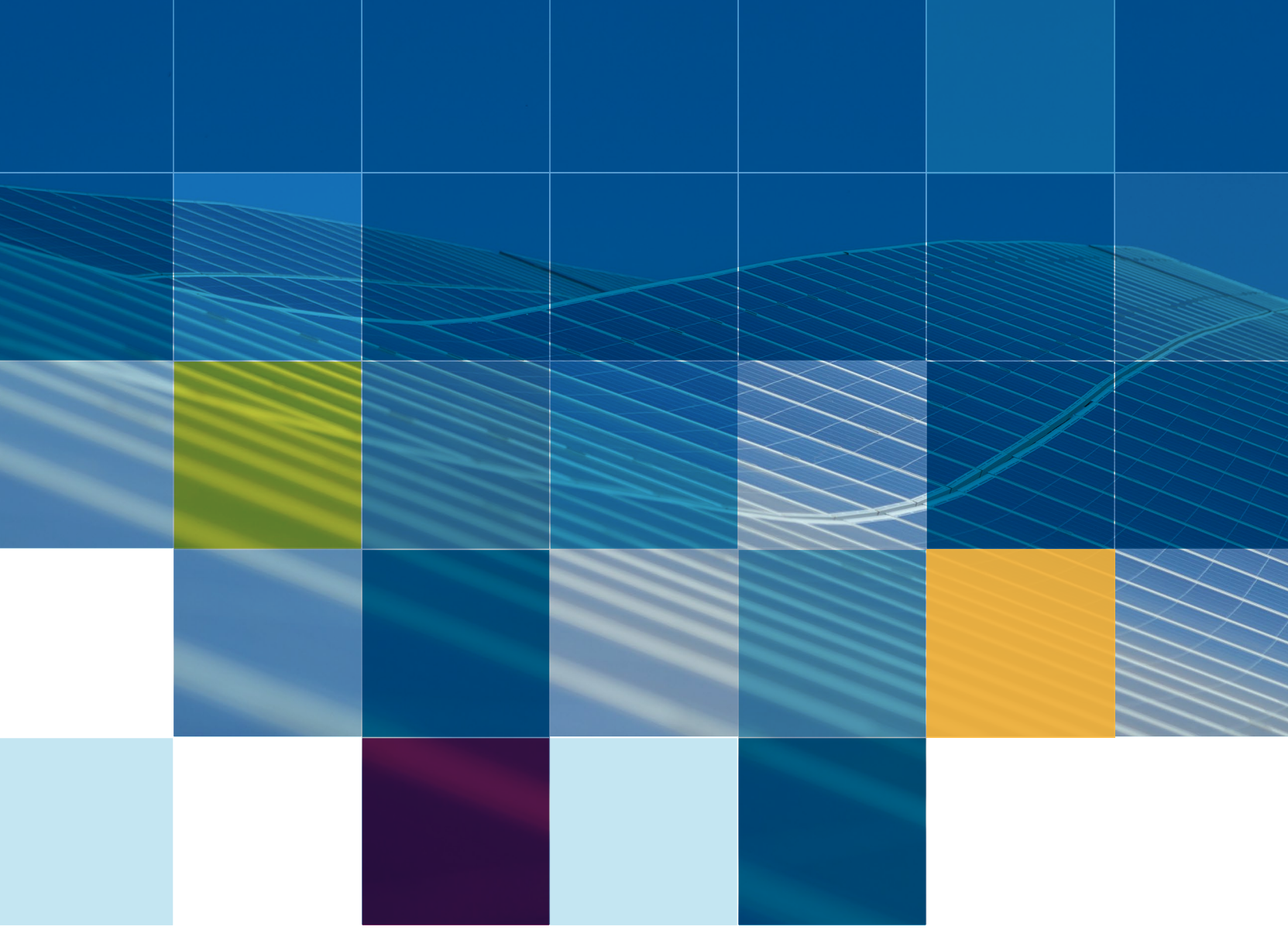

HEP

ANNUAL AND SUSTAINABILITY REPORT

2021

HEP Group

Introductory note

Unless required otherwise by the context, the term „HEP Group“, „HEP“, or „Group“ means Hrvatska elektroprivreda d.d. together with its dependent companies.

The term „Company“ means Hrvatska elektroprivreda d.d.

Except in the parts of the Report that show consolidated data for HEP Group and with a special note thereof, this Report does not include data on the Croatian Transmission System Operator d.d., which operates according to the independent transmission system operator model (ITO model) and independently publishes its non-financial reports.

