2019

HEP

Annual and Sustainability Report
HEP Group

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1

INTRODUCTION

by the President
of the Management
Board

President of the Management Board
Frane Barbarić

Introduction by the President of the Management Board

The business year 2019 in HEP Group was marked by the start of a significant investment cycle in renewable energy sources and a continuation of good business results. The Group generated profit of HRK 1.4 billion and increased its electricity share on the Croatian market to 91%. Our generation facilities produced 12.3 TWh of electricity.

In late November 2019, Standard & Poor's upgraded the stand-alone credit profile of Hrvatska elektroprivreda from bb to bb+ and affirmed the company's baseline rating (BB+) stating that HEP had improved its hydrology and fuel price volatility exposure management. Moody's affirmed HEP's long-term credit rating (Ba2) in 2019 and boosted the outlook from stable to positive.

In order to achieve efficient financial position management in view of the characteristics of HEP's existing generation capacities, it is important to open a new development direction aimed at building a diverse and flexible production portfolio which can respond to demands set by the energy-climate policy of both Croatia and EU. In late 2019, the European Commission adopted the Green Deal for making Europe the first climate neutral continent until 2050. With this in mind, HEP Group as one of the biggest energy companies in South East Europe sees its opportunity for strengthening its energy sector position based on a green, sustainable, advanced and climate neutral economy. In its development strategy for the period until 2030, HEP Group has already opted for a sustainable development scenario complementary to the European Green Deal.

As part of our renewable scenario, our first acquisition carried out in 2019 was a purchase of an operating solar plant. Solar plant Kaštelir in Istria is the first large non-integrated solar power plant in our system. We also commenced the erection of HEP's first windfarm, VE Korlat (58 MW), which is the first new wind power plant in Croatia to produce electricity without a contract with HROTE (Croatian Energy Market Operator) on guaranteed takeoff at an incentivized price. The solar power plant on the island of Vis was also undergoing construction in 2019, and the erection of Cres and Vrlika solar power plants was prepared. Development of several other solar power plant projects was launched or continued, some in cooperation with local self-government units.

Projects of large conventional power plants were also developed in 2019. At the end of the year, main works on the construction of the high-efficiency combined-cycle unit in EL-TO Zagreb CCPP (150 MWe, 114 MWt) commenced. Also, a development project of upgrading the existing Senj hydropower system by increasing its capacity by more than 400 MW also continued by preparing project documentation and obtaining permits. Such many generation-related projects were made possible by a very clear stance of the Croatian Government towards Croatia's transition to the low-carbon energy, and the creation of conditions for investments in renewable energy sector and energy in general.

In addition to business activities aimed at increasing capacities and production from low carbon energy sources, the implementation of measures and the preparation of energy efficiency increase projects was intensified under the renewable scenario. In late 2019, the EU Grant Agreement was signed for the project of replacing the connection hot-water pipeline in Osijek, while the European Commission approved the grant of EUR 57 million for the Zagreb hot-water network revitalization project. Business activities within Croatia's transition to the low-carbon economy include an accelerated continuation of the eMobility program implementation resulting in the installation of 64 public charging stations adding to a total installed number of 117 EV charging stations from the project started until end 2019.

Among other business activities, gas business is becoming more prominent. Pursuant to the decision passed by the Croatian Government in February 2019, HEP d.d. recapitalized LNG Hrvatska d.o.o. responsible for the construction of the liquefied natural gas terminal, which commenced in April 2019. As a new gas supply route, the LNG terminal will increase the security of supply for HEP and Croatia as a whole. HEP d.d. continued to operate as a wholesale gas supplier in 2019, the obligation which will expire on 31 March 2021 pursuant to the Regulator's decision (HERA). A significant step forward in gas business development was made by the acquisition of Plin Vtc from Virovitica, a gas distribution and supply company.

Business results and success we achieved in 2019 would not have been possible without quality and motivated employees. We would like to express our satisfaction with constructive negotiations we had with trade unions which resulted in the signing of the new Collective Agreement for HEP Group. In addition, education programs continued in 2019 though HEP Academy as an in-house training center for the education of HEP Group workers. As one of the biggest and most desirable employers in Croatia and for the purpose of long term sustainability of employment for individual work places, we have continued to provide scholarships to high school and university students at an increased rate than in the previous period.

HEP aims at becoming a center of excellence and a regional leader in development and implementation of advanced technological solutions to successfully respond to all market, environment, and social challenges. Relying on rich experience and knowledge of our experts, we will continue to build Hrvatska elektroprivreda as a key Croatian energy company of strategic importance for national economy and the entire Republic of Croatia.

President of the Management Board
Frane Barbarić

ON HEP GROUP

HEP Group companies

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.

The Group consists of Hrvatska elektroprivreda d.d. as the parent company and its dependent companies listed here.

Dependent companies	Country	Ownership share (%)	Core activity
HEP Proizvodnja d.o.o.	Croatia	100	Production of electricity and heat
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 a public service
HEP Opskrba d.o.o.	Croatia	100	Electricity supply
HEP TOPLINARSTVO d.o.o.	Croatia	100	Heat production, distribution, supply, and purchase of heat
HEP PLIN d.o.o.	Croatia	100	Gas distribution and supply
HEP Trgovina d.o.o.	Croatia	100	Electricity and emissions trading and optimization of power plant operations
HEP ESCO d.o.o.	Croatia	100	Implementation and funding of energy efficiency projects
Plomin Holding d.o.o.	Croatia	100	Development of local infrastructure in the vicinity of Plomin TPP
CS Buško Blato d.o.o.	Bosnia and Herzegovina	100	Hydro equipment maintenance
HEP Upravljanje imovinom d.o.o.	Croatia	100	Management of non-operating assets and tourism
HEP NOC	Croatia	100	Training, professional improvement and accommodation services
HEP VHS Zaprešić d.o.o.	Croatia	100	Design and construction of multi-purpose hydrotechnical system
PLIN VTC d.o.o.[2]	Croatia	100	Gas distribution and supply in Virovitica-Podravina County
HEP Energija d.o.o.	Serbia	100	Electricity trading
HEP Energija d.o.o. Ljubljana	Slovenia	100	Electricity trading
HEP Energija d.o.o.	Bosnia and Herzegovina	100	Electricity trading
HEP Energjia d.o.o. sh.p.k.	Kosovo	100	Electricity trading
ENERGETSKI PARK KORLAT d.o.o.[3]	Croatia	100	Electricity production
HEP Telekomunikacije d.o.o.	Croatia	100	Telecommunication services
SUNČANA ELEKTRANA POREČ d.o.o. [4]	Croatia	100	Electricity production
IE – NEKRETNINE d.d. [5]	Croatia	100	Real estate operations
Nuklearna elektrana Krško d.o.o.[6]	Slovenia	50	Electricity production
LNG Hrvatska d.o.o.[7]	Croatia	84	LNG (liquefied natural gas) operation

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

[2] Pursuant to the Agreement on the Purchase and Sale of Business Shares in Plin VTC d.o.o. concluded on 3 April 2019, HEP Plin d.o.o. acquired a 100% ownership of said company's business shares. The merger of Plin VTC d.o.o. with HEP Plin d.o.o. is planned for 2020

[3] On 20 May 2019, HEP d.d. acquired a 100% share in Energetski park Korlat d.o.o. project company

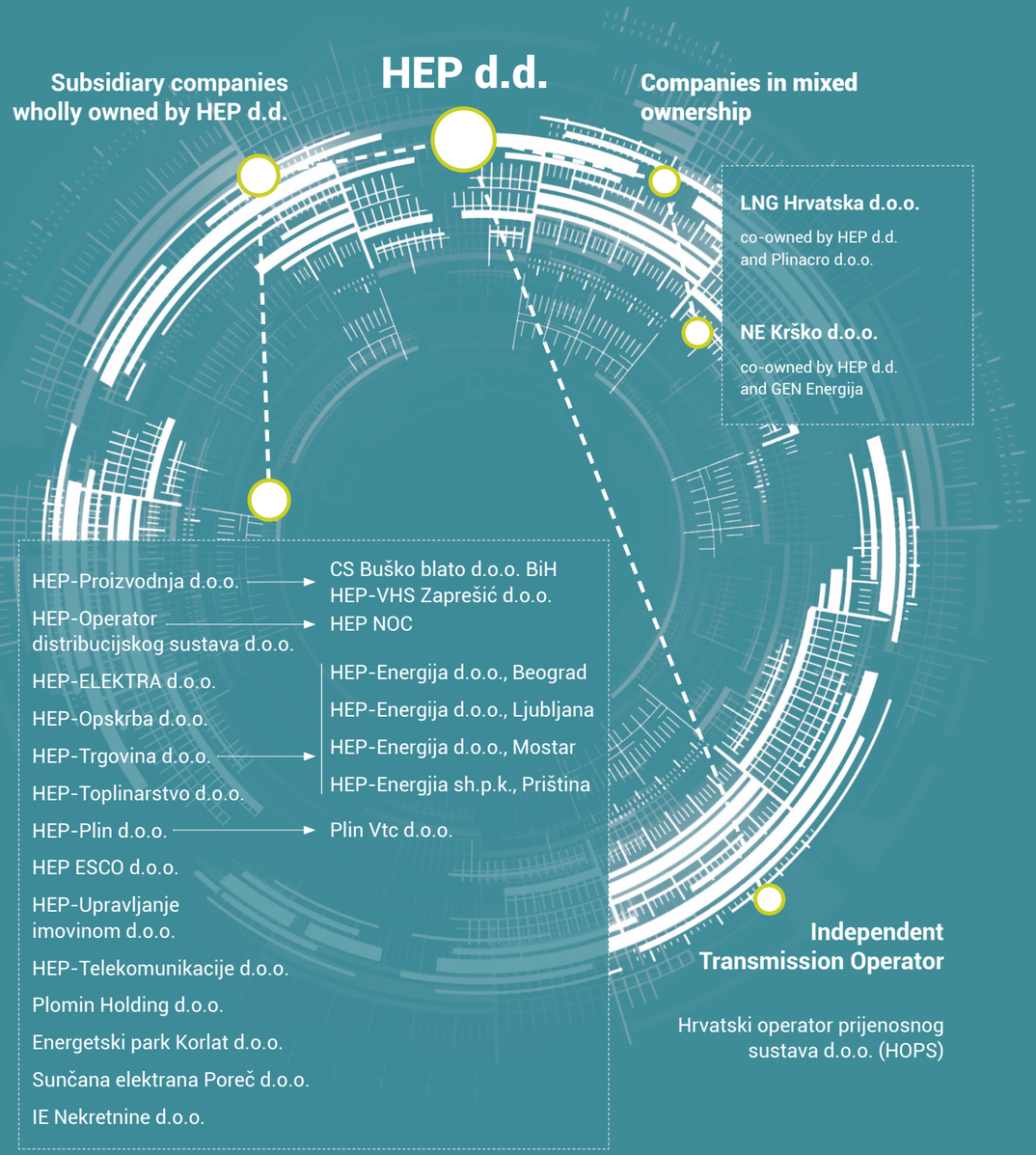
[4] In June 2019, Plomin Holding d.o.o. became a sole owner of Elektrane Sabadin d.o.o. (Elektrane Sabadin d.o.o. changed its name into SUNČANA ELEKTRANA POREČ d.o.o.)

[5] As of July 2019, HEP d.d. is a sole company owner

[6] In consolidated financial statements, the share in NE Krško d.o.o. is shown by the method of joint asset and liabilities management, HEP Group's share is shown for each asset and liability across income and expenditure.

[7] Joint venture with Plinacro d.o.o. (84%:16%) for the construction and operation of LNG evacuation pipelines from the island of Krk onto mainland and further towards final destinations

102-45,
102-48



Key data*

* Consolidated data presented include HOPS

Generation facilities, transmission, and distribution network

28 HPP and RES
installed capacity of
2,166 MW[1]

7 TPP and 50% NPP Krško
installed capacity of
1,423 MW

183 TS
HV substations
(400-200-110 kV)

26,567 TS
MV and LV substations
(35-20-10 kV)

7,794 km
of HV lines
(overhead and cables)[2]

140,065 km
of MV and LV lines
(overhead and cables)

[1] Excluding HPP Dubrovnik Unit B which generates electricity for Bosnia and Herzegovina
[2] Including 110 kV overhead lines currently operating as MV (36.0 km in total)

Basic indicators

18.3 TWh
Sale of electricity[3]
+4.5%
2017 17.4 TWh
2018 17.5 TWh

12.3 TWh
Electricity production
-4.3%
2017 12.0 TWh
2018 12.9 TWh

1.8 TWh
Heat sales
-2.2%
2017 1.9 TWh
2018 1.8 TWh

1.6 TWh
Gas retail[4]
+11.5%
2017 1.4 TWh
2018 1.4 TWh

5.8 TWh
Gas wholesale
-1.7%
2017 6.2 TWh
2018 5.9 TWh

15,515.2 HRK m
Operating income
+2.1%
2017 14,969.3 HRK m
2018 15,198.3 HRK m

3,967.9 HRK m
EBITDA
+2.4%
2017 3,749.5 HRK m
2018 3,876.8 HRK m

1,402.6 HRK m
HEP Group's net profit
+2.8%
2017 1,300.3 HRK m
2018 1,364.8 HRK m

42,558.0 HRK m
Total assets
+5.5%
2017 38,851.6 HRK m
2018 40,349.6 HRK m

3,386.6 HRK m
Investments
+42.5%
2017 2,431.9 HRK m
2018 2,376.1 HRK m

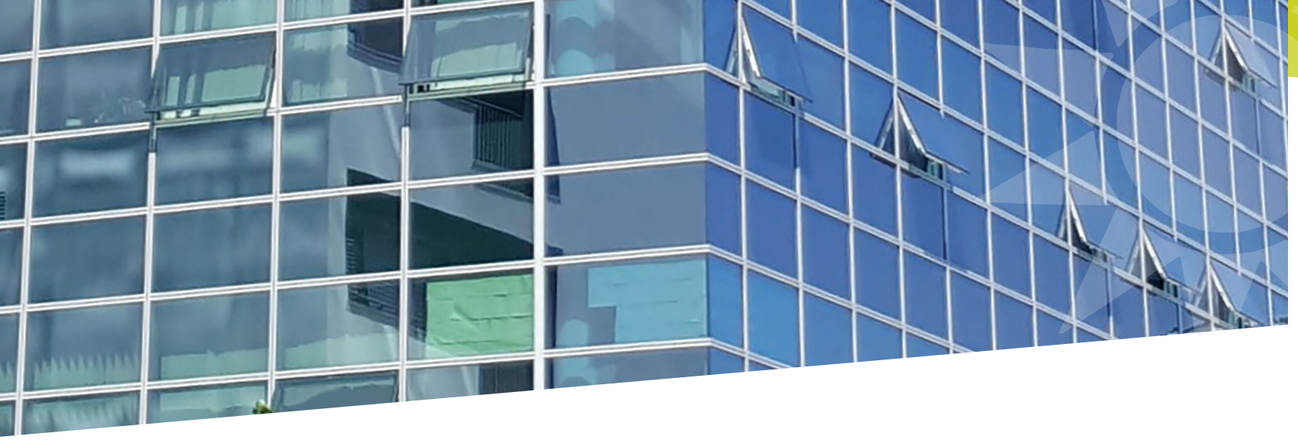
11,520
No. of employees
+509
2017 11,894
2018 11,011

[3] HEP sale in Croatia and abroad
[4] Plin VTC d.o.o. data included for 2019

CORPORATE

and ethical
governance

3



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.

The management structure of HEP d.d. during 2019

General Assembly

Tomislav Ćorić	Member	Since February 15, 2018

Supervisory Board

Goran Granić	President	Since December 7, 2017
Jelena Zrinski Berger	Member	Since December 7, 2017
Lukša Lulić	Member	Since October 29, 2018
Ivo Ivančić	Member	Since October 29, 2018
Meri Uvodić	Member, employee representative	Since December 4, 2018

Management Board

Frane Barbarić	President of the Management Board	Since January 1, 2018
Saša Dujmić	MB Member	Since December 4, 2014
Nikola Rukavina	MB Member	Since January 1, 2018
Marko Ćosić	MB Member	Since January 1, 2018
Petar Sprčić	MB Member	Since January 1, 2018
Tomislav Šambić	MB Member	Since January 1, 2018

All members of the Management Boarda and managers in HEP Group are Croatian citizens and local experts from various Croatian regions.

Statement on the implementations of the Corporate Governance Code

Pursuant to Article 22 of the Accounting Act (OG 78/2015, 134/2015, 120/2016), Hrvatska elektroprivreda d.d. has produced the Statement on the Implementation of Corporate Governance Code.

In 2019, the Company implemented the Corporate Governance Code for the companies in which the Republic of Croatia has shares (OG 132/2017).

The Company adheres to the provision of the Code except for those the implementation of which at a given moment is not possible, applicable, and practical. Said exceptions include the following:

- Dividend policy was not adopted as it falls within the jurisdiction of the Company owner i.e. the Republic of Croatia. Dividend payout is carried out in accordance with the Budget Act and the National Budget Execution Act.
- The Company did not introduce an independent compliance officer but is in the process of setting up said mechanism.
- The Supervisory Board did not set up the employee reward and motivation system, in particular with reference to the Management Board, in view of the salaries and other remuneration made in favor of the president and members of the Management Board defined under the Decision on determining salaries and other remuneration of the president and members of companies (OG 83/2009, OG 77/2014).
- Remuneration paid to the members of the Supervisory Board is not defined in line with the company success contribution as each SB member receives a fixed and set remuneration amount in accordance with the Decision of the Shareholders' Assembly of HEP d.d. from 30 April 2009 under the Decision of the Croatian Government class 120-02/09-01/14, file no.: 5030105-09-1 from 2 April 2009.
- The practice of the Supervisory Board of evaluating the work of the Management Board, middle management, and boards in terms of defined company targets in the previous period does not exist. However, some mechanisms serving as measures as defined in the Corporate Governance Action Plan are being set up. Said Plan also foresees the introduction of the Audit Committee competence for the selection, appointment, and removal of an internal auditor.

Corporate governance

In accordance with the HEP Group corporate governance model, HEP d.d. manages and carries out some corporate tasks as well as directs, coordinates and monitors activities in dependent companies. Each member of the Management Board is an executive in charge of a corporate function. The main internal organization of HEP d.d. is based on a corporate governance approach and on the authority the Company has over individual business activities.

Management Board

The President and the members of the Management Board are appointed and revoked by the Supervisory Board of the Company. The term of office of the president and the members of the Management Board is 4 years. The Management Board of the Company consists of 6 members, one of whom is appointed the President. The current structure of the Management Board consists of six functions: president of the Management Board, Board member in charge of financial affairs support functions, financial operations, procurement and EU regulation, Board member in charge of regulatory functions, regulated and market activities, Board member in charge of market activities, Board member in charge of production activities, and Board member in charge of investments, strategic and corporate development, project development and IT.

Pursuant to the Articles of Association of the Company and for the purpose of the execution of managerial tasks and authorities, the Management Board carries out the following activities:

- manages the business affairs of the Company;
- establishes and implements the business policy, medium- and long-term plans;
- carries out decisions passed by the Supervisory Board and the Shareholders Assembly, and takes measures and issues instructions for their implementation;
- passes Company internal rules as well as organizational rules;
- represents and acts for the Company, and signs contracts within the framework of the law and these Articles of Association;
- proposes decisions on matters from the scope of work of the Supervisory Board and Shareholders Assembly of the Company;
- submits reports to the Supervisory Board on business policy and other principle issues regarding future operations as well as on deviations from earlier predictions providing the reason;
- submits annual financial reports to the Company's Supervisory Board;
- submits the report on the Company's state-of-affairs to the General Assembly once a year;
- submits the written consolidated annual company report to the General Assembly;
- appoints members of the Assembly and Supervisory Boards of the companies in which HEP d.d. has controlling interest or significant influence;
- appoints and revokes Company's employees with special authorities and responsibilities;
- passes staff and employment plans;
- proposes and takes necessary measures and issues direct orders to ensure operations of the Company, especially the safety and the operation of the power system;
- performs other work-related tasks in line with the law and Company rules.

Supervisory Board

The Supervisory Board consists of a maximum of 7 (seven) members. Six members are appointed by the Shareholders Assembly of the Company and one is elected by the Works Council pursuant to the provisions of the Labor Act. The Decision adopted by the General Assembly on appointing and revoking Supervisory Board members enters into force on the day of its adoption.

The Supervisory Board supervises the management of the Company's business affairs. Pursuant to the Company's Articles of Association and within the scope of its responsibilities, it:

- appoints and revokes the Management Board of the Company;
- examines and reviews business records, documentation, cash records, securities and other documents related to the operations of the Company;
- gives consent to annual financial reports made by the Management Board of the Company;
- gives prior consent to the decisions of the Management Board where this is set under the Articles of Association;
- submits reports to the Shareholders Assembly of the Company on the supervision carried out, especially regarding financial operations and its consistency with business records;
- performs other activities set by the law and Company rules.

Some large transactions, long term debt and the establishment of a company in Croatia and abroad requires the consent of the Supervisory Board. The Supervisory Board appoints the Audit Committee responsible for the objectivity and credibility of information and reports submitted to the Supervisory Board. It also supervises the implementation of internal and external audits in the Company and prepares and supervises the implementation of the SB decisions regarding report submission and audits within HEP Group.

General Shareholders Assembly

The Shareholders Assembly is composed of shareholders and/or their proxies. The Shareholders Assembly decides on issues set under the law and the Articles of Association, in particular it:

- passes the Articles of Association and its amendments;
- appoints and revokes the members of the Supervisory Board;

- makes decisions on the use of profit;
- revokes members of the Management and Supervisory Boards of the Company;
- appoints the auditor of the Company;
- decides on an increase or decrease in the capital stock of the Company;
- decides on status changes and a dissolution of the Company;
- carries out other work in accordance with the law and the Articles of Association of the Company.

Internal Auditor

The Internal Audit Department is responsible for the corporate function of internal audit and as such represents a part of the internal supervision of HEP Group.

Business operations of Internal Audit are defined under the Act on the Internal Control System in the Public Sector (OG 78/15) and the Internal Audit Rules, which have been harmonized with the IPPF (International Professional Practices Framework). The Rules are based on the fundamental internal audit principles (integrity, objectivity, confidentiality, expertise) and guarantee a quality normative framework necessary for the professional conduct of the internal audit department tasks. The International Professional Practices Framework is a layout of professional rules and guidelines defining the work of the internal audit, which have been structured and integrated in a document published by the IIA Global.

The Internal Audit Department carries out internal audits in line with the Strategic Plan and the Department Annual Plan adopted by the Management Board of HEP d.d. with the consent of the Audit Committee. The purpose of internal audits is to provide the Supervisory Board, the Audit Committee and the Management Board of HEP d.d. a reasonable guarantee of security, efficiency and effectiveness of the business system and processes, reliability and accuracy of information, compliance of business operations with laws, regulations and official documents of HEP d.d. as well as HEP Group's plans and business policies.

The Department also provides recommendations for the improvement of business processes, it assists the Management Board of HEP d.d. and the responsible management of HEP Group in improving internal controls and mitigating operating risks.

Pursuant to the Audit Act and the Act on the Internal Control System in the Public Sector, the Internal Audit Department falls under the jurisdiction of the Audit Committee.

Audit Committee of the Supervisory Board

Goran Granić, PhD, president

Professor Boris Cota, PhD, independent external member

Professor Boris Tušek, PhD, independent external member

Responsible and ethical operations

Pursuant to the provisions of the Code of Ethics, HEP Group companies have their own ethics commissioner who is their representative in the Group's Ethics Committee, and a member of the Ethics Committee may also be a representative of trade unions registered with HEP.

Ethics commissioners monitor the application of the Code of Ethics in the company in which they are appointed, promote ethical behavior in employee relations and customer relations, give advice to employees on ethical behavior, receive complaints from employees and other interested legal and natural persons on unethical and possible corrupt practices, carry out the procedure of examining the merits of complaints and keep records of received complaints.

Procedures for examining the merits of the complaint of the Ethics Commissioner, as well as the Ethics Committee of the HEP Group, include the statement of the other party with the relevant documentation. If possible, a conversation is held on both sides to gain a better insight into the case and to make an opinion easier. Cooperation with all organizational units as well as individuals is excellent, and special work is being done to collect feedback from participants in the proceedings on how the case has been resolved.

Furthermore, the Ethics Committee, among other tasks prescribed by the provisions of the Code of Ethics, analyzes the occurrence of violations of the Code of Ethics and monitors its application, as well as informs the Management Board of HEP d.d. about the implementation of the Code of Ethics and its observations at least twice a year, and more often as needed. Also, the Ethics Committee encourages and proposes measures to strengthen ethical standards in HEP.

Structure of complaints received in 2019

	TOTAL	JUSTIFIED	UNJUSTIFIED
Number of received complaints	88	29	59
Number of solved complaints	88	29	59
- number of anonymous complaints	3	1	2
- number of non-anonymous complaints	85	28	57
Number of non-anonymous complaints filed by HEP employees	4	0	4
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	81	28	53
Number of complaints by type *(stated potential areas of complaints)*			
a) labor relations	4	0	4
b) discrimination	1	0	1
c) corruption	2	0	2
d) conflict of interest	0	0	0
e) nepotism	0	0	0
f) public procurement	0	0	0
g) customer relations	6	2	4
h) calculation and invoicing	34	8	26
i) connection to LV network	19	12	7
j) unauthorized consumption	4	1	3
k) other	18	6	12
Total	**88**	**29**	**59**

HEP Group memberships

During 2019, 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 (Congres International des Réseaux Electriques de Distribution)
LWA (Live Working Association)
EFET (European Federationof 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, SAD), through HIIR – Institute of Internal Auditors of Croatia)
ISACA (Information Systems Auditand Control Association); through Croatian subsidiary ISACA Chapter Croatia
ECLA (European Company Lawyers Association)
Croatian Academy of Technical Sciences
Electrical Engineering Society
Croatian Nuclear Society
Croatian Water Protection Society
Croatian Green Building Council
Croatian Gas Association
Croatian Association of Corporate Treasurers
Croatian Association MIPRO
Croatian Air Protection Association
Croatian Association of Nature and Environmental Protection Experts
Croatian Standards Institute
Croatian Business Council for Sustainable Development
Croatian Chamber of Commerce
Croatian-Austrian Chamber of Commerce
German-Croatian Chamber of Industry and Commerce
CROMA - Croatian Association of Managers and Entrepreneurs
Croatian Public Relations Association

STRATEGIC

approach to
sustainability

4

Material topics

7 PRISTUPAČNA I ČISTA ENERGIJA

8 DOSTOJANSTVEN RAD I GOSPODARSKI RAST

9 INDUSTRIJA, INOVACIJE I INFRASTRUKTURA

11 ODRŽIVI GRADOVI I ZAJEDNICE

12 ODGOVORNA POTROŠNJA I PROIZVODNJA

13 ODGOVOR NA KLIMATSKE PROMJENE

Material topics:

Stability and security of generation, distribution and supply of energy

Sustainable construction and energy sector development

A responsible, sustainable and quality employer

Successful and profitable business

Investing in sustainable environmental protection and responsible environmental impacts management

Continuous market growth and maintained competitiveness on domestic and regional markets

Stakeholder dialogue, transparent communication and public education

Strategic goals HEP2030:

Sustainable and flexible energy portfolio

Optimization and development of business processes

Market adaptability

Stakeholder collaboration

HEP Group publishes its sixth Sustainability Report. In the past several years we considered our material topics carefully and checked them with our stakeholders. We considered the integration of material topics in the strategic and development objectives of HEP Group and our impact management in those areas. Our approach to responsibility and sustainability in economic relations, society and the environment were included in the HEP Group 2030 Strategic Goals. Considering the Group size and diversity of our companies and businesses, our impacts are versatile. However, they are fully interconnected within the material areas. As in the previous reporting period, we evaluated material areas in the context of our strategic goals and the UN sustainable development goals (SDGs). The process of materiality check was initiated internally with discussions in our Working Group for Sustainability Reporting, and then examined them with our stakeholders. Compared to the previous reporting period, very slight corrections were demanded within the material areas. To describe the aspects and boundaries of our impacts, within the material areas we defined very precise material topics.

102-47

Material topics management and stakeholders' opinions

102-44, 102-46

For many years, HEP Group has conducted its business within the material areas which reflect its economic, environmental, and social impacts. Each year we record certain progress in connecting our strategic goals with material areas and material topics are fully included in the 2030 Strategic Goals of HEP Group. In this chapter we present description of strategic approach and materiality management as well as the connections of material topics with strategic goals and risk management approach within each material area which is crucial for stakeholders' decision making an active impact management of HEP Group.

Stability and security of generation, distribution and supply of energy is a basic and umbrella material topic of HEP Group. As a leader in energy sector development in Croatia, we are aware of our responsibility towards the economic development of all Croatian regions and raising quality of our business and the quality of life of our customers. Development of technology and the increasing dependability of economy and citizens on the access to and the quality of distribution and supply of electricity, heat, and gas, encourage us to continuously invest in the advancement of generation and infrastructure. Stability and security are primarily visible in the preparation of capital investments and their realization, development of distribution network and responsible portfolio management. This material topic is reflected in all our strategic goals, but primarily in sustainable and flexible energy portfolio and securing diversified generation mix. Our stakeholders recognize the reliability of the distribution system as increasingly important topic because it ensures the stability of supply. Additionally, as the largest energy group in the country, we ensure the national critical infrastructure for generation and distribution of electricity.

To ensure the realization within this material area we collaborate with state bodies, local communities, academic community, and other stakeholders. Our stakeholders evaluate this material area as the most important and crucial for their own sustainability and their decision making.

We manage risks within this material area by responsible adapting to regulatory and legal provisions and responsible management by which we create better conditions for all our customers. We continuously advance and modernize our operations to ensure high quality and secure generation, distribution, and supply of energy. More than 50 percent installed capacity for electricity generation is in our hydropower plants, which renders the generation system very dependable on hydrologic conditions. We manage this risk by developing diversification of our generation portfolio. Security of ICT system and security and reliability of operating facilities are ensured by continuous investments in modernization and process development.

This material area comprises the following material topics: investment planning, diversified generation mix, reliable distribution systems and enabling national critical infrastructure.

Sustainable construction and energy sector development are closely connected with the previous material area. They are based on strengthening own generation and planning and development of new projects. The development of sustainable construction we impact the development of local communities, incite community investment, influence economic dynamics, and enable the development of critical infrastructure. Our stakeholders evaluate this material area as very important for their own sustainability. The area is particularly incorporated in our strategic goal sustainable and flexible energy portfolio.

HEP Group actively manages this topic, which was specifically accentuated during 2019, by launching projects of generation from renewable sources of energy. The planned construction of new generation facilities always includes potential risks of realization. HEP Group decreases these risks by providing flexible plans and timely assessments.

This material area includes the following topics: investment in RSE, revitalization of generation facilities and network, investment in highly efficient co-generation facilities, use of best available techniques, and energy efficiency in distribution.

Successful and profitable business is part of the HEP Group 2030 Strategic Goals. Successful management within this material area comprises long-term investment planning, adequate replies to dynamic changes in regulations and changes in purchase prices. Furthermore, successful business is reflected in responsible corporate governance and utilization of Group synergies. As one of financially most significant business organizations in the country, being fully state-owned, HEP Group is aware of its strategic importance for Croatia. This material area corresponds with the strategic goal optimization and development of business processes, especially in realizing operational efficiency in managing various sectors. Besides, this area corresponds to stakeholder collaboration strategic goal, in the segment of investments realization or various subsidies or fees for local communities. Compared to the previous reporting periods, stakeholders evaluate this area with higher importance for their sustainability, but still giving precedence to stability and security, which points out to the context in which stakeholders interpret successful operations.

Risks in the domain of successful and profitable business are largely generated in the framework responsible to ensure sustainable business to companies, such as legal or regulatory provisions or other standards and expectations from the

environment. We invest efforts to manage such risks by timely recognizing our opportunities. Responsible governance and operations ensure positive financial result. Having in mind the size of HEP Group, our positive financial results directly influences the realization of profit for the owner, economic development, GDP growth, positive employment trends and local community development.

