
2015	3,159,815	31,155,776
2016	3,139,605	30,956,505
2017	3,130,517	30,866,898
2018	2,917,797	28,769,478

Biodiversity

HEP's thermal power plants are situated within urban or industrial areas and are not within eco-network Natura 2000 area or areas protected on national level. Certain protected areas are in the vicinity of production facilities, i.e. significant landscape Savica close to TE-TO Zagreb, or TE-TO Osijek which is close to the border of Regional park Mura-Drava.

Large number of HEP's hydropower plants are situated within Natura 200 eco-network, some are completely or partially in the nationally protected areas like national parks, nature parks, regional park and areas of significant landscapes. Additionally, within Natura 2000 areas significant for birds there are around 5,000 kilometers of overhead mid voltage lines, which is around 20 percent of the total length of HEP ODS's overhead mid voltage lines.

During 2018, there have been not pollutions, constructions or expansions of the plants, impacts on expansion of invasive species, pathogens or parasites, decrease of the number of indigenous species, changes of habitats, changes in natural processes, changes in underground water salinity or level.

HEP PROIZVODNJA HPPS AND ECOLOGICAL NETWORK

HPP / HES	Areas of protection significant for wild species and habitats	Areas of protection significant for birds
PRODUCTION AREA NORTH		
HE Varaždin	HR 2001307 Drava - accumulations	HR 1000013 Drava accumulations
HE Čakovec	HR 2001307 Drava - accumulations	HR 1000013 Drava accumulations
HE Dubrava	HR 2001307 Drava - accumulations HR 5000014 Drava upper stream (from Donja Dubrava to Terezino polje)	HR 1000013 Drava accumulations HR1000014 Drava upper stream (from Donja Dubrava to Terezino polje)
PRODUCTION AREA WEST		
HES Senj / HE Senj HES Senj / HE Sklope	HR 2001012 Lika Field HR 5000022 Velebit Nature Park	HR 1000021 Lika karstic fields HR 1000022 Velebit
HES Vinodol / CHE Fužine HES Vinodol / RHE Lepenica HES Vinodol / HE Vinodol	HR 2001353 Lokve - Sunger - Fužine HR 5000019 Gorski kotar and North Lika HR 2001042 Lič Field HR2001300 Zebar	HR 1000019 Gorski kotar and North Lika

HE Rijeka	HR 2000658 Rječina	-
HE Zeleni Vir	HR2001345 Vražji prolaz and Zeleni Vir HR 5000019 Gorski kotar and North Lika	HR1000019 Gorski kotar and North Lika
HE Gojak	HR 2000592 Ogulin-Plaški area	-
HE Ozalj	HR 2000642 Kupa	-
HE Lešće	HR 2000592 Ogulin-Plaški area	-
PRODUCTION AREA SOUTH		
RHE Velebit	HR 2001267 Ričice HR 2001268 Otuča HR 2001269 Obsenica HR 5000022 Velebit Nature Park HR 2000641 Zrmanja	HR 1000021 Lika karstic fields HR 1000022 Velebit
HE Golubić	-	-
HE Miljacka	HR 2000918 Krka Nature Park wider area	HR 1000026 Krka and surrounding plateau
mHE Krčić	HR 2000917 Krčić	-
HE Jaruga	HR 2000918 Krka Nature Park wider area HR 3000171 Krka estuary	HR 1000026 Krka and surrounding plateau
HE Orlovac	HR 5000028 Dinara HR 2000936 Rude	HR 1000028 Dinara
CS Buško blato	-	-
HE Peruća	-	HR 1000029 Cetina
HE Đale	HR 2000929 Cetina River – canyon	HR 1000029 Cetina
HE Zakučac	HR 2000929 Cetina River – canyon HR 2001352 Mosor	HR 1000029 Cetina HR 1000027 Mosor, Kozjak and Trogir hinterlands
HE Kraljevac	HR 2000929 Cetina River – canyon	HR 1000029 Cetina
HE DUBROVNIK		
HE Dubrovnik	-	-
HE Zavrelje	-	-

HEP PROIZVODNJA SYSTEM AND PROTECTED AREAS

HPP / HPPS	Protected areas
HYDROPOWER PLANTS' PRODUCTION AREA NORTH	
HE Varaždin (operating since 1975)	Mura-Drava Regional Park
HE Čakovec (operating since 1982)	Mura-Drava Regional Park
HE Dubrava (operating since 1989)	Mura-Drava Regional Park
HYDROPOWER PLANTS' PRODUCTION AREA WEST	
HES Senj / HE Senj (operating since 1965)	Velebit Mountain Nature Park
HE Sklope	-
HES Vinodol / CHE Fužine	
HES Vinodol / RHE Lepenica	-
HES Vinodol / HE Vinodol	
HE Rijeka	-
HE Zeleni Vir (operating since 1921)	Vražji prolaz and Zeleni Vir significant landscapes
HE Gojak	-
HE Ozalj	-
HE Lešće	-
HYDROPOWER PLANTS' PRODUCTION AREA SOUTH	
RHE Velebit (operating since 1984)	Velebit Mountain Nature Park
HE Golubić	-
HE Miljacka (operating since 1906)	Krka upper stream significant landscape Krka National Park
HE Jaruga (operating since 1895/1904)	Krka upper stream significant landscape Krka lower stream significant landscape Krka National Park
mHE Krčić (operating since 1988)	Krka upper stream significant landscape Krčić significant landscape
HE Orlovac	-
CS Buško blato	-
HE Peruća	-
HE Đale	-
HE Zakučac (operating since 1961/1981)	Cetina River canyon significant landscape
HE Kraljevac (operating since 1912/1932)	Cetina River canyon significant landscape
HE DUBROVNIK PLANT	
HE Dubrovnik	-
HE Zavrelje	-

HEP is obligated to plan and construct energy infrastructure in these areas in a way to prevent and decrease risks for birds habituating there. Areas of ecological network have been identified as well as species in these areas. Measures include 17 bird species from the Red List of Threatened Species:

Golden eagle, *Aquila chrysaetos*
Eurasian eagle-owl, *Bubo*
White stork, *Ciconia ciconia*
Short-toed snake eagle, *Circaetus gallicus*
Western marsh harrier, *Circus aeruginosus*
Hen harrier, *Circus cyaneus*
Montagu's harrier, *Circus pygargus*
Merlin, *Falco columbarius*
Lesser kestrel, *Falco naumanni*
Peregrine falcon, *Falco peregrinus*
Red-footed falcon, *Falco vespertinus*
Common crane, *Grus*
Griffon vulture, *Gyps fulvus*
White-tailed eagle, *Haliaeetus albicilla*
Black kite, *Milvus migrans*
Osprey, *Haliaetus*
European honey buzzard, *Pernis apivorus*

Monitoring of the riskiest areas for bird electrocution was conducted in four areas most significant for birds within Natura 2000: areas of Jastrebarsko and Pisarovina (Elektra Karlovac), Neretva delta (Elektrodalmacija Split), Lonjsko polje (Elektra Sisak) and island of Cres (Elektroprimorje Rijeka). Monitoring has been conducted with expert and field support by BIOM association ornithologists and volunteers.