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1

MANAGEMENT BOARD'S REPORT

In the past business year HEP's business operations were conducted in an extremely complex, even crisis situation. Nevertheless, in the second year of COVID-19 pandemic we showed high resilience and continued to launch a series of investments with a high national component.

In addition to the measures adopted by the Croatian Government, our activities also contributed to a quick recovery of the Croatian economy and historically record high GDP growth in Q3 2021.

Compared to decreased electricity demand in 2020 due to the pandemic, in 2021 we saw a 5.6 percent increase in domestic sale. HEP Group's market share was 89.0 percent. Due to higher exports of surplus electricity, the sale abroad increased by 22.6 percent compared to the previous year.

The beginning of the year was marked by a catastrophic earthquake which struck the region of Banovina and the central part of Croatia on 29 December 2020. Employees of HEP-Distribution System Operator d.o.o. gave their full contribution to the implementation of earthquake relief activities from the very first day. Based on the conclusions of the Government of the Republic of Croatia, HEP Group companies wrote off energy-related receivables from households in the earthquake-affected area throughout 2021. A total of HRK 79.1 million was written off.

GRI 102-14

The mentioned crisis circumstances were followed by an increase in the wholesale price of energy and electricity. The upward price trend intensified in the last quarter of 2021 and continued even stronger this year. Compared to the year before, in 2021 the average purchase price of gas paid by HEP increased by 68.5 percent, of coal by 97 percent, and of carbon dioxide emissions by 67 percent. On the plus side, hydro generation exceeded the plan, and thanks to the high level of operational availability of thermal power plants, we were able to adequately optimize the operation of generation facilities. All this enabled us to continue to record good business results in 2021, reaching the consolidated profit in the amount of HRK 1.02 billion.

Our increasingly effective management of risks and overall financial position in the circumstances of changing hydrological conditions and energy prices has been recognized by Standard & Poor's rating agency. In its report from October 2021, Standard & Poor's upgraded HEP's credit rating from BB + to BBB-, matching the sovereign rating and returning to the investment grade for the first time since 2009. Investment credit rating is important for the realization of our investment plans focused on achieving a renewable, low-carbon development scenario.

The realization of investments in 2021 amounted to HRK 3.1 billion. Regarding size and significance, the investment in Kosinj Hydropower System (HRK 1.54 billion) stands out. Under the Decision of the Croatian Government in July last year this project was declared a strategic investment project. The works on ancillary utility infrastructure in the construction area were conducted last year. Project documentation for the issuance of location permits was prepared for the second part of the overall project ie Senj 2 hydropower plant (390 MW; HRK 1.9 billion). The execution of a multiannual cycle of hydropower plant reconstructions and revitalizations continued, including five power plants in 2021. Regarding other capital generation projects, the construction of the high-efficiency combined cogeneration unit in EL-TO Zagreb CCPP continued (150 MWe/114 MWt; HRK 920 million).

HEP's first windfarm, Korlat (58 MW, HRK 495 million) commenced its regular operation in 2021. The investment cycle in solar power plants continued. Solar power plants Kaštelir 2 (connection capacity of 2 MW), Marići (1 MW) and Kosore Jug near the town of Vrlika (2.1 MW) were put into operation. The construction of the currently biggest solar power plant in Croatia, Obrovac (connection capacity of 7.35 MW and installed capacity of 8.7 MW) was completed and the procedure for the issuance of its operational licence was initiated as well as for Stankovci solar power plant (2.5 MW). In September 2021, HEP signed a cooperation agreement with six municipalities and the town of Valpovo for developing solar power plant projects, total capacity of 60 MW and estimated investment value of HRK 380 million. Together with 11 power plants from the first round of concluded agreements, these account for the total of 168 MW and the investment exceeding one billion kuna. Including the projects which are being developed completely independently, there are 40 solar power plant projects in various stages of development.

Regarding investments in the electricity segment, a significant part again included transmission and distribution, where a series of capital constructions and reconstructions of substations and power lines projects was completed, continued or launched. By the end of the year more than 80 percent of the Smart Grid Pilot Project, co-financed by HRK 150 million of European funds, was finished.

Investments in the heat energy segment were also marked by the EU co-funded projects. The first of the three phases of the HRK 700 m revitalization of the City of Zagreb's hot-water network project, was completed. The revitalization includes 68.5 kilometers, i.e. one third of the hot-water network. The HRK 78 m replacement of the connecting hot-water line from TE-TO Osijek CHP to Heating Plant Osijek commenced at the end of the year.