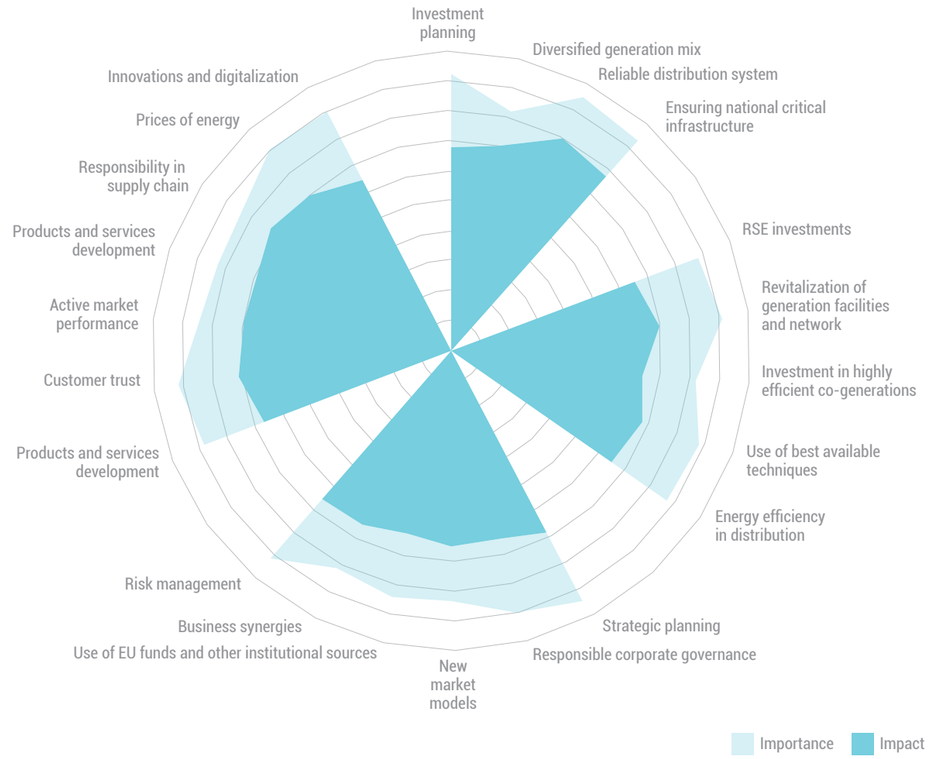
This material area includes the following topics: strategic planning, responsible corporate governance, new market models, EU funds and other institutional financing sources, synergy effects in business environment and risk management.

Continuous market growth and maintained competitiveness on domestic and regional markets is the fourth material area which stakeholders consider very important in generating impacts. By our responsible management, HEP Group ensures market and economic sustainability in this area. Energy markets change rapidly due to technological, industrial and infrastructure development, but also by changes in social trends and customers' habits. On a liberalized market, it is extremely important to win and keep customers' trust, be capable of agile adaptation to new trends and responsibly approach pricing policies. This material area is specifically included in our strategic goal market adaptability. We build our market development on continuous development of new products and services in all market segments. Compared to the previous reporting periods, our stakeholders still accentuate the importance of customer trust and the development of new products and services as elements having great impact on their own sustainability.

Market risks that HEP Group can manage primarily relate to adaptations to new regulations and market trends, but also to our own capabilities to adequately respond to those adaptations and trends. Having in mind that HEP Group, due to the wide spectrum of its sectors, reaches to all households and businesses, customer relations advancement is vitally important to us, especially in educating market on responsible consumption, energy efficiency and potential savings. HEP Group manages market shares risks by creating new products and services, brand strengthening, marketing communications and by fostering customer relations. Special risk is emergence of energy poverty, which we manage by bringing adequate measures and participating in various projects and by collaboration with stakeholders (e.g. state bodies, local communities, and civil society), which ameliorate the consequences. We respond to the challenges of the liberalized market by exploring opportunities of various models of business expansion, as well as positioning HEP Group as regional energy leader and by expanding our business operations in the region.

This material area comprises the following topics: development of products and services, customer trust, active market performance, purchase power and energy poverty, responsible supply chain, energy prices, innovations, and digitalization.

Stakeholders' assessments on the importance and impacts of material topics in business development and market segments



Investing in sustainable environmental protection and responsible environmental impacts management is a substantially significant material area in the energy sector and development plans of HEP Group. We understand our responsibility to adapt our business operations to climate change challenges and we continuously develop activities to contribute to the mitigation of consequences. Sustainability in environmental segment is ensured by investing in responsible management of the emissions into air, responsible use and protecting waters and developing energy efficiency projects. Responsible waste management and high quality of environmental assessments are also important. Systematic sustainability is impacted by increasing costs of environmental protection and costs of trading with greenhouse emissions. Environmental material topics management is integrated in all strategic goals of HEP Group. Our stakeholders consider this area vital for their decision making related to business operations and sustainability.

In the segment of environmental impacts, HEP Group faces various challenges. They partially emerge from the surroundings and relate to regulatory and legal provisions and standards, to which HEP Group fully adapts to all new requirements. Risks related to the development of projects are decreased by timely and quality communication with stakeholders during various environmental assessment processes. By providing versatile public content, we strive to contribute to public awareness in the topics of environmental protection and our management of impacts in that segment. We actively manage our environmental risks and improve our standards by obtaining certificates.

This material area comprises the following topics: climate change and greenhouse gasses emissions, energy efficiency, sustainable waste management, reduction of emissions into air, use and protection of waters, biodiversity, and environmental and ecological network assessments.

Stakeholders' assessments on the importance and impacts of material topics in the segment of environmental management

A responsible, sustainable and quality employer comprises HEP Group responsibility as a large organization which operates in all parts of the country. As one of the largest and most significant employers in Croatia, HEP Group influences the employment potential in all local communities and has significant impact on the labor market. This does not only reflect in the size of the employer, but also in the needs for employment of various profiles of employees and experts. Therefore, it is very important to maintain the reputation of an attractive employer, to continuously invest in education of our employees, their protection and safety at work. In this way we ensure opportunities for our employees to develop professionally, to manage their careers in a sustainable way and we enable a motivating and healthy workplace. Besides internal development, we achieve this by creating partnerships and by our investments in science and education. This material topic is vitally important to our employees, while our external stakeholders evaluate it as of average importance. Material area is integrated into our strategic goal optimization and development of business processes, which supports continuous growth of competences and innovation potential of our employees as well as efficient knowledge management on the corporate level.

The highest risks in the domain of workplace in Croatia during 2019 related to the dynamic development of labor market, large competition in search for high potentials, experts, and employees in some specific professions. To respond to those risks, we continuously develop the reputation of HEP Group as an attractive employer and develop a motivating working environment. In partnership with educational institutions we strive to develop professionalism and quality of our present and potential employees. By providing competitive and quality working conditions, we strive to keep our employees' loyalty.

This material area includes the following material topics: responsible employer, diversity and inclusion, safe and healthy workplace, and dialogue with social partners.

Stakeholder dialogue, transparent communication and public education is a material area crucial for relationship building with all our stakeholders related to all material topics. HEP Group manages this area by creating and maintaining various partnerships with institutions, associations, and local communities, including the stakeholders vital for HEP Group business operations, by participating in policies development. We particularly carefully approach the responsibility of marketing communications and our disclosure of data on impacts. This material area is recognized by our stakeholders as less important on average for their business decision-making and sustainability. HEP Group recognizes the importance of this material area and in our Strategy HEP 2030 we listed a specific strategic goal for stakeholder collaboration. In this area we manage risks by timely and transparent communication on all issues, customer education and by concluding versatile partnerships with stakeholders.

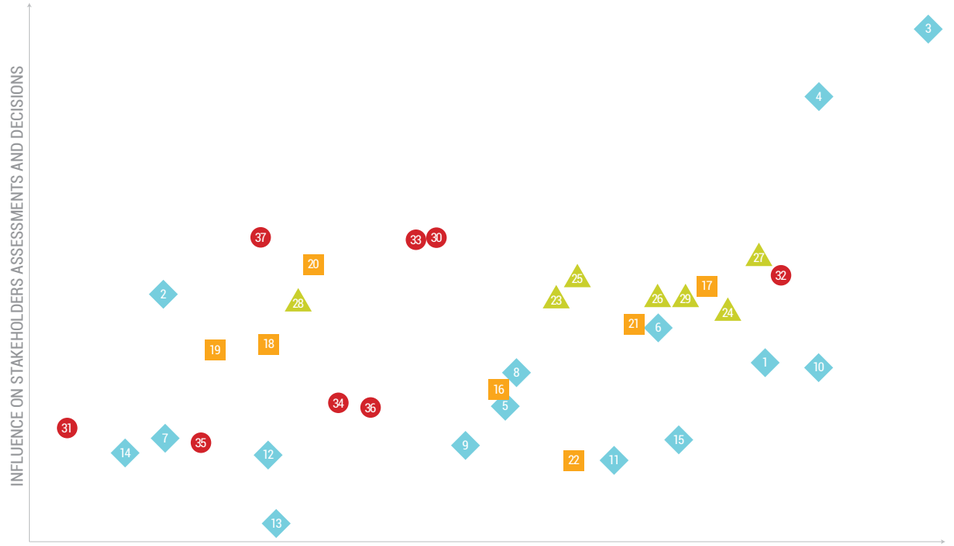
This material area comprises the following material topics: stakeholder engagement, collaboration with stakeholders and partnerships, community investment and contemporary communications channels.

Stakeholders' assessments on the importance and impacts of material topics in social segments

Materiality matrix

Having in mind the specific characteristics of the industry and stabile trends in our environment, material topics of HEP Group have not changed significantly, compared to the previous reporting period. Compared material indicators i.e. stakeholders' views of the importance of economic, environmental and social impacts of HEP Group and the impacts of material topics on the decisions and sustainability of stakeholders is presented in materiality matrix. The materiality matrix was composed compliant to GRI guidelines and is a result of stakeholder engagement process.

According to our stakeholders, individual material economic, environmental and social impacts of HEP Group have various importance for their decisions and assessments. Materiality matrix helped us to determine the boundaries of sustainability report. Thematic chapters of this report comprise data according to all relevant indicators within the boundaries. Thematic chapters also contain descriptions of various projects and activities undertaken by HEP Group, which reflect our approach in managing material topics and developing sustainability and responsibility.



Economic topics

1. Investment planning
2. Diversified generation mix
3. Reliable distribution systems
4. Ensuring national critical infrastructure
5. Res investments
6. Revitalization of generation facilities and network
7. Investment in high-efficiency cogenerations
8. Use of best available techniques
9. Energy efficiency in distribution
10. Strategic planning
11. Responsible corporate governance
12. New market models
13. Eu and other institutional financing sources
14. Synergy effects in business
15. Risk management

Market topics

16. Products and services development
17. Customer trust
18. Active market approach
19. Purchase power and energy poverty
20. Responsible supply chain
21. Prices of energy
22. Innovation and digitalization

Environmental topics

23. Climate change and greenhouse emissions
24. Energy efficiency
25. Sustainable waste management
26. Reduction of emissions into air
27. Use and protection of waters
28. Biodiversity
29. Eia and ecologic network assessments

Social topics

30. Attractive employer
31. Diversity and inclusion
32. Safe and healthy workplace
33. Dialogue with social partners
34. Contemporary communication channels
35. Stakeholder engagement
36. Stakeholder collaboration and partnerships
37. Community investments

Stakeholder engagement

In this reporting period we conducted special stakeholder engagement with detailed questions related to HEP Group impacts within sustainable development, material topics, potentials of HEP Group to contribute to contribute to the SDGs, responsible behavior of HEP and the success in implementing sustainability and responsibility. Stakeholder engagement was conducted in two ways. The survey conducted by online channels included 78 representatives of all key stakeholder groups of HEP Group: state authorities and organization, local community units, customers and service users, HEP Group suppliers, scientific and educational institutions, civil society associations, media, social partners and other external stakeholders. We conducted individual interviews with five stakeholders, representatives of academic community and energy experts to gain a deeper insight into HEP Group sustainability, success in impact management and the potential of the future development of HEP Group in the context of energy sector and its development role in the wider social context.

Besides conducted stakeholder engagement process, HEP Group continuously involves stakeholders in various ways in our business processes and business operations. Stakeholders' opinions are collected in legally provided processes of public engagement in the environmental assessment impact procedures, ecological network impact and environmental permits assessments. We regularly collect opinions from our customers and users of services on their satisfaction and potentials to improve HEP Group business operations. HEP d.d. employees participate in internal survey on employee satisfaction.

The most important area of impact is stability and security of generation, distribution and supply of energy, evaluated important by even 68 percent of our stakeholders. Slightly less stakeholders (62%) consider that investments in sustainable environmental protection and responsible management of environmental impacts are significantly important. Sustainable construction and development of energy system is evaluated as very important by 55 percent of our stakeholders, while 50 percent of stakeholders think that successful and profitable business is equally important to competitive business operations on the domestic and regional markets.

Stakeholders state that the most important material topics for HEP Group management are reliable distribution systems (80%), ensuring national critical infrastructure and use and protection of waters (74% respectively), customers' trust and strategic planning (72% respectively).

Stakeholders evaluated success of HEP Group in managing material areas by an average grade of 3.6 (out of 5), which is a qualitative increase compared to the previous reporting periods. Management in the segment of stability and security of generation, distribution and supply of energy was evaluated as the most successful while there is room for improvement in the areas of successful and profitable business, especially in using EU financing and financing by other institutional sources as well as the development of new market models.

More than a half of our stakeholders read HEP Group's sustainability reports. 78 percent of them think that the reports are interesting and substantial and state that the content is of high quality and contains relevant information.

102-42, 102-43

HEP Group Stakeholders

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:
Croatian Energy Market Operator (HROTE), commercial customers, residential customers, competition, business partners, suppliers, CROPEX and other 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 (INTERNATIONAL AND NATIONAL):
expert associations, interest associations, Croatian Chamber of Economy

CIVIL SECTOR:
consumer protection associations, environmental NGO's

MEDIA:
national, local, expert

102-40

Stakeholders' opinions on HEP Group progress in sustainable development and recommendations for improvements

Within stakeholder engagement process we conducted interviews with five relevant representatives of academic community and experts in the energy and sustainable development. All of them express substantial understanding of the rising importance of sustainable development and responsible business conduct and hold them vital for successful management of a significant and sizeable organization like HEP Group. Stakeholders, like the previous reporting period, think that the largest responsibility for institutional enabling of sustainability is on the part of the state, whose task is to set sustainable goals and approaches both in national and sectoral strategies. However, the stakeholders also accentuate the responsibility of the companies, especially large ones and of a strategic importance, in realizing sustainable development goals in Croatia. They perceive the role of HEP Group as one of the leaders of sustainable and responsible management of impacts on economy, society and the environment.

Stakeholders specifically commend HEP Group's increased investments in a more dynamic development of RSE energy generation and the modernization of generation facilities as well as the development of infrastructure. According to stakeholders, HEP Group should have initiated the investments even earlier, thus they expect more significant investments and development of RES in future. Stakeholders expect that HEP Group increases investments in exploring new solutions, innovation and new technologies, so that it does not stand out only by its economic and strategic significance but also by its modern approach.

…the progress in RES investment is visible and, in this area, HEP Group assumed the leading role …

…the only imaginable development is sustainable and low-carbon development and HEP can approach this issue more decisively …

HEP Group is one of the few large companies in Croatia which can prove partial visibility of its contribution to the sustainable development goals within its strategic business planning, but it has potential to connect more closely its business policies with the realization of SDGs. Low-carbon approach changes the paradigm of energy development which provides huge potential for HEP Group development. Stakeholders expect that HEP increases its position of market regional leader, but also underline the importance that the group remains state-owned.

Technological development, innovations and digitalization can considerably influence the level of service for customers. The importance of accessibility and stable supply of energy is increasing, and customers demand more complex and sophisticated services at affordable prices. The development of contemporary management models, advanced networks, multidisciplinary approach to energy sector development as well as the rise of prosumerism should form the base for future customer relations. And all that by using contemporary communication channels and transparent stakeholder relations.

…long-term market success can be ensured by not only advancing customer experience but also forming partnerships with customers …

…HEP acts with more agility today but can improve utilization of its potentials of expertise and experience …

A more agile approach by HEP in most segments has become visible lately. Stakeholders recognize long-term sustainability of the system in further adaptation to external trends and the strengthening of corporate governance. HEP Group has exceptionally high-quality experts and exactly the highest expertise should always lead. Stakeholders expect the rejuvenation of the system, which would be challenging in terms of developing organization and culture capable of retaining the highest potentials and attracting new ones. HEP is an attractive employer for new generations, but it must provide them opportunities to develop and implement their know-how and abilities.

HEP Group traditionally develops good relations and partner collaborations with the academic community, higher education and experts. This role must be maintained and strengthened to enable dynamic development of new solutions to the benefits of HEP as well as the economy and the entire society. HEP has potentials to show capabilities in the development of startups and even establish an aggregator company. The combination of contemporary approaches to development and partner collaborations with stakeholders could really result in brave but very successful developments.

…strengthening relations with expert and research community is vitally important for the development of energy sector …

Materiality in the context of sustainable development goals

In relation to the previous reporting period, the potentials of contribution of HEP Group to the realization of particular UN sustainable development goals have remained the same. Potential contributions to SDGs relate to the material areas and the strategic goals of HEP Group 2030.

Affordable and clean energy:

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

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

Contributions to the realization of this goal is reflected in these material areas:
Sustainable construction and energy sector development
Stability and security of generation, distribution and supply of energy

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 of all workers, including migrant workers, particularly women migrants, and those in precarious employment

Contributions to the realization of this goal is reflected in these material areas:
Successful and profitable business
Responsible, sustainable and quality significant employer

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

Contributions to the realization of this goal is reflected in these material areas:
Stability and security of generation, distribution and supply of energy
Sustainable construction and the development of energy sector

Sustaibnable 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

Contributions to the realization of this goal is reflected in these material areas:
Continuous market development and competitiveness on national and regional markets
Stability and security of generation, distribution and supply of energy
Investments in sustainable environmental protection and responsible management of environmental impacts

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

Contributions to the realization of this goal is reflected in these material areas:
Investments in sustainable environmental protection and responsible management of environmental impacts
Continuous market development and competitiveness on national and international markets
Stakeholder dialogue and transparent communication and stakeholder education

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

Contributions to the realization of this goal is reflected in these material areas:
Investing in sustainable environmental protection and responsible environmental impacts management
Stakeholder dialogue and transparent communication and stakeholders' education

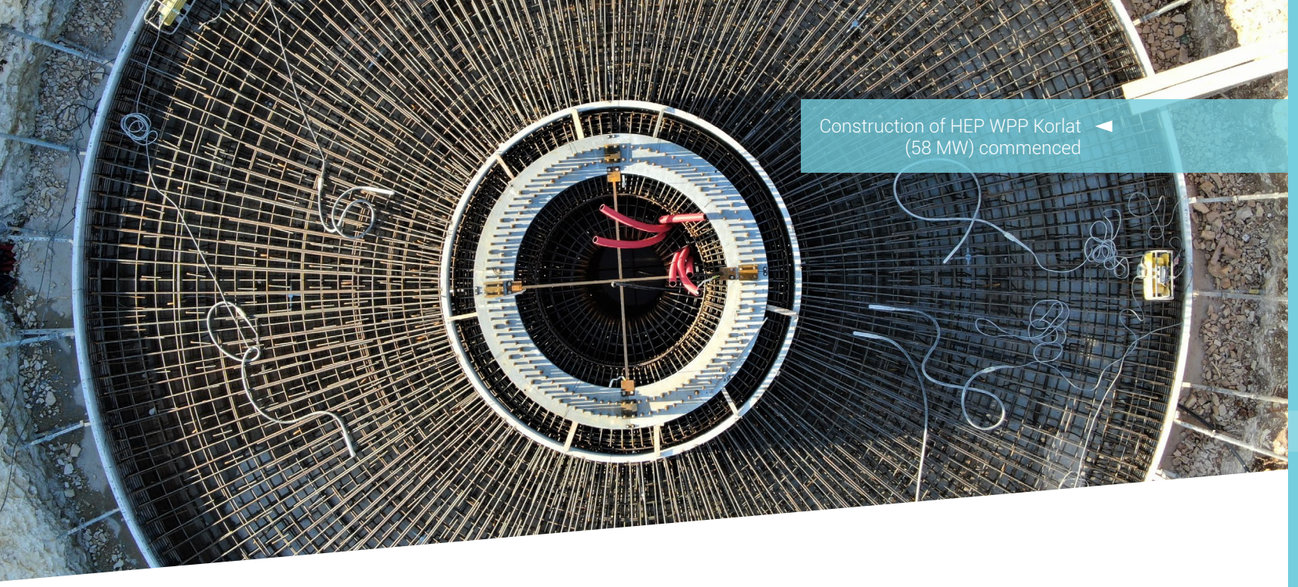
HEP Group

BUSINESS

operations in 2019

5

(The report on HEP Group
business operations in 2019 is
consolidated for the entire Group,
including HOPS)



Construction of HEP WPP Korlat (58 MW) commenced ◄

Business environment and operations

HEP Group continued to fulfil its mission of a sustainable, reliable and competitive production, distribution and supply of energy in line with the customers' needs and retaining a high level of social responsibility in 2019. HEP Group core values were preserved, and good business results achieved strengthening the Group's financial position.

As the Croatian economy continued to strengthen in 2019, the first estimated figures published by the Croatian Bureau of Statistics showed a 2.9% increase of the gross domestic product compared to 2.6% in 2018. This was the fifth consecutive year of the GDP growth. The stable growth of economic activities during the year was slowed down in late 2019 resulting in mere 0.5% rise of industrial production, a consequence of slowed down production of the processing industry which accounts for more than 80 percent of total production. The average annual rate of inflation in 2019 was 0.8 percent.

The exchange rate of the kuna against the euro was relatively stable. According to the Croatian National Bank lists of exchange rates in 2019, the average exchange rate of the kuna against the euro was 7.42, which was an increase of only 0.04% compared to 7.41 in 2018. The average exchange rate of the kuna against the US dollar was 6.63 i.e. a 5.5% increase compared to the average exchange rate in 2018 (6.28), which reflected the weakening of the euro against the USD on the world financial markets.

Favorable trends throughout the year were contributed by a successful tourist season and a continued growth of nominal and real paid gross and net salaries, which stimulated the recovery of personal consumption as well as the retention of low interest rates. According to the Croatian Bureau of Statistics data, the registered unemployment rate in December 2019 was 7.8 percent compared to 8.9% in December 2018. Despite seemingly favorable labor market trends, the reduced unemployment rate was a result of not only new jobs but also of a continued emigration of the working population.

In March 2019, Standard & Poor's credit-rating agency upgraded Croatia's investment rating to the level it had lost in 2012. The rating level reflecting adequate credit quality was affirmed in June 2019 by Fitch. Moody's graded Croatia's rat-

ing two notches below the investment level, but it upgraded the outlook from stable to positive.

External factors affecting HEP's business operations include the price of electricity, energy fuel and CO_2 emission units. The price of oil in late 2018 was 45.15 USD per Barrel and was mostly rising in 2019 (the price peak was in April – 66.24 USD per Barrel). The price of oil levelled off at 61.14 USD per Barrel in late 2019. The 2019 price stabilization was the result of easing trade tensions between China and the USA as well as of the Middle East unrests. The average price of power futures on the HUDEX[1] in 2019 was 62.88 EUR/MWh, which was a 33.1 percent increase compared to 47.25 EUR/MWh in 2018. A significant rise of electricity wholesale prices in July and August 2019 was a result of bad hydrology and reduced water flows in the region, a short-lived growth of gas and coal prices, and record high prices of CO_2 emissions. In late 2019, the sport market[2] gas price on CEGH[3] was 12.56 EUR/MWh, which was a 43.9% decrease compared to 22.38 EUR/MWh in 2018. The price of European Emission Allowances (EUA) on the EEX[4] spot market in late 2018 was 23.40 EUR/t compared to 24.93 EUR/t in late 2019, which was a 6.5% increase. The price of coal continued its decreasing trend started in late 2018 to reach its lowest level in September 2019 (43.55 USD/t). In late 2019, the price of coal was 45.55 USD/t[5], a 39.4% decrease compared to 75.15 USD/t in late 2018.

Despite being faced with market challenges resulting from the rise of electricity prices on power exchanges and increasingly complex customer demands in 2019, HEP Group conducted a number of activities focused on improving customer relations, permanent service enhancement, development of the existing and offering of the new and innovative products as well as marketing campaigns aimed at the strengthening of HEP brand which resulted in the increase of the market share in the supply of electricity to domestic customers of 91.4 percent. Activities on regional markets continued with a particular emphasis on the Slovenian market where the electricity supply contracts with a number of large customers had been concluded.

HEP sold 14.9 TWh of electricity to domestic customers (312 GWh more than in 2018), and 3.3 TWh of electricity to neighboring markets (482GWh more than in 2018). Income from the sale of electricity in Croatia increased by 3.6 percent as a result of the increase of the average selling price for business customers of HEP Elektra (guaranteed supply) and HEP Opskrba (supply), and the increase of HEP's share in the sale to business customers. At the same time, as a result of reducing a part of tariff items as of 1 January 2019, income from the use of transmission and distribution network was also reduced. According to HERA's decisions[6], the average reduction of tariff items for electricity transmission and distribution for business customers in 2019, compared to 2018, was 10-15 percent (depending on the connection voltage level). Income from the sale of electricity abroad increased as a result of the sale to Elektroprivreda HZ HB, the higher price of electricity surpluses generated in HEP Group power plants and resale, as well as the higher price and increased supply to regional customers.

[1] Hungarian Derivative Energy Exchange

[2] Day Ahead Market

[3] Central European Gas Hub

[4] European Energy Exchange

[5] Source: https://markets.businessinsider.com/commodities/coal-price

[6] https://narodne-novine.nn.hr/clanci/sluzbeni/2018_12_112_2185.html
https://narodne-novine.nn.hr/clanci/sluzbeni/2018_12_112_2186.html

In 2019, HEP ensured 20.7 TWh of electricity i.e. 4.2 percent more than in 2018, for customer supply, sale abroad, losses in the transmission and distribution network, pumping station operation and captive use, 12.3 TWh of which (60%) was produced by power plants owned or partially owned by HEP Group, while the remaining volume was procured on the market and purchased from the Croatian Electricity Market Operator (renewable energy sources and high-efficiency cogenerations in the system of incentives).

The year 2019 was characterized by average hydrology resulting in hydro generation of 5.8 TWh, lower by 1.1 TWh (15.7%) than in 2018 (partly due to the non-operation of Dubrovnik HPP since early 2019), while the production by HEP thermal power plants increased by 502 GWh (15.7%). In 2019, Krško NPP produced 2.8 TWh, and HEP's incentivized solar and cogeneration plants 23 GWh. In light of a lower production volume by hydropower plants and increased sale, the electricity purchase on the market (including the repurchase from renewable sources and high efficiency cogeneration) amounted to 8.3 TWh, i.e. by 1.3 TWh (18.3%) more than in 2018, which affected the growth of electricity purchase costs by 23.9 percent.

HEP d.d. continued to be the wholesale gas market supplier in 2019[7]. Total income from the sale of gas decreased by 29.7 percent as a result of gas supply to domestic customer in 2018[8], while income from the wholesale and retail sale of gas increased. Gas business made a major step forward in 2019 by acquiring the gas distribution and supply company Plin VTC d.o.o. from Virovitica.

Income from the sale of heat energy decreased as a result of a 2.2.% reduction in demand affected by warmer weather during a part of the heating season.

The Group recorded net profit of HRK 1.40 billion, which was by HRK 37.9 million (2.8%) more than in 2018 i.e. HRK 1.36 bn. The profit was earned from electricity, while all other activities reported loss.

Financial activities reported profit of HRK 24.0 m, a bit less than in 2018. The change of the fair value of the cross-currency swap for the bonds issued in 2015 accounted for a major part of financial income while financial expenses are mainly the result of interests.

All liabilities were settled within due period throughout 2019. The Group ended the business year with HRK 3.35 billion in cash and cash equivalents, an increase of HRK 571.9 million (20.6%) compared to end 2018. The repurchase of company bonds issued on the international capital market was carried out on four occasions during 2019[9]. Dividend of HRK 212.4 million was paid into the State Budget. Pursuant to the decision of the Croatian Government, HEP d.d. injected additional capital in LNG Hrvatska d.o.o., the company responsible for the construction of the LNG terminal, which was launched in April.

HEP Group continued to be one of the biggest investors in Croatia in 2019 with HRK 3.39 bn invested, including the HRK 262.3 m investment in Krško NPP.

Pursuant to the decision passed by the Croatian Government, HEP d.d. injected additional funds of HRK 216.1 million in LNG Hrvatska d.o.o. Investments were funded from the company own funds due to good liquidity as a result of a good business year.

Main works on the construction of the gas-fired high efficiency Unit L at EL-TO Zagreb CCPP (150 MWe and 114 MWt) commenced. Construc-

[7] Under the decision passed by the Croatian Energy Regulatory Agency (HERA) from 28 October 2019, Hrvatska elektroprivreda d.d. was appointed a wholesale gas market supplier for the period from 1 April 2020 until 31 March 2021

[8] from 22 February until 31 October 2018

[9] Eurobonds were issued in 2015 in the amount of USD 550 million

tion development of Kosinj hydropower system and Senj 2 HPP continued.

HEP Group launched a cycle of significant investments in renewable energy sources. Non-integrated solar power plant SE Kaštelir (1 MW) was acquired, and the construction of HEP's first wind plant – VE Korlat (58 MW) started as well as the works on the construction of Vis solar power plant (3.5 MW). Project acquisition was initiated as well as the erection of solar power plant Cres (6.5 MW). Development of a number of other solar power plant projects continued. Further implementation of the eMobility project resulted in the installation of 64 public charging stations.

Equipment was being replaced on an ongoing basis as well as the reconstructions and refurbishments of the existing generation facilities and of the transmission and distribution network, which was carried out primarily by engaging domestic producers and contractors.

The implementation of energy efficiency measures and the preparation of EE projects was intensified. In late 2019, the agreement on the award of EU grant for the replacement of the connecting pipeline in Osijek was signed. The European Commission also awarded a EUR 57 m grant for the revitalization of the Zagreb hot-water network. Photovoltaic plants were installed on the roofs of HEP corporate buildings and operating facilities for the purpose of reducing captive energy consumption.

In late November 2019, Standard & Poor's upgraded the stand-alone credit profile of Hrvatska elektroprivreda d.d. from bb to bb+, and affirmed the company's baseline rating (BB+) stating that HEP had improved its hydrology and fuel price volatility exposure management. Moody's affirmed HEP's long-term credit rating (Ba2) and boosted the outlook from stable to positive.

HEP Group had 11,520 employees at the end of 2019, which was by 509 more than in late 2018, the result of new employment as a consequence of downsizing HEP DSO employees as part of the company reorganization scheme carried out in the end 2018. Work relations and workers' rights in HEP Group companies were regulated under the Collective Agreement for HEP Group in effect for the period 1 January 2018 until 31 December 2019.