Field monitoring has been conducted in periods of highest bird activity (late spring and early autumn), and all cases of electrocution of protected species were reported to the authorized ministry. Additionally, research results were used to determine priorities for supply and implementation of protection measures. Research results showed that the island of Cres had the most casualties from electrocution, especially among highly protected species (griffon vulture and golden eagle). HEP invested over HRK 600,000 in isolation equipment to protect birds from electrocution on the island of Cres in 2017 and 2018. More than 90 pillar spots on risky parts of the mid-voltage overhead network have been protected. Parts of the mid-voltage line Srem-Plat-Verin, where electrocution of golden eagle was recorded, are recognized as the riskiest past for electrocution where spot isolation measures cannot be applied. HEP therefore decided to implement more demanding but permanent solution, isolated conductors, to be installed as soon as possible.

A total of 1,113 pillar locations of the mid-voltage network were examined in the monitoring, finding 127 individual birds for which can be concluded that they have been electrocuted to death, which is 0.09 birds per pillar spot. Out of this amount, 54 birds are highly protected species, while 19 are included in protection goals of Natura 2000 network.

HEP ODS participates on expert meetings and workshops to develop action plans for protected species management (griffon vulture, golden eagle and European roller) organized by the Croatian agency for Environment and Nature. The program is run within EU project directed at managing protected species. HEP has been recognized as one of the most important stakeholders here because of the electrocution and habitat issues, so several meetings, workshops and study tours have been organized to show the best practice in this area. Activities to develop these strategic documents will continue in the coming years, with expected outcome in joint management plan approved by the authorized ministry, which will obligate all stakeholders.

HEP ODS participated in the application of international project Life "Danube Free Sky" to protect birds from negative impacts from the energy infrastructure in Nature Park Kopački rit. Along with HOPS, HEP ODS is one of the partners-beneficiaries. All activities, materials and works for the realization of the project have been determined; HEP ODS will finance 27.5 percent of the funds, while the remaining amount will come from EU funds.

Protection of the white stork homes. Following the agreement with the Ministry of Environmental Protection and Energy on the protection of white stork, during 2018 HEP ODS installed new carriers for stork nests on distribution network pillars, as well as fixed and replaced deteriorated ones. Elektra Križ excels among 14 distribution areas, with 60 protection measures of white storks.

Habitat for terns. BIOM association since 2014, when an artificial island has been made in HE Varaždin accumulation for the nesting of common tern (Sterna hirundo) has been tending to this habitat. In the autumn and early spring, before the birds return from the south, the vegetation is mowed and removed from the island. Succession of the island and river banks severely degrades such habitats of crucial importance for these birds. Since September 2017, BIOM association conducts these activities within Interreg Tern project, aimed at preserving tern population in the Sava and the Drava basins, by the Ornithology Institute of the Croatian Academy of Science and Arts with partners in Croatia and Slovenia. The association set up photo traps on the island to monitor tern nesting, as well as the presence of other birds and predators like the otter. A fence has therefore been installed to prevent otters to come to the island and increase success for tern nesting. Apart from conservation activities, the association has organized a seven-day education camp „Our Drava" for high-school pupils from the Varaždin County, including their visits to HE Čakovec. The main motive of the camp were common terns, biodiversity and protection of the Drava River.

Water management

Total amount of withdrawn and emitted water in 2018 remained on similar level compared to 2017. There have been no sources significantly affected by water withdrawal, or natural habitats or species significantly affected by water emissions.

Data on quantities of withdrawn and emitted water, as well as quality testing results, are delivered in accordance to regulations to the Croatian Water Management Company twice a year. Dedicated to improving business processes, manage data and plan more efficiently, this data is also available in HEP's internal electronic base INFOZOK (Information system of environmental protection).

WITHDRAWN WATER AND WASTEWATER DISCHARGE TYPES AND QUANTITIES FROM THERMAL POWER PLANTS AND THERMAL POWER PLANTS FOR HEAT PRODUCTION IN 2018

Plant	Source	Water quantity (m^3)	Wastewater	Treatment system	Discharge	Water quantity (m^3)
TE PLOMIN	Bubić Burrow	443,840	technological waters	treatment of waste waters, neutralization and depositing device	Čepić canal - sea	131,085
			rainfall from coal depot	lamellar settler		
			oily waters	oil separation		
	Public water supply system	9,677	sanitary waters	BIO device		4,872
	Sea (cooling waters)	243,177,300	cooling waters	no treatment		192,378,183
TE RIJEKA	Public water supply system	19,847	technological waters	treatment of waste waters, neutralization and depositing device	Sea	19,623
			oily waters	oil separation		
			sanitary waters	BIO device		556
	Sea (cooling waters)	0	cooling waters	no treatment		0

TE-TO SISAK	The Sava river	36,007,635	technological waters	treatment of waste waters, neutralization and depositing device	Sava	6,932
			oily waters	oil separation		
	Public water supply system	8,610	sanitary waters	no treatment		8,610
	The Sava river (cooling waters)	35,814,400	cooling waters	no treatment		35,814,400
TE-TO ZAGREB	Wells (+ public water supply system)	1,492,490	technological waters	treatment of waste waters, neutralization and depositing device	City sewage system	674,758
			oily waters	oil separation		
			sanitary waters	no treatment		
	The Sava river (cooling waters)	84,828,000	cooling waters	no treatment	Sava River	67,862,400
					Savica Lake	16,965,600

Plant	Source	Water quantity (m^3)	Wastewater	Treatment system	Discharge	Water quantity (m^3)
EL-TO ZAGREB	Wells	891,942	technological waters	treatment of waste waters, neutralization and depositing device	City sewage system	103,210
			oily waters	oil separation		
	Public water supply system	3,412	sanitary waters	no treatment		
TE-TO OSIJEK	The Drava river	263,161	technological waters	neutralization	City sewage system	128,399
			oily waters	oil separation		
	Public water supply system	9,977	sanitary waters	no treatment		
			clean rainfall waters and rainfall waters from liquid fuel management system	oil separation	Palčić canal	12,151
KTE JERTOVEC	The Krapina river	9,624	technological waters	treatment of waste waters, neutralization and depositing device	Jertovec stream	5,159
			oily waters	oil separation		
	Public water supply system	826	sanitary waters	BIO device		
HE VINODOL	Public water supply system	669	sanitary waters	imhof precipitator	Dubračina stream	669
HE SENJ	Public water supply system	1,865	sanitary waters	BIO device	Sea	1,865

During 2018, there have been not pollutions, constructions or expansions of the plants, impacts on expansion of invasive species, pathogens or parasites, decrease of the number of indigenous species, changes of habitats, changes in natural processes, changes in underground water salinity or level.

Waste management

HEP Group produced a total of 1,455.49 tons of hazardous and 71,694.79 tons of non-hazardous waste in 2018; there has been a decrease in quantities of hazardous waste by 2,248.5 tons due to smaller amounts during revitalizations and reconstructions compared to 2017. Quantities of non-hazardous waste somewhat increased, as a consequence of operations of bioenergy plants fueled by untreated wood pellets, which commenced with work in 2017.

For all waste produced in HEP Group data is filed electronically according to types, quantities and locations of waste production in HEP's internal electronic base INFOZOK (Information system of environmental protection) since 2009. Waste produced on HEP's locations is handed over to authorized companies with waste management permits. Waste is beforehand separated and stored in temporary storage facilities built in accordance with regulation. HEP reports on the quantities and types of waste once a year via electronic Environmental Pollution Registry. There have been no significant spills caused by waste produced in 2018 in HEP Group.