Regarding investments in HEP's third key business segment, gas operations, the most important one refers to the liquefied natural gas terminal on the island of Krk, which was completed and put into operation as of 1 January 2021. The investment was carried out by LNG Hrvatska d.o.o., a company co-founded by HEP d.d., which is also a capacity lessee. In the first year of its operation, the terminal proved itself an important additional gas supply route. Other investments in gas operations, apart from investment in the gas network, primarily included continued acquisitions. Gradska plinara Krapina and Darkom distribucija plina Daruvar were acquired in March and June, respectively. It should also be mentioned that after seven years of successfully performing this activity, under the Gas Market Act, on 31 March 2021 HEP discontinued its wholesale gas market supplier role. Regarding investments in other business segments, one should mention the continuation of the eMobility project, with the total number of ELEN charging stations exceeding 300 by the end of the year, of which more than 250 are publicly available.

At the UN Climate Change Conference in Glasgow, Croatia pledged to reduce CO_2 emissions by 45 percent by 2030 compared to 1990, to achieve a 39 percent share of renewables

in final consumption and to stop using coal by 2033 at the latest. This poses a challenge to HEP as the carrier of energy transition and the most important factor in achieving the goal of Croatia's energy self-sufficiency in terms of the accelerated realization of a renewable development scenario. In addition to the mentioned renewable sources, advanced networks and electromobility, we are also looking at projects of energy storage tanks, production and use of hydrogen and other advanced technologies, counting on the possibility of applying for grants within the National Recovery and Resilience Plan.

In order to achieve the set goals, we will mobilize all our capacities, experience, knowledge and expertise. We will know how to keep the workers who can and are ready to do so. As an employer, we aim at establishing a good cooperation with trade unions, which was satisfactory last year. This is illustrated by the fact that in July we reached an agreement on extending the implementation of the Collective Agreement for the next two years. In addition to retaining existing employees, we also take care of new employment. We continued with the scholarship program and conducted a scholarship tender for pupils and students for the school and academic year 2021/2022.

The current situation on the global energy markets and the market trends at the beginning of 2022 indicate that the current business year will be one of the most challenging and difficult in terms of business operation for HEP in the last decade. In such circumstances, our goal is to maintain HEP's strength and ability by working together with key stakeholders in the society and the Croatian energy sector for the benefit of all our customers and our owner, the Republic of Croatia, to which we are deeply committed.

President of the Management Board

Frane Barbarić

2 ON HEP GROUP

HEP GROUP COMPANIES

HEP d.d. (Hrvatska elektroprivreda d.d.) is the parent company of HEP Group with the seat in Zagreb, wholly owned by the state. It consolidates the management of HEP Group dependent companies and is the owner of the assets, which it contractually transfers to its subsidiaries for management.

The core activity of HEP Group is electricity generation, transmission, distribution, supply and trade. In addition, HEP Group is engaged in the generation, distribution and supply of heat energy, natural gas wholesale[1] and retail supply and gas distribution, provision of energy services, and other energy and non-energy activities.

The Group consists of Hrvatska elektroprivreda d.d. as the parent company and its dependent companies listed below (state as of 31 December 2021).

GRI 102-1
GRI 102-2
GRI 102-3
GRI 102-5

1 According to the Gas Market Act, HEP ceased to perform the activity of the supplier on the gas wholesale market on 31 March 2021.

Dependent companies	Country	Ownership share (%)	Core activity
HEP-Proizvodnja d.o.o.	Croatia	100	Generation 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	Generation and distribution of heat
HEP-PLIN d.o.o.[2]	Croatia	100	Gas distribution and supply
HEP-Trgovina d.o.o.	Croatia	100	Electricity trade 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	Maintenance of hydro equipment
HEP - Upravljanje imovinom d.o.o.	Croatia	100	Management of non-operating assets and tourism
HEP-Nastavno obrazovni centar	Croatia	100	Training, professional development and accommodation services
HEP - VHS Zaprešić d.o.o.	Croatia	100	Design and construction of multi-purpose hydrotechnical system
HEP Energija d.o.o. Beograd	Serbia	100	Electricity trading
HEP Energija d.o.o. Ljubljana	Slovenia	100	Electricity trading
HEP Energija d.o.o. Mostar	Bosnia and Herzegovina	100	Electricity trading
HEP Energjia sh.p.k. Priština	Kosovo	100	Electricity trading
ENERGETSKI PARK KORLAT d.o.o.	Croatia	100	Electricity generation
HEP-TELEKOMUNIKACIJE d.o.o.	Croatia	100	Telecommunications services
SUNČANA ELEKTRANA POREČ d.o.o.[3]	Croatia	100	Electricity generation
SUNČANA ELEKTRANA VIS d.o.o.	Croatia	100	Electricity generation
ORNATUS d.o.o.	Croatia	100	Electricity generation
Nuklearna elektrana Krško d.o.o.[4]	Slovenia	50	Electricity generation
LNG HRVATSKA d.o.o.[5]	Croatia	75	LNG (liquified natural gas) operation
GRADSKA PLINARA KRAPINA d.o.o.[2]	Croatia	100	Distribution and supply of gas
DARKOM DISTRIBUCIJA PLINA d.o.o.[2]	Croatia	100	Distribution and supply of gas