Financial results

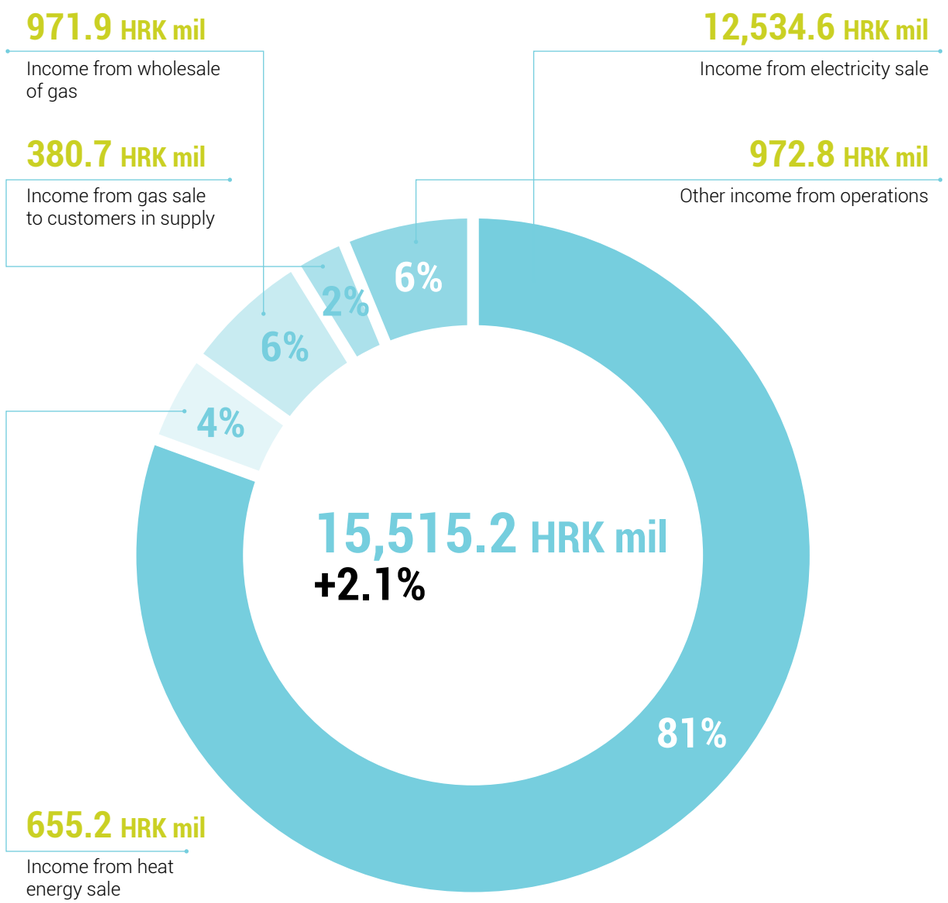
According to financial indicators, HEP Group is one of the biggest business groups in the Republic of Croatia. In 2019, the Group generated operating profit of HRK 1,694.3 m, an increase by HRK 35.8 m (2.2%) compared to 2018 due to a better operating income/cost ratio. Financial activities generated profit of HRK 24.0 m, an increase of HRK 0.7 m than in 2018. Net profit of HEP Group amounted to HRK 1,402.6 m, of which HRK 1,404.0 m was attributable to equity owners, and the loss of HRK 1.4 m to non-controlling interest.

Operating income of HRK 15,515.2 m increased by HRK 316.9 m compared to 2018, primarily as a result of increased income from sale of electricity by HRK 727.2 m (6.2%), and of other operating income by HRK 169.3 m, while income from the sale of gas decreased by HRK 606.3 m (61.4%).

Operating expenses of HRK 13,820.9 m increased by HRK 281.1 m compared to 2018. This increase was the effect of increased purchase cost of electricity (23.9%) as the result of increased market electricity purchase for customer supply and trade and increased price of emission allowances (53.3%) due to higher prices and increased volume compared to 2018, while the purchase value of sold gas decreased (32.4%) primarily as the result of gas sale to a domestic customer in 2018.

Consolidated profit and loss account (abridged)	2018 HRK m	2019 HRK m	Δ 2018 HRK m	%2018
Operating income	15,198.3	15,515.2	+316.9	+2.1%
Operating expenses	13,539.8	13,820.9	+281.1	+2.1%
Profit from operations	1,658.5	1,694.3	+35.8	+2.2%
Net profit of the Group	1,364.8	1,402.6	+37.9	+2.8%
Net profit attributable to owners of the parent	1,364.8	1,404.0	+39.3	+2.9%

Operating income



Operating income (HRK m) and its share in overall operating income (%)

The Group earned 81 percent of its operating income (HRK 12.5 bn) from the sale of electricity. A 6.2 percent increase (HRK 727.1 m) compared to the year before was the result of HEP's increased share in the sale to business customers, and the rise of the average selling price of electricity for business customers of HEP Elektra and HEP Opskrba.

Income from the sale of electricity to Croatian customers increased by 5.0 percent. Said income increase was the result of HEP's increased share in the sale to business customers and the rise of the average selling price for business customers of HEP Elektra and HEP Opskrba due to a growth of market prices. The average price for business customers of HEP Elektra and HEP Opskrba increased by 27.4 and 15.8 percent, respectively. At the same time, HERA adopted a decision on reducing tariff items for electricity transmission and distribution for business customers as of 1 January 2019. In light of the implementation of the Regulation passed by the Ministry of Economy on the Criteria for Obtaining the Status of a Vulnerable Customer of Energy from Networked Systems (OG 95/2015) and the Decision adopted by the General Shareholders Assembly of HEP d.d., under which the electricity price for household customers did not change, the solidarity charge reduced HEP's income from the sale of electricity to households by HRK 170.2 million.

As of 1 April 2014, HEP d.d. has been the wholesale gas supplier including the sale of gas to suppliers that supply gas to households as part of the public service. Pursuant to HERA's decision from October 2019, HEP shall carry out said activity until 31 March 2021. As per the above, the Group generated income of HRK 971.9 m accounting for 6 percent of its operating revenue. This represented an increase of HRK 36.2 m compared to 2018 as a result of the rise in the selling price as of 1 April 2019.

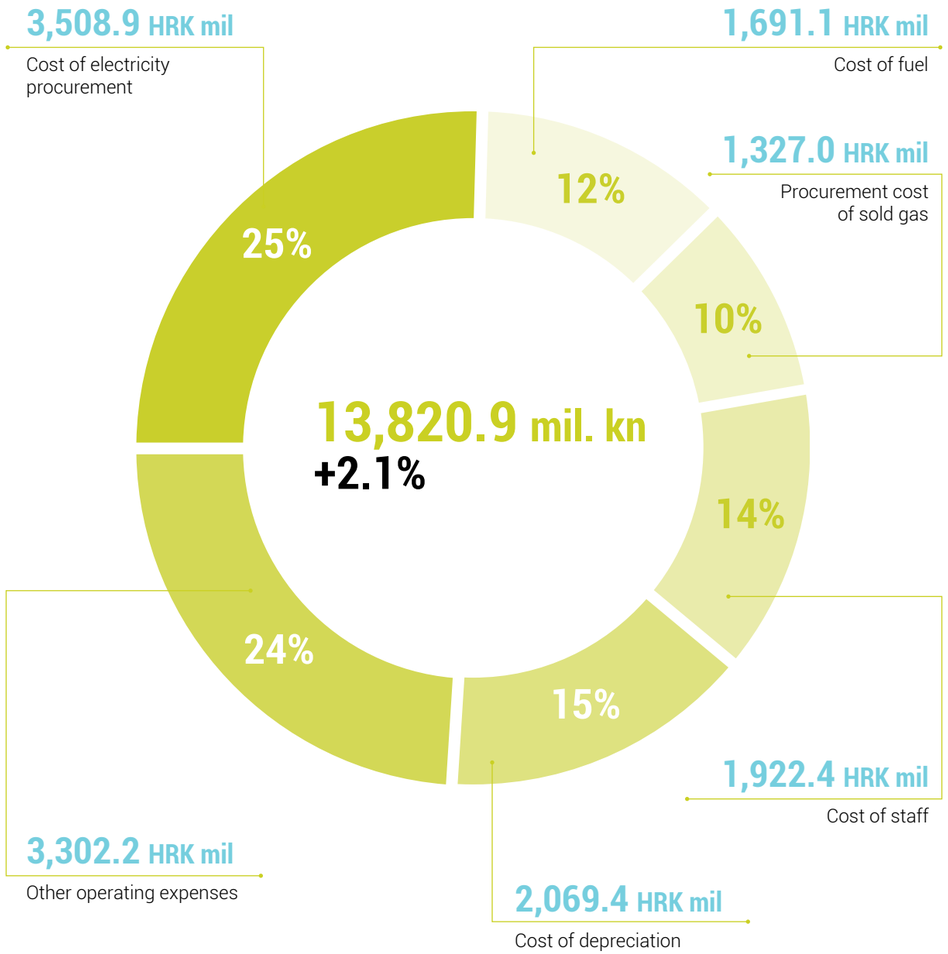
Income from the sale of gas to end customers amounted to HRK 380.7 m accounting for 2 percent of operating income, a decrease by HRK 606.3 m compared to 2018 as the result of gas sale to a domestic customer in 2018 which did not continue in 2019.

Income from the sale of heat energy amounted to HRK 655.2 m, which accounted for 4 percent of operating income. This HRK 9.3 million decrease was the result of a 2.2% percent lower demand at a 0.8 percent higher average selling price.

Other operating income of HRK 972.8 m increased overall by HRK 169.3 m (21.1%) compared to the year before as the result of a better collection of billed value adjustments by HRK 46.8 m, increased income from connection fees by HRK 46.3 m, as well as other increased operating income generated by Krško NPP by HRK 40.4 million, while income from the sale of material, default interests and provision cancellation decreased.

Operating expenses

The Group's operating expenses in 2019 increased by HRK 281.1 million to HRK 13,820.9 m.



Operating expenses (HRK m) and its share in overall operating expenses (%)

Energy fuel for electricity and heat production and electricity purchase accounted for 38 percent of overall costs amounting to HRK 5,200.0 million. The cost of energy fuel in 2019 decreased by HRK 4.2 m primarily due to lower coal and natural gas prices, while electricity purchase increased by HRK 677.7 million as the result of a higher electricity purchase volume for customer supply and trade.

Electricity import rose by 1.5 TWh at the 13.5 percent higher purchase price than in 2018. The electricity purchase from off-system producers and traders in Croatia increased by 224 GWh at the 8.5 percent lower price. 365 GWh less electricity was purchased from incentivized eligible producers as a result of lowering the mandatory purchase volume of produced incentivized electricity from 100 to 70 percent.

The cost of energy fuel decreased by HRK 4.2 million (0.2%) compared to 2018. Despite increases in electricity production by 15.8 percent and increased consumption of all energy fuels, lower energy fuel prices were primarily the result of lower coal and natural gas prices. 16.7 percent more coal was used at the 18.6 percent lower price as well as 9.5 percent more natural gas at the 8.7 percent lower price. The cost of wood biomass used in the operation of BE-TO Osijek and BE-TO Sisak cogeneration plants rose in light of a 29.6 percent increase in the wood biomass price at 12.2 percent more volume consumed.

The purchase value of sold gas was HRK 1,327.0 million, a decrease by HRK 634.7 million (32.4%) compared to 2018 primarily due to gas purchase for sale to a domestic customer in 2018.

The cost of staff amounted to HRK 1,922.4 m, an increase by HRK 81.2 million (4.4%) as a result of increased hiring in accordance with adopted employment plans from 2018 and 2019 as well as a 2 percent increase in salary points as of 1 January 2019. Gross salary deductions reduced in light of a reduced rate of contributions as of 1 January 2019 from 17.2 to 16.5 percent.

Compared to 2018, the 3.8 percent increase of other operating expenses was primarily due to increased costs for emission allowances by HRK 140.3 m resulting from a 21.1 percent price increase in 2019 compared to 2018 at increased emission unit volumes by 332 thousand tons. In addition, maintenance costs, litigation-related provisions, severance provisions and jubilee awards as well as workers' material rights and energy savings procurement costs also increased. The cost of the value adjustment of trade receivables decreased by HRK 270.0 million, as well as the cost of chargeable services and materials, the value adjustment of reserves and long-term fixed assets, and severance provisions under employment contract terminations.

Results by sectors

The major share of the Group's operating income (86.5%) and of the Group's overall operating profit was earned from electricity. Compared to 2018, a decrease of the operating results was a consequence of reduced transmission and distribution tariff items for business customers, and of an increase of variable operating costs. District heating accounted for 4.6 percent of operating income and recorded operating loss of HRK 214.5 million. Compared to the year before, the loss was decreased due to lower costs of energy fuel as a result of a lower price of natural gas. The share of gas wholesale and retail in operating income accounted for 8.9 percent recording HRK 35.5 million of operating loss compared to HRK 367.7 m of operating loss in 2018. The 2018 loss amount was the effect of the adjustment of value of reprogrammed trade receivables domestically. Better 2019 performance was also a consequence of reduced loss in gas wholesale.

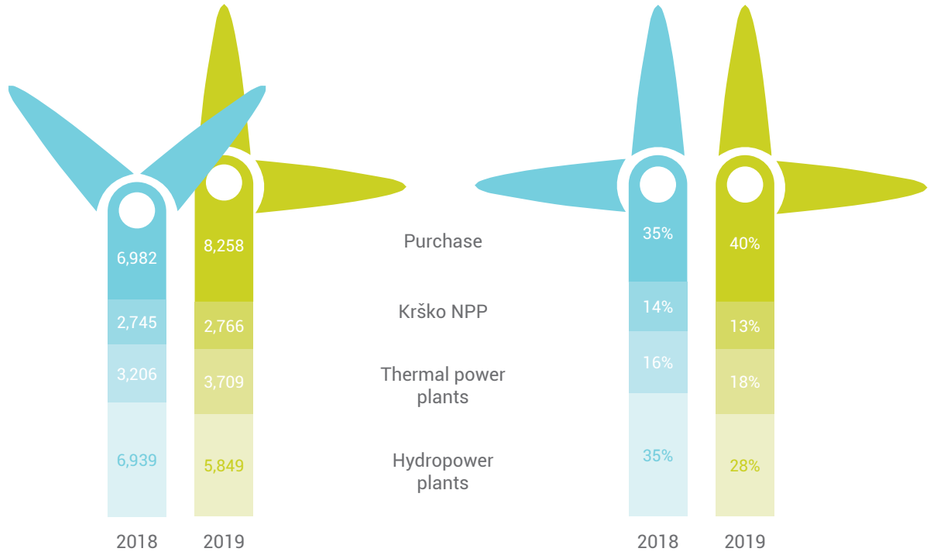
Operating result in HRK m	electricity			heat			gas		
	2018	2019	%2018	2018	2019	%2018	2018	2019	%2018
Operating income	12,529.0	13,422.8	+7.1%	722.0	718.3	-0.5%	1,947.2	1,374.1	-29.4%
Operating expenses	10,262.9	11,478.5	+11.8%	962.0	932.8	-3.0%	2,314.9	1,409.6	-39.1%
Profit (loss) from operations	2,266.1	1,944.3	-14.2%	-240.0	-214.5	-10.6%	-367.7	-35.5	-90.3%

Electricity

Electricity generation, transmission, distribution and supply are activities carried out by HEP Group across the entire territory of Croatia. The Group is the biggest supplier of electricity in the Republic of Croatia with 14.9 TWh of electricity sold domestically, 3,341 GWh more supplied to customers in Slovenia, Serbia, Bosnia and Herzegovina and as export of surplus electricity and resale. In 2019, the operating profit of HRK 1,944.3 m was generated, which was by HRK 321.8 million less than in 2018.

Income from the sale of electricity totaled at HRK 12,534.6 m, 89.5% (HRK 11,223.1 m) of which was earned from the supply of domestic customers, and 10.5 % (HRK 1,311.5 m) from the sale abroad.

AVAILABLE ELECTRICITY (GWh)



NOTE: Solar power plants and bio plants owned by HEP recorded production of 23 GWh in 2019 (15 GWh in 2018) accounting for 0.1% share in overall production and purchase in 2018 and 2019.

Power plants wholly or partially owned by the Group generated 12.3 TWh of electricity, which was by 559 GWh less than in 2018 accounting for 60% of the overall electricity demand by the Group in 2019.

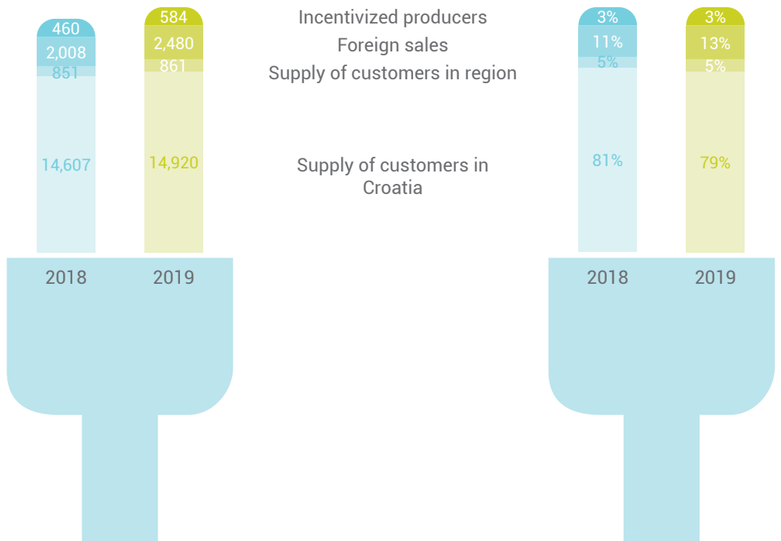
The year 2019 was marked by a dry first half (in particular January, March and April) and increased water inflows in October and November. At the end of the year, hydro generation accounted for 5.8 TWh (28% of electricity demand), which met generation levels in average hydro circumstances. Compared to 2018 characterized by favorable hydrology, the 2019 production was lower by 1,090 GWh (15.7%). A decrease in production compared to 2018, in addition to hydrology, was also the result of the Dubrovnik HPP outage in early 2019, which accounted for only 24 GWh of produced electricity compared to 767 GWh in 2018.

Electricity generation in thermal power plants and cogeneration facilities increased by 502 GWh to 3,709 GWh, accounting for 18 percent of total energy demand in 2019. Krško nuclear power plant supplied 2,766 GWh, which was by 22 GWh more than in 2018. The regular 18-month power plant overhaul was conducted in October 2019.

As a result of decreased hydro production and increased customer supply in Croatia and the region, 8,258 GWh of energy was procured off-system (40 percent of demand), which was by 1,276 GWh (18.3%) more compared to 2018. From the overall procured amount, electricity import for customer supply accounted for 5,972 GWh. Furthermore, 1,844 GWh was purchased by HEP Group from HROTE on the basis of production from the existing renewable energy sources and cogeneration in the system of incentives (365 GWh less as a result of reducing the mandatory volume of purchased incentivized electricity from 100% to 70%), while 361 GWh was purchased from the off-system producers (including electricity take-off from customers with own production) and from traders in Croatia.

HEP's incentivized power plants produced 584 GWh, which was an increase of 123 GWh primarily due to increased production by Unit L in TE-TO Zagreb CCGT, which underwent a capital overhaul in the last quarter 2018.

SALE OF ELECTRICITY (GWh)



14.9 TWh of electricity was sold to domestic customers: 5.7 TWh to households and 9.2 TWh to business customers. HEP Group sales accounted for 91.4% share in the overall electricity sale to end customers in Croatia in 2019. 861 GWh was sold to customers in the region, which was by 10 GWh (1.2%) more than in 2018. The remaining volume of electricity sold abroad (2.5 TWh) increased by 472 GWh compared to 2018, and it included the export of electricity surpluses generated by HEP Group power plants, electricity sale to Elektroprivreda HZ HB and the sale of balancing energy to the system operator in the region.

Compared to 2018, income from the sale of electricity increased by HRK 727.1 million (6.2%) to HRK 12,534.6 million. Increased income from domestic sale by HRK 379.4 m (3.6%) was the result of increased demand, the increased share of HEP in the sale to business customers, and the rise of the average selling price for business customers of HEP Opskrba and HEP Elektra. The sale of 584 GWh of electricity produced in power plants with the incentivized eligible producer status generated income of HRK 329.2 m i.e. by HRK 71.8 m more than in 2018. Despite an increase in the overall income, a portion of income attributed to electricity transmission and distribution decreased in light of reduced tariff items for business customers. Income from electricity export amounted to HRK 1,311.5 million, an increase by HRK 191.4 million (17.1%).

District heating

Heat energy production, distribution and supply are conducted on the territory of Zagreb, Osijek, Velika Gorica, Zaprešić, Samobor and Sisak.

District Heating generated operating loss of HRK 214.5 million in 2019. Compared to 2018, the loss was reduced by HRK 25.5 million due to lower energy fuel costs resulting from a reduction in the price of natural gas.

A total of 2,223 GWh of heat energy was produced in 2019, which was by 32 GWh or 1.4 percent less than in 2018. HEP-District Heating plants generated 130 GWh, while 2,093 GWh was produced in cogeneration facilities of HEP Proizvodnja. Total generated volumes, process steam and heat accounted for 23.5 percent and 76.5 percent, respectively.

The sale of heat energy in 2019 reached 1,783 GWh i.e. a 2.2% or 40 GWh less compared to 2018, of which households and business customers accounted for 57.9% (1,032 GWh) and 42.1% (751 GWh), respectively.

The sale to households and business customers in 2019 decreased overall by 1.4 and 3.3 percent, respectively compared to 2018. Said decrease was the result of warmer weather during the part of the heating season (February 77 GWh, March 94 GWh, November 15 GWh, December 31 GWh).

Gas

HEP Group conducts the activity of retail gas distribution and customer supply. As of 1 April 2014, it has also become the wholesale gas supplier. These business activities generated operating loss of HRK 35.5 million compared to HRK 367.7 million of loss incurred in 2018.

In total, income from gas sale in 2019 amounted to HRK 1,352,6 million, gas distribution and supply to HRK 380.7 million, and wholesale gas supply to HRK 971.7 million. Total income from gas supply decreased by HRK 570.2 million as a result of HEP gas sale to a domestic industrial customer in 2018.

Retail gas distribution and supply is conducted in the Osječko-baranjska, Virovitičko-podravska and Požeško-slavonska counties. Following the gas market liberalization, HEP Plin d.o.o. started supplying customers across other distribution areas (Zagreb, Varaždin, Sveta Nedjelja, Pula, Bjelovar, Zadar, Križevci, Kutina, Ivanić Grad, Sisak, Slavonski Brod, Samobor, Koprivnica, Pitomača, Virovitica, Rijeka, Vinkovci, Đurđevac, Čakovec, Zabok, Karlovac, Jastrebarsko, Vrbovec, Dugo Selo, Pakrac, Orahovica, Umag, Pitomača, Nova Gradiška, Vukovar, Daruvar, Krapina, etc.)

Income from retail gas distribution and supply generated by HEP Plin in 2019 increased by 4.3 percent to 1,458 GWh. The sale of gas to household and business customers rose by 0.3% and 7.9%, respectively. The sale to customers on HEP Plin own distribution area increased by 0.9% compared to a 22.3% increase of gas sale to customers on other distribution areas in Croatia. As a result of increased sale volume as well as an increase of the average selling price by 4.8%, income from gas distribution and supply rose by 9.2 percent.

Under the Agreement on the Purchase and Sale of Business Shares in Plin Vtc concluded in April 2019, HEP PLIN acquired a 100% ownership of Plin Vtc company shares. Said company's gas sale amounted to 101 GWh in 2019.

Pursuant to the Gas Market Act and decisions adopted by HERA, HEP d.d. has been the wholesale gas supplier. This business activity includes the sale of gas to those public service suppliers that supply gas to household customers who have opted for HEP d.d. Pursuant to HERA's decision from 28 October 2019, HEP d.d. will continue to perform said activity until 31 March 2021.

The gas price was set by the Croatian Government for the period until 31 March 2018. As of 1 August 2018, said price is set according to the Methodology for setting the amount of tariff items for the public service of gas supply and guaranteed supply under which the price of gas for the wholesale market supplier and the suppliers under the obligation of public supply supplying household customers is set.

The gas wholesale activity earned income of HRK 971.9 million accounting for 6.3 percent of HEP Group's total operating income. Said income was by HRK 36.2 million higher compared to 2018 as a result of a 9.7% increase in the gas selling price. The purchase value of sold gas was 1,152.9 million, a decrease by HRK 30.1 million compared to 2018 as a result of slower sales and a lower gas transportation cost.

Financial position

Pursuant to the decision passed by the Croatian Government, HEP d.d. injected additional funds in LNG Hrvatska d.o.o. in February 2019. Thus, LNG Hrvatska d.o.o. was represented in the financial statements by applying the equity method, which lead to an increase in balance sheet positions compared to 2018.

Consolidated balance (abridged)	31 Dec 2018		31 Dec 2019		%2019/ 2018
	HRK m	share	HRK m	share	
Long-term asset	33,041.6	82%	34,405.6	81%	+4.1%
Short-term asset	7,308.1	18%	8,152.4	19%	+11.6%
Total asset	**40,349.6**	**100%**	**42,558.0**	**100%**	**+5.5%**
Capital and reserves	24,369.4	60%	25,610.3	60%	+5.1%
Long-term provisions	1,067.5	3%	1,195.4	3%	+12.0%
Long-term liabilities	11,112.0	28%	11,080.6	26%	-0.3%
Short-term liabilities	3,800.8	9%	4,671.8	11%	+22.9%
Total liabilities and equity	**40,349.6**	**100%**	**42,558.0**	**100%**	**+5.5%**

Assets

The value of HEP Group's total assets at the end of 2019 was HRK 42.6 bn, an increase by HRK 2.2 bn. Long-term assets accounted for 81% of the Group's asset value, which marked an increase of HRK 1.4 bn as a result of increased value of property, plants and equipment by HRK 1.3 bn, increased fair value of financial assets and property investments.

The value of short-term assets of HRK 8.2 bn represents an increase by HRK 844.3 million due to increased cash and cash equivalents by HRK 571.9 m and reserves by HRK 222.1 m in light of increased CO_2 emission unit reserves. Other short-term receivables increased by HRK 91.0 million as the result of advanced payments made towards working capital, while trade receivables decreased by HRK 30.8 million.

Capital and liabilities

Capital and reserves at the end of 2019 amounted to HRK 25.6 billion, a rise of HRK 1.2 bn in comparison with 2018 as the result of higher retained profit. Dividend of HRK 212.4 million was paid from the 2018 profits to the State Budget.

Long-term provisions increased by HRK 127.9 million due to higher provision amounts for severance payments and thermal power plant decommissioning.

Long-term liabilities amounted to HRK 1.1 billion accounting for 26% of the Group's total liabilities and capital. They were reduced by HRK 31.4 million as a result of decreased swap transaction-related and bond-related liabilities, while the long-term loan-related liabilities increased in view of using the loan for funding the Krško NPP security upgrade program.

Short-term liabilities amounted to HRK 4.7 billion, an increase by HRK 871.0 million compared to early 2019. Other short-term liabilities also increased due to increased deferred income from the financial support for the building of the LNG terminal. Trade and staff liabilities increased by HRK 189.7 m and HRK 32.2 m, respectively. Tax and contribution-related liabilities decreased as well as current maturity of long-term loans.

Credit rating

HEP is rated by both Standard & Poor's and Moody's. In late April 2019, Moody's affirmed the long-term credit rating of Hrvatska elektroprivreda (Ba2) and upgraded its outlook from stable to positive. Due to the methodology and criteria used by Moody's in grading HEP, said upgrade was the result of the upgraded sovereign rating. In its report, Moody's also stated that HEP would retain its strong financial profile in the future period.

In late November 2019, Standard & Poor's upgraded the stand-alone credit profile of Hrvatska elektroprivreda to bb+. In its report, S&P stated that Hrvatska Elektroprivreda d.d. (HEP) improved its ability to manage exposure to historically very volatile hydrological conditions and commodity price fluctuations. In addition, HEP's gradual but clean transformation focused on reducing profit volatility served as a hedging factor for financial indicators during the last seven-year cycle affected by both favorable and unfavorable hydrology. The analysts emphasized that the upgrade of the company's standalone credit quality was the result of the expectations of reduced HEP's profit volatility in view of hydrology or fuel prices. They believe that HEP will continue being subject to some volatility, which is characteristic of hydropower generation; however, they expect such volatility to be more contained than in the past. HEP has restructured its operations to ensure a long-term efficient and flexible cost structure on a consolidated group level, and it is expected that HEP will continue posting sound financial performance.

CREDIT AGENCY	Baseline credit assessment	Standalone credit quality
Standard & Poor's	BB+ (stable)	bb+
Moody's	Ba2 (positive)	ba2

Investments

In 2019, the Group made investment in the amount of HRK 3,386.6 m. Main investments focused on the reconstruction and the modernization of generation facilities and electric power system plants, the construction of new generation facilities and the reconstruction of the existing and the construction of new transmission and distribution network infrastructure.

Investments in HRK m	2017	2018	2019	%19/18
Investments in property, plants and equipment	2,431.9	2,376.1	3,386.6	42.5%

Through continuous investments in the maintenance and modernization of the existing facilities and the construction of new generation capacities and network systems, HEP meets the following objectives: security of energy supply, competitiveness of HEP's power system, the development of HEP Group's business system, contribution to sustainability and the continuity of the Croatian energy sector by taking into consideration the increasing presence of other participants on the open market, especially in electricity supply and electricity generation from renewable energy sources.

Through investments, HEP Group meets preconditions for Croatia's future reach of an adequate level of energy independence in electricity sector, by taking current electricity consumption and the projection of its growth into consideration as well as necessary decommissioning of thermal facilities, unable to meet the prescribed conditions of environment protection due to their technological old age.

Published financial reports

HEP d.d. General Assembly, at its annual meeting held on July 22, 2020, reviewed consolidated and unconsolidated annual financial statements of HEP d.d. and of HEP Group for 2019, including the Independent Auditor's Report, the Annual Report on the state of affairs and operations of HEP d.d. and HEP Group in 2019, and the Report of the Supervisory Board on the supervision conducted in 2019. Acts of the members of the Management and the Supervisory Boards of HEP d.d., respectively, were ratified for 2019.

Annual consolidated financial reports and the Independent Auditor's Report for 2019 as well as the annual unconsolidated reports and the Independent Auditor's Report for 2019 were signed on May 15, 2020 and published on the Internet page of HEP Group, available at these links:

http://www.hep.hr/investors/financial-data/financial-statements/consolidated-financial-statements/2460

and

http://www.hep.hr/investors/financial-data/financial-statements/unconsolidated-financial-statements/2461

Sustainable

MARKET APPROACH

6

Continued reconstruction and overhaul of hydro power plants, reconstruction of HPP Senj in preparation

Stability and security of generation and distribution of energy and energy sources

The primary business goal of HEP Group is to ensure a high level of security of generation, distribution and supply of energy and energy sources to citizens and business entities in Croatia. In this role, we are aware of the importance of our role and the impact of HEP Group on various aspects of business and quality of life of our customers.

The role of HEP Group is included in regulations, strategies and development plans, but also clearly stated in the expectations of our stakeholders. At a time of extremely intensive technological development, the importance of reliability of production, distribution and supply is becoming even more pronounced. The development and investment activities of HEP Group are aimed at maintaining the values and functions of the existing energy infrastructure system and ensuring the long-term stable development of HEP Group's activities.

Development and investments in generation capacities are aimed at increasing the value of key, strategic production facilities, while investments in new generation capacities seek to diversify sources and energy sources to ensure long-term reliability and availability of the group's generation portfolio. At the same time, investments in renewable energy sources, primarily through the development of projects in wind and solar power technologies, are one of the focuses of a long-term goal based on the concept of sustainable development.

The basic goal of the investment is the construction of new production facilities, revitalization of existing facilities, replacement and renewal of obsolete equipment, which increases production and power of production units and increases efficiency to ensure reliability and availability of energy facilities and harmonization of technological development in line with economic development of Croatia. Replacing plants, equipment and devices at the end of their life and increasing the efficiency of existing plants and equipment optimizes the production process and reduces the risks of long-term downtime and the occurrence of major and serious malfunctions, thus preventing production losses.