Location of Plomin thermal power plants holds the only HEP's waste depot site, internal non-hazardous waste depot. It is used only for disposal of own waste made on the process of production of electricity from coal. Waste is disposed in accordance with waste management hierarchy. Pursuant to market demand, a part of the waste is submitted to companies authorized for waste reuse, and it is used as replacement for mineral raw materials. Internal waste depot recorded 10,742.12 tons of disposed non-hazardous waste in 2018. Decrease of amounts in comparison to 2017 is a result of the fact that TE Plomin 1 was not operational.

HEP also takes over 50 percent of annually produced waste from nuclear power plant Krško, and consequently has to dispose a half its waste. In 2018 Krško produced:

Low and intermediate level radioactive waste (in volume):
10.296 m^3 / 5,489,428.8 MWh (el) = 1.875 x 10^{-9} m^3/kWh (el)

Low and intermediate level radioactive waste (in net mass):
13,939.4 kg / 5,489,428.8 MWh (el) = 2.539 x 10^{-6} kg/kWh(el) or 2539 µg/kWh(el)

High level radioactive waste (spent fuel),
replacement of 56 combustible elements = 48.7 t U x 56/121 element in core = 22,538.84 kg U

High level radioactive waste:
22,538.84 kg U / 5,489,428.8 MWh (el) = 4.11 x 10^{-6} kgU/kWh(el)

Data on low and intermediate level radioactive waste for 2018 was lower than in the previous years; in 2018 only radioactive waste that was previously measured and characterized was stored, because new equipment for measuring, characterization and processing was in installation and testing phase. It is therefore impossible to give a precise information on the volume and mass of this waste for 2018. A part of it will be incinerated which will decrease volume and mass, and a part will be super compressed, decreasing volume. It is planned to characterize and process as many packets of radioactive waste as possible and in 2019, thus returning to an average of about 30 m^3 per year.

Circular economy and HEP. In 2018, HEP concluded the project conducted in partnership with the Faculty of Agronomy Zagreb, to determine the possibilities to use ash produced in two HEP's bioenergy plants in Osijek and Sisak as soil ameliorator which will decrease acidity and increase crop on agricultural areas. These two plants use untreated wood pellets as fuel in the production of electricity and heat energy. HEP's Central Chemical and Technological Laboratory analyzed ash used in tests. Results showed that ash from biomass has potential to be used on agricultural land in production, but also on similar areas like landscaping, sporting or wood ecosystems, as soil ameliorator for regulation, i.e. increase of pH reaction and soil enrichening. However, to determine precise doses of ash application we need to conduct additional research to prevent possible negative effect in terms of ash overdosing.

Other than determining possibilities to use ash in agricultural production, HEP launched research on the use of ash in construction industry to decrease the levels of deposited waste, exploitation of minerals and prices of products. In cooperation with the Faculty of Civil Engineering in Zagreb, HEP initiated this project to determine in what are the materials that can benefit from biomass ash from Osijek and Sisak in the production. The project with test physical and chemical characteristics of ash and see whether it can be used to produce construction materials and products, analyze construction materials and products for produced purposes and examine market potential in Croatia, EU members and other countries that can use ash in production of materials and products in construction industry.

6

OPEN ORGANIZATION: THE VALUE OF KNOWLEDGE

Aware of the responsibility we have for our employees, we at HEP understand the responsibility stemming from the size of our organization and the obligation to set and upgrade labor standards on the entire market. To be a responsible, sustainable and quality employer, because we are a significant employer, is vitally important to us. Therefore, we strive to continuously raise the quality of workplace and invest in professional growth, safety and satisfaction.

Investing in employees is connected with the investment in innovation. Only those who have opportunities to educate and advance, exchange experiences and work on versatile projects will be able to drive innovation and development in the organization. We recognize opportunities for innovation development in cherishing diversity and supporting the culture in which all ideas are welcome. All that rests on digital foundations which enable fast and simple knowledge acquiring as well as the adaptation of content and dynamics of education and development to individual employees.

Knowledge management and maintenance of acquired knowledge in the organization is also one of the important elements for ensuring continuous and sustainable development. All mentioned would be irrelevant if it were not accompanied by constant open and transparent communication with this important stakeholder group, to ensure workplace satisfaction and the utilization of individual potentials of all HEP employees.

CONTRIBUTION TO SDGs

SDG 8 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

MATERIAL TOPICS IN THIS AREA

Be responsible, sustainable and quality employer (significant employer)

Invest in innovation and utilize advantages of digital transition

Maintain stakeholder dialogue, provide transparent communication and public education on relevant topics

STRATEGY 2030 OBJECTIVES

Realize efficiency by optimization and development of business processes

Encourage continuous development of competencies and innovation of employees and efficient knowledge management

Stakeholder communication aimed at the realization of group business objectives

GOALS IN THIS AREA

Optimal defining of employment needs

Life-long learning and development of specialist knowledge and skills

Increase of employee satisfaction

Planning and development of HEP Group human resources is based on the long-term Strategy of HR Development for 2017 – 2012. It defines strategic goals, priorities and incentives for development of human resources and employment in HEP Group. The Strategy encompasses processes of human resources management by optimal definition of needs for new employees, dynamized selection process with the purpose of selecting the best candidates and the necessity of life-long education to develop specialist knowledge and skills. The Strategy contains goals: increase of employee satisfaction, development and implementation of employee efficiency system, increase of motivation by introducing award by merit system.

The evaluation of corporate climate has been conducted since 2006, upon the request of authorized persons in the leading company and subsidiaries. In HEP d.d. the evaluation is obligatory on annual or bi-annual basis, because of Mamforce standard introduction. The survey on organization climate is a measure conducted to collect feedback of employees on their perception of workplace and to assess their satisfaction with relevant aspects. The results are presented to the management and employees and recommendations provided for improvements of aspects which received lower evaluation.

Working conditions and collective agreement

The valid Collective Agreement in this reporting period is in force from January 1, 2018 until December 31, 2019. Collective Agreement encompasses all employees of companies within HEP Group. Collective Agreement was signed by two representative unions (Croatian Electro-economic Union – HES and Independent Union of HEP Workers – NSRHEP) and the Employer Association of HEP Group – comprised of representatives of all HEP subsidiaries.

All employees, regardless of labor status (permanent or temporary) realize the same rights from the Collective Agreement. In addition, persons employed part-time have the following rights secured by the Collective Agreement: full amount for travel expenses; loyalty bonus; aid in extraordinary circumstances; full amount of holiday bonus; full amount of Christmas and Easter bonus; full amount of seniority bonus; and full amount of lunch bonus.

Besides the stipulated legal deadlines in which the unions should be timely informed on significant changes in business operations, Collective Agreement stipulates that the company should timely, at least once bi-monthly inform unions on the restructuring plans and privatization of the company and their impact on economic and social conditions of employees.

The decisions on redundancy incentives passed in 2016 were in force also in 2018. Employees who reached the age of 63.5 were enabled to use retirement incentives and to initiate labor contract termination. Employees who fulfill conditions may request the labor contract termination.

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Diversity and equal opportunities

With an aim of systematic diversity management, all employment positions in HEP Group are available according to equal opportunities to qualified men and women, regardless of their marital or family status, pregnancy or maternity, sexual orientation, or any other discriminatory basis. The published vacancy advertisements clearly state that the persons of all genders can apply to the position. Additionally, the advertised positions are titled in both genders. Documentation on the selection of candidates or employee advancements, including internal and external advertisements, accentuate that HEP Group seeks persons of both genders and offers them equal opportunities in all positions.

Anti-discrimination approach is regulated by the Regulation on the Process and Measures for Employee Dignity Protection in all HEP Group companies and by the Ethical Code. As the signatory of Diversity Charter Croatia, HEP obliged to develop organizational culture which promotes and appreciates individual diversities and contributions, supports collaboration, unity and development of relations based on mutual respect, promote values of diversity and non-discrimination, among managers, employees, and other stakeholders, ensure workplace which enables individual innovative thinking and creative development, enable equal opportunities of professional and personal development for all employees, create working atmosphere of zero tolerance towards violent behavior, harassment, victimization and discrimination as well as empower employees to use the existing mechanisms of discrimination prevention. There were no cases of discrimination in the workplace in the reporting period.

AVERAGE AND MINIMUM ENTRY SALARY IN 2018 ACCORDING TO GENDER, COMPARED TO 2017

Gender	Average minimum salary	Average entry salary	Ratio
M ♂	5,438.26	3,564.25	128%
F ♀	5,944.66	4,827.72	111%

Comparison 2018/2017	Average minimum salary	Average entry salary
M ♂	-22%	-32%
F ♀	-10%	-4%

Average minimum and entry salaries in 2018 decreased compared to the previous year, because there was no new employment in some companies with lower number of employees, which generally have higher salaries and employ skilled and specialized workers more frequently.

Education and professional development

HEP Group invested a total of HRK 12,635,225 in employee education, out of which HRK 6,906,774 was allocated to professional development and HRK 5,017,673 in trainings. The average education investment per worker amounted to HRK 1,278, while 19.73 percent of workers was included in education programs. This is enabled by continuous and targeted education, professional training, post-graduate studies, additional qualifications acquisition or education upgrades, which enables our employees to develop and acquire know-how and skills.

We endorse life-long learning based on market requirements. However, HEP Group does not have formal programs for knowledge and skills acquisition supporting continuous employability and successful completion of employment. These are ensured by financed professional trainings and post graduate studies, qualifications change and professional upgrades, which enable our employees to apply their existing skills and knowledge and acquire new ones.

We have continued professional development programs – education lasting from several days up to one year and in-house foreign language courses. Our employees also participate at various conferences, consultations, symposia, seminars, expert workshops, as well as events organized by CIRED, MIPRO, CIGRE, Air protection, Energy and process facilities, certified programs for energy exchange trading and other certified programs. Additionally, they are provided professional trainings compliant to legal provisions and workplace requirements, expert exams, safety at work and fire-fighting exams, and other programs. According to workplace requirements and individual development needs, 37 workers have undergone additional education.

Average training hours	2017	2018	
Men	35.9	83.17	Gender
Women	48.5	72.52	
Employees	35.5	78.04	Labor category
Management	304.9	329.40	

Employees showed interests in attending train the trainers and knowledge management educations, diversity education, personal data protection related to the Decree on Data Protection and mentoring education. We continuously enable professional trainings in the areas of public procurement, finance, controlling, accounting, corporate law, audit, environmental protection, energy, ICT, project management, marketing, public relations and various expert and specialist education programs organized by HEP Education Center in Velika, which was certified by the Ministry of Science and Education. Employees attended education in negotiations, B2B sales, communication skills, business etiquette, emotional intelligence at work, motivation, NLP and office management.

Human Resources Department organized the education in business communication for 95 employees in 2018, workers' dignity protection for 71 workers, efficient customer communication for 20 employees of HEP Elektra Customer Service. Education was also organized in defining corporate objectives and KPI's for seven HEP Trgovina managers and HEP ESCO, within the introduction of efficiency evaluation system in these companies.

Within the program of the implementation of energy management system and introduction of ESCO Monitor in HEP buildings, HEP ESCO organized education Green business for employees of HEP d.d.

A special application Education Register is used to monitor all education and training programs financed by HEP, which is planned to be upgraded in 2019.

In compliance with the long-term human resources strategy of HEP for 2017 to 2030, we initiated the establishment of mentoring system for interns. Initial analysis was conducted defining key processes during the internship management, process was developed, present best-case practice was defined, along with the areas necessary to be revised and improved. Preparations were initiated for design and the development of new system for HEP Group.

It is planned to continue financing post-graduate studies for employees, targeted professional trainings and development program, by which employees will acquire additional knowledge and skills to ensure competitiveness in all segments of HEP Group, by organizing internal education, compliant to the requirements of HEP Group units, providing scholarships for regular university and high-school students, and by cooperating with scientific and education community as well as CSR

HEP Academy. HEP Academy is a project by Human Resources Sector of HEP d.d., an internal education center aimed at active management of our employees' ideas, information and knowledge and identification, selection and transfer of crucial knowledge internal and external to the organization. In addition to internal education provided by classical methods, HEP Academy is based on organizing education by e-learning system Moodle, adapted to the needs of HEP Group, in cooperation with all sectors. The selection of education content included in HEP Academy is based on quality and quantity research and analysis of market and trends.

Case study competition. HEP recognized the value of engaging young highly specialized experts in Case Study, organized by IEDC Bled School of Management and IEDC Alumni Club Croatia in April 2018. In this competition young talents realize their creative potential, develop problem solving skills, presentation and team work skills. HEP five-member team participated in solving a business case related to challenges of launching Amazon company to physical market.

activities aimed to communicate HEP as a responsible and desired employer.

In planning future employment, besides organizing internships, we have participated in several university events: Career Day at the Faculty of Mechanical and Electrical Engineering in Split (participation in Career Speed Dating), Career Fair at the Technical Faculty in Rijeka and Career Speed Dating at the Faculty of Electrical Engineering in Zagreb, which was a simulation of job interviews in speed dating form. Since 2016, we have cooperated with the Open Media Group on the project „Informal Employment Bureau: practical learning! ", where we implement career speed dating for young people without adequate parental care.

Productivity evaluation

In 2018, the second formal evaluation period was conducted in HEP-Opskrba. Out of 85 employees, 70 filled the formal conditions for participation in the working productivity management system (82.35 percent of HEP Opskrba employees). The evaluation period comprised all planned activities: annual individual meetings with employees, obligatory and additional consulting and development conversations, supported by HR Department. Employees participated in internal education and meetings on the evaluation system and attended external education on realization of personal objectives and the strategic objectives of the company. Following the evaluation period, it was established that 60 employees met the criteria for variable salary payment, while the most successful ones in particular areas received acknowledgement for their achievements. The system is fully operational in the electronic format and during the year the application functions were upgraded.

Productivity evaluation is introduced in other HEP Group companies. In 2018, preparations were completed to implement the system of productivity management and bonuses in HEP Trgovina. Employees' objectives were defined, the application Work Productivity was adapted to include additional HEP Group companies into the system and respective Regulation on Productivity Management and Employee Bonuses for HEP Trgovina was developed. The first evaluation period for that company will be implemented in 2019.