Modernization and overhaul of power plants

In 2019, the cycle of reconstruction and revitalization of hydropower plants continued. These interventions replace obsolete equipment with new ones at the level of the latest technological and technical solutions, and the improvement of the technological process and modernization of equipment is achieved, often with the introduction of process automation and remote control. The primary goals of revitalization are to increase the availability of power plants for the needs of the power system, to extend the life of hydropower plants and to reduce the costs of maintenance and operation of plants. Although the primary goal of hydropower revitalization is not to increase power and production, it is, according to previous study research, achieved where possible. In total, as a result of the investment cycle in the reconstruction, upgrade and revitalization of existing hydropower plants, HEP expects to generate an additional 160 megawatts of new power. The expected increase in annual production is about 380 million kilowatt hours. The revitalization cycle began in 2012 and by the end of 2019, around HRK 1.4 billion had been invested. By 2030, HEP plans to invest another HRK 2.2 billion.

In HPP Zakučac, the overhaul of unit A was performed, on which the problem of increased turbine vibrations was successfully solved. In RHPP Velebit, unit A was overhauled with the replacement of the pump-turbine rotor, the frequency start-up system and equipment of the 35 kV switchyard were replaced, and the power plant's own consumption, cooling and drainage equipment was replaced. In HPP Dubrovnik, activities were carried out for the purpose of training the equipment so that the power plant would be put into operation after the accident at the beginning of the year. The final activities on putting the CPZ (Production Center West) into operation are in progress. It will provide better management, respect for the boundaries of work and the system as a whole and consequently, facilities and plants of hydropower plants based on the new model of management and optimization of HES PP HPP West. Direct benefits include improved planning and management in the PP HPP West basins, which leads to increased production of hydropower plants (reduction of overflows and minimization of specific water consumption) and more efficient redistribution (ratio of variable and basic energy) of electricity for the same hydrological conditions and water use, which ultimately has its economic equivalent and reduced maintenance and operating costs.

At the end of the year, the works on the last, third stage of revitalization were completed in the Gojak hydroelectric power plant. After the replacement of generators, A and B, their trial run was performed, and the replacement of generator C was performed. After the trial run of that part of the plant and the technical inspection, a use permit was obtained for the entire reconstruction of HPP Gojak. As part of the revitalization, high-power block transformers, control, signaling, protection, measurement and regulation systems and generator excitation systems were replaced, as well as all three turbines, which improved energy characteristics and reconstructed the 35 kV plant. Following the completion of an extensive revitalization, worth around HRK 100 million, the capacity of HPP Gojak was increased from 48 to 57 MW.

At HPP Ozalj, all works of the 3rd stage have been successfully completed and a trial run is in progress. HPP Ozalj 1 is a flow-through power plant built and put into operation in 1908. Given the fact that the generators have been in operation for 110 years, it is quite understandable that they are at the end of their life and need to be rebuilt to the extent allowed by their monument protection. Revitalization of the Ozalj 1 HPP generator includes the replacement of obsolete primary and secondary equipment and the network connection (except for turbines, which were replaced about twenty years ago). The installation of new equipment has improved the technical characteristics of the unit and at the same time will extend the service life and improve the availability and reliability of the power plant. The replacement of the first generator was completed in 2017, the replacement of the second generator in 2018, and the replacement of the third generator in 2019.

The location permit for the reconstruction of HPP Senj was obtained and the activities on the preparation of tender documentation for the replacement of primary equipment on the reconstruction project continued. Activities have begun on the development of the main project for the Reconstruction of HPP Varaždin, and the tender documentation for turbines and generators is in a high stage of preparation. The replacement of the USZMR system, uninterruptible power supply system and own consumption system in HPP Đale is in progress, as well as the replacement of the control system, turbine regulation and water supply in MHPP Miljacka.

The Buško Blato reservoir is of exceptional energy importance in the Cetina River Basin because it is a multi-purpose and multi-year reservoir with an available volume of about 800 million m³ of water, which is used at a drop of about 400 m in the HPP Orlovac. Works on the underground sealing started in August 2019, and the completion is expected in 2021. The investment is expected to save water loss of approx. 1-2 m³/sec and additional production on the threshold of HPP Orlovac 30-60 GWh.

Activities continued in the preparation of documentation for the construction of the Drežnica Field retention.

In TPP-HP Sisak, the construction of the "steam block" plant 1x10t/h has been completed. All required indicators (boiler capacity and efficiency) were proven during the trial operation, and the realization of planned savings would be quantified after the plant is in constant operation during one reference year. In 2019, the lamellar sedimentation tank was reconstructed at TPP Plomin 2, and the plant was put into operation. The reconstruction of the settling tank envisages the construction of a filter plant on the south side of the existing settling tank, and its purpose is to further purify and improve the quality of the water discharged into the Čepić canal. During 2019, TPP-HP Zagreb reconstructed the combustion system of hot water boilers VK5 and VK6, and devices for analysis and measurement of gas flow of the total consumption of the plant were delivered and installed. In TPP-HP Osijek, the pipe inserts of the hot water heater were replaced. The goal of the investment is to replace obsolete equipment (older than 30 years) in order to increase the operational readiness of the hot water system of the city of Osijek and the security of heat supply to consumers. Reconstruction of the primary air supply system of WBK boilers of block 45 MW in TPP-HP Osijek has also been completed. Reconstruction of the primary air supply system increases the reliability of the system, reduces the stress of primary equipment, improves the characteristics of combustion control in boilers and achieves savings of primary and electricity by applying energy efficiency measures. In PP-HP Zagreb, we removed boiler K7 and built low-pressure steam boiler number 3. This enables the provision of heat consumption that is endangered by the decommissioning of units A, B and K7, and soon H and J, as well as increasing production efficiency and reliability of superheated steam supply in transitional periods when production from other plant units is not economical or available.

Available capacities of HEP Group

HYDRO POWER PLANTS Accumulation	AVAILABLE POWER (MWe) / (-MW pumping work)	HYDRO POWER PLANTS Flow	AVAILABLE POWER (MWe)
MHPP Zakučac	539.15*	HPP Varaždin	92.65
RHPP Velebit	270 (-240)	HPP Dubrava	79.78
MHPP Orlovac	237.0	HPP Čakovec	77.44
MHPP Senj	216.0	HPP Gojak	55.5
HPP Dubrovnik	126/117	HPP Rijeka	36.8
HPP Vinodol	90.0	GHPP Miljacka	20
HPP Peruća	60.0	HPP Jaruga	7.2
HPP Kraljevac	46.4	HPP Golubić	6.54
HPP Đale	40.8	HPP Ozalj	5.5
HPP Sklope	22.5	HPP Krčić	0.38
PS Buško blato	7.5/4.2/(-10.2/-4.8)	HPP Lešće	41.2
PHPP Fužine	4.6/(-5.7)	HPP Lešće ABM	1.09
HPP Zavrelje	2		
RHPP Lepenica	0.8 (-1.2)		
HPP Zeleni vir	1.7		

PS: pumping station, PHPP. pumping HPP, RHPP. reversible HPP, * Includes MHPP Prančevići available power 1.15 MWe

THERMAL POWER PLANTS	AVAILABLE POWER (MWe, MWt, t/h tech.steam)	FUEL
TPP-HP Sisak	229 / 0 / 121	natural gas / gas oil
TPP-HP Zagreb	410 / 708 / 334	natural gas / gas oil
PP-HP Zagreb	80 / 316 / 206	natural gas / gas oil
TPP-HP Osijek	89 / 210 / 160	natural gas / gas oil
CTPP Jertovec	48	natural gas / gas oil
TPP Rijeka	303	fuel oil
TPP Plomin 1	105	bituminous coal
TPP Plomin 2	210	bituminous coal
NUCLEAR POWER PLANT	**AVAILABLE POWER (MWe)**	**FUEL**
NPP Krško*	348	nuclear

*HEP disposes of a half of the capacity of NPP Krško

PHOTOVOLTAIC POWER PLANTS	AVAILABLE POWER (MWe)	FUEL
Non-integrated (1)	1	solar
Integrated (36)	0.8	solar
BIO ENERGY PLANTS	**AVAILABLE POWER (MWe, MWt, t/h)**	**GORIVO**
BPP-HP Sisak	3/10/12	untreated wood pellets
BPP-HP Osijek	3/10/12	untreated wood pellets

According to data from the PPE application (power plant production indicators), in 2019 the average operational availability of hydropower plants was 70.3 percent, and the operational availability of thermal power plants was 57.8 percent. With appropriate preventive maintenance of generation facilities of electricity and heat, HEP Proizvodnja in 2018 maintained a high level of availability of most production units. With certain difficulties during contracting and timely execution of overhaul activities, the planned annual maintenance works of production units were successfully performed, while corrective maintenance works were performed within a reasonable time in order to malfunctions and eliminate operational faults and deficiencies.

Distribution network development

Continuous improvements in electricity distribution are ensured by the construction, reconstruction and revitalization of several significant transformer stations and other distribution system facilities. Key activities in the business area of distribution network development are related to the successful implementation of the investment plan. In 2019, eight capital investments in connection points and main medium voltage (MV) lines were completed. The total value of completed investments amounts to more than HRK 62.6 million (of which more than HRK 17.6 million was invested in 2019). It should be emphasized that during 2019 in the area of Elektra Sisak the final works on the transition of 10 kV network to 20 kV voltage were intensified, making Elektra Sisak the first electricity distribution area to fully complete the transition from 10 kV to 20 kV operating voltage.

In 2019, HEP ODS continued to invest in the electricity distribution network on the coast and on the islands, planned in the amount of about HRK 800 million for the period 2018-2021. These investments will directly contribute to the further success of Croatian tourism and the creation of better living, working and staying conditions on the islands, in accordance with the strategic plans of the Government of the Republic of Croatia aimed at creating conditions for sustainable development of Croatian islands.

During 2019, a number of significant transformer stations and other facilities on the distribution network were built, reconstructed or revitalized, and the emphasis of investment activities was on continuing and completing a number of long-term investments in progress and launching a smaller number of new capital investments. Also, a significant progress has been made in the project preparation for the construction of SS 110/10 (20) kV Zamošće.

Among the most significant projects in 2019 was the construction of the new SS 110/10 (20) kV Medulin. During 2019, the degree of introduction of plants of all voltage levels into the remote-control system continued to increase. Activities of construction, revitalization and modernization of the remote-control system in 53 facilities of voltage level x / 10 (20) kV, 115 facilities of voltage level 10 (20) / 0.4 kV, 60 switching devices in the network 10 (20) kV and 50 failure indicators in the 10 (20) kV air network.

In addition, it is extremely important to mention investments in metering devices and infrastructure by repairing and reconstructing billing metering points and connections, with the aim of reducing non-technical losses, but also recon-

structing dilapidated and technically obsolete connections. In accordance with the strategic 2030 goals of HEP Group, HEP ODS applies modern technological solutions by which the existing network is gradually developed and transformed into an advanced electricity network. Special attention is paid to monitoring and improving supply quality indicators consisting of voltage quality, power reliability and service quality. Further investment in the distribution network will ensure its long-term ability to follow the development of consumption and enable the development of the electricity market and increase the capacity for production from renewable energy sources connected to the distribution network and increase the quality of supply.

Introduction in advanced networks

Investments in metering devices and infrastructure through the rehabilitation and reconstruction of metering points and connections are especially important in the distribution system. This directly affects the reduction of non-technical losses. As the use of innovations and progress of the digital transition is one of the material issues of the HEP Group, pilot projects are especially important to test various technological solutions that can contribute to the modernization of the distribution system, increase energy efficiency and reliability of electricity supply and development of advanced networks.

The pilot project for the introduction of advanced networks is partly financed by grants provided from EU funds in the amount of HRK 149.95 million. The purpose of the project is the computerization of part of the electricity distribution network. The pilot project is taking place in five distribution areas (Zagreb, Osijek, Split, Zadar and Dubrovnik) and will be implemented until 2022. The remaining HRK 26.86 million for the implementation of the project is provided by HEP ODS. In addition, HEP ODS will invest an additional HRK 52 million, so the total investment in advanced networks will amount to almost HRK 230 million. This project will establish an advanced metering infrastructure, which will enable more accurate calculation of losses and locating areas with increased network losses, monitoring electricity consumption and its active management at the end user level where 24 thousand existing meters will be replaced by advanced ones. Summary meters will be installed in 6,125 transformer stations, and the existing 449 transformers will be replaced with new, more energy efficient ones.

SINCRO.GRID is one of three projects in the field of advanced networks (Smart Grid) which will use advanced forecasting tools to effectively integrate the activities of all network users to achieve maximum efficiency of the transmission and distribution network. The purpose of the project is to use advanced technical systems and algorithms to manage power flows in order to improve the quality of voltage in the power system which will result in increased transmission capacity of existing lines, thus ensuring better integration of renewable energy sources into the power system and increase security of network users. The project also brings other improvements: reduction of dependence on energy imports, reduction of the impact of fossil fuels on the environment, increase of transmission cross-border capacities and development of new technologies and the economy. The project is the result of many years of successful cooperation between Slovenian and Croatian operators, and the goal of the project is to solve the challenges in managing the power system and eliminating congestion in the power network.

In February 2017, the project was assessed as the most innovative and was granted the total requested co-financing of EUR 40.5 million, which is 51 percent of the project value, under the Connecting Europe Facility (CEF), a program to support infrastructure projects. In 2019, work was done on the communication connection of distribution dispatch centers with the HOPS platform for the exchange of data required for calculations in the virtual control center that will manage the reactive power compensation devices in the HOPS network.

3Smart project. In December 2019, the project "Smart building - Smart grid - Smart city" (3Smart) was completed, which is co-financed from the Interreg Danube program. The project brought together 18 partners from six countries in the Danube region, including HEP ODS, HEP ESCO and HEP d.d. The total value of the project is EUR 3.8 million, of which HEP's share is around EUR 444,500. Co-financing of 85 percent of the project costs with EU funds has been approved. The main goal of the project is to prepare a technological and regulatory basis for cross-energy management among buildings, distribution network and urban infrastructures in the Danube region.

Most of the activities in 2019 were focused on achieving the full functionality of devices and equipment of pilot projects, and on ensuring the exchange of data between equipment and central control devices and systems. Coordination of the extended project team were held throughout the year, where experiences and information related to the optimization of pilot work were exchanged. In the second half of the year, presentations for the interested public were held at the locations of the pilot projects, where the ideas of the 3Smart project and the results achieved were presented.

Revitalization of heating network. Every year, in accordance with the development plans and financial possibilities, HEP Toplinarstvo carries out the works of revitalization of the heating network in the heating systems it manages. This constantly ensures increased quality of stability and security of heat distribution, which has a positive impact on the development of local communities in Zagreb, Osijek, Sisak, Velika Gorica, Samobor and Zaprešić. Planned revitalization of the heating network reduces the number of emergency interventions in the heating network, losses in heat transfer and maintenance costs of the network, prevents failures and increases the operational safety of heating systems and reliability of end customers' heat supply.

► Planned revitalization of the heating network reduces the number of emergency interventions

At the end of November 2019, the European Commission approved funds for the project of replacing sections of hot water highways and distribution networks for 18 settlements in Zagreb. The purpose of this project is to replace 68.5 km of hot water mains and hot water distribution networks in the Zagreb area to achieve the goal of increasing system efficiency, i.e. reducing heat and water losses in the system.

The total value of the project is HRK 556.13 million, of which HRK 421.50 million are grants from the Operational Program Competitiveness and Cohesion for the financial period 2014-2020, while the remaining HRK 134.63 million is provided by HEP.

In 2019, intensive work was done on the replacement of the hot water distribution network in Zagreb, and the implementation of the capital investment project of connecting the Dubrava settlement to the central heating system of Zagreb continued. This enables the replacement of expensive fuel production from block and house boilers with more efficient heat production from TPP-HP Zagreb cogeneration units. Reconstruction of the existing steam pipeline reduces the distribution losses of the eastern steam pipeline network, and indirectly the emissions of harmful substances into the environment. In 2019, HRK 16.3 million of own funds were invested in the project of connecting the Dubrava settlement to the CHS Zagreb.

Also, parts of the hot water route in Velika Gorica and Samobor were revitalized, which increases the energy efficiency of the heating system and the reliability of thermal energy supply in these cities, reduces heat losses, reduces running water replenishment losses and reduces the number of emergency interventions in the system. HRK 2.2 million was invested in the revitalization of the hot water network in Velika Gorica in 2019, and HRK 2.4 million in Samobor. Parts of the hot water network in Osijek and Sisak were revitalized, while a smaller part of the steam pipeline was revitalized in Osijek. HRK 6.4 million was invested in the revitalization of the hot water network in Osijek and HRK 3.2 million in Sisak.

In 2019, we introduced a system for optimizing the production of thermal energy in the boiler room in Velika Gorica and carried out the reconstruction of the boiler rooms in Zagreb and Zaprešić. We successfully realized 30 major emergency interventions on the hot water network, in which the complete hot water pipes were replaced with new ones.

Works on thermal systems are financed through tariff items of power for heat production and power for heat distribution, which in accordance with the methodologies for determining the amount of tariff items for production and distribution of heat are charged to end customers in monthly heat bills.

In December 2019, HEP Toplinarstvo signed an Agreement for support from EU funds for the project "Replacement of the connecting hot water pipeline from TPP-HP Osijek to the heating plant Osijek". The project includes the replacement of the connecting hot water pipeline that is laid between the heating plant and the thermal power plant-heating plant Osijek, about 4.5 km long. The project will ensure further development of hot water consumption, expansion of the hot water network and possible further increase of the efficiency of the central heating system by lowering the temperature regime. Also, the goal of the project is to increase the security and reliability of the supply of end customers with thermal energy. The total value of the project is HRK 78 million, of which HRK 46 million is co-financed by EU funds, while the rest of the funds are provided by HEP. The project is implemented through the Operational Program Competitiveness and Cohesion for the financial period 2014-2020.

Participation in the KeepWarm Project. During 2019, HEP Toplinarstvo participated in the KeepWarm project to increase the efficiency of central heating systems (CHS) in Central and Eastern Europe. The KeepWarm project is funded by the EU and aims to accelerate a cost-effective investment in modernizing district heating systems, modernizing CHS across the region and reducing greenhouse gas emissions by improving system performance and promoting the transition from fossil fuels to less polluting sources such as renewables. The project brings together eleven project partners from various relevant sectors (energy agencies, national CHS associations, agricultural chambers, research institutes, consulting houses, non-profit organizations) in Central and Eastern Europe. Project partners seek to ensure that best environmentally friendly heating and cooling practices are implemented across Europe, replicating the KeepWarm project approach in other countries and regions.

Distribution network data

Length and category of distribution network lines

Voltage level	Overhead lines (km)	Cables (km)	Submarine cables (km)	Total (km)
Lines 35(30) kV	2,992.60	1,383.70	141.7	4,518.00
Lines 20 kV	4,641.80	5,822.70		10,464.50
Lines 10 kV	15,780.70	11,126.90	252	27,159.60
Network 0.4 kV	44,208.00	17,874.70		62,082.70
Home connections (0.4 kV)	22,871.30	12,969.40		35,840.70
Total	**90,494.40**	**49,177.40**	**393.70**	**140,065.50**

Electricity losses in the distribution network

Electricity losses are indicators of business efficiency and quality of electricity distribution activities in HEP ODS. Reducing electricity losses is one of the most important business goals and to achieve it, investment and operational measures have been implemented for many years. The implementation of these measures has resulted in a downward trend in the amount of electricity losses over the years.

According to their character, losses are divided into two key groups. Technical losses, which are a consequence of the operating condition of the distribution network and the technical characteristics of the network elements, relate to the magnetization losses of the cores of a large number of transformers and to the heat losses on lines and transformers. Non-technical losses, which are a consequence of unmeasured and unaccounted energy consumed by electricity customers, and relate mostly to measurement errors, unauthorized electricity consumption etc.

According to the existing methodology, electricity losses are the difference between the energy that entered the distribution network (from the transmission network and power plants connected to the distribution network) and the energy charged to end customers. Losses are expressed as a percentage of the total electricity supply. Losses in the distribution network for 2019 amounted to 1,276 GWh, or 7.64 percent, of which technical losses amounted to about 51 percent, and non-technical 49 percent. Losses in the distribution network decreased compared to 2018 when they amounted to 1,288 GWh, or 7.68 percent.

Distribution network reliability

Security and stability of energy supply is part of the mission of the HEP Group and is a material topic that all stakeholders assess as an issue of the greatest importance and impact for the economy and society and for their sustainability and business. That is why safe and stable energy supply is woven into the strategic goals of HEP Group 2030. The realization of goals is reflected in the responsible management of reliable service and constant efforts to reduce the frequency and duration of power outages and reduce electricity losses in the distribution network.

In accordance with the Conditions for the quality of electricity supply, HEP ODS keeps electronic records of planned and unplanned power outages (power outages), and their frequency (SAIFI - average number of power outages per customer, per year). The frequency of power outages for 2019 is 1.05 for planned outages and 2.21 for unplanned outages (with force majeure). The average duration of power outages per network user per year (SAIDI) in 2019 was 153 minutes for planned outages, for unplanned outages without force majeure 100 minutes and for unplanned outages with force majeure 192 minutes, or a total of 345 minutes.

A step forward on the gas market

In 2019, investments were made in facilities and equipment that needed to be replaced or renewed in order to increase the reliability of network operation and investments in the preparation and construction of new gas pipelines in all local governments where HEP Plin distributes gas and where there is a need to expand the network. The dynamics of realization is conditioned by the obligations from the concession contracts, for the construction of which it is estimated that there is economic justification. In April 2019, HEP Plin took over the company Plin VTC d.o.o. Virovitica. This takeover is part of HEP Group's strategy, which is focused on the further development of the gas business and active participation in the consolidation process on the Croatian gas market. With this acquisition, HEP Plin has confirmed its position as one of the leading gas distributors and suppliers in Croatia, with almost half a century of experience and business tradition.

Based on the decision of the Government of the Republic of Croatia in February 2019, HEP increased equity of the company LNG Hrvatska d.o.o. in charge of building a liquefied natural gas terminal, which also began in April. As a new gas supply route, the LNG terminal will increase security of supply for HEP and the whole of Croatia.

During 2019, after the final investment decision was made, activities on the realization of the first phase of the floating terminal for liquefied natural gas on the island of Krk were intensified. The main activities included opening the construction site at the terminal location and monitoring the execution of works on land, as well as monitoring the obligations during the conversion of the ship in accordance with the contract for the procurement of FSRU ship and obtaining project and permit documentation. Following the closure of the binding capacity lease procedure (Open Season procedure) and the adoption of the Final Investment Decision in January 2019, contracts for the use of the terminal on a total of 0.52 billion cubic meters were concluded with HEP and INA. HEP d.d. in April 2019 leased the terminal capacity of 0.42 billion cubic meters per year for a period of 10 years, i.e. from 1 January 2021 to 30 September 2030.

In February 2019, the Croatian Energy Regulatory Agency designated HEP d.d. for suppliers on the wholesale gas market for a period of two years - from 1 April 2019 to 31 March 2021. Out of 34 suppliers in Croatia, 33 concluded contracts with HEP in 2019, which is an improvement compared to the previous year, when there were 32 of them.

Sustainable construction and development of energy system

In accordance with the set strategic goals, HEP intends to increase the share of renewable energy sources from 35 to 50 percent by 2030. During 2019, most of our investments in the total value of HRK 3.4 billion were focused on the renovation and modernization of production facilities and power system facilities, as well as the construction of new production power facilities. With these investments, which were 42.5 percent higher than in the previous year, we made a special step forward in 2019 in launching renewable energy and high-efficiency cogeneration projects. By diversifying our portfolio, we ensure stability and security, as well as the long-term sustainability of the system, and, in accordance with our HEP2030 strategy, but also following the guidelines of the Energy Strategy draft, we position ourselves as a leader in sustainable planning and construction.

Investment cycle in solar power plants initieated with the acquisition of operating SPP Kaštelir

HEP's projects for the construction of renewable sources of energy and high-efficiency cogeneration

In 2019, we significantly increased the dynamics of the development of renewable energy sources and high-efficiency cogeneration. We recognize this area as a strategically important area of business, and we have launched a series of investments.

SPP Kaštelir. In 2019, HEP acquired the company that operated the 1 MW Kaštelir solar power plant. It is the first non-integrated solar power plant in HEP's portfolio. The power plant is in Sabadin in the municipality of Kaštelir-Labinci in Istria. SE Kaštelir, which is in the incentive system, produced 1.5 million kWh in 2019.

SPP Cres (Orlec Trinket East). In 2018, HEP took over the project for the construction of the Cres Solar Power Plant, which had been developed by the Primorje-Gorski Kotar County until then, and in 2019 concluded a contract for the construction of the power plant. The construction site of SE Cres is located about 2 kilometers north of the settlement Orlec on the island of Cres. The connected power of the power plant is 6.5 MW with an expected production of about 8.5 million kWh per year, which corresponds to the consumption of about 2,500 households. The power plant is expected to be commissioned in 2020. The planned operation of the power plant is 25 years. The power plant is financed from HEP's own funds. The unit planned reduction of greenhouse gas emissions is 1.985 tCO_2/y. This project has multiple positive impacts on the local community and the domestic economy, through financial contributions after the construction of the power plant, but also during the construction itself, because it will involve 60 percent of domestic companies. It will produce electricity without incentives.

SPP Vis. In September 2019, the construction of the Vis solar power plant began, with a connection capacity of 3.5 MW. It is located on an area of 5.5 hectares, on the hill Griževa glavica, at an altitude of about 250 meters, near the village of Žena Glava. A total of 11,200 340 Wp photovoltaic modules will be installed in the power plant, a 5.2 km long medium-voltage cable network will be installed, and five frequency converters with a nominal power of 720 kW, products of the domestic manufacturer Končar, will be installed in cooperation with HEP. The expected annual production is about 5 million kWh of electricity, which can meet the needs of about 1,600 households. It will also produce electricity without incentives. The value of the investment is HRK 31.3 million.

SPP Vrlika Jug. The Vrlika Jug solar power plant represents the realization of the first phase of the planned construction in the southern part of the Kosora Work Zone in the town of Vrlika. The connected power of the power plant will be 2.1 MW, and the expected annual production will be around 2.9 million kWh. The value of the investment is HRK 11 million. During 2019, the construction of the power plant was prepared, which is planned for 2020, and the power plant will start operating by the end of the same year. SPP Vrlika Jug will also produce electricity without incentives.

WPP Korlat. In May 2019, the construction of WPP Korlat began, which will be the first wind farm in HEP's portfolio. WPP Korlat is located on the eponymous location, eight kilometers northwest of Benkovac. The connected power of the wind farm is 58 MW, while the expected annual production is about 170 GWh, which is 1 percent of the annual electricity consumption in Croatia. The electricity produced is enough to supply more than 50,000 households. The total value of the investment is more than 500 million kuna. The wind farm will have 18 wind turbines with an individual installed capacity of 3.6 MW. The commissioning of the power plant is planned by the end of 2020. WPP Korlat does not have the status of a privileged producer, i.e. it does not have a contract with the Croatian Energy Market Operator (HROTE). It will be the first new wind farm in Croatia to produce electricity without a guaranteed purchase at an incentive price. The profitability of the investment was determined according to the market prices of electricity.

The construction of WPP Korlat; investment worth more than HRK 500 million

Visualization of the construction of the new block in PP-TP Zagreb, which started in late 2019

Solar power plants on the roofs of HEP's office buildings. In accordance with the National Renewable Energy Action Plan, which stimulates the construction of small solar power plants, in 2018, in addition to the construction of large solar power plants with a total planned capacity of 350 MW (by 2030), HEP initiated the construction of 10 to 50 kW solar power plants on roofs own business and production buildings that will use electricity at the place of production. During 2019, HEP financed, and HEP's energy efficiency company HEP ESCO carried out the construction of 22 solar power plants to cover its own electricity consumption with a total power of 645 kW. Any surpluses will be delivered over to the network under market conditions.

On-site energy production has multiple benefits and is one of the determinants of European energy policy. With small solar power plants, whether on business or residential buildings, the idea is to produce the optimal amount of energy for the needs of the building.

Block L in PP-TP Zagreb. At the end of 2019, the main works on the construction of the combi-cogeneration high-efficiency block "L" in PP-TP Zagreb began. Previously, during 2019, building permits were obtained, documentation was prepared for all phases of project implementation, old buildings on the site were removed, all necessary infrastructure was relocated, and the location was prepared to accommodate the new block.

For this investment worth HRK 900 million, HEP signed in July 2018 a Contract on construction and procurement and installation of equipment and a long-term maintenance agreement with FATA SpA (a member of the Danieli Group) from Italy, and a loan agreement with the European Bank for Reconstruction and Development (EBRD) and the Loan Agreement with the European Investment Bank (EIB). Through the EIB, the project was also included in the Investment Plan for Europe.

The new 150 MWe and 114 MWt plant will use natural gas and replace two production units at the existing location to ensure long-term heat supply to more than 80,000 residents of western and northern Zagreb and steam to industrial consumers.

In addition, the new block L in PP-HP Zagreb will be a reliable source of electricity for the power system. With more power, it will enable more flexible operation of existing units and their longer stay in operation, i.e. higher production on site with less impact on the environment, because with the application of state-of-the-art energy solutions carbon dioxide emissions will be reduced by about 150,000 tons per year. In comparison, the old plant that the new unit replaces has a specific emission of 682 g/kWh, while the new unit will have a specific emission of 187 g/kWh.

Also, the KKE PP-TP Zagreb project with a total efficiency of 90 percent and primary energy savings of more than 25 percent in the combined process of electricity and heat production, is certainly justified in terms of reducing the impact on climate change, which was confirmed by the EBRD, which gave it the highest rating from an environmental point of view.

The construction of such highly efficient combi-cogeneration plants is in the function of building and maintaining a diversified and flexible production energy portfolio. The realization of this project is in the function of harmonizing the work of production units with the Directive on Industrial Emissions and meeting the emission limit values prescribed by the environmental permit. At the same time, natural gas, although a fossil fuel, is an acceptable transitional energy source which, due to its lower environmental effects than other fossil fuels, is an important energy source in the long-term transition to a low-carbon economy.

HES Kosinj / HPP Senj 2. In 2019, Hrvatska elektroprivreda continued to develop the hydropower system (HES) Kosinj and HPP Senj 2, with a capacity of 412 MW and a total investment value of EUR 460 million. These projects represent the second phase of the construction of HES Senj, a system built in the first phase, by which it is intended to use the remaining hydro potential in the Lika and Gacka river basins. Namely, the existing HES Senj has been using part of their hydro potential for 54 years by operating HPP Sklope (22.5 MW) on the fall created by the dam Kruščica and HPP Senj (216 MW) on the fall from Gusić field to the Adriatic Sea (440 m gross). Realization of the second phase of the unified system, i.e. construction HES Kosinj will enable additional electricity production, complete protection against flood waters in Kosinjsko polje, increase the security of water supply of the southern branch of the water supply system of the Croatian coast and improve road and other communal infrastructure in the wider area. Today, the Senj hydropower system has an average annual production of 1.15 TWh. The construction of the second phase facilities, HES Kosinj and HPP Senj 2 envisages additional production of 320 GWh per year, with the largest part of the total new production of 1.45 TWh being peak and control energy. In 2019, a location permit was obtained for HES Kosinj and an investment decision was made. The investment value of HES Kosinj is HRK 1.54 billion, and for HPP Senj 2 HRK 1.91 billion.

Continued development of HES Kosinj and HPP Senj 2, capacity of 412 MW - visualization of the future HPP Kosinj

Market development and competitiveness

Customer oriented business

Responsible market relations are one of the foundations of a healthy and successful business. Increasing demands for the development of industries, business, infrastructure and public activities encourage the energy sector to constantly develop new products and services. In addition to enriching the portfolio, the focus of the wholesale and retail market is the requirements of users and customers and user experience as a prerequisite for the development of competitiveness. As a leader in the Croatian electricity market, HEP Group set ambitious market development goals, which in 2019 were mostly focused on defining and designing new products and services and developing the user experience. Steps have been made in this, and HEP Group is constantly improving the use of synergy effects among its companies and exploring the possibilities of other business expansion models. We also improve quality by communicating with our market stakeholders, especially customers, users and suppliers.

HEP Opskrba

By introducing new services based on digitalization, following the trends of transformation of the energy sector, HEP Opskrba strives to ensure differentiation in relation to the competition. Therefore, one of the initiatives in 2019 was focused on "peer to peer" trading. The initiative contributes to the realization of European and national goals related to the promotion and increase of the share of renewable sources, which indicates the possibility of co-financing from EU funds. During 2019, the business case was defined, and the trading principle was elaborated.

During 2019, an E-invoice was introduced for customers in the public procurement category, and E-invoices were successfully delivered to about 4,200 customers. This initiative enabled harmonization with legal provisions, differentiation from competition, technological, economic and social sustainability, improvement of HEP's reputation, reduction of costs for printing, sending and archiving invoices, digitalization and improvement of cash flow. During 2019, HEP Opskrba independently conducted a customer satisfaction survey. To ensure faster and better resolution of customer requirements, a new communication channel - messenger Chatbot - has been implemented on the Facebook page of HEP Opskrba.

Number of HEP Opskrba customers on 31/12/2019

Customer category	2018	2019
No of customers - commercial	36,328	35,146
No of customers – residential	51,646	59,866
Total	**87,974**	**95,012**

In 2019, we recorded a slight decline in the number of customers in the commercial category compared to 2018. This decline is mainly due to customer deregistration with network operators, the closure of business entities and the termination of contracts due to non-performance of customer contractual obligations (irregular payment). The number of measuring points in the residential category grew at a rate of 15.8 percent compared to 2018.

Number of billing metering points of HEP Supply customers by voltage levels on 31/12/2019

Customer category	2018	2019
High voltage	**139**	**144**
Medium voltage	**1,795**	**1,822**
Low voltage - commercial	94,426	96,551
Low voltage - public lighting	15,667	17,952
Low voltage - residential	51,646	59,801
Total low voltage	**161,739**	**174,304**
Total	**163,673**	**176,270**

Apart from the category of high and medium voltage, where the number of metering points is relatively stable, an increase in the number of metering points was recorded at all other voltage levels during 2019. The significant increase in the number of metering points in public lighting is a consequence of the public tenders won, as well as the increase in the number of metering points for existing customers (cities and municipalities).

In 2019, due to non-payment, at the request of HEP Opskrba, a total of 189 disconnections were carried out, of which 84 disconnections of customers in the residential category and 105 disconnections of customers in the commercial category. Out of this number, the contract with some customers was terminated - with 24 customers of the household category and 48 customers of the commercial category.

The share of timely submitted requests of suppliers for re-establishment of electricity supply to the end customer, after the cessation of reasons for temporary suspension of electricity supply, in

2019 was 98.77 percent, or of the total number of requests which were 162, with 160 resolved within one day.

HEP is constantly expanding its offer and, in addition to supplying energy, offers increasingly complex and modern energy services to the market. Among them is the Benefit Program for HEP Group customers based on the one-stop-shop principle, which combines electricity supply and multiple energy services in one place. Thus, in 2019, HEP Opskrba, in cooperation with HEP ESCO, offered its customers in the commercial category electricity supply energy services that can help them meet and reduce their consumption (covering 560 largest customers of HEP Opskrba). Customers of HEP Opskrba can take advantage of one of two service packages from the program: Systematic Energy Management (SGE) and ESCO Project Preparation (ESCO) or Educational Services.

HEP Elektra

Number of billing metering points of HEP Elektra customers by voltage levels

Customer category	2018	2019	%19/18
High voltage	**1**	**1**	**0%**
Medium voltage	**304**	**272**	**-10.5%**
Low voltage - commercial	81,295	83,579	+2.8%
Low voltage - public lighting	2,084	1,643	-21.2%
Low voltage - residential	2,008,848	2,026,349	+0.9%
Total low voltage	**2,092,227**	**2,111,571**	**+0.9%**
Total	**2,092,532**	**2,111,844**	**+0.9%**

Number of billing metering points according to customer status

Customer category	2018	2019	%19/18
Residential	2,008,848	2,026,349	+0.9%
Commercial	83,684	85,495	+2.2%
Total	**2,092,532**	**2,111,844**	**+0.9%**

During 2019, HEP Elektra timely submitted a total of 32,216 requests to re-establish the supply of electricity to the end customer after the cessation of the reasons for the temporary suspension of the supply of electricity. Of these, 31,789 or 98.61 percent were resolved within one day. A total of 3,870 written complaints were received, of which 3,851 or 99.51 percent were resolved within one day. The call center received a total of 1,092,341 calls, of which 41,676 or 3.82 percent were answered within one minute.

HEP Toplinarstvo

Number of end customers

Customer category	2018	2019
Residential	121,081	121,954
Industry and business premises	6,333	6,426
Total	**127,414**	**128,380**

HEP Toplinarstvo regularly provides advice on energy savings in the household with advice on energy savings of thermal energy on its website, as well as leaflets with invoices to end customers. In 2019, we improved the interactive relationship with our customers and optimized business processes in terms of dialogue and transparent communication with stakeholders.

In March 2019, HEP Toplinarstvo introduced a new My Account application which enables end customers to review and download heat bills for the past 12 months, review debits and payments made for heat bills, review and download annual heat consumption bills for the past three years. serve for the purposes of issuing the energy certificate of the space, review of the annual reports on the operations of HEP Toplinarstvo within the activities of the buyer of thermal energy and clarification of the model for the distribution and calculation of delivered thermal energy. The application is easy to use and clear and is available to end customers of thermal energy 24 hours a day.

In June 2019, HEP Toplinarstvo started robotizing the business process of entering data on the number of household members used to calculate and distribute the costs of thermal energy for the preparation of domestic hot water in the NAPTOP application. Robotization is carried out by loading the forms for reporting the number of household members, electronically filled in by authorized representatives of co-owners, into a special folder that the program / robot scans and compares with the master data in the NAPTOP application database. The data loaded in this way, after being verified by the clerk, are entered into the application database with one click. This facilitates and speeds up the work of authorized representatives of co-owners, speeds up and facilitates the work of HEP Toplinarstvo and reduces the possibility of errors in manual data entry.

During December 2019, an anonymous survey of end customers' satisfaction with the work and services of HEP Toplinarstvo was conducted at the HEP Toplinarstvo End Customer Reception Center in Zagreb and in the organizational units in Osijek and Sisak on a sample of 104 respondents. The survey confirmed that end customers appreciate and notice the efforts of HEP Toplinarstvo employees to improve the quality of customer relations. High marks and positive comments were recorded primarily on the speed of our response to inquiries and complaints, the availability of information about our services and our professionalism and expertise.

In 2019, the supply of thermal energy was suspended due to non-payment for eight customers in the household category and six customers in the industry and business consumers category.

HEP Plin

Number of customers

Customer category	2018	2019	2019/2018(%)
Residential TM1-TM4	66.399	71.876	108.25
Commercial TM1-TM8 (up to 1 mil. m³)	4.221	5.877	139.23
Commercial TM9-TM12 (over 1 mil.m³)	6	16	266.67
Total	**70,626**	**77,769**	**110.11**

TM = tariff model

Number of customers by supply areas

Supply area	No of customers
Osijek-Baranja County	64,882
Požega-Slavonia County	8,558
Virovitica-Podravina County	3,896
Other counties	433
Total	**77,769**

Plin Vtc, a company owned by HEP Plin, as of 31 December 2019 had a total of 7,950 customers, of which 7,045 households and 905 in the entrepreneurship category. All customers are in the Virovitica-Podravina County.

Last year, HEP Plin introduced the possibility of paying SEPA invoices by direct debit and thus replaced standard standing orders with a modern method of direct debit according to the amount of each individual invoice. SEPA direct debit is a type of payment instrument available for use to all bank clients who have joined the unique SEPA Basic Direct Debit Scheme in Croatia. Through SEPA direct debit, it is possible to pay bills at the same fee as in the case of the Direct debit payment service. With this, HEP Plin met the needs of its customers and took care of paying the bills.

Projects for customers and the community

HEP ODS Customer Center in Vukovar. Since September 2019, the HEP ODS Customer Call Center in Vukovar employs twenty people, and together with the customer center in Knin it forms a unique support system of HEP ODS for 2.4 million network users in Croatia. The unique customer center is in the function of further improving the standards of communication with customers.

HEP EE solar plus. HEP EE solar plus is a program of construction of integrated solar power plants in combination with energy efficiency measures for public buildings, office buildings, hotels and industrial facilities. Since July 2019, HEP Group offers its business customers the possibility of building integrated solar power plants on a turnkey basis under very favorable conditions through the HEP EE solar plus program. The program is performed according to the ESCO model, which means that there is no technical or financial risk for the customer of HEP Group, and the investment is paid out of the savings.

The implementation of this project achieves various improvements in business. The integration of photovoltaic power plants into HEP's distribution network requires the modernization of the distribution network, and therefore HEP ODS is working intensively on the introduction of a smart grid. The introduction of smart grids improves energy management and encourages efficient use of energy in buildings. At the same time, energy companies have more precise information based on which they can procure energy, which results in a reduced share of unused energy. External contractors, i.e. local companies, are involved in the implementation of the program.

Cooperation on Interreg projects. In 2019, there were three ongoing projects from the Interreg cross-border cooperation program in which HEP ESCO participates.

The aim of the TEESCHOOLS project is to propose optimal financing models for energy efficiency projects (nZEB) that will help mayors and school principals to conduct energy audits of buildings in a simple way so that they can decide on technical solutions and optimal financing models for energy efficiency projects in schools. The FEED-SCHOOLS project focuses on developing tools and methodologies to help develop energy efficiency and renewable energy projects in schools (nZEB), calculating CO_2 emissions, developing an optimal financing model for energy efficiency projects and an e-learning platform in Central European schools. The TOUREST project includes the development of a study and recommendation of the community of regional and local self-government and the development of tools for self-assessment of water management in the tourism sector and strengthening the capacity of local and regional self-government in sustainable water management in tourism.

In addition to having a developmental character both in technological and market terms, projects in the field of energy efficiency and renewable energy sources financed by EU funds contribute to the growth of profitability and scope of operations of HEP ESCO. In addition, EU-funded activities can be considered as exports of intellectual and professional services. These projects are financed 85 percent by EU funds and 15 percent by own funds.

The project in which HEP ESCO also participates, and is fully funded by European funds, is Social-

Watt as part of the Horizon 2020 program. The project focuses on the development of an innovative program to alleviate energy poverty in Europe. It will develop tools to enable energy suppliers to identify energy poverty among their customers, analyze and plan energy poverty alleviation measures and monitor their implementation.

BigEVdata. The purpose of the bigEVdata project is to develop an innovative complete solution that will integrate big data modeling of behavior and habits of consumers (users) of charging station infrastructure and enable efficient use and management of the charging network for electric vehicles. The project has been implemented since March 2018 and is financed from the Operational Program Competitiveness and Cohesion for the financial period 2014-2020 (IRI project), with a total value of HRK 19.7 million (of which over HRK 11 million is co-financed by the European Union). HEP is the holder of the project, and the partners are the University of Zagreb, the Faculty of Electrical Engineering and Computing and the company NEOS. The project will be implemented by 2021.

► E-chargers erected within bigEVdata project

Responsible procurement management

HEP d.d. is a sectoral contracting authority obliged to apply the Public Procurement Act, which entered into force on 1 January 2017. The current Public Procurement Act is harmonized with the Acquis Communautaire in the field of public procurement, i.e. with Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and with Directive 2014/25/EU of the European Parliament and of the Council of 26 February 2014 on the procurement of entities operating in the water sector, energy and transport sector and the postal services sector.

During 2019, HEP Group conducted 603 public procurement procedures, of which 45.6 percent related to the procurement of goods, 19.1 percent to works and 35.3 percent to services.

The total value of the conducted procedures amounts to HRK 3,130,192,488, of which 50.5 percent refers to the procurement of goods, 24.3 percent to the procurement of works and 25.2 percent to the procurement of services.

The value of simple procurement, i.e. procurement of goods and services with an estimated value of up to HRK 200,000 and works up to HRK 500,000 in 2019 amounts to a total of HRK 509,994,412. Out of the total amount, the largest share belongs to the procurement of goods in the amount of HRK 221,339,996.

In 2019, 101 procurement procedures were conducted based on exemptions from the application of the Public Procurement Act with a total value of HRK 1,042,040,583, while in 2018 71 procurement procedures were conducted based on exemptions from the application of the Public Procurement Act with a total value of HRK 614,373,080.

The total number of suppliers for HEP Group in 2019 is 8,846, of which 8,605 are domestic and a total of HRK 10,655,191,610.45 was paid, and 241 foreign suppliers were paid HRK 5,225,682,378.83.

During 2019, there were no significant changes in the procurement system or the selection of suppliers. Procurement procedures are carried out in accordance with the applicable Public Procurement Law and internal acts of companies.

Investing in
sustainable

ENVIRONMENTAL PROTECTION

and responsible
impact
management

HPP Jaruga, operating since 1903, within the National Park Krka

Investing in sustainable environmental protection and responsible impact management

Objectives related to investment in sustainable environmental protection in HEP Group are planned annually in accordance with the requirements of legal regulations, as well as on the basis of monitoring best practices and best available techniques in the field of sustainable environmental management in electricity generation and distribution and HEP's development strategy until 2030.

For the purpose of systematically setting goals in the field of environmental protection, energy management and monitoring the success of the implementation of these goals, the headquarters and companies of HEP Group have introduced certified integrated systems according to ISO norms. During 2019, HEP Group emphasized the implementation of EU policy objectives in the field of climate protection, therefore, the most important activities were related to the preparation of construction and construction of renewable energy sources and high-efficiency cogeneration, energy savings in business and production processes, reducing consumption liquid fuel and increasing consumption of natural gas as a transition fuel to low-carbon energy production and e-mobility. Activities related to sustainable waste management, biodiversity conservation and water management and protection were continued.

The biggest risk was related to the increase in the price of greenhouse gas emissions. This risk is managed by purchasing emission units in quantities corresponding to CO_2 emissions from HEP's sources in the EU-ETS system at the same time as purchasing fossil fuels, and by continuously monitoring changes in market prices. No cases of non-compliance with environmental laws and regulations were recorded during the reporting period.

Management systems according to ISO norms in HEP Group

HEP d.d. and HEP Upravljanje imovinom

Hrvatska elektroprivreda d.d. became the holder of the integrated quality management system, environmental protection, energy and health protection certificate according to the international standards ISO 9001:2015, ISO 14001:2015, ISO 50001:2018 and ISO 45001:2018. At the same time, HEP Upravljanje imovinom is certified in the segment of operations that form an inseparable unit with HEP d.d., also according to the international standards ISO 9001:2015, ISO 14001:2015, ISO 50001:2018 and ISO 45001:2018.

HEP Proizvodnja

In HEP Proizvodnja, the assessment of compliance with legal and other requirements is given through the Assessment of the environmental, quality and energy management system in accordance with ISO 14001 and 9001 and ISO 50001 and when assessing environmental aspects, which are reviewed at least once a year. In addition, the evaluation is carried out through the implementation of internal audits, which are aimed at meeting compliance obligations. The representative for quality, environment and energy keeps a register of legal and other requirements and informs the environment coordinators/representatives for the environment at the locations of plants and production areas about all changes. In September and October 2019, the second supervisory audit of the integrated environmental and quality management system at the level of HEP Proizvodnja was conducted in accordance with ISO 14001:2015 and ISO 9001:2015 and the first supervisory audit of the energy management system in accordance with ISO 50001:2018 in all plants and in the headquarters.

HEP-ODS

Protection of worker health and safety, environmental protection and efficient energy management are part of the business strategy of HEP Operator distribucijskog sustava (HEP ODS). The environmental management system according to the international standard ISO 14001 is the first management system certified at the level of 21 distribution areas and HEP ODS headquarters in 2013. In 2018, the transition of this system to the requirements of the new standard ISO 14001:2015 was successfully implemented. The occupational health and safety management system was established in 2015, and in 2017 it was successfully certified for the first time according to the OHSAS 18001:2007 standard. In 2019, the transition of this system to the requirements of the ISO 45001:2018 standard was successfully implemented. The basic commitment of HEP-ODS in energy management is to achieve permanent improvement of energy performance on all business facilities, equipment and devices, including reduction of losses in the distribution network through the implemented energy management system according to ISO 50001:2011 which is confirmed by TÜV Croatia.

HEP Toplinarstvo

HEP Toplinarstvo implemented the first supervisory audit of the integrated quality and environmental management system in October 2019, in accordance with ISO 9001:2015 and ISO 14001:2015. The assessment of compliance with legal and other requirements is carried out through the assessment of environmental aspects at least once a year and through the implementation of internal audits, where it checks compliance with legal and other requirements. The appointed person responsible for monitoring the company's compliance with legal and other requirements keeps a list of legal regulations and other requirements, along with the assessment of compliance.

HEP Opskrba

HEP Opskrba's customer service was the first in Croatia to receive the ISO 9001:2015 certificate for service quality with its exceptional commitment and high level of service provided. In the second part of 2017, preparations for the certification of the Customer Service for ISO 9001:2015 began. The process was successfully completed in the planned period and the Customer Service received ISO certification for a period of three years with mandatory recertification audits each year.

Environmental permits

All existing thermal power facilities of HEP Proizvodnja with a nominal thermal power of more than 50 MWt have obtained environmental permits, which are also a precondition for the operation of the plant, i.e. the production of electricity and heat in accordance with the provisions of the Environmental Protection Act. During 2019, changes and harmonization of all environmental permits with the legislation were made due to the new requirements from the Commission Implementing Decision (EU) 2017/1442 on establishing conclusions with best available techniques (BAT) for large combustion plants in accordance with the Directive 2010/75/EU of the European Parliament and of the Council.

Status of harmonization of environmental permits by plants:

- TE Plomin 1 - obtained a new environmental permit 02/25/2019 and until the measures specified therein are implemented, the block cannot be put into operation.
- TE Plomin 2, TPP-HP Zagreb, TPP-HP Osijek, TPP-HP Sisak - Expert basis for the needs of harmonization of environmental permits related to the said Decision of the Commission and the construction of new boilers with rated thermal power lower than 50 MWt at the plant sites have been completed in full and submitted to the Ministry of Environmental Protection and Energy. Decisions on new environmental permits are expected during 2020.
- PP-HP Zagreb – in addition to the prepared expert basis for the consideration of the Commission Decision, it deals with measures related to the construction of a new KKE PP-HP Zagreb, a plant larger than 50 MWt, given that it is a condition for obtaining a use permit for a new plant. The decision on the environmental permit is expected in the second half of 2020, because a public hearing and public inspection of the documentation for the purpose of issuing measures for the new plant must be conducted.
- TPP Rijeka and CTPP Jertovec – they have not been processed because they do not have the stated obligation to comply, given that these are plants that have obtained exemptions for a limited lifespan until the end of 2023.

Total expenditures and investments in environmental protection in 2019

Environmental protection area	Costs of regular operations (in HRK m)	Investments (in HRK m)
Air and climate	1.73	0
Waste waters	1.87	0
Waste	8.13	6.32
Protection of soil and underground waters	0.44	0.01
Protection of nature and landscape	9.90	2.14
Other – fees and implementation of energy efficiency measures in final consumption	67.95	10.91
Total for 2019	**90.02**	**19.38**

Energy

Energy consumption in HEP Proizvodnja

All HEP Proizvodnja plants prepared Energy Review Reports where the data on average consumption and production for 2016-2018 was used, as well as Analyses of energy indicators (2018 and 2019). The Joint Report on the Energy Inspection of HEP Proizvodnja was also prepared on the basis of data from the Energy Inspections and Plant Analysis. Energy performance and energy performance improvement are based on monitoring and measuring results including EnPIs.

Energy performance indicators are defined through the Energy Review, which considered the average consumption and production for the period 2016-2018. The following parameters have been established for energy consumption - energy base (ENB): total energy consumption (kWh), energy consumption for the production process, energy consumption outside the production process (heating, air conditioning, lighting), total water consumption (for HPPs only sanitary) (m³), total sanitary water consumption (m³), total energy produced (kWh), total delivered energy (at threshold) (kwh), total average number of employees, total area (m²) (facilities where people live and work). The energy audit also identified the following parameters / indicators of energy efficiency or energy performance EnPI: energy consumption [consumed kWh / delivered kWh], energy consumption per employee (lighting, heating, air conditioning) [kWh/employee], energy consumption per m² of space (lighting, heating, air conditioning) [kWh/m²], water consumption (sanitary) per employee [m³/employee] and water consumption per delivered kWh (only for TPP) [m³/kWh].

Using data for 2018 and 2019 from the Analysis of energy indicators of all plants, energy consumption indicators for HEP Proizvodnja d.o.o. and their comparison 2019/2018 are:

	2018	2019	2019/2018
Total energy consumption [kWh] (all energy sources, including vehicle fuel, water energy at HPPs)	17,303,521,040.95	16,069,730,374.85	92.9%
Energy consumption for the production process [kWh] (including water energy at HPPs and fuel for auxiliary units, etc.)	17,233,248,057.98	16,001,749,422.05	92.9%
Energy consumption outside the production process [kWh] (lighting, heating, air conditioning)	35,094,422.71	33,967,962.08	96.8%
Total water consumption [m³] (only for TPP, technological + sanitary)	246,523,403.62	262,858,953.55	106.6%
Sanitary water consumption [m³]	86,498.82	130,574.62	151.0%
Total energy produced [kWh]:	13,332,289,597.47	12,060,847,799.83	90.5%
Total energy delivered [kWh]	12,960,891,386.08	11,669,407,794.28	90.0%
Total number of employees	1,970	1,991	101.1%
Total area [m²] (spaces where people live and work)	126,694.00	127,275.94	100.5%
Total fuel consumption for vehicles [kWh]	3,126,275.78	3,206,240.54	102.6%

Analysis of energy efficiency parameters or energy performance EnPI for 2018 and 2019 and their comparison between 2019/2018:

	2018	2019	2019/2018
Energy consumption [consumed kWh/delivered kWh]	1,25681	1,25358	99.7%
Energy consumption per employee (lighting. heating. air conditioning) [kWh/employee]	20,654.93	17,466.09	84.6%
Energy consumption per m² of space (lighting. heating. air conditioning) [kWh/m²]	424.28	387.21	91.3%
Water consumption (sanitary) per employee [m³/employee]	43.46	54.19	124.7%
Water consumption per delivered kWh (only for TPP) [m³/kWh]	0.03277	0.03085	94.1%

The analysis was conducted on the basis of the Analysis of energy indicators from all locations (Plants/PP) for 2018 and 2019 using the data on the energy base from the Energy Review (2016-2018). The data indicate a trend of improvement in energy efficiency indicators of most indicators in 2019 (compared to 2018, but also in relation to the energy base). Numerous investments made in the last three years which have significantly improved energy efficiency have a great impact on the improvement of energy indicators and energy efficiency parameters.

The indicator of total energy consumption indicates a decrease in relation to the energy base and in 2018. In itself, total energy consumption is not a relevant parameter (because it is largely dependent on production). However, all energy efficiency indicators and especially the most important - energy consumption per committed kWh - indicate positive trends. The indicator of energy consumption outside the production process also shows a decreasing trend, which is confirmed by energy efficiency indicators (energy consumption per employee and energy consumption per m² of space), which is in turn directly related to the implementation of numerous investments in energy efficiency in recent years (construction of new energy efficient facilities), reconstruction of existing buildings, installation of new heating and air conditioning systems, installation of LED lighting etc.). Energy efficiency indicator - sanitary water consumption per employee and sanitary water consumption indicator recorded an increase and the reason for this is the rupture of drinking water pipelines which was not noticed on a monthly basis as for the location of TPP Plomin, as well as increased water consumption due to renovation of HPP Dubrovnik.

The data indicates a trend of improving most energy efficiency indicators in 2019 (compared to 2018, but also in relation to the energy base). Numerous investments made in the last three years that have significantly improved energy efficiency, such as the construction of new energy efficient buildings, reconstruction of existing buildings, installation of new heating and air conditioning systems, installation of LED lighting and other projects have a great impact on the improvement of energy indicators and energy efficiency parameters.

Consumption in HEP Group buildings

In February 2019, the Management Board of HEP adopted a Decision on the implementation of the second phase of the Program for the Establishment of the Energy Management System (SGE) in the buildings of Hrvatska elektroprivreda. More than 80 projects will be implemented through the system of systematic energy management known as the HEP SGE program. Thus, HEP plans to comprehensively manage energy in its buildings with the aim of effectively managing energy costs by identifying potentials for energy and water savings and reducing the impact of HEP's buildings on the environment.

The HEP SGE program is in line with the revised Building Energy Efficiency Directive which encourages the use of new smart technologies to reduce energy consumption in buildings and prioritize energy efficiency. During 2019, 13 energy managers and 79 associates were appointed, 43 locations of HEP ODS were selected for the installation of remote readings (128 metering points) and energy optimization was performed for two buildings (Elektra Varaždin, HEP ODS Velika Gorica).

Following the activities from previous periods, the planning of the introduction of remote reading of energy and water consumption in these buildings continued. Remote reading is carried out by installing measuring and communication equipment on the building, which enables automatic and remote connection of the building with the computer-business system ESCO Monitor. The implementation of this activity will ensure the control over energy and water consumption and enable the measurement and verification of savings after the implementation of energy efficiency measures. The introduction of the ESCO Monitor application in all buildings owned and used by the HEP Group will create a unique database of general and energy data on its buildings and provide insight into consumption and costs for energy and water.

Total energy consumption on the location of the HEP Group headquarters in 2019

Energy source	2018	2019	2019/2018 %
Electricity [kWh]*	2,210,775	1,758,004	-20.48%
Heat energy [kWh]	2,065,143	1,743,395	-15.58%
Natural gas [kWh]*	19,580	24,975	+27.55%

Energy management in HEP ODS

HEP ODS wants to be a leader in the field of energy efficiency and promote energy efficiency both among its employees and in the wider economic and social environment. The basic commitment of the company in energy management is to achieve permanent improvement of energy performance in all business facilities, equipment and devices, including the reduction of losses in the distribution network through an implemented and certified energy management system according to ISO 50001.

At all locations of the process energy audit significant energy consumption is monitored and controlled, and the measured values are recorded in the measurement plans on a monthly basis. In accordance with the defined criteria, significant energy consumption accounts for 67 percent of total energy consumption (without losses).

► The second phase of the implementation of the energy management system in HEP buildings is underway

Significant energy consumption, energy and fuel consumption in the two largest buildings in each distribution area of HEP ODS

Energy consumption by year	2017	2018	2019
Total energy consumption in the 2 largest buildings per DP (in kWh)	22,323,862	21,140,976	19,615,308
Total fuel consumption (in kWh)	30,866,898	28,769,478	29,386,849
Total significant energy consumption (in kWh)	48,867,302	46,009,875	43,481,271

Total energy consumption in the two largest buildings of all distribution areas accounts for 45 percent of total significant energy consumption. In 2019 the total energy consumption in the two largest buildings decreased by 4,135,701 kWh compared to the energy base and by 1,525,668 kWh compared to 2018. By establishing, certifying and improving the energy management system, as well as through investments in energy efficiency measures and continuous education and raising the awareness of workers in energy management, a continuous trend of decreasing energy consumption has been recorded compared to the energy base and/or previous business years. Based on the commitment to continuous improvement of energy performance in energy management, HEP ODS also recognized all other benefits of the energy management system and in 2019 invested a total of HRK 7,227,198 in energy efficiency measures and HRK 6,373,886 were invested in 2018. This is the largest investment in energy efficiency measures so far.

According to financial accounting, in 2019 HEP ODS allocated 38 percent less funds for energy costs than in the year of the energy base. In 2019, HEP ODS was also preparing for the implementation of new energy audits of the process in 2020 at 133 locations of energy audits of the process which include 780 total registered buildings. With new energy reviews of the process in 2020 HEP ODS will adopt a new energy base with which it will compare significant energy consumption in the next five-year period.

Reduction of energy and fuel consumption in HEP ODS

Reduction of energy consumption by year (w/o kWh losses)	2018/2017	2019/2018	2019/2015
Total significant energy consumption	-2,832,117	-2,528,604	-5,459,184
Energy consumption in 2 largest buildings according to the DP	-1,228,109	-1,525,668	-4,135,701
Fuel consumption	-2,097,419	+617,371	-1,768,927
HEP ODS TOTAL	-6,157,645	-3,436,901	-11,363,812

HEP ODS: reduction of diesel and gasoline fuel consumption

In 2019, there was a decrease in fuel consumption by energy base (base year 2015) by 1,768,927 kWh (179,404 l) and an increase in consumption by 2 percent compared to the previous 2018 by 617,371 kWh (62,614 l) due to the increased volume of electricity distribution activities. The value of the Energy Performance Indicator (EnPI) for fuel is a relevant indicator of how efficiently and how the fleet and fuel consumption are managed (the share of petrol fuel in total fuel consumption is 5 percent). The average EnPI of diesel fuel for passenger cars in 2015 was 9.4 l and in 2019 6.6 l/100 km, while for trucks in 2015 it was 14.9, and in 2019 12.2 l/100 km. The average value of the energy performance indicator (EnPI) for diesel and petrol is continuously decreasing over the years according to the energy base and this trend is efficient fleet management and fuel consumption.

Energy savings in HEP Toplinarstvo

During 2019, HEP Toplinarstvo prepared a Report on the energy audit of a large company in which data on electricity consumption of boiler rooms, data on water consumption for boiler rooms and data on consumption and energy costs required for the operation of boiler rooms were used to analyze plant consumption in 2016, 2017 and 2018.

Data for commercial buildings for electricity, heat and water consumption were taken from the Report on energy inspections of buildings and an analysis of fleet consumption was made; 2018 was chosen as the reference year.

Energy consumption in boiler rooms

Energy source	2016	2017	2018
Electricity consumption/ (kWh)	4,082,972	4,024,254	3,586,317
Natural gas consumption/(kWh)	146,813,000	144,206,868	139,813,872
Extra light fuel oil consumption/(kWh)	34,386,972	34,555,560	26,525,928
Medium light fuel oil consumption/(kWh)	2,092,789	646,768	217,900
Water consumption/(m^3)	12,482*	4,406	5,490

**the significant increase in water consumption in 2016 is the result of a rupture during which there was a significant water leak*

Energy consumption in office buildings

Energy source	Consumption in buildings
Electricity consumption/(kWh)	367,208
Thermal energy consumption/(kWh)	1,047,614
Water consumption/(m^3)	3,206

Fleet consumption analysis

Total fleet vehicle power/(kW)	4,491
Total consumption/(l)	52,107
Total energy consumption/(kWh)	519,031.75
Fleet CO_2 emissions/($kgCO_2e$)	139,163.13

The analysis of energy consumption showed that the largest energy consumers are production equipment, i.e. boiler room equipment and hot water and steam pipelines. In its regular operations, HEP Toplinarstvo implements energy efficiency measures related to the modernization of boiler rooms, such as replacement of existing boilers with extra light fuel oil with gas condensing boilers, replacement of hot water pipes with new pre-insulated pipes with installed fault detection and replacement of pumps with new pumps with frequency regulation where the greatest energy savings are achieved.

Savings for the reconstruction of thermal substations for 2018 and 2019

	Reconstructions of thermal substations / (kWh saved)
2018	5,017,910.72
2019	5,999,324.62
TOTAL SAVED/kWh	**11,017,235.34**

Certain savings are also achieved by applying measures to increase the energy efficiency of buildings. These measures referred to the replacement of lighting fixtures with energy efficient LED lighting and the installation of fuel consumption devices.