Guide through written business communication. HR Sector developed a Guide through written business communication, aimed at upgrading the level of communication culture in HEP and in communication with our stakeholders, supporting correct langugage use, language culture development and the correct written business communication with colleagues and business partners. The Guide encompasses a narrow part of the contemporary Croatian language norm and responds to questions and uncertainties on the grammatical use of language in business communicaiton. The Guide is published on infohep intranet and is intended for internal use.

Health and safety at work

Health and safety at work has been systematically managed in HEP Group by the application of international standards. In the reporting period, the norm OHSAS 18001:2007 was replaced by ISO 45001:2018, with the intention to upgrade management of this area.

Collective Agreement comprises issues of health and safety at work in the part which regulates rights to health insurance, safe working conditions and regulates obligations of employees related to safe conduct of activities. The entire workforce is represented through the Safety at Work Committee, with the selection of safety at work commissioners in all organizational units where the working condition require.

Workers with the high frequency or risk from occupational diseases as well as other workers which are exposed to high risks in their daily work, are comprised by Collective Agreement. Internal regulations of subsidiary companies contain lists and descriptions of such workplaces and those are recognized as hazards, harm or exceptional effort at work. Such positions are covered by the highest level of health and safety.

INJURIES AT WORK, BY COMPANIES IN 2018

Company	2017	2018
HEP d.d.	1	1
HEP Proizvodnja	10	7
HEP ODS	96	109
HEP Toplinarstvo	4	4
HEP Plin	0	4
HEP Opskrba	0	0
HEP Upravljanje imovinom	0	0
HEP Elektra	1	2
Total	112	127

During 2018, HEP Group registered a total of 127 injuries at work, 18 women and 109 men. There were 25 heavy and 102 light injuries. In the reporting period there were 5,066 working days, i.e. 40,524 working hours lost due to injuries.

HEP employees in numbers

TOTAL NUMBER OF EMPLOYEES

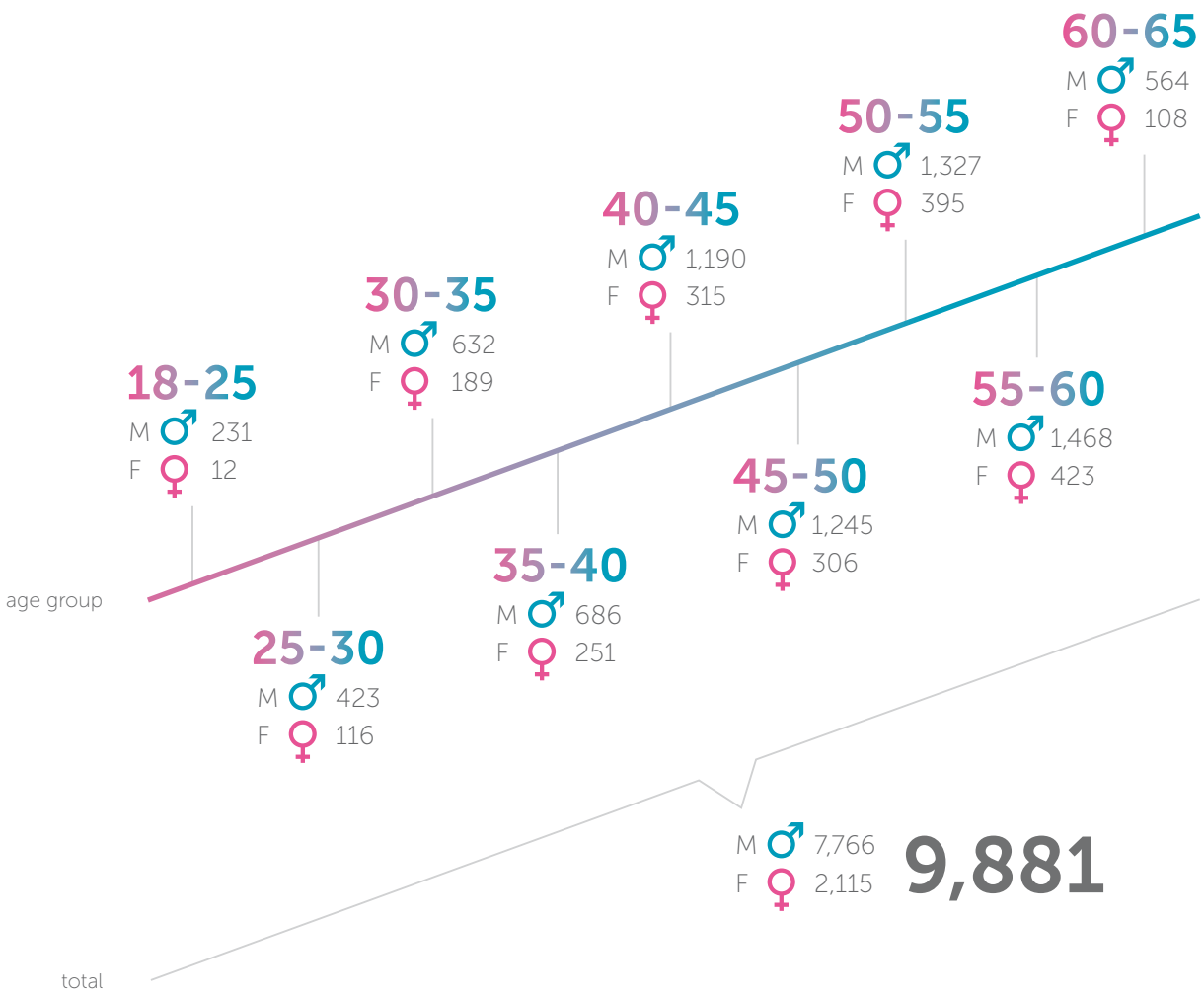
Year		12/31/2017	% of the total workforce	12/31/2018	% of the total workforce
Age group	<30	683	6.33	782	7.91
	30 - 50	4,917	45.6	4,814	48.72
	50>	5,182	48.06	4,285	43.37
Total		**10,782**	**100**	**9,881**	**100**
Gender	Male	8,419	78.08	7,766	78.6
	Female	2,363	21.92	2,115	21.4
Total		**10,782**	**100**	**9,881**	**100**

MANAGEMENT

Year		12/31/2017	% management	12/31/2018	% management
Age group	<30	1	0.87	1	0.86
	30 - 50	67	58.26	65	56.03
	50>	47	40.87	50	43.1
Total		**115**	**100**	**116**	**100**

Year		12/31/2017	% management	12/31/2018	% management
Gender	Male	90	78.26	93	80.17
	Female	25	21.74	23	19.83
Total		**115**	**100**	**116**	**100**

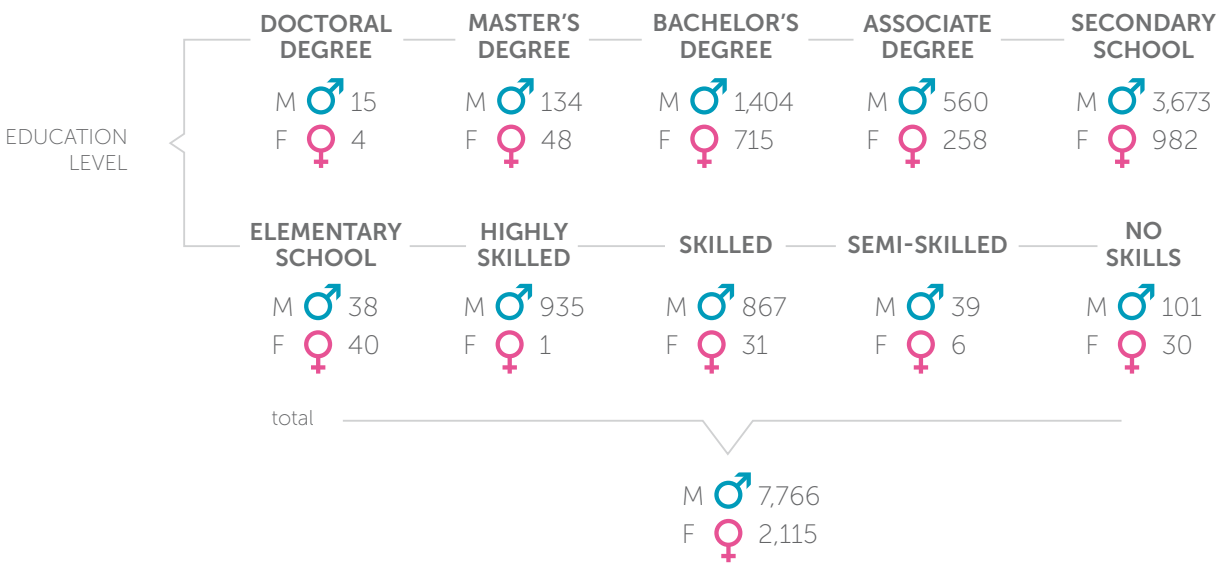
AGE AND GENDER STRUCTURE



TYPE OF CONTRACT

Gender	Type of contract	Number of employees
Female	Temporary	57
Male	Temporary	193
Female	Permanent	2,058
Male	Permanent	7,573
Total		**9,881**

EDUCATION STRUCTURE



PERSONS WITH DISABILITY

Age group	M	F	
25-30	0	1	
30-35	10	1	
35-40	7	2	
40-45	34	8	
45-50	60	9	
50-55	110	23	
55-60	153	27	
60-65	46	7	
Total	**420**	**78**	**498**

NEW EMPLOYMENT AND EMPLOYEE TURNOVER

Age group	Employed 2017	Employed 2018	Age group	Left 2017	Left 2018
Male			**Male**		
< 18	2	2	< 18	0	0
18-25	96	112	18-25	2	0
25-30	134	89	25-30	5	5
30-35	85	51	30-35	8	4
35-40	45	28	35-40	12	10
40-45	22	19	40-45	17	10
45-50	15	14	45-50	12	11
50-55	6	5	50-55	16	14
55-60	1	5	55-60	82	84
60-65	0	2	60-65	502	397
65-70	0	0	65-70	65	66
Total	**406**	**327**	**Total**	**721**	**601**
Female			**Female**		
18-25	13	6	18-25	1	0
25-30	33	35	25-30	3	3
30-35	36	18	30-35	1	0
35-40	17	16	35-40	2	5
40-45	12	10	40-45	2	5
45-50	6	3	45-50	5	5
50-55	0	4	50-55	8	5
55-60	0	0	55-60	77	74
60-65	0	0	60-65	88	125
65-70	0	0	65-70	6	9
Total	**117**	**92**	**Total**	**193**	**231**

SALARIES AND BONUSES

Average gross salaries in 2018 (HRK)

	Annual amount			Monthly amount		
Education level	Female	Male	M/F Ratio	Female	Male	M/F Ratio
doctoral degree	298,320.90	250,882.59	84%	24,860.08	20,906.88	84%
master's degree	231,151.27	242,247.68	105%	19,262.60	20,187.30	105%
bachelor's degree	171,867.38	180,921.70	105%	14,322.28	15,076.80	105%
associate degree	133,003.96	144,624.45	109%	11,083.66	12,052.03	109%
secondary school	110,855.72	117,616.11	106%	9,327.97	9,801.34	105%
elementary school	88,663.82	89,305.58	101%	7,388.65	7,442.13	101%
highly skilled	120,929,20	132,294.74	109%	10,077.43	11,024.56	109%
skilled	99,746.23	108,744.19	109%	8,312.18	9,062.01	109%
semi-skilled	70,465.34	93,668.16	133%	5,872.11	7,805.68	133%
no skills	77,733.07	89,421.26	115%	6,477.75	7,451.77	115%

RETIREMENT PLAN FOR THE NEXT FIVE YEARS

Year	Number
2019	20
2020	69
2021	106
2022	195
2023	251
TOTAL	**641**

PARENTAL LEAVE

♂	Men	13
♀	Women	94
	Total	**107**

7

SOCIETY:
HEP IN THE COMMUNITY

HEP Group has always strived to be a reliable partner to the communities in which we operate. We systematically recognize specific needs of the society and through various programs support quality humanitarian, cultural, education, environmental, health, scientific and sports projects.

Following one of the major principles in stakeholder relations – respect for material and non-material diversity of local communities, creating friendly environment – HEP develops its projects taking into consideration needs and opinions of its stakeholders.

Donation allocation process is conducted compliant to the publicly available Instruction on Criteria and Process of Financing and Contracting Donations, Sponsorships and Auspices. Annual overview of donated and sponsored projects as well as media auspices is published on the corporate web site, according to the name of the receiver and the amount of allocated financing.

Through stakeholder consultation and engagement processes in various projects, HEP collects valuable feedback which is incorporated in planning processes. In community investment projects, the company realizes continuous dialogue with communities, associations, clubs and institutions, which is useful in detailed planning and direction of future investments.

We strive to systematically recognize specific needs of the society and through various programs support quality humanitarian, cultural, education, environmental, health, scientific and sports projects.

CONTRIBUTION TO SDGs

SDG 9 Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

SDG 11 Make cities and human settlements inclusive, safe, resilient and sustainable

MATERIAL TOPICS IN THIS AREA

Maintain stakeholder dialogue, provide transparent communication and public education on relevant topics

Invest in innovation and utilize advantages of digital transition

STRATEGY 2030 OBJECTIVES

Stakeholder communication aimed at the realization of group business objectives

GOALS IN THIS AREA

Increase the level of information and understanding of HEP development projects in the communities and the society

Be a reliable, responsible and open corporate citizen

Community investments

HEP donated HRK 12.3 million to various projects and programs of associations, civil society organizations and local communities in 2018.

The largest amount is allocated through the regular annual donations tender "Light on the joint way". Even 262 projects were selected dealing with youth, art and heritage, environment, science and society as well as humanitarian associations in 2018.

The largest individual donation, like in the previous years, was allocated to the humanitarian demining projects, in cooperation with the Croatian Mine Action Center. In 2018, the donation was dedicated to demining the mine-infested areas in Novo Selište in Sisak – Moslavina County, amounting to HRK two million. In total, over the past 18 years HEP invested over HRK 77 million in mine clearing projects.

Several significant donations were granted to health, education and cultural institutions as well as local communities for co-financing communal, cultural and sports or recreational projects. HEP also donated to annual programs of associations of HEP workers, war veterans' association and the pensioners' association.