Savings achieved by implementing the measure: Zagreb Complex - Replacement of existing lighting fixtures with energy efficient LED lighting

	2017		2018		2019		Total	
	kWh	tCO_2	kWh	tCO_2	kWh	tCO_2	kWh	tCO_2
Phase I.	35,249.51	8.28	35,249.51	8.28	35.249,51	8.28	105,784.53	28.24
Phase II.			35,007.9	9.12	35,007.9	9.12	70,015.80	18.24
TOTAL SAVED							**175,764.33**	**46.48**

Energy projects co-financed by European funds. In addition to business activities aimed at increasing capacity and production from low-carbon energy sources as part of the renewable scenario, we have intensified the implementation of measures and preparation of projects to increase energy efficiency. At the end of the year, HEP Toplinarstvo signed a grant agreement from EU funds for the project of replacing the connecting hot water pipeline in Osijek and the European Commission approved support in the amount of EUR 57 million for the project of revitalizing the hot water pipeline network of Zagreb.

Fuel consumption in thermal power plants and thermal power plants-heating plants of HEP Proizvodnja

Coal consumption increased in 2019 by 14.32 percent compared to 2018 due to the increase in the number of hours of operation of a coal-fired power plant. Consumption of liquid fuel in thermal power plants and thermal power plants-heating plants decreased by 74.73 percent compared to 2018 and the consumption of more environmentally friendly natural gas increased by 8.65 percent.

Consumption of forest biomass was reduced in 2019 by 23.4 percent due to the reduction in the number of operating hours of BE-TO Sisak. The production of electricity from hydropower plants in 2019 decreased compared to 2018 by 15.72 percent due to a decrease in the amount of precipitation, i.e. water used by hydropower plants for production. At the same time, the production of electricity from thermal power plants increased by 13.93 percent compared to 2018 in order to ensure the supply of customers.

Quantities and types of used fuels in thermal power plants. thermal power plants and bioenergy

Type of fuel	2018	2019.	2019/2018 (%)
Coal / x 10^3t	496.8	579.8	+16.7
Forest biomass/ x 10^3t	60.5	68.0	+12.4
Liquid fuel/ x 10^3t	7.2	1.8	-75.0
Natural gas/ x 10^3 MWh	5,598	6,128	+9.5

HEP Toplinarstvo fuel consumption in boiler rooms for city heating

The amount of liquid fuel used in boiler rooms for heating cities during 2019 decreased by 23.10 percent and natural gas by 4.20 percent. The reason for the decrease in fuel consumption is the reduction of the need for thermal energy production due to the milder winter and partly due to the reconstruction of boiler rooms. which aimed to increase the efficiency of production plants.

Quantities and types of fuels used in boiler rooms for city heating

Type of fuel	2018	2019	2019/2018 (%)
Liquid fuel/x 10^3t	2,375	1,828	-23.0
Natural gas/ x 10 m^3	14,328.6	13,737.4	-4.1

Emissions into air in HEP Group

By performing the activity of production of electricity and heat using coal, liquid fuel, natural gas and forest biomass, air emissions are generated. Pollutants from HEP's sources are carbon dioxide (CO_2) carbon monoxide (CO), nitrogen oxides (NO_x), sulfur dioxide (SO_2) and solid particles. During 2019, there were no emissions of pollutants into the air during the normal operation of HEP's plants. Also, in thermal power plants and thermal power plants-heating plants of HEP production, all measures prescribed by environmental permits were implemented.

Compared to 2018, there was an increase in emissions of polluting NO_x, CO and particles into the air in line with an increase in electricity production from thermal power plants and thermal power plants and a decrease in SO_2 emissions due to reduced liquid fuel and increased natural gas consumption.

Emissions of all pollutants from HEP's bioenergy plants to forest biomass were higher due to the application of the emission calculation methodology based on the fuel consumption balance and periodic emission measurements prescribed for medium combustion plants.

Emissions from urban heating boilers are also calculated on the basis of the fuel consumption balance and periodic emission measurements prescribed for medium combustion plants.

Emissions of pollutants into air - NO_x, SO_2, CO and solid particles from thermal power plants and thermal power plants for heat production

	CO t/y	SO_2 t/y	NO_x t/y	Solid particles PM 10 t/y
2019	199	248	1.517	103
2018	162	386	1.391	39
2019/2018 %	+22.8	-35.8	+9.1	+164.1

Emissions of CO, SO_2, NO_x and particles from bioenergy plants

	CO t/y	SO_2 t/y	NO_x t/y	Solid particles PM 10 t/y
2019	14.36	0.84	54.79	27.88
2018	5.2	0.27	26.87	9.54
2019/2018 %	+176.2	+211.1	+103.9	+192.2

Emissions of pollutants into air – NO_x, SO_2, CO and solid particles from boilers for city heating

	CO t/y	SO_2 t/y	NO_x t/y	Solid particles PM 10 t/y
2019	8.63	8.40	9.12	NA*
2018	5.20	5.30	43.27	NA*
2019/2018 %	+66.0	+58.5	-78.9	

** NA - Below the level of emissions that need to be reported to the Pollution Register*

CO_2 greenhouse gas emissions

Compared to 2018, CO_2 emissions from HEP's thermal power plants, thermal power plants-heating plants increased in line with the increase in electricity and heat production. The increase in CO_2 emissions from bioenergy was due to the application of the emission calculation methodology based on the fuel consumption balance and periodic emission measurements that are prescribed for medium combustion plants. CO_2 emissions from city heating boilers have been reduced compared to 2018.

Reports on greenhouse gas emissions for 2019 have been prepared for all HEP plants that are in the European Greenhouse Gas Emissions Trading System (EU-ETS), namely HEP Proizvodnja thermal power plants thermal power plants and the HEP Toplinarstvo Osijek plant, were verified by authorized verifiers and submitted to the Ministry of Environmental Protection and Energy. During 2019 the only HEP Toplinarstvo plant in the EU-ETS, the Osijek plant, did not work, so the authorized verifier confirmed that there were no CO_2 emissions.

The calculation of CO_2 emissions uses the methodology and emission factors defined in the approved Greenhouse Gas Emission Monitoring Plans for HEP Proizvodnja thermal power plants, i.e. those prescribed by the Intergovernmental Panel on Climate Change (IPCC) for HEP Toplinarstvo plants.

In accordance with legal regulations, emission units were transferred to HEP's accounts opened in the European Union Register during April 2020 for 2019, whereby HEP, as every year since the start of trading in 2013, fulfilled its obligation in a timely manner.

Total CO_2 greenhouse gas emissions from HEP sources

	2018	2019	2019/2018 %
Thermal power plants and thermal power plants for heat production/ tCO_2	2,274,841	2,570,930	+13.0
Bioenergy plants on wood biomass* / tCO_2	46,667	76,772	+64.5
Boilers for heating cities / tCO_2	30,973	26,534	-14.3
Total	**2,352,481**	**2,674,236**	**+13.7**

** CO_2 emissions from bioenergy plants are not in the emissions trading system*

Free emission allowances allocated to HEP's facilities in the EU-ETS. Based on the submitted Requests for the allocation of free CO_2 emission units for the production of thermal energy by the MEPE, in 2019 HEP was allocated 189,052 free emission units.

Intensity of greenhouse gas emissions CO_2 for generated electricity During 2019, 2,196,633 t CO_2 were released from HEP's thermal power plants, thermal power plants for heat production and bioenergy plants in the electricity production process. The intensity of CO_2 emissions for produced electricity from HEP's thermal and thermal power plants and bioenergy for 2019 was 589 g CO_2/kWh, while intensity of CO_2 emissions for the production of total available electricity of the HEP Group (TPP, TPP-HP, BPP-HP, HPP, 50% NPPK, purchase from RES and import) was 131 g CO_2 / kWh.

Intensity of greenhouse gas emissions CO_2 for generated electricity and heat. During 2019, 2,674,236 tons of CO_2 were emitted from all HEP sources for the generation of electricity and heat (thermal power plants. thermal power plants for heat production, bioenergy plants and boiler rooms for urban heating). The emission intensity was 199 g CO_2/kWh. The intensity of CO_2 emissions for the production of total available electricity and heat of the HEP Group (TPP, TPP-HP, BPP-HP, HPP, 50% NPPK, purchase from RES, imports and boiler rooms for city heating) for 2019 was 130 g CO_2 / kWh.

Solar power plants on the roofs of HEP's office buildings

In accordance with the National Action Plan for Renewable Energy Sources which stimulates the construction of small solar power plants, in addition to the construction and takeover of large solar power plants (Kaštelir, Vis Cres and Vrlika) with a total capacity of 350 MW (by 2030), HEP has initiated the construction of 10 to 50 kW solar power plants on the roofs of HEP's business and production buildings that will use electricity at the production site. During 2019, HEP financed and HEP's energy efficiency company HEP ESCO carried out the construction of 22 solar power plants to cover its own electricity consumption with a total power of 645 kW. Any surpluses will be handed over to the network under market conditions.

On-site energy production has multiple benefits and is one of the determinants of European energy policy. "Prosumer", i.e. a customer with its own production, is a term that is increasingly used in the EU and the world. With small solar power plants, whether on business or residential buildings, the idea is to produce the optimal amount of energy for the needs of the building. Consumers are active, key players in the energy markets of the future. In the future, they will have a more diverse offer and the possibility of producing and selling their own electricity.

► Solar power plant on the roof of HEP ODS building in Varaždin is one of 22 such SPPs installed in 2019

The most significant investments in energy efficiency and air protection in HEP Proizvodnja

TPP-HP Sisak

At the beginning of 2019, a new steam boiler PK3 with a capacity of 12.5 t / h was put into operation, and in July 2019 a use permit was obtained. The commissioning of the new steam boiler increased the energy efficiency of steam production in TPP-HP Sisak because the auxiliary boiler room does not work in the summer months, when the need for steam is lowest, and therefore the emission of pollutants into the air, primarily NO_x, is lower as well.

Reconstruction of the combustion and control system was made on the auxiliary boiler PK2, which improved the combustion and management of the technological process of combustion. Reconstruction increased the degree of boiler utilization, and the installation of new equipment reduced Electrical energy consumption and the replacement of burners reduced NO_x emissions into the air.

TPP-HP Zagreb

In TPP-HP Zagreb, the reconstruction of hot water boilers VK5 and VK6 has been completed. The pressure system burners and the process control system regulation and protection of hot water boilers have been replaced, and natural gas is used as fuel. This reduced emissions of SO_2, NO_x, CO and solid particles. All medium fuel oil tanks that will no longer be used as propellant have also been cleaned and preserved.

Energy efficient lighting

During 2019, the existing lighting systems in all HEP Proizvodnja plants were replaced with more energy-efficient LED lighting. The implementation of this measure has reduced consumption in plants.

Other emissions - halogenated hydrocarbons (HFC. PFC) and SF_6 in HEP ODS

HEP ODS submits data on the consumption of halogenated hydrocarbons and SF_6 to the Ministry of Environmental Protection and Energy. In 2019, SF_6 was supplemented in plants where there was less gas than required.

Consumption of halogenated hydrocarbons (HFC. PFC) and SF_6		2018	2019
Switchgear and control gear - high-voltage appliances and assemblies	Amount of switchgear (pcs)	11.689	12.332
	Filling the switch gear with SF_6 gas (t)	31.33	32.59
	Leakage of SF_6 from equipment in operation (kg)	60.50	38.56
	Handling used SF_6	**	**
	SF_6 gas handling and switching equipment after service life (kg)	56.1	64.8

► Reconstruction of hot water boilers VK5 and VK6 and other investments in TPP-HP Zagreb reduce the SO_2, NO_x, CO and solid particles

Imissions into air

The PP-HP Zagreb and TPP Plomin plants have installed automatic measuring stations for monitoring the quality of the surrounding air. Measurements are carried out continuously according to the Ordinance on air quality monitoring. The data are publicly available and there were no overruns in the parameters related to air quality during 2019.

eMobility continues!

Among the business activities within the transition of Croatia to a low-carbon economy, we should mention the accelerated continuation of the eMobility program, within which 64 public filling stations were installed in 2019 out of a total of 117 installed from the beginning of the project until the end of 2019.

On the occasion of the National Nikola Tesla Day, HEP marked the commissioning of the first 16 charging stations for electric vehicles on motorways through co-financed EAST-E and NEXT-E projects, within which HEP will install 53 fast AC / DC charging stations and 4 ultra-fast chargers with power above 150kW. For the first time, these charging stations enabled electric car owners to drive from the border with Slovenia and Hungary to the Adriatic Sea, and the Republic of Croatia to connect to the network of charging stations for electric vehicles on the Trans-European Transport Network. A new cycle of setting up charging stations for electric vehicles at tourist points in Dalmatia followed. Thus, new ELEN filling stations were set up in cities on the coast and islands, namely in Ploče, Stari Grad, Jelsa, Makarska and Drvenik-Gradac. In November 2019 the installation of one hundred bottling plants was marked. HEP's 100th charging station located on King Tomislav Square in Zagreb is co-financed by funds from the EU project EAST-E within which HEP will install 27 fast charging stations with a capacity of 50 kW throughout Croatia. With the planned realization, HEP will have a total of 35 public filling stations in the City of Zagreb.

HEP launched the first superchargers on highway rest stations in 2019

Water management in HEP Group

HEP Proizvodnja

In the reservoirs of hydropower systems PP HE Sjever, PP HE Zapad and PP HE Jug whose operator is HEP Proizvodnja, regular tests of physico-chemical, biological and at certain locations ichthyological parameters are carried out and reports are prepared in accordance with the Regulation on water quality standard. During 2019, there were no exceedances of the maximum permitted concentrations of pollutants in accordance with water permits.

All HEP-Proizvodnja production facilities have prescribed conditions related to water discharges in environmental permits (TE) and water rights permits (TE and HE).

Affected water and water intakes and the types. quantities and discharges of wastewater from thermal power plants and thermal power plants for heat production of HEP Proizvodnja in 2019

PLANT	SOURCE	Water quantity (m^3)	Wastewater	Treatment system	DIS-CHARGE	Water quantity (m^3)
TPP PLOMIN	Bubić burrow	447,539	technological waters	treatment of waste waters. neutralization and depositing device	Čepić canal-sea	129,590
			rainfall from coal depot	lamellar settler		
			oily waters	oil separation		
	Public water supply system	23,062	sanitary waters	BIO device		6,231
	Sea (cooling waters)	259,625,546	cooling waters	no treatment		242,285,498
TPP RIJEKA	Public water supply system	22,625	technological waters	treatment of waste waters. neutralization and depositing device	Sea	230
			oily waters	oil separation		20,478
			sanitary waters	BIO device		634
	Sea (cooling waters)	0	cooling waters	no treatment		0
TPP-HP SISAK	The Sava river	181,525	technological waters	treatment of waste waters. neutralization	The Sava river	10,456
			oily waters	oil separation		
	Public water supply system	4,394	sanitary waters	no treatment		4,394
	The Sava river (cooling waters)	48,593,202	cooling waters	no treatment		48,593,202
TPP-HP ZAGREB	Wells (+ public water supply system)	1,381,273	technological waters	treatment of waste waters. neutralization and depositing device	City sewage system	629,987
			oily waters	oil separation		
			sanitary waters	no treatment		
	The Sava	105,593,000	cooling waters	no treatment	The Sava river	84,474,400
					Savica lake	21,118,600
PP-HP ZAGREB	Wells	834,410	technological waters	treatment of waste waters. neutralization and depositing device	City sewage system	91,460
			oily waters	oil separation		
	Public water supply system	2,502	sanitary waters	no treatment		
TPP-HP OSIJEK	The Drava river	265,571	technological waters	neutralization	City sewage system	131,413
			oily waters	oil separation		
			sanitary waters	no treatment		
	Public water supply system	11,907	clean rainfall waters and rainfall waters from liquid fuel management system	oil separation	Palčić canal	14,220
CTPP JERTOVEC	Rijeka Krapina	9,110	Technological waters	treatment of waste waters. neutralization and depositing device and precipitation	Jertovec stream	5,054
			oily waters	oil separation		
	Public water supply system	954	sanitary waters	BIO device		
HPP VINODOL	Public water supply system	482	sanitary waters	Imhof precipitator	Dubračina stream	482
HPP SENJ	Public water supply system	902	sanitary waters	BIO device	Sea	902

During March 2019, concessions for water abstraction for technological needs for the plants TPP-HP Zagreb, PP-HP Zagreb, TPP-HP Sisak, TPP-HP Osijek, TPP Plomin and CTPP Jertovec expired. In accordance with the submitted requirements to the Ministry of Environmental Protection and Energy and the decisions of Hrvatske vode, water permits have been obtained for these plants. In 2019, requests for the issuance of water permits for the abstraction of water for technological needs were sent to Hrvatske vode and water permits were obtained for TPP Plomin, TPP Osijek, TPP Sisak and PP-HP Zagreb. A water permit was obtained for TPP-HP Zagreb in 2020 while the procedure for obtaining a water permit for CTPP Jertovec is in progress. In 2019, concessions for the use of water for the generation of electricity for the plants of HPP Golubić. HPP Jaruga and HPP Ozalj expired, so requests for their extension were sent to the Ministry of Environmental Protection and Energy.

In 2019, there was no pollution or expansion of plants in terms of impact on the spread of invasive species, pathogens or parasites, reduction in the number of indigenous species, habitat changes, changes in natural processes, changes in salinity or groundwater levels. No significant environmental spills were recorded in 2019 either.

HEP ODS

HEP ODS has 12 locations with a valid water permit registered in the Register of Environmental Pollution. All 12 locations with water permits belong to the Danube Basin, but except in the case of Skrad, all wastewater is poured into the public drainage system, and before that it is treated at wastewater treatment plants. Based on water permits, regular annual water quality tests are performed. These are discharges of technological wastewater at the locations of transformer workshops, transformer warehouses with larger quantities of transformer oil, car washes and food preparation and serving facilities. Discharges are usually indirect (except for the Skrad site) and the receiver is a public drainage system with a central wastewater treatment plant.

The amount of discharged technological wastewater from the HEP ODS plant

Distribution area	Location	Total volume of wastewater discharged (m^3/god)
Elektra Požega	Central warehouse	199.2
Elektra Zabok	Central warehouse	8,516.144
Elektra Zagreb	Transformer workshop	1,228.36
Elektra Virovitica	Kitchen (HQ)	231
Elektra Virovitica	Workshop (HQ)	11,877.6754
Elektroprimorje Rijeka	Skrad (workshop)	9,552.9
Elektroprimorje Rijeka	Skrad (biodevice)	118
Elektra Zagreb	Autopark	1,986.6
Elektra Zagreb	Autopark 2	1,986.6
Elektra Čakovec	Autopark	180
Elektra Čakovec	Kitchen (HQ)	66
Elektra Sisak	Carwash	79.741

The most significant investments in water management and protection in HEP-Proizvodnja

TPP-HP Sisak

By replacing the pH control system at the neutralization basins in the wastewater and sludge treatment plant in TPP-HP Sisak, the monitoring of wastewater quality before discharge into the internal drainage system has been improved.

TPP Plomin

During heavy rains, and due to the increased inflow of rainwater in a short period of time, the existing lamellar sedimentation tank failed to reduce the total value of the suspended matter to the legally prescribed value. Such events occur several times a year. Reconstruction of the sedimentation tank ensured adequate removal of suspended particles during heavy rainfall. Construction began in 2018, and by the end of the year, all construction work was completed, as well as the installation of mechanical equipment. In 2019, a technical inspection was performed at the plant and a use permit was obtained.

PA HPP West

In GHPP Vinodol, regular cleaning of the tank and cooling water intake inspection of the cooling water filter in the distribution chamber rinsing of the Dubračina riverbed was conducted after the conclusion works on the rehabilitation of the riverbed for which Hrvatske vode is responsible.

PA HPP South

In 2019, the RHPP Velebit plant underwent a major overhaul of Unit 1, which included the replacement of the pump in the drainage system and the pump in the cooling system. In order to determine the presence of oil, a detector of the occurrence of oil in the cooling system was installed, and the detector will also be installed in the drainage system.

In September 2019, work began on the replacement of the drainage system, i.e. the installation of separators and oil level indicators in GHPP Orlovac. Instead of the existing well pumps, new generation drainage pumps have been installed in the drainage system, the so-called submersible pumping units, which are used in wastewater systems and drainage systems in water transfer, which may contain a certain content of solids.

► RHPP Velebit underwent a major overhaul of Unit 1

Biodiversity protection

HEP Proizvodnja

HEP's thermal power plants are located within urbanized or industrial areas and are not located within the Natura 2000 ecological network area or protected areas at the national level. Some protected areas are close to production facilities, such as the significant Savica landscape near Thermal power plant – heating plant Zagreb or Thermal power plant – heating plant Osijek near the Mura-Drava Regional Park border.

A large number of HEP's hydropower plants are located in the area of the Natura 2000 ecological network, and some are fully or partially in protected areas such as national parks, nature parks, regional parks and areas of significant landscape.

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		
HPP Varaždin	HR 2001307 Drava - accumulation	HR 1000013 Drava reservoirs
HPP Čakovec	HR 2001307 Drava - accumulation	HR 1000013 Drava reservoirs
HPP Dubrava	HR 2001307 Drava – accumulation HR 5000014 Upper stream of Drava (from Donja Dubrava to Terezino polje)	HR 1000013 Drava reservoirs HR 1000014 Upper stream of Drava (from Donja Dubrava to Terezino polje)
PRODUCTION AREA WEST		
HES Senj / HPP Senj	HR 2001012 Ličko polje	HR 1000021 Lika carst fields
HES Senj / HPP Sklope	HR 5000022 Velebit Nature park	HR 1000022 Velebit
HES Vinodol / PHPP Fužine HS Vinodol / RHPP Lepenica HES Vinodol / HPP Vinodol	HR 2001353 Lokve - Sunger - Fužine HR 5000019 Gorski kotar and north Lika HR 2001042 Ličko polje HR2001300 Zebar	HR 1000019 Gorski kotar and north Lika
HPP Rijeka	HR 2000658 Rječina	-
HPP Zeleni Vir	HR2001345 Vražji prolaz and Zeleni Vir HR 5000019 Gorski kotar and north Lika	HR1000019 Gorski kotar and north Lika
HPP Gojak	HR 2000592 Ogulin – Plaški area	-
HPP Ozalj	HR 2000642 Kupa	-
HPP Lešće	HR 2000592 Ogulin – Plaški area	-
PRODUCTION AREA SOUTH		
RHPP Velebit	HR 2001267 Ričice HR 2001268 Otuča HR 2001269 Obsenica HR 5000022 Velebit Nature park HR 2000641 Zrmanja	HR 1000021 Lika carst fields HR 1000022 Velebit
HPP Golubić	-	-
HPP Miljacka	HR 2000918 NP Krka wider area	HR 1000026 Krka and surrounding plateau
mHPP Krčić	HR 2000917 Krčić	-
HPP Jaruga	HR 2000918 NP Krka wider area HR 3000171 Confluence of Krka	HR 1000026 Krka and surrounding plateau
HPP Orlovac	HR 5000028 Dinara HR 2000936 Rude	HR 1000028 Dinara
PS Buško blato	-	-

HPP / HES	Areas of protection significant for wild species and habitats	Areas of protection significant for birds
HPP Peruća	-	HR 1000029 Cetina
HPP Đale	HR 2000929 Cetina river - canyon	HR 1000029 Cetina
HPP Zakučac	HR 2000929 Cetina river - canyon HR 2001352 Mosor	HR 1000029 Cetina HR 1000027 Mosor. Kozjak and Trogir hinterland
HPP Kraljevac	HR 2000929 Cetina river - canyon	HR 1000029 Cetina
HPP DUBROVNIK PLANT		
HPP Dubrovnik	-	-
HPP Zavrelje	-	-

HEP Proizvodnja system and protected areas

HPP / HES	Protected area
HYDROPOWER PLANTS' PRODUCTION AREA NORTH	
HPP Varaždin (operating since 1975)	Regional park Mura- Drava
HPP Čakovec (operating since 1982)	Regional park Mura- Drava
HPP Dubrava (operating since 1989)	Regional park Mura- Drava
HYDROPOWER PLANTS' PRODUCTION AREA WEST	
HES Senj / HPP Senj (operating since 1965)	Velebit nature park
HPP Sklope	-
HES Vinodol / PHPP Fužine	
HES Vinodol / RHPP Lepenica	-
HES Vinodol / HPP Vinodol	
HPP Rijeka	-
HPP Zeleni Vir (operating since 1921)	Significant landscape Vražji prolaz and Zeleni Vir
HPP Gojak	-
HPP Ozalj	-
HPP Lešće	-
HYDROPOWER PLANTS' PRODUCTION AREA SOUTH	
RHPP Velebit (operating since 1984)	Velebit nature park
HPP Golubić	-
HPP Miljacka (operating since 1906)	Significant landscape Krka – upper stream National park Krka
HPP Jaruga (operating since 1895/1904)	Significant landscape Krka – upper stream Significant landscape Krka – lower stream National park Krka
mHPP Krčić (operating since 1988)	Significant landscape Krka – upper stream Significant landscape - Krčić

HPP / HES	Protected area
HPP Orlovac	-
PS Buško blato	-
HPP Peruća	-
HPP Đale	-
HPP Zakučac (operating since 1961/1981)	Significant landscape Cetina river canyon
HPP Kraljevac (operating since 1912/1932)	Significant landscape Cetina river canyon
HPP DUBROVNIK PLANT	
HPP Dubrovnik	-
HPP Zavrelje	-

HEP ODS

HEP is obliged to plan and build energy infrastructure in a way that prevents and reduces the risk of extinction of strictly protected bird species. Natura 2000 conservation areas important for birds and related species to which energy measures apply have been identified. Within the conservation area Natura 2000 significant for birds is located just over 5,000 kilometers of overhead medium voltage lines, part of which is isolated and does not pose a threat to birds. The measures cover a total of 17 bird species that are on the Red List of Endangered Bird Species:

Golden eagle, *Aquila chrysaetos*

Eurasian eagle - owl, *Bubo*

White stork, *Ciconia cicionia*

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*

The most important investments in the protection of biological diversity in HEP Proizvodnja

Production area HPP North. The project documentation for the Reconstruction of HPP Varaždin was prepared and reviewed, in which the technical solution of the new fish path was proposed. The proposed solution defines a new route and improvement of the fish path.

During the rehabilitation of the bridge over the drainage canal of HPP Varaždin, two thematically different info boards on ornithofauna and protected species living in the area of Drava power plants, i.e. in the area of the UNESCO transboundary biosphere reserve Mura-Drava-Danube as well as the Mura-Drava Regional Park and the area of the ecological network Natura 2000. Info boards were made in cooperation with Public Institution Priroda of Varaždin County and the City of Varaždin.

The most important investments in the protection of biological diversity in HEP ODS

Contribution to the protection of white storks in Croatia. Through almost two decades of implementation of activities for the protection of white storks within the 14 distribution areas of HEP ODS, a real coexistence has developed between field workers and this strictly protected bird species. Although activities on the protection of storks nesting on electric poles are regulated by a voluntary agreement with the Ministry of Environmental Protection and Energy and 14 public institutions for protected area management, they have become an integral part of regular network maintenance activities and one of the recognizable symbols of the HEP Group. Thus, in 2019, at the level of HEP ODS, about 200 activities were carried out that contribute to the safe nesting of white storks, mostly related to the replacement or repair of nest holders, installation of protective equipment and technical assistance in ringing young storks. There are more than 1,000 stork nests on the pillars of HEP ODS, and a special decision of the competent ministry has been obtained for all activities.

Reduction of negative impacts on biodiversity. The power grid, depending on its technical characteristics, can pose a threat to strictly protected bird species due to electrocution on hazardous elements (electric shock). Legal obligations to implement protection measures to reduce this threat have been recognized within the Natura 2000 area of conservation important for birds and cooperation has been established with the competent public institutions for protected areas and interested associations for the protection of birds.

The island of Cres has been recognized as a priority habitat for the implementation of measures to protect birds from electrocution, as the main habitat of the highly endangered and legally protected griffon vulture species. A field visit to the lines in 2019 determined a significant reduction in the threat thanks to the installed protective equipment at key points. Also, for the most critical section about five kilometers long (Srem-Plat-Verin branch), a long-term solution was applied using an insulated conductor and an underground cable. In 2019, over HRK 1.5 million were invested in measures to protect endangered bird species.

At the initiative of the representatives of the Lonjsko Polje Nature Park, an agreement was reached on the topic of protection of birds from electrocution within the park. In cooperation with Elektra Križ and Elektra Sisak, the protection of all potentially dangerous sections of the network within the nature park is planned. There have been 70 dangerous poles identified for protection, and the activities are expected to be completed by mid-2020.

The application for the LIFE Danube Free Sky project has been made, where HEP ODS, Elektroslavonija Osijek is one of the users in cooperation with the Kopački rit Nature Park. The concept of the project has been given the green light, and the result will be known in mid-2020. The project envisages the protection of all hazardous lines within the boundaries of the Kopački rit Nature Park by applying long-term solutions (insulated guide) and installing insulation equipment with funding from European Union funds.

Contribution to the development of action plans for the management of strictly protected species. As part of the project of the Ministry of Environmental Protection and Energy funded by EU funds "Development of proposals for management plans for strictly protected species (with action plans)", HEP ODS was recognized as one of the most important stakeholders for strictly protected species of griffon vultures, golden eagles and golden crows. During 2019, a series of working meetings and workshops with stakeholders were held to determine the necessary activities for the protection of these species. At the end of 2019, a conference was held with presentations of the results of action plans and concrete measures related to HEP ODS. This completes the process of joint development of action plans that are currently in the phase of approval and signing by the Minister of Environmental Protection and Energy after which they become binding.

► Stork protection activities are recognized symbol of HEP Group

Hazardous and non-hazardous waste management in HEP Group

In 2019, HEP Group produced a total of 3,105.98 tons of hazardous waste and 81,001.11 tons of non-hazardous waste. The increase in the amount of hazardous waste of 1,650.49 compared to the previous year is a consequence of the cleaning of fuel oil tanks in thermal power plants. The increase in the amount of non-hazardous waste by 9,306.32 tons refers mainly to non-hazardous construction waste generated as a result of overhaul, revitalization and rehabilitation of HEP's plants and due to ash generated in bioenergy plants which use untreated wood chips as fuel.

Waste generated in the HEP Group is separated at the place of origin according to the type and properties of waste and, where possible, is managed in accordance with the order of priority of waste management. All waste generated in the HEP Group is handed over, in accordance with legal regulations, to companies that have a waste management permit or are entered in the appropriate register. After handing over the waste to an authorized waste management company, in accordance with legal regulations, the responsibility for the waste producer ceases, and the responsibility passes to the authorized company. Depending on the type of waste and the existing waste management system in Croatia, waste is handed over for further recovery and disposal. Since Croatia does not have a hazardous waste landfill, and energy reuse capacities are limited and it is thermally possible to recover only some types of waste that are not generated in HEP Group's business processes, authorized waste management companies export hazardous waste. Until the arrival of authorized waste management companies, waste is temporarily stored, for a maximum of one year, in warehouses that are regulated in accordance with the provisions of the Ordinance on waste management.

HEP's only landfill is located on the site of Plomin thermal power plants where only its own non-hazardous production waste is disposed of and only when companies in the surroundings that have a waste recovery permit cannot, in accordance with market requirements (e.g. production capacity. plant maintenance) take over part of the non-hazardous waste. During 2019, a total of 8,405.30 tons of non-hazardous waste was disposed of at the landfill in Plomin, which is 11.28 percent of non-hazardous waste produced in Plomin. The largest amount of fly ash generated in Plomin is not disposed of in landfills but is handed over to cement plants in Croatia and the surrounding area because the quality of fly ash generated in TPP Plomin 2 is much better than the ash generated during operation of both power plants. The amount of disposed non-hazardous waste has decreased in comparison with the previous year because companies that have a recovery permit took over a larger amount of waste.

For all waste generated in the HEP Group, data on the generation and flow of waste are kept in HEP's electronic database INFOZOK (Environmental Information System). INFOZOK is also connected to an electronic database maintained by the Ministry of Environmental Protection and Energy e-ONTO. For now, TE Plomin is the only one obliged to fill in the e-ONTO because it has a permit for waste disposal.

Waste data are also entered every year by March 31st for the previous calendar year in the electronic database Environmental Pollution Register (ROO) maintained by the Ministry of Environmental Protection and Energy.