This is just a part of HEP's contribution to the preservation of Croatian culture and heritage. We support numerous art and cultural projects, artists, promote Croatian culture abroad and support activities aimed at preservation and promotion of national and local culture.

Debt write-offs. In September 2018, based on the Law on Debt Write-off to Physical Persons, HEP Group companies decided to grant debt write-offs to physical persons up to the maximum amount of HRK 5,000, for principal and cost, increased by interests. Write-offs were implemented by HEP Elektra, HEP ODS, HEP Opskrba, HEP Toplinarstvo and HEP Plin, based on debtors' claims.

Proud light of the Croatian culture. Besides our natural wealth, Croatian cultural heritage is our most valuable national asset. With an aim of preserving, supporting and revitalizing cultural scene in Croatia, HEP supports artistic and cultural projects as well as heritage and tradition projects. Our support is contained in the campaign „Proud light of the Croatian culture" which attracted the attention of the Croatian public in late 2018. The campaign promotes opera, ballet and the Croatian National Theater orchestra, alka society from Sinj, Lado national ensamble, Dalmatian a capella singers Elektrodalmacija and other heritage wealths and events such as lace of Lepoglava, a capella festival in Omiš, Hvar theater, Vinkovci autumn event and Dubrovnik summer festival.

Special support to education

Computers for elementary schools. The project of donating computers to elementary schools in Croatia „For our little geniuses" was continued in 2018. Out of the total of 100 computers for 31 schools in the last donation cycle, 50 computers were donated in 2018. Computers are granted to schools which have outdated IT equipment or do not have it at all. In order to receive a donation, schools are invited to record a short video presenting the school and the reason why they need new computers. By this action, HEP encourages creativity and digital literacy from the early age.

Internships. Many high school and university students are enabled to perform their internship practice in various HEP sectors and companies. During 2018, internship program encompassed 342 secondary school students from industrial, craft, professional, technical, nautical, electrical, mechanic, economic and administration schools and 73 students from technical colleges and universities majoring in mechanical engineering, electrical engineering, chemical engineering and technology, geotechnology, computing, ICT, and social such as legal or economic sciences.

We participate in the Summer Internship Program by the Faculty of Electrical Engineering and industrial internship by the Faculty of Mechanical Engineering and Shipbuilding (Atlantis system), enabling students opportunities to earn valuable experience at work and experience business environment. HEP provides internship in HEP Group units in Osijek for the students of Faculty of Electrical Engineering, Computing and Information Technologies, while the applications are collected through the IT system Stup. We also provide internship for the students of Effectus College.

Imam žicu! Award is Croatia's longest-running socially responsible project tying economy and educational system. HEP awarded financial rewards for the 24th time to the best elementary and secondary school pupils in mathematics, physics and electrotechnics. In 2018, 38 pupils were awarded. Since the beginning of the project, over 750 awards were granted. The schools with the largest number of awards in 2018 are: XV Grammar School from Zagreb (five awarded pupils), Technical School from Karlovac (three awards), Frane Petrić Grammar School from Zadar (two awards), Elementary School Bogumil Toni from Samobor (two awards) and VI Elementary School from Varaždin (two awards).

Scholarships. HEP grants scholarships to university and high school students. In the past 12 years we granted more than 140 scholarships, mostly from technical sciences. In 2018, we conducted a tender for scholarships for regular students in the year 2018/2019, based on which we granted 14 scholarships in technical sciences for future employment in HEP organizational units, field units and generation facilities of HEP Group. In 2018, we initiated granting scholarships to secondary school students, and we conducted a scholarship tender for academic year 2018/2019, based on which we realized seven scholarships for HEP ODS.

HEP allocates regular financial support for children of deceased employees and in cooperation with Rotary Club Zagreb Kaptol for parentless children.

Think green – act green

100 green trees in HE Vinodol. On the occasion of Planet Earth Day and within the project ZelEn, HEP Opskrba conducts the action „100 green trees." For the fifth year in a row, together with the buyers of ZelEn product, HEP Opskrba landscaped the environment of another hydropower plant, HE Vinodol. In the first four years, the „100 green trees" initiative helped planting trees and landscaping surroundings in hydropower plants Ozalj, Kraljevac, Čakovec i Zakučac, aimed at raising awareness about responsible relation to nature in which we conduct business and live. By this action, HEP-Opskrba wants to contribute to the UN program "Billion green deeds", international movement to protect the planet and secure sustainable future, initiated in 2010.

ZelEN for energy efficiency. Revenue realized by the sales of ZelEn, green energy generated from renewable energy sources, are collected in the fund used for the realization of RES, energy efficiency and systematic energy management projects in public sector institutions caring for socially sensitive population. IN 2018, HEP Opskrba and HEP d.d. published a public tender for the allocation of funds collected by the sales of ZelEn. Public tender attracted 11 application, whereas the Committee for ZelEn considered seven of them, which fulfilled basic criteria. Projects of improvement of energy efficiency in kindergarten Seahorse (DV Radost) from Slatina, kindergarten in Osijek and the Center for Social Care in Požega were granted means from ZelEn fund in 2018.

zelEn
ZELENA ENERGIJA

Velebitska degenija, 20th jubilee. HEP Opskrba and the Environmental journalists' Assembly of the Croatian Association of Journalists awarded the annual award Velebitska degenija for the best work in the field of environmental protection in print, internet, radio and TV journalism, as well as news photography. The laureates of the 20th jubilee award were: Vedrana Simičević, Goran Latković, Mladen Iličković, Snježana Babić and Mladen Stubljar.

Stakeholder engagement and communication on development projects

HES Kosinj/HE Senj 2. Having conducted the public discussion for the first part of the project of HES Kosinj in 2017, the Ministry of Environmental Protection and Energy issued in May 2018, the Decision on the acceptability of HES Kosinj for the environment and ecological network. Simultaneously, a process of Environmental Impact Assessment was conducted for the second part of the project, HE Senj 2. Public consultation was held from April 5 to May 21, 2018, with public presentations in Otočac and Senj. The Decision on the acceptability of HE Senj 2 for environment and ecological network was issued in December 2018.

Small hydropower plants. During 2018, a public consultation was conducted on the environmental impact assessment of the small hydropower plant Otočac, of 1.8 MW capacity. The Decision on the acceptability of the project for the environment was submitted in December 2018. Also, the environmental impact assessment procedure was conducted for the small hydropower plant Vinodol Dolac of 4.3 MW capacity. The relevant ministry assessed that the environmental impact assessment study is not necessary, and the positive opinion was issued in August 2018.

TE Plomin 1. HEP Proizvodnja submitted a request for the adaptation of the Decision on the Environmental Permit for the existing facility Plomin 1 to the Ministry of Environmental Protection and Energy on February 9, 2018. The request listed the reasons for the adaptation of the Decision on the integrated conditions of environmental assessment of the existing facility Plomin 1 – revitalization of TE Plomin 1, harmonization with the positive environmental protection regulations after December 31, 2017., prolongation of the life cycle of components for 15 to 20 years and the modernization of the generation facility. In the procedure, the Ministry requested expert studies and the public consultation was held during April and May 2018.