Waste management from Krško Nuclear Power Plant (NEK). Hrvatska elektroprivreda takes over 50 percent of the annual electricity produced in the Krško Nuclear Power Plant. This makes it responsible for half of the waste produced at this nuclear power plant. During 2019, a total of 287 packages of LILW (low and intermediate level radioactive waste) with a volume of 60.9 m^3 and a net weight of 24,860.3 kg were stored in the Krško NPP, i.e. 1.0971x10-8 m^3/kWh(el) or 4,493 µg/kWh(el). In 2019. 56 fuel elements of spent fuel were replaced (it is considered high-level radioactive waste (HLW)), i.e. 22,538.84 kg U, or 4.11x10 µgU/kWh(el).

Circular economy - the use of ash in the construction industry.. In cooperation with the Faculty of Civil Engineering, University of Zagreb and CKTL (Central Chemical Technology Laboratory), HEP made an analysis of the possibilities of using wood biomass ash in the construction industry and thus reduced the amount of waste disposed of in landfills and contributed to meeting the goals of the circular economy. The results of the research showed that wood biomass ash generated in two of HEP's bioenergy plants can be used in the construction industry for the production of overpass heads and park curbs. Within the project potential companies were identified that could use ash in their production process after drying as a substitute for minerals and reduce the cost of production.

Record number of tests in the Central Chemical Technology Laboratory (CKTL)

During 2019 CKTL conducted the largest number of tests so far and doubled the number of test samples. The largest share of samples consisted of solid biofuels (51%), ash (22%), and coal and coke (15%).

At the beginning of 2019, an agreement was signed with the certification house TÜV Croatia for laboratory testing of wood chips and pellets for the purposes of their certification according to the European certification schemes EN Plus and Good Chips. In order to be able to perform testing activities under these schemes, CKTL expanded its scope of accreditation in September according to the requirements of the HRN EN ISO / IEC 17025 standard, thus fulfilling all the conditions to become a testing body for the EN Plus and Good Chips certification schemes that are part of the European umbrella organization Bioenergy Europe. For now, CKTL is the only recognized testing laboratory for the certification of pellets and wood chips in the region and Southeast Europe.

During 2019, began the cooperation with the company Beton Lučko RBG for Contractual Research - chemical and physical analysis of wood chips and ash for the purpose of "Development of innovative building composites using bio ash". The cooperation with the Faculty of Civil Engineering from Zagreb also continued within the project Tarec2 - "Transformation of ash from wood biomass into building composites with added value".

The laboratory continued its cooperation with faculties during 2019 with professional visits and internships. Thus, as part of the courses. visits to the laboratory of students of the Faculty of Mining, Geology and Petroleum Engineering and the Faculty of Chemical Engineering and Technology from Zagreb were organized. Also, several professional internships of third year students of the Faculty of Chemical Engineering and Technology were conducted in CKTL.

Coordinated inspections in HEP Proizvodnja

During 2019, coordinated inspections were carried out in the plants Thermal power plant - heating plant Sisak, Thermal power plant - heating plant Osijek and Power plant – heating plant Zagreb. Detailed reports from inspections were given in the Plant Reports and no violations of regulations were found during the inspections.

Biomass ash can be used in construction industry - BPP Sisak

Responsible, sustainable
and quality

EMPLOYER

Responsible, sustainable and quality employer

Being a responsible, sustainable and quality employer for the HEP Group is important precisely because it is a significant employer. Therefore, we always strive to raise the attractiveness of all jobs and invest in professional growth, health, safety and satisfaction of our employees.

In 2019, a new Collective Agreement was signed, according to which all employees, regardless of employment status, i.e. whether they have a fixed-term or indefinite employment contract, exercise the same level of rights. Investments in the education and professional development of HEP employees continued through professional development and training, as well as the acquisition of additional and new professional and specialist knowledge and skills in areas crucial for the development and competitiveness of HEP.

During the reporting period, the catalog of HEP Academy's internal trainings in all segments of business processes was expanded in accordance with the needs of the HEP Group, market research and evaluations of conducted trainings.

The safety management system in all HEP Group companies derives from the obligation set by the Occupational Safety and Health Act, and each company has its own regulations on occupational safety which further regulate this area. Also, health and safety issues are covered by the Collective Agreement and relate to the protection of life, health and dignity of workers and ensuring their health and safety. In 2019, HEP d.d. and HEP Upravljanje imovinom has introduced a certified health and safety management system according to the international standard ISO 45001: 2018. In addition to these two companies, HEP ODS has introduced a certified health and safety management system.

The main goal in 2019 in the field of performance management was to coordinate the functioning of the performance management and reward system in HEP Opskrba and HEP Trade, with special emphasis on HEP Trade, which introduced this system in 2019. The implementation was carried out in accordance with the Ordinance on Performance Management and Remuneration, and both companies successfully completed the evaluation period, which was reflected in the positive assessment of the Supervisory Boards of these companies and the payment of a variable salary

for all employees who exercised this right in the observed year.

Change in management due to the necessary adjustment of management and employees to the new situation was assessed as a risk in the implementation of the performance management system in HEP. The company successfully went through a period of adjustment and this did not manifest itself in the quality of the functioning of the system or in the final achievement of strategic and individual goals. It was crucial for HEP Trgovina to accustom employees to the activities covered by the system in terms of proper fulfillment of obligations prescribed by the Ordinance on Performance Management and Remuneration and inclusion in the system of employees of the defunct company HEP Opskrba plinom, which were merged with HEP Trgovina in 2019.

Special attention is paid to defining goals (strategic and individual) and measures for their realization. In HEP Trgovina, this process was completed successfully, with a detailed elaboration of all employee goals and a clearly defined monitoring of performance at each individual goal. The achievement of goals was assessed by the success of the implementation of all activities of the performance management system and employee remuneration, analysis of the level of achievement of goals, at the strategic and individual level, and acceptance of performance assessments as a whole and employees individually by supervisory boards.

Working conditions and collective bargaining

The Collective Agreement for Hrvatska elektroprivreda concluded on 30 October 2019 applies from 1 January 2020 to 31 December 2021; the previous one was in force during the reporting period (from 1 January 2018 to 31 December 2019). The Collective Agreement was concluded by two representative trade unions (Croatian Electricity Trade Union - HES and the Independent Trade Union of Croatian Electric Power Industry - NSRHEP) and the Association of Employers of Croatian Electric Power Industry, members of which are HEP Group companies. The Collective Agreement applies to all employees of the signatory companies.

All workers, regardless of their employment status, i.e. whether they have a fixed-term or indefinite employment contract, exercise the same level of rights from the Collective Agreement. Also, the Collective Agreement provides for part-time workers:

- full amount for transportation costs
- reward for long-term work with the employer (according to the conditions set out in this Collective Agreement)
- extraordinary assistance (according to the conditions set out in this Collective Agreement)
- the full amount of the holiday allowance
- full amount of payment on HEP Day, Christmas and Easter
- the full amount of the salary supplement for continuous employment with the employer
- the full amount of the salary supplement for the total length of service
- the full amount of the dietary supplement

In addition to the prescribed legal deadlines in which significant changes in business are notified in advance, the Collective Agreement obliges the employer to inform the unions in a timely manner, and at least once every two months, about the

preparation of plans for restructuring and privatization of the employer.

Also, during 2016, HEP Group companies made decisions on incentive measures for termination of employment, which are still in force. According to the decision, the age limit for exercising the right to incentive measures for retirement is 63.5 years of age. Workers who meet this condition can initiate the conclusion of an agreement to terminate the employment contract with the employer.

Welcome brochure to Hrvatska elektroprivreda. The Human Resources Department has prepared a Welcome Brochure to Hrvatska elektroprivreda with the aim of improving the corporate culture and bringing new employees closer to the basic corporate values that guide us in our business. The brochure was designed in a simple way to make it easier for new employees to get used to the new business environment, provide relevant information based on which they will get a more detailed insight into HEP's activities, achieve a more professional business image and encourage and strengthen corporate culture. Some practical experiences and insights are listed that will help them to accept professional challenges and commit more successfully to professional standards of work. The brochure was published on the intranet in December 2019 in cooperation with the Sector for Market and Marketing Strategy and the Sector for Corporate Communications and is for internal use.

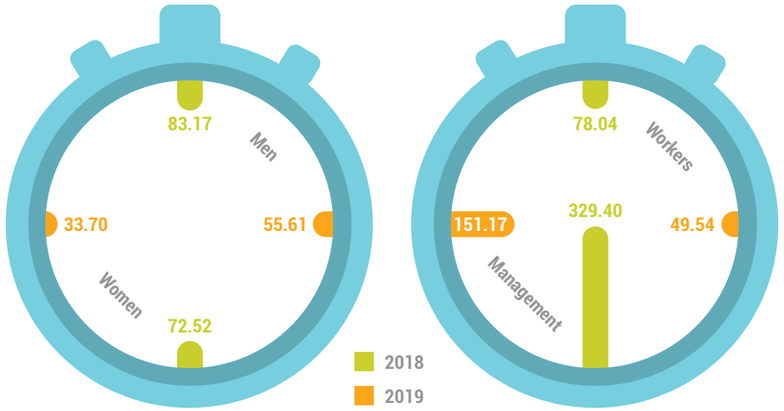
HEP Group employees participated in various expert gatherings in 2019 - Gas Conference 2019 ◄

Education and professional development

In 2019, HEP Group invested a total of HRK 13,963,864 in the education of employees, of which HRK 7,516,436 for professional training and HRK 4,690,099 for professional training. On average, HRK 1,355 per worker was invested in education, and 37.33 percent of workers were involved in some form of education.

Compared to 2018, in 2019 the interest of workers for online education in a shorter period increased and a slightly lower interest was expressed for one-year or several-month professional training and education. The needs for education of employees are determined at the level of organizational units and companies of the HEP Group and are implemented in accordance with the education plan for the current year.

Average number of training hours in 2019



We invest in additional training of employees, which ensures their acquisition of additional and new professional and specialist knowledge and skills in areas key to the development and competitiveness of HEP. However, the company does not have formal programs for skills and lifelong learning which support permanent employment opportunities and help successfully complete employment.

Respecting the educational needs of employees, in accordance with business and development goals, we refer employees to postgraduate studies, further education, retraining, targeted professional development and professional training. Thus, we encourage lifelong learning of workers at all hierarchical levels with the aim of adapting to market needs, motivation and their engagement, ensuring their professional and personal development and career advancement.

In accordance with the need to acquire additional and new knowledge and skills from the scope of work performed by the employee and the expected benefits for HEP's business as a whole, an internal tender was announced for attending postgraduate specialist and doctoral studies in 2019 for HEP Group. Commission motivational interviews were conducted, and a decision was made for 39 workers to be referred to this type of education.

A total of 28 workers were directed to additional training, and given the growing challenges of the electricity market, the impact of new technologies on business and changes in the business environment, the interest of workers for professional development was expressed primarily in the technical profession - conferences, conferences, seminars, workshops, congresses, courses, professional meetings CIGRE, MIPRO, CIRED, specialist certified programs for trading on energy exchanges, but also other certified programs and professional training (according to legislation, job needs, professional exams, driving exams, occupational safety, fire protection). Also, the workers attended foreign language courses and education related to law, public procurement, accounting, auditing, finance, controlling, ISO standards, office management, project management, MBA, information and communication technologies, energy, environmental protection, but also soft / social skills (communication skills, customer relations, negotiation, meeting management). Organized by the HEP-Teaching Education Center in Velika, they attended specialist training programs in the field of live work verified by the Ministry of Science and Education, as well as other professional training and professional training related to the electrical profession.

In 2019, the system of monitoring and reporting in the field of education for the needs of the HEP Group was improved through the application "Education Records". In cooperation with the Sector for Human Resources and the Sector for Information and Communication Technologies, the existing reports were revised and new reports on the realized educational activities were prepared, and the modules of professional development and professional training were supplemented. The activity of connecting applications from the field of professional development continued.

In accordance with the Long-Term Human Resources Development Strategy of the HEP Group for the period 2017-2030, work continued on the development of a mentoring system for monitoring trainees with the aim of standardizing the process of introducing new employees to work at the level of the HEP Group, as well as preserving and making optimal use of existing key knowledge. The method of monitoring, reporting and conducting internships has been defined, and a proposal for application support in the establishment of a mentoring system has been developed. A training program for the development of key mentoring skills and a manual to assist in the evaluation and appraisal of trainees' work have also been prepared.

In 2020, we plan to continue directing workers to those types of education by attending which they will acquire new, professional and specialist knowledge and skills, attracting future workers by awarding scholarships to full-time students, and cooperating with the scientific and educational community by introducing different activities that will present HEP Group as a socially responsible employer.

HEP Academy. The Human Resources Department project, as an internal educational center of the HEP Group, actively manages the ideas, information and knowledge possessed by our employees and identifies, selects and disseminates key knowledge located inside and outside the organization. In addition to internal trainings that are performed in the classic way, HEP Academy bases its work on the organization of trainings through Moodle, an e-learning system tailored to the needs of the HEP Group in cooperation with other sectors of the company. In 2019, HRK 144,521 was spent for the needs of the project and the procurement of internal education for e-learning. A total of 2,278 HEP Group employees participated in trainings organized by HEP Academy in 2019.

The selection of trainings procured by HEP Academy is based on qualitative and quantitative research and analysis of markets and trends, as well as according to the needs of organizational units, and the procurement process is directed accordingly. The trainings organized by HEP Academy for the employees of the HEP Group are mostly trainings of general importance for the entire system of the group. Organized by HEP Academy, HEP Human Resources Department, the following internal trainings were held with internal and external trainers for the needs of HEP Group companies:

- three internal trainings "Business Correspondence" for a total of 22 employees
- two internal trainings "Communication skills and business etiquette" for a total of 18 employees
- for employees of HEP Elektra contact centers, three internal trainings "Effective communication with customers" (a total of 21 employees) and internal training "Stress Management" (13 employees) were organized
- In-house trainings "Time Management" (9 employees), "Strategic Thinking and Change Management for Workers and Assessors" (30 employees) and internal training "State of the Electricity Market" were organized for HEP Opskrba employees within the work performance management system (36 workers)
- as part of the performance management system, an in-house training "Leadership skills" was organized for the management of HEP Trgovina (7 employees)
- as part of the HEP Balance program, an in-house lecture "Personal Finance Management" was organized for HEP d.d. employees. (36 workers)
- at the initiative of the Diversity and Non-Discrimination Policy Team, two in-house lectures on diversity and non-discrimination were held (82 workers in total)
- professional internal trainings "Review of part of data on HEP Proizvodnja d.o.o." (17 workers) and "Energy production in HEP production plants" (59 workers) and "Overhaul of NE Krško" (24 workers) were also organized.

Through the e-learning system of HEP Academy, online trainings are also organized:

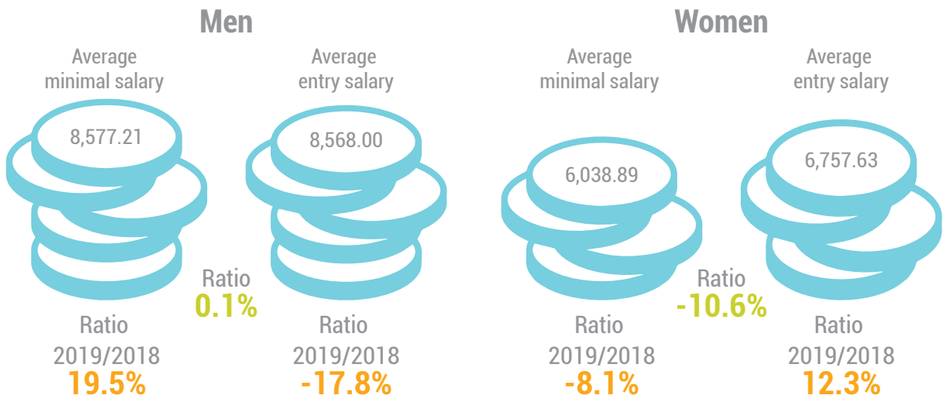
- GDPR - 1,763 workers successfully completed the training
- Excel basic - 55 workers successfully completed the training
- Excel Databases and pivot tables - 57 workers successfully completed the training
- Excel Calculations and conditional commands - 29 workers successfully completed the training

Diversity and equal opportunities

All jobs in the HEP Group are available on equal terms to qualified men and women, regardless of marital and family status, pregnancy and maternity, sexual orientation and any discriminatory grounds. When publishing the vacancy announcement, it was clearly pointed out that persons of both sexes can apply for the advertised position. Also, the name of the job in the masculine and feminine gender is used in advertising. In the documentation on the selection or promotion of candidates, including the advertisement (internal or external), the emphasis is on the fact that employers in the HEP Group seek and provide the possibility of equal access to all jobs for persons of both sexes.

In the HEP Group, the employer regulated the issue of discrimination with the Ordinance on the procedure and measures for the protection of the dignity of workers for each HEP Group company and the Code of Ethics.

The ratio of the average minimum and starting salary in 2019 by gender and comparison with 2018



In HEP Group companies, the range of coefficients for salary calculation is defined by the Collective Agreement; the data shown in the table refer to the average lowest paid salary in HEP Group companies.

Diversity Policy adopted. At the end of 2017, HEP Group signed the Diversity Charter, the aim of which is to encourage the implementation of diversity policy in the business sector. As a signatory to the Diversity Charter, HEP has also committed itself to adopting the Diversity Policy. It commits the HEP Group to develop an organizational culture where individual differences and contributions of each employee are recognized and valued, to encourage cooperation, togetherness and interpersonal relationships based on mutual respect and appreciation, to promote the values of diversity, equality and non-discrimination among management, employees and other stakeholders, provide a working environment that will enable innovative thinking and creative development of each worker, ensure equal opportunities for professional and personal development for all workers, create a working atmosphere free from violent behavior, harassment, victimization and discrimination and empower workers to use existing anti-discrimination mechanisms.

In May 2018, the Diversity and Non-Discrimination Policy Adoption Team was established, which worked diligently in the coming months to review the current situation regarding diversity in the HEP Group and to draft the Diversity and Non-Discrimination Policy, which was officially adopted in May 2019. From that moment on, we continuously promote the Diversity and Non-Discrimination Policy through interactive lectures, online education, publication of articles on Info-HEP and HEP Vjesnik.

No cases of discrimination were recorded in HEP Group companies, i.e. no complaints were received due to violation of the Code of Ethics, both internally or by end customers and other stakeholders.

A company that cares for families. In November 2019, HEP d.d. was awarded the advanced standard Mamforce Company (Change category), and during the year the employees of HEP d.d. participated in thematic conferences organized within this project and other relevant programs in this area (The Change Code, Equality is better for all, Children are our most important job, Responsible employers for responsible parenting 2.0).

Performance appraisal and feedback

The fourth evaluation period for HEP Opskrba in 2019 was joined by the first evaluation period for HEP Trgovina. The system is fully applied and during the year we worked on improving the existing functionalities of the Work Performance application, as well as on the development of new ones, in cooperation with the Sector for Information and Communication Technologies.

Out of 90 HEP Opskrba employees, 83 of them met the formal prerequisites for participation in the performance management system, which makes up 92% of HEP Opskrba employees. Namely, according to the Ordinance on Performance Management and Remuneration, trainees and workers employed for an (un)determined period of less than six months within the evaluation period do not participate in the performance appraisal system. In 2019, there were 7 (8%) such workers in HEP Opskrba. In HEP Trgovina, out of 58 employees, 47 of them met the formal prerequisites for participation in the performance management system, which makes up 81% of the company's employees.

Within the evaluation period, all activities prescribed by the Ordinance on Performance Management and Remuneration (conducted annual interviews with employees, mandatory semi-annual and additional consultations as needed and final, development interviews) were carried out with the support of the Human Resources Department. All employees participated in internal trainings and courses on the system, attended external trainings, all in order to achieve the set individual goals and strategic goals of the company. At the end of the evaluation period, it was determined that 71 HEP Opskrba employees meet the condition for performance appraisal. Of the 71 workers who qualify for performance appraisal, 38 (54%) are women and 33 (46%) are men. In HEP Trgovina, 39 employees met the condition for performance appraisal. Out of 39 employees who meet the condition for evaluation in the performance system, 16 (41%) are women in HEP Trgovina and 23 (59%) are men.

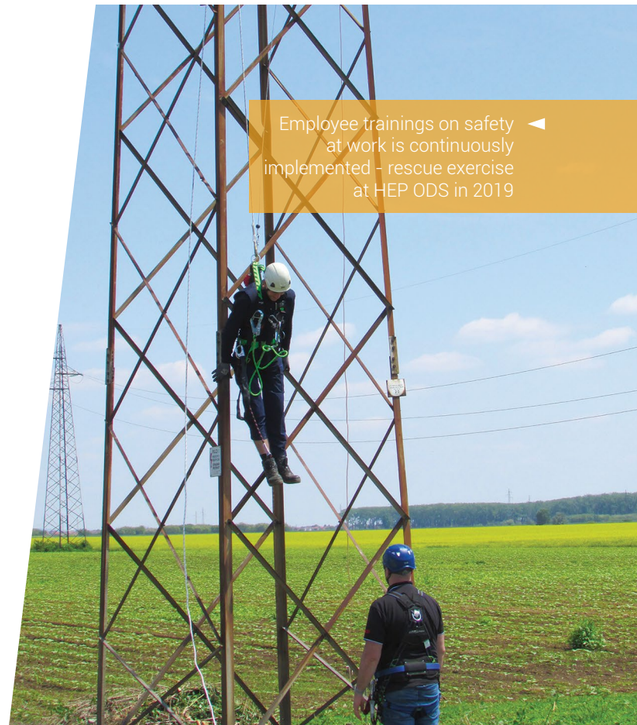
In the context of a hierarchical structure, the performance of managers within the performance system is observed through the performance of the organizational unit they manage. In addition, they were assessed in the developmental aspect, more precisely in behavioral competencies and work behavior, as were all other workers. Regarding other hierarchical levels, out of the total number of rated employees, 15 (21%) are managers in HEP Opskrba, 56 (79%) are operational managers, while 5 (15%) are managers in HEP Trgovina and 29 are operational level managers (85%).

Health and safety in the workplace

Certified health and safety management systems according to the international standard ISO 45001: 2018 has the ruling company HEP d.d. and subsidiaries HEP ODS and HEP Upravljanje imovinom.

The safety management system in all HEP Group companies arises from the obligation set by the Occupational Safety and Health Act, and each company has its own Occupational Safety and Health Regulations which further regulate this area. Also, health and safety issues are covered by the Collective Agreement and relate to the protection of life, health and dignity of workers and ensuring their health and safety. The total workforce is represented through the Occupational Safety and Health Committee, with the election of commissioners of occupational safety and health workers in all organizational units where working conditions require it.

Workers with a high frequency or high risk of illness, as well as other workers who are subject to high risks in business and performance of work tasks are generally covered by the Collective Agreement, while internal acts of subsidiaries describe and recognize such jobs as potential dangers, harms and efforts in the workplace. They are subject to the highest levels of protection of the health and safety of workers at work.



Employee trainings on safety at work is continuously implemented - rescue exercise at HEP ODS in 2019 ◄

Injuries at work according to companies in 2019

Company	2018	2019
HEP d.d.	1	4
HEP Proizvodnja	7	21
HEP ODS	109	124
HEP Toplinarstvo	4	6
HEP Plin	4	3
HEP Elektra	2	0
TOTAL	**127**	**158**

Compared to the previous year, the number of injuries at work increased, with fatal injuries of three workers. Namely, in the fire that broke out on January 10, 2019 in the engine room of the Dubrovnik hydroelectric power plant, three workers of the power plant were killed, and six workers were injured. Significant material damage occurred, and electricity production was interrupted. The event did not have a detrimental impact on the environment, nor on the health and safety of the population in the vicinity of the power plant. Immediately after the accident, an internal audit was conducted, and a crisis team was established. Prior to the commencement of rehabilitation works, safe working conditions were established in terms of air quality and cleanliness, protection of the working environment from the consequences of fire and checking the stability and safety of the construction of HPP Dubrovnik.

As proof and confirmation of the success of the conducted cleaning and remediation of all burned and fire-contaminated surfaces of the engine room and other underground parts of the HPP Dubrovnik, an authorized company conducted the measurement of chemical hazards in the work environment in the plant, and composed the records on the inspection. Measurements included the determination of the number of glass fibers in the dust and the concentration of the following compounds: PAH-polycyclic aromatic hydrocarbons, hydrocarbons monoxide (CO), carbon dioxide), hydrogen chloride (HCl), formaldehyde (CH2 O), total dust. These parameters were measured at 25 measuring points within the engine room of HPP Dubrovnik. Based on the minutes, an expert opinion was prepared on the personal protective equipment that had to be used during the conduct of reconstruction works in the plant.

During 2019, intensive activities were carried out to replace the destroyed and repair the damaged equipment, with the aim of establishing the functionality of the equipment at the level it was before the fire with a high degree of safety.

Immediately after the fire in HPP Dubrovnik, an urgent inspection of all HEP Proizvodnja production facilities was carried out. To improve the safety of facilities and the working environment, a special team was established that visited all power plants and checked their compliance with all regulations and instructions governing issues of safety, safety at work and fire protection. The cause and circumstances of the accident at HPP Dubrovnik are the subject of an investigation and judicial proceedings, which are still ongoing.

Due to the tragic accident and possible traumatic consequences, all employees at the power plant were provided with psychological assistance upon request. In relation to the families of the injured workers, HEP has fulfilled all the rights arising from the Collective Agreement for the HEP Group and other regulations.

Risk identification and training. Procedures for hazard identification, risk assessment and accident investigation are regulated by the Hazard Identification and Risk Assessment Procedure. This procedure determines the procedures and responsibilities of the occupational health and safety management system of the documented scope of HEP Group companies for continuous identification of hazards, harmfulness and work effort, risk assessment and determination of necessary controls in the field of occupational health and safety management. The procedure defines the ways and methods of making a risk assessment, the mandatory contents covered by the assessment and the data on which the risk assessment is based regarding the classification of hazards, harmfulness and work-related work.

The expert working group, appointed by the President of the Management Board and gathering about twenty members from HEP Group companies and organizational units, is in charge of harmonizing, consolidating and coordinating work, existing valid acts and instructions, and drafting plans and programs of measures to improve occupational safety and health and safety from fire in HEP. Workers themselves, who are familiar with all the elements of hazards and risks they face, take part in the risk assessment for jobs.

Every accident at work must be investigated to determine whether the accident was due to negligent work, unprofessional and improperly used means of work or the accident occurred for some reason beyond the worker's control at the time. Based on the obtained data, protection measures are assessed and adopted, and attempts are made to anticipate actions that can prevent the recurrence of the accident.

Worker training is carried out continuously, when hiring new workers, changes in jobs, changes in work technology and after the occurrence of an injury at work. The training is conducted in accordance with the work processes and jobs that workers perform during working hours. For the implementation of training and / or training, programs are used that were revised in 2019 and harmonized with all changes in the law and applicable regulations. The programs include workplaces for jobs located within Hrvatska elektroprivreda. For low-risk jobs and jobs with special powers, training programs designed for distance learning are used, while for all other training, training is conducted in a theoretical and practical way.

Adverse effects on health and safety are prevented by informing employees and other workers about all the dangers that threaten them in the workplace. For this purpose, work instructions are published, and signs and notices are highlighted. In companies located within the HEP Group, supervision is carried out over the application of measures and rules in the field of occupational safety and fire protection.

Health services. The Collective Agreement provides all HEP Group employees with an annual health checkup. Also, all employees who work in high-risk jobs perform periodic examinations to determine their health status and ability to perform jobs. For each job, the worker must obtain a doctor's certificate that he is capable of performing them, and if a worker has a limited ability to work, a procedure is initiated to determine whether the worker can use aids (glasses, hearing aids, etc. on which the work medicine specialist gives consent) to continue to perform these tasks.

Promoting health. Health Day is an event that, in addition to plenty of positive experiences, provides employees with many new insights into the importance of sports, healthy and regular diet and eating habits, as well as valuable information on body composition analysis and numerous tips from other areas of healthy living. During the Health Day 2019, participants were able to analyze body composition by weighing on a tanita scale, get useful advice from nutritionists to improve diet and change eating habits, and a variety

of tips for tasty and nutritious meals, as well as physiotherapist advice on proper posture.

Regular physical activity is one of the prerequisites for a healthy and quality life. Given that the modern age and lifestyle that imposes a sedentary lifestyle and thus insufficient movement, more than ever it is necessary to encourage physical activity. Therefore, in 2019, the HEP Group provided its employees with the use of the MultiSport card, with which employees can participate in various sports facilities daily, and in 2019 it was used by 1,771 HEP Group employees.

HEP people in numbers

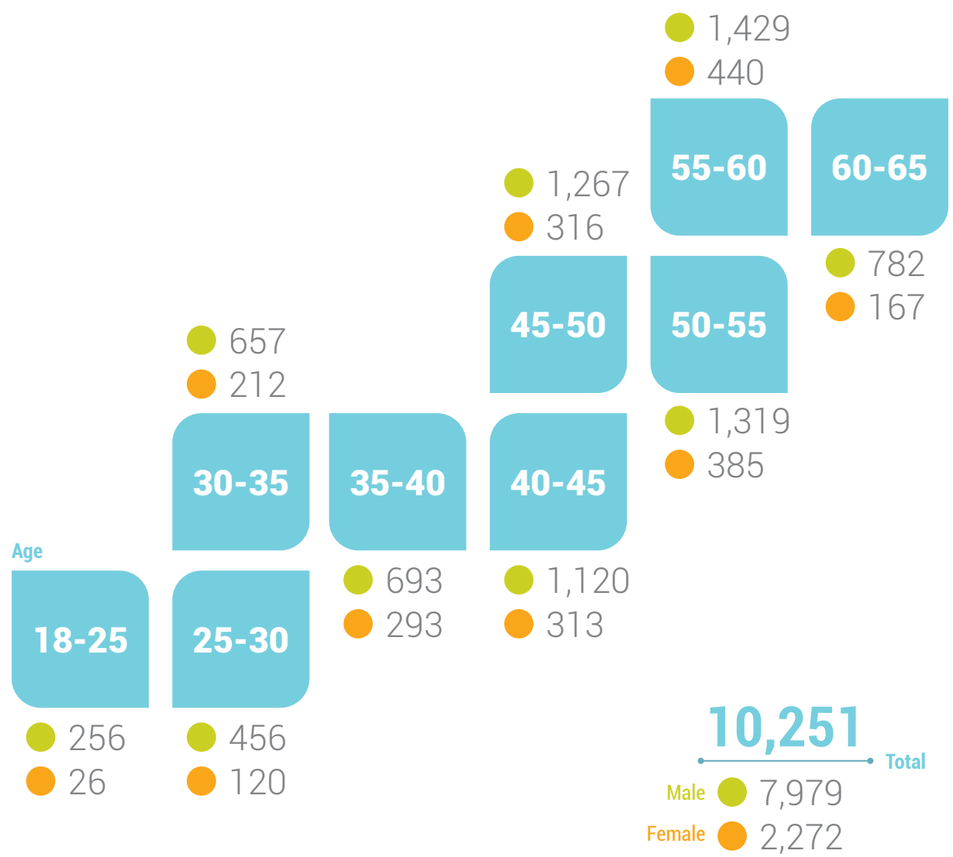
Total number of employees in 2019

YEAR		31/12/2018	% out of the total no. of employees	31/12/2019	% out of the total no. of employees
AGE GROUP	<30	782	7.9%	858	8.4%
	30 - 50	4,814	48.7%	4,871	47.5%
	50>	4,285	43.4%	4,522	44.1%
TOTAL		**9,881**	**100%**	**10,251**	**100%**
GENDER	MALE	7,766	78.6%	7,979	77.8%
	FEMALE	2,115	21.4%	2,272	22.2%
TOTAL		**9,881**	**100%**	**10,251**	**100%**

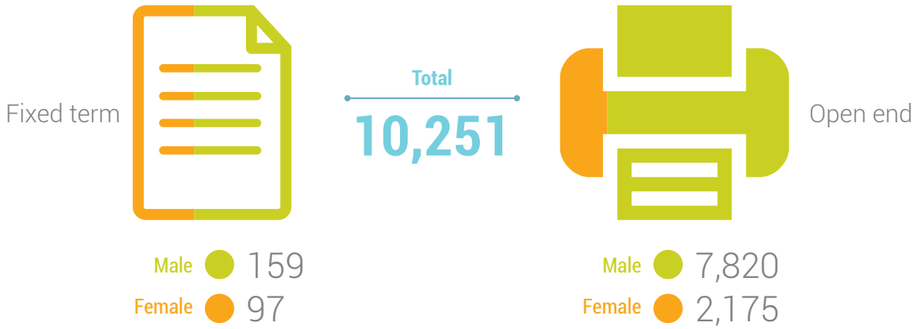
Management in 2019

YEAR		31/12/2018	% out of the total no. of employees	31/12/2019	% out of the total no. of employees
AGE GROUP	<30	1	0.9%	0	0%
	30 - 50	67	58.3%	66	57.4%
	50>	47	40.9%	49	42.6%
TOTAL		**115**	**100%**	**115**	**100%**
GENDER	MALE	90	78.3%	96	83.5%
	FEMALE	25	21.7%	19	16.5%
TOTAL		**115**	**100%**	**115**	**100%**

Employees according to age



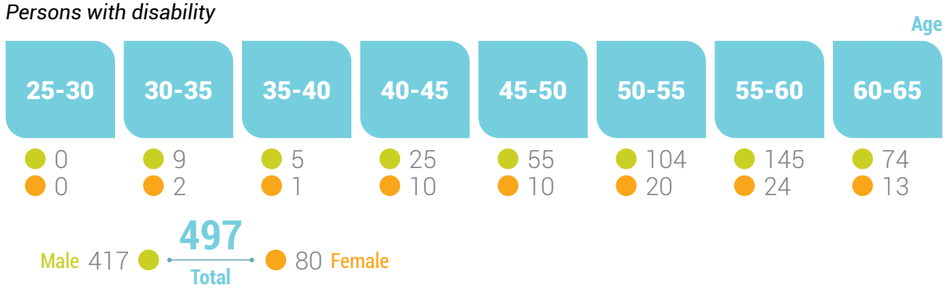
Employees according to contract type



Educational structure of employees

Education degree	FEMALE	MALE
doctoral degree	5	16
master's degree	50	134
Bachelor's degree	801	1,470
associate degree	275	587
secondary school	1,031	3,796
elementary school	41	53
highly skilled	2	918
skilled	34	890
semi-skilled	5	29
no skills	28	86
Total	**2,272**	**7,979**

Persons with disability



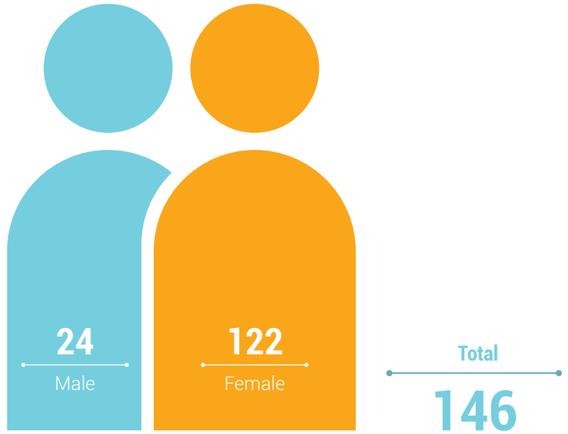
New employees and employee turnover

Age group	Employed 2018	Employed 2019	Age group	Departure 2018	Departure 2019
MALE					
do 18	2	1	do 18	0	0
18-25	112	79	18-25	0	2
25-30	89	109	25-30	5	17
30-35	51	79	30-35	4	21
35-40	28	44	35-40	10	19
40-45	19	34	40-45	10	16
45-50	14	23	45-50	11	16
50-55	5	13	50-55	14	7
55-60	5	2	55-60	84	10
60-65	2	2	60-65	397	35
65-70	0	0	65-70	66	31
TOTAL	**327**	**386**	**TOTAL**	**601**	**174**
FEMALE					
18-25	6	0	18-25	0	0
25-30	35	20	25-30	3	4
30-35	18	44	30-35	0	2
35-40	16	35	35-40	5	4
40-45	10	22	40-45	5	6
45-50	3	11	45-50	5	3
50-55	4	9	50-55	5	2
55-60	**0**	**1**	**55-60**	**74**	**1**
60-65	0	0	60-65	125	9
65-70	0	0	65-70	9	2
TOTAL	**92**	**187**	**TOTAL**	**231**	**33**

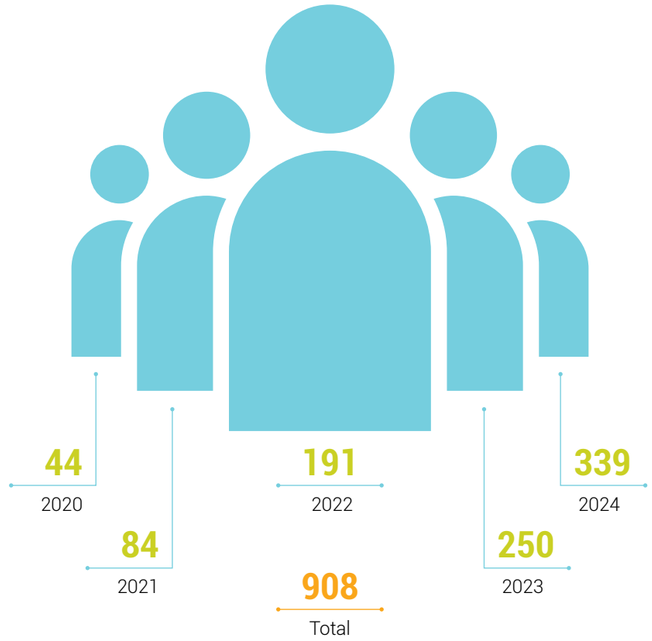
Salaries

Average gross salaries in 2019 (HRK)						
	Annual amount			Monthly amount		
EDUCATION	FEMALE	MALE	RATIO M/F	FEMALE	MALE	RATIO M/F
doctoral degree	256,036.74	251,301.39	-2%	21,336.39	20,941.78	-2%
master's degree	226,473.03	242,371.80	7%	18,872.75	20,197.65	7%
Bachelor's degree	172,918.06	181,483.42	5%	14,409.84	15,123.62	5%
associate degree	135,316.86	145,616.25	8%	11,276.40	12,134.69	8%
secondary school	112,339.67	118,884.98	6%	9,361.64	9,907.08	6%
elementary school	88,827.13	90,176.39	2%	7,402.26	7,514.70	2%
highly skilled	109,052.41	135,562.31	24%	9,087.70	11,296.86	24%
skilled	102,997.17	109,628.23	6%	8,583.10	9,135.69	6%
semi-skilled	73,174.44	97,216.92	33%	6,097.87	8,101.41	33%
no skills	81,156.96	92,170.48	14%	6,763.08	7,680.87	14%
		Total ratio	8%		Total ratio	8%

Parental leave



Number of workers fulfilling conditions for retirement in the next five years



Stakeholder

DIALOGUE

transparent
communication,
and education

► In 2019 we continued informing stakeholders on new and existing projects - visualization of the future HPP Kosinj

Stakeholder dialogue, transparent communication, and education

Encouraging growth and development of society is one of the tasks of large corporations. Therefore, HEP continued to implement socially responsible project in 2019, aimed at encouraging youth, environmental protection, art and culture heritage, science and society, humanitarian actions, scholarships for pupils and students, acquisition of ICT equipment for elementary schools to encourage IT literacy.

The company also continued to provide professional internships for pupils and students through work and direct contact with the business environment. The projects were implemented through the publication of public tenders on HEP's website.

In 2019, HEP continued to award journalists for their best works in the field of environmental protection to encourage monitoring of the impact of the project and activities on the environment and informing the public. To encourage community investment in energy efficiency and renewable energy projects, in 2019, HEP continued with donations from ZelEn. The total amount of all these donations in 2019 thus reached HRK 14.4 million.

In addition to socially responsible projects, HEP is involved in public information procedures for new and existing projects that require an assessment of the need to assess the impact of the project on the environment, environmental impact assessment processes and ecological network impact processes. In 2019, two projects were implemented in which property and legal relations were resolved, as well as a project to improve the water regime in coordination with Hrvatske vode. The most significant risk here relates to the uncertainty of the duration of assessment procedures for environmental impact assessment processes and ecological network impact processes in which the public and the interested public are involved. This risk is beyond HEP's influence, but all procedures during 2019 were carried out in accordance with the prescribed deadlines.

Space usage fees. In 2019, HEP Proizvodnja directed a total of HRK 91.9 million in fees to the local self-government units (municipalities and cities) in whose area its power plants are located for the use of space used by electricity generation plants. The fee is paid on the basis of a decision of the Government of the Republic of Croatia and represents compensation for the avoided benefit of the local community that cannot use the space occupied by power plants for other economic purpose. The basic purpose of using the funds raised is to finance the preparation of projects for European energy efficiency and renewable energy funds, preparation of spatial planning documentation and strategic environmental assessment for energy projects, preparation of energy infrastructure in business zones and technology parks, building renovation projects and project aimed to help vulnerable customers.

Awarding excellence

As many as 278 organizations received funding in the annual donation competition. A total of 1,165 valid applications were received for the competition for donations "Light on the joint way 2019", and HEP selected projects and programs of 278 associations, institutions and civil society organizations for co-financing.

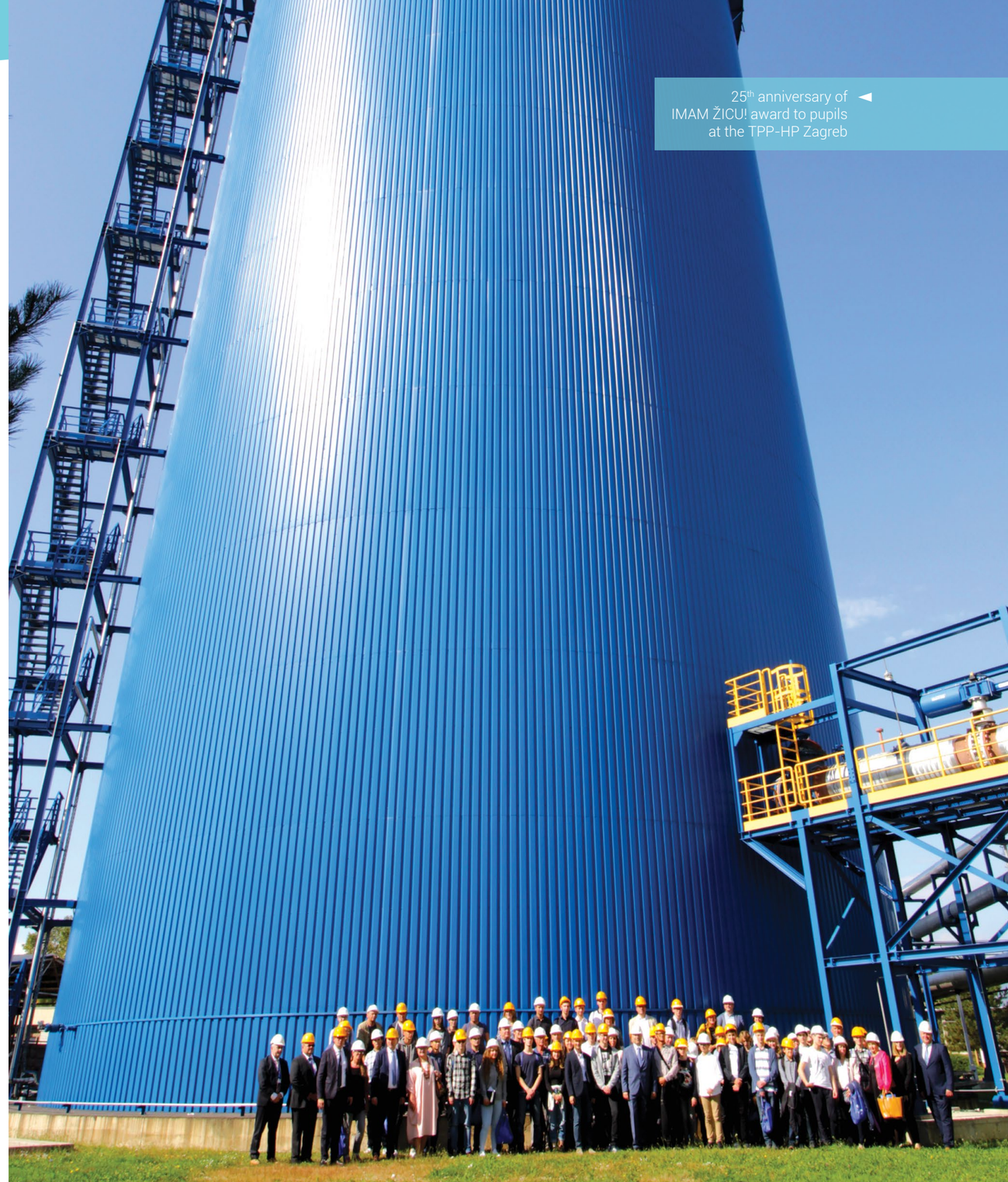
These organizations thus divided the grant fund for projects and programs into five categories: youth, environment, arts and cultural heritage, science and society, and humanitarian action.

Continuing with scholarship program. HEP Group has a great influence on the labor market, not only with the number of employees, but also with its needs for various profiles of experts. In each part of the HEP Group, the needs for new young workers are considered on an annual basis. For the school and academic year 2018/2019 the conditions for awarding seven scholarships to full-time students of the final grades of secondary schools and 14 scholarships to full-time students of graduate studies in technical specializations were met. For the school and academic year 2019/2020 at the level of the HEP Group, the need for scholarships for 89 full-time students in the final grades of secondary schools and 40 full-time graduate students in technical professions was expressed, and the implementation of the scholarship tender is planned for 2020. By targeted planning of scholarship needs for pupils and students, we provide professional staff that are important for the successful functioning and stability of the entire system.

IMAM ŽICU! for the jubilee 25th time! The jubilee 25th award ceremony for the students IMAM ŽICU!, which HEP awards to primary and secondary school students for achievements in the field of mathematics, physics and electrical engineering, was held in October 2019.

A total of 37 students received the award in the amount of HRK 3,000, which makes a total of 787 students HEP has awarded since 1995. Among the schools whose students won the most awards, the XV Gymnasium from Zagreb stands out with eight awarded students, while Vladimir Prelog School of Natural Sciences from Zagreb, Private Gymnasium and Futura School of Economics and Informatics from Zagreb and Franjo Petrić Gymnasium from Zadar have two awarded students each. Winners of the award for the school year 2018/2019 are all students who won first prize in national competitions in mathematics and physics and public exhibition of experimental works in physics, as well as students of secondary vocational schools who won the first three places in the national competition in the category of Electrical Installations.

For our little geniuses. This action is part of HEP's activities within the cooperation with the education system. As a holder of energy activities that require investments in expertise and knowledge, and as a company of strategic importance for Croatia, HEP has recognized that investing in the development of young people's knowledge is an incentive for their further development and success. Therefore, our goal is to sensitize the public about the state of IT equipment in our schools, to



25th anniversary of IMAM ŽICU! award to pupils at the TPP-HP Zagreb ◄

give our contribution to the Croatian educational system and to enable even better development and progress of the youngest.

Together with the donation cycle for 2019, HEP provided as many as 250 computers for students in 74 primary schools throughout Croatia as part of the "For our little geniuses" campaign. The total value of donated IT equipment is almost HRK 1.25 million. New computers are donated to schools that do not have enough computers in relation to the number of students, schools with inadequate and outdated computer equipment or are in areas of special state concern.

Cooperation with scientific and educational community. Within the program of professional internships, HEP enables students to gain practical experience through work and direct contact with the business environment, under the professional supervision of a mentor. From year to year, the interest of pupils and students in performing professional practice at HEP is increasing.

In 2019, an agreement on business cooperation in areas of common interest was signed with the Faculty of Economics in Zagreb.

The internship in 2019 was completed by almost 500 interns; 373 students from industrial-craft, vocational, (maritime) technical, electrical engineering, mechanical, economic and administrative schools and 113 students, mostly mechanical engineering, electrical engineering, chemical engineering and technology, computer science and information technology, and to a lesser extent social sciences - fields of economics and law. We also successfully implement the professional internships of EFFECTUS students based on a signed agreement on business cooperation.

We are also involved in professional internship programs such as the Summer Internship Program of the Faculty of Electrical Engineering and Computing in Zagreb, then the industrial internship of the Faculty of Mechanical Engineering and Naval Architecture in Zagreb (Atlantis system), Faculty of Electrical Engineering, Computing and Information Technology Osijek FERIT Osijek (Stup portal).

In 2019, we participated in several career fairs organized by universities: FER (twice), the Faculty of Engineering in Rijeka, the Faculty of Science in Zagreb and the FSB. We also participated in two Career Speed Dating workshops organized by FSB and FER in Zagreb. In addition to the opportunity to find a job, young people are given the opportunity to practice their presentation skills and get immediate feedback from the employer.

HEP provides monthly financial support or scholarships for the children of its deceased employees. In cooperation with the Rotary Club Zagreb Kaptol, through the humanitarian action "Step into Life", the company awards scholarships for children without adequate parental care, which also supports the education of young people.

More than two decades of awards for the highest quality journalistic works. On the occasion of May 22, the International Day for Biological Diversity and the Day of Nature Protection in the Republic of Croatia, the "Velebit Degenija" award for the best journalistic work in the field of environmental protection and nature in written, radio and television journalism and newspaper photography in 2018 was awarded.

This annual award for the best journalistic work in environmental protection was initiated in 1998 by the Association of Environmental Journalists of the Croatian Journalists' Association and the company APO, which was succeeded in 2016 by another member of the HEP Group - HEP Opskrba.

In the category of works published in the press and on the Internet, the winner of the monetary award and plaque "Velebit Degenija" for 2018 is Željko Bukša for the text "The fewer shows the costs are lower", published in the professional magazine EGE. The winner of the award in the category of television works is Jagoda Bastalić for a series of reports on the illegal disposal of waste grit in Zaton Obrovački, broadcast on HRT's show "Labyrinth". Goran Šafarek won the award in the category of photography-reportage for a series of photographs of the Drava River in the reportage "Drava, a river at a crossroads" published in the magazine Meridijani. In the category of radio reports for the report on fuel oil pollution in the port of Bršica in the Raška Bay, the winner of the award is Mirjana Žugec Pavičić from the Croatian Radio.

Green projects for green communities

ZelEn donation for energy efficiency. Funds generated by HEP Opskrba through the sale of electricity with a guarantee of origin exclusively from renewable sources are collected in the fund from which projects in the field of renewable energy sources, energy efficiency and systematic energy management are implemented at public sector facilities. care for socially vulnerable categories of the population.

In these facilities, in addition to improving energy efficiency, the quality of living is also raised. At the same time, these projects increase the savings achieved by the HEP Group and thus reduce the Group's financial liabilities under the savings liability system. By the end of 2019, nine projects worth almost HRK 2.4 million were realized from the ZelEn Fund.

Allocation of funds in the name of compensation for the product ZelEn. In 2019, donated energy efficiency projects were carried out in the Morski konjić Kindergarten in Slatine on the island of Čiovo, in the administrative building of the Osijek Kindergarten in Osijek and in the Family Center building in Požega.

A new public call for the allocation of funds in the name of the fee for the product ZelEn for 2019, with a total value of one million kuna, has also been published. Two projects were selected for the construction: the installation of a heat pump and an integrated solar power plant at the Secondary Vocational School in Varaždin, and the replacement of lighting and remote control at the Ljudevita Gaja Elementary School in Osijek.

HEP Opskrba: Our ZelEn Story. HEP Opskrba launched a new action in 2019 - in cooperation with the Argonaut Association, which deals with nature and environmental protection and promoting sustainable development, primarily on the island of Murter, Murter area and the Kornati archipelago, HEP Opskrba employees organized cleaning of the hard-to-reach northern coast of Murter. The location was chosen because it is a difficult to reach place and therefore, unlike most bays and the coast on the island, this coastline is quite polluted by waste caused by sea currents and waves.

For five years in a row, HEP Opskrba employees and ZelEn customers have been cleaning the environment and planting trees around HEP's hydroelectric power plants Ozalj, Kraljevac, Čakovec, Zakučac and Vinodol with the aim of raising awareness of responsible business towards nature and the environment in which they live and work. The action "100 Green Trees" resulted in a significantly higher number of planted trees than planned, so in 2019 HEP Opskrba launched a new action "Our ZelEn Story".

Support for culture, health and humanitarian projects

During 2019, HEP continued to provide support to national and regional projects in the field of culture and tradition. Some of our most prominent partners are Sinjska alka, Dubrovnik Summer Festival, Vinkovci Autumn, Klapa Festival in Omiš, but also projects of Croatian national theaters and regional and local cultural organizations.

With the desire to support and preserve cultural heritage in Croatia, HEP has for many years supported projects in the field of art and culture, but also projects aimed at preserving tradition and heritage. In 2019, the HEP KULTURA campaign continued with the slogan "Proud light of Croatian culture", which includes numerous professional and amateur ensembles, sights and events.

With the support to culture, the company participated and launched a number of humanitarian projects such as a donation to the Croatian National Theater Split for the adaptation of theater space for people with disabilities, support to health institutions - Metković Health Center, Sveti Duh Hospital, Osijek Clinical Hospital, Zagreb Clinical Hospital and Municipality Lovinac, but also donations for the realization of the project "Fairytale surgery".

HEP participated in the UNICEF survey. At the conference "Children are our most important work" held in November 2019, the results of the first national survey on the impact of the business sector on children's rights and the Advisory Body for Children's Rights and Corporate Social Responsibility, which will work under UNICEF to realize children's rights in the business community. As one of the important business entities in Croatia with great social impact, HEP also participated in this research whose main objectives were to understand the extent to which children's rights are recognized as part of corporate social responsibility in Croatia and to identify the most important barriers and motivating factors for companies and other stakeholders in Croatia for greater engagement on children's rights.

Engagement and informing stakeholders about HEP projects

Improvement of water regime downstream of HPP Lešće. During the operation of HPP Lešće, which has been in operation since 2010, the changed conditions of the water regime in the Dobra riverbed downstream of the hydroelectric power plant have contributed to more intensive coastal erosion. The impacts of HPP Lešće are monitored continuously and in a coordinated manner, based on the Agreement on Cooperation between HEP-Proizvodnja and Hrvatske vode for the period 2014-2018, which has been extended for the period 2019-2022. Observed damages on the downstream course of Donja Dobra are being repaired, which is financed by HEP-Proizvodnja in accordance with the established annual activity plans.

Recognizing the interest of the local community, in March 2019 a joint commission was appointed to prepare the signing of the Partnership Agreement on the Project "Improvement of water regime due to the operation of hydropower plant Lešće on the river Donja Dobra, downstream of hydroelectric power plant Lešće and preparation of regime ". The agreement was signed in September 2019 by HEP-Proizvodnja, Hrvatske vode and Karlovac County. The agreement aims to ensure the optimization of the water regime of the Donja Dobra River, and the improvement of hydrological, hydraulic and geomorphological parameters, as well as the reduction of possible risks to the environment. Also, by the decision of Hrvatske vode from September 24, a joint operational body was appointed, in which HEP Proizvodnja representatives participate, with the task of initiating all necessary activities for the permanent solution of the observed phenomena on the river Donja Dobra.

Resolving property-legal relations in the future Drežničko polje Retention. HEP-Proizvodnja is planning a project in Drežničko polje that would extend the period in which water is retained in the existing natural retention, which would be used for additional production in the Gojak and Lešće hydroelectric power plants. By mid-2018, coverage

zones were defined, and activities were launched to inform the local population in more detail about the project. The landowners and members of the Drežnica Local Board are acquainted with the situation and the planned dynamics of the project, the location of future buildings with equipment and the plan of further activities to initiate the procedure of property and legal affairs. The procedures for the purchase of land plots in the coverage area, started in September 2018, were carried out based on a subdivision study transparently and at a price determined by court experts.

Resolving property-legal relations in the future accumulation of HPP Kosinj. During 2019, the bases were prepared for a fair solution of property-legal relations, i.e. compensation of property owners in the settlements located on the location of the future Kosinj reservoir. The goal of HEP is to reach a solution in communication with the local population, i.e. owners of land and buildings, and in accordance with the legal framework. The documentation that will be the basis for defining the optimal variant of owner compensation will be based on the data that will be obtained by a new cadastral survey financed by HEP. All the above is prepared in cooperation with the local self-government and the competent bodies at the county and state level. The method of compensation thus determined will be presented to landowners at public exhibitions planned to be held in 2020.

Small hydroelectric power plant Đale. The Ministry of Environmental Protection and Energy published on its website the Information on HEP's request for an assessment of the need to assess the environmental impact of the small 6.4 MW Đale hydropower plant together with the Environmental Protection Study in June 2019. In February 2020, the Ministry of Environmental Protection and Energy issued a Decision according to which it is not necessary to carry out the procedure of assessing the impact of the project on the environment or the main assessment of the acceptability of the project on the ecological network. The decision prescribes the measures that need to be implemented for SHPP Đale.

Small hydroelectric power plant TE-TO Zagreb. In December 2019, HEP submitted a request to the Ministry of Environmental Protection and Energy for an assessment of the need to assess the impact of the project on the environment and submitted the Environmental Protection Study for the small hydropower plant TE-TO Zagreb with a capacity of 84.3 kW. Pursuant to the Decision of the Ministry of Environmental Protection and Energy from January 2020, which, like the Information and the Study, was published on the ministry's website, it is not necessary to conduct an environmental impact assessment procedure or a major assessment of the project's acceptability. The procedure can be carried out with the implementation of the measures prescribed by the decision.

Solar power plant Obrovac Sinjski. In May 2019, the Environmental Protection Study and Information on HEP's request for an assessment of the need to assess the environmental impact of the 60 MW Obrovac Sinjski solar power plant were published on the Ministry of Environmental Protection and Energy website. In September 2019, the ministry issued a Decision that for the said intervention it is necessary to carry out the procedure of assessing the impact of the intervention on the environment and the main assessment of the acceptability of the intervention for the ecological network. The decision was issued for a period of validity of two years, and in that period HEP, as the project holder, should submit a request for the implementation of the environmental impact assessment procedure.

Removal of boiler K7 and construction of low-pressure steam boiler NTK3 at the location EL-TO Zagreb. In September 2019, HEP submitted a request to the Ministry of Environmental Protection and Energy to assess the need to assess the impact of removing the K7 boiler and the construction of a low-pressure steam boiler NTK3 at the EL-TO Zagreb site on the environment. In October 2019, the Ministry of Environmental Protection and Energy adopted and published on its website a Decision according to which it is not necessary to carry out the procedure of assessing the impact of the project on the environment or the main assessment of the acceptability of the project on the ecological network.

Modification of conditions from the Decision on integrated environmental protection conditions for the TPP Rijeka plant. From 15 January to 13 February 2019, the public inspection for the draft Decision on Amendments to the Conditions from the Decision on Integrated Environmental Protection Conditions for the TPP Rijeka Plant lasted. Information on the request and public insight, as well as the draft Decision, are published on the MEPE website.

Environmental permit for TPP Plomin 1. On 25 February 2019, the Ministry of Environmental Protection and Energy issued a Decision on the environmental permit for TPP Plomin 1, which was published on the Ministry's website. For the Expert Basis for Amendments to the Environmental Permit Conditions for the existing TPP Plomin 1, a public hearing and public inspection was conducted during 2018, and a public inspection of the draft Decision on Environmental Permit was conducted in early 2019. All information, expert background, decisions and solutions are published on the MEPE website.

Procedures for reviewing the conditions of the environmental permit for compliance with the Decision on Conclusions of the European Commission on Best Available Techniques (BAT) for TPP Plomin 2, TPP Zagreb, TPP Osijek and TPP Sisak. Pursuant to the Environmental Protection Act and the EC Implementing Decision on establishing conclusions for large combustion plants published in the Official Journal of the EU on 31 December 2017, in 2019 HEP sent requests for the implementation of procedures for reviewing environmental permit conditions with the European Commission Decision HEP's plants. Information on the procedures for reviewing the conditions of environmental permits for harmonization with the Decision was published on the website of the Ministry of Environmental Protection and Energy, together with expert bases setting out the content of reviewing and amending the conditions of environmental permits. Based on expert expertise, the Ministry of Environmental Protection and Energy will issue decisions on new environmental permits for these plants in 2020.

Cooperation with partners on renewable energy projects. Exploring the possibility of developing and building renewable energy projects and integrating ready-made RES projects or those with a high level of development into its product portfolio, in February 2019 HEP issued a public invitation to interested partners to express interest in developing and selling RES projects in Croatia.

The invitation was sent to local self-government units for joint preparation of development documentation for solar power plant (SE) projects and legal or natural persons interested in selling non-integrated (stand-alone) SE projects in power development greater than or equal to 2 MW, wind farms in development or operation and hydropower plants. developing or operating a power greater than or equal to 1 MW. More than 70 local self-government units responded to the call, and

a dozen commercial projects were offered for potential purchase. Based on the analysis of received expressions of interest and communication with local self-government units as potential partners, HEP signed agreements on the development of solar power plant projects with five municipalities and cities by the end of 2019 and initiated several more signing agreements. The total power of the mentioned projects is 120 MW, while 100 megawatts is the potential total power of solar power plants, which HEP, based on communication with local self-government units, began to develop independently at several other locations.

Working with the local community helps us accelerate the realization of our renewable development scenario. On the other hand, municipalities and cities can engage more strongly in the development of sustainable energy infrastructure in their area, which will contribute to their economic and overall development.

Cooperation with stakeholders on the development of charging infrastructure for electric vehicles. For the successful implementation of the electromobility development project, it is important to cooperate with stakeholders, interested local governments (cities and municipalities) and other stakeholders who have an interest and desire to modernize public and private transport and contribute to reducing CO_2 emissions and preserving the environment. To ensure suitable locations for the installation of charging stations, HEP enters into cooperation agreements with interested municipalities and cities on the development project of HEP for the construction of infrastructure for charging electric vehicles.

ELEN charger on Stjepan Radić Square in Zagreb ◄

Award-winning progress of our sustainability reports

According to the expert jury of the Green Frog Award, HEP made the greatest progress in non-financial reporting in 2018 among Croatian companies. The award for progress, presented in the HEP Group Sustainability Report for 2017, was given to HEP at the conference "Investing in Sustainability" held in April 2019 in Zagreb, organized by Deloitte Croatia and in cooperation with the Croatian Employers' Association and the Global Compact Network of Croatia.

GRI Standard, and to increase transparency, it also includes data according to the indicators of the Sectoral Supplement for Energy. A working group composed of more than 30 members from all parts of the HEP Group worked on the preparation of the report, and the online questionnaire also included stakeholders of the HEP Group, 71 of them of different profiles. They, as well as members of HEP's working group, commented on the choice of material issues and the assessment of the potential of HEP Group's contribution to achieving certain global goals of sustainable development, which have been increasingly in the focus of politics and the business sector.

ABOUT THIS REPORT

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About this report

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This is the first Annual Report of the HEP Group, which includes a description of the management of financial and non-financial impacts of companies. It also includes the sixth sustainability report according to the methodology of the Global Reporting Initiative, which monitors strategies, activities and goals in 2019. The last report was published in June 2019 and is available on the link: http://www.hep.hr/UserDocsImages//dokumenti/Izvjesce%20o%20odrzivosti//HEP_2018_Sustainability.pdf.

The report is compiled according to the core option of the GRI Standard guidelines and includes data according to the indicators of the Sectoral Supplement for Energy. The Sustainability Report is not subject to an external verification process, but we are considering this option for future reporting periods.

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