HE Lešće. In mid-November 2018, a working meeting was held with the representatives of Karlovac County and the Croatian Water Management Company with the topic of prevention of impacts of HE Lešće on the downstream flow of the river Dobra. The occurrence of water wave results in temporary floods in the surrounding locations of the river downstream. In cooperation with the Croatian Water Management Company, HEP Proizvodnja continuously invests efforts in the protection from negative impacts of waters. The cooperation was established to jointly analyze the impacts of HE Lešće on the downstream of the river Dobra and consider permanent solutions for impact minimization, respecting the role of HE Lešće in the electric energy system of Croatia and integrated water management.

FEES PAID TO LOCAL COMMUNITIES FOR POWER PLANT SPATIAL USE IN 2018

	Fee amount for 2018 in HRK	City / municipality	Share in fee (%)
HEP Proizvodnja d.o.o.	**83,813,879.60**		
HYDROPOWER PLANT SECTOR	**55,154,354.04**		
Production area HPP NORTH	**10,178,989.94**		
HE Varaždin TOTAL	**3,848,755.99**		
HE Varaždin	3,809,220.21		
mHE Varaždin	39,535.78		
		Varaždin	14%
		Sračinec	22%
		Petrijanec	39%
		Cestica	25%
HE Čakovec TOTAL	**3,174,590.28**		
HE Čakovec	3,155,447.68		
mHE Čakovec	19,142.60		
		Orehovica	5%
		Čakovec	25%
		Nedelišće	8%
		Varaždin	8%
		Trnovec Bartolovečki	46%
		Sveti Đurđ	4%
		Martijanec	4%

HE Dubrava TOTAL	**3,155,643.67**		
HE Dubrava	3,135,195.05		
mHE Dubrava	20,448.62		
		Prelog	43%
		Sveta Marija	12%
		D. Vidovec	2%
		D. Dubrava	3%
		Sveti Đurđ	24%
		Mali Bukovec	2%
		Veliki Bukovec	14%
Production area HPP WEST	**12,755,159.77**		
HE Rijeka	**712,103.43**		
		Rijeka	64%
		Jelenje	36%
HE Vinodol	**1,101,349.32**		
		Vinodolska općina	22%
		Lokve	35%
		Fužine	40%
		Kraljevica	3%
HE Gorski kotar	**82,339.05**	Skrad	100%
HE Senj	**7,848,366.23**		
		Senj	18%

		Otočac	29%
		Perušić	29%
		Gospić	24%
HE Sklope	**677,820.84**		
		Perušić	20%
		Gospić	80%
HE Gojak	**1,520,583.75**	Ogulin	100%
HE Ozalj	**163,924.99**	Ozalj	100%
HE Lešće TOTAL	**648,672.16**		
HE Lešće	576,671.80		
ABM Lešće	72,000.36		
		Ogulin	32%
		Generalski Stol	23%
		Bosiljevo	45%
Production area HPP SOUTH	**26,126,110.64**		
RHE Velebit	**3,584,403.14**		
		Obrovac	39%
		Gračac	8%
		Lovinac	41%
		Jasenice	12%
HE Đale	**1,208,625.99**		
		Trilj	26%
		Vrlika	29%
		Hrvace	20%
		Otok	25%

HE Kraljevac TOTAL	**502,276.63**		
HE Kraljevac	273,470.49		
HE Kraljevac ABM	228,806.14		
		Omiš	10%
		Zadvarje	90%
HE Orlovac	**3,315,040.43**		
		Otok	67%
		Trilj	33%
HE Zakučac i mHE Prančevići	**14,959,055.76**		
HE Zakučac	14,912,065.65		
mHE Prančevići	46,990.11		
		Vrlika	22%
		Hrvace	14%
		Otok	19%
		Omiš	21%
		Trilj	24%
HE Peruća	**1,263,521.15**		
		Vrlika	60%
		Hrvace	40%
HE Miljacka	**838,520.06**		
		Promina	50%
		Ervenik	22%
		Kistanje	28%
HE Jaruga	**250,439.79**		
		Skradin	38%
		Drniš	50%
		Šibenik	12%

HE Krčić i Golubić	**204,227.69**		
HE Golubić	193,949.52	Knin	100%
HE Krčić	10,278.17	Knin	100%
Facility HE Dubrovnik	**6,094,093.69**		
HE Dubrovnik	6,052,953.89		
		Konavle	35%
		Župa Dubrovačka	65%
HE Zavrelje	41,139.80	Župa Dubrovačka	100%
THERMAL POWER PLANT SECTOR	**28,659,525.56**		
TE-TO Sisak	**5,159,262.81**	Sisak	100%
KTE Jertovec	**8,146.84**	Konjšćina	100%
TE-TO Zagreb TOTAL	**8,024,201.42**		
TE-TO Zagreb	4,610,010.00	Grad Zagreb	100%
TE-TO Zagreb block L	3,414,191.42	Grad Zagreb	100%
TE-TO Osijek	**460,212.01**	Osijek	100%
EL-TO Zagreb	**1,272,519.06**	Grad Zagreb	100%
TE Plomin II	**13,735,183.42**		
		Kršan	64%
		Labin	18%
		Raša	6%
		Pićan	6%
		Sveta Nedelja	6%

HEP d.d.	**149,272.46**		
BE-TO Sisak	54,045.44	Sisak	100%
BE-TO Osijek	95,227.02	Osijek	100%

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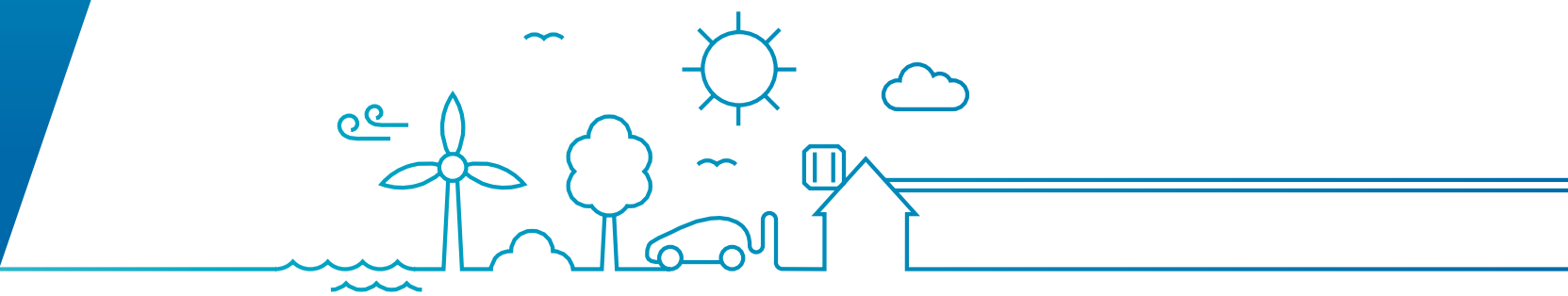
REPORT PROFILE AND INDICATORS



The fifth Sustainability Report of HEP Group is aligned with strategies, activities and objectives in 2018. The report contains data for HEP Group, without data for the independent transmission operator – HOPS, unless in the parts where consolidated financial figures are published. The report is composed compliant to the Core Option of the Global Initiative Reporting Standard and includes data pursuant to the Electric Utilities Sector Supplement in order to ensure higher transparency.

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