1 As of 1 July 2013, HOPS operates under the Independent Transmission Operator model (ITO).
2 HEP-Plin d.o.o. is the sole owner of GP Krapina d.o.o. and Darkom DP d.o.o. as of March and June 2021, respectively.
3 M Vizija d.o.o. merged with Sunčana elektrana Poreč d.o.o. in October 2021.
4 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.
5 Joint venture with Plinacro d.o.o. (75%:25%).

GRI 102-4
GRI 102-6
GRI 102-10
GRI 102-48

Key data

Generation facilities (installed capacity), transmission and distribution network

28 **hydropower plants**
installed capacity 2.167 MWe*

5 **solar power plants (self-standing)**
installed capacity 9,6 MWe

63 **solar power plants on HEP rooftops**
capacity 2,2 MWe

1 **wind power plant**
installed capacity 58 MWe

2 **bioenergy plants (wood chips)**
installed capacity 6 MWe and 20 MWt

7 **thermal power plants and thermal power-heat plants**
1074 MWe and 930 MWt

50% **Nuclear power plant Krško**
installed capacity 348 MWe

186
HV substations (400-220-110 kV)

26.859
110,35(39) and 10(20) kV high voltage substations

7.779
km of HV lines (overhead and cables)**

142.364
km of MV and LV overhead and cable lines

* excluding HPP Dubrovnik Unit B which generated electricity for Bosnia and Herzegovina
** including 110 kV overhead lines currently operating as MV (11.0 km in total)

Basic indicators

17.4 TWh
Sale of electricity[1]
+7.8 %
2020 16.1 TWh

13.7 TWh
Electricity production
+9.8 %
2020 12.5 TWh

2.0 TWh
Heat sales
+8.4 %
2020 1.9 TWh

2.2 TWh
Gas retail[2]
+17.4 %
2020 1.8 TWh

0.5 TWh
Gas wholesale[3]
-84.5 %
2020 3.1 TWh

15,969.6 HRK m
Operating income
+11.1 %
2020 14,372.6 HRK m

3,438.3 HRK m
EBITDA
-21.3 %
2020 4,370.0 HRK m

1,019.5 HRK m
Net profit of HEP Group
-30.4 %
2020 1,463.8 HRK m

46,906.4 HRK m
Total assets
+5.1 %
2020 44,639.5 HRK m

3,083.1 HRK m
Investments
-29.0 %
2020 4,342.2 HRK m

11,778
No. of employees (31.12.2021)
+110
2020 11,668

GRI 102-7

1 HEP sale in Croatia and abroad
2 In addition to HEP-Plin d.o.o. data, data of Plin VTC d.o.o. (January - June 2020), PPD - opskrba kućanstava d.o.o. and PPD - distribucija plina d.o.o. (April-June 2020) achieved in HEP Group before the merger with HEP-Plin d.o.o. were included for 2020.
In addition to HEP-Plin d.o.o. data, data of GP Krapina d.o.o. (April-December 2021) and Darkom DP d.o.o. (July-December 2021), which sole owner is HEP-Plin d.o.o., were included for 2021.
3 As of 31 March, HEP ceased to operate as a wholesale gas market supplier

3

CORPORATE GOVERNANCE AND ETHICAL BUSINESS

Contributions to the UN sustainable development goals (SDGs):

Material topics:

Responsible corporate governance

Principles of governance: ESG* criteria in this section			page
Purpose of business	Description of mission, vision and business purpose	GRI 102-26	16-17
Quality of management bodies	Management bodies composition	GRI 102-22	19
Ethical business conduct	Management of ethical issues and anti-corruption	GRI 205-3	26

* ESG = environmental, social, governance impacts

Vision and mission support the strategic areas of HEP Group business operations in six directions: sustainable and flexible energy portfolio, increased use of renewable energy sources, implementation of the concept of smart networks, and development of business processes, adapting to markets and stakeholder collaboration.

GRI 102-16

MISSION

Sustainable, reliable, and competitive production, 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, that develops technologies, competitive advantage and innovative business models focused on the future customer needs and collaborates with the national and international institutions and companies.

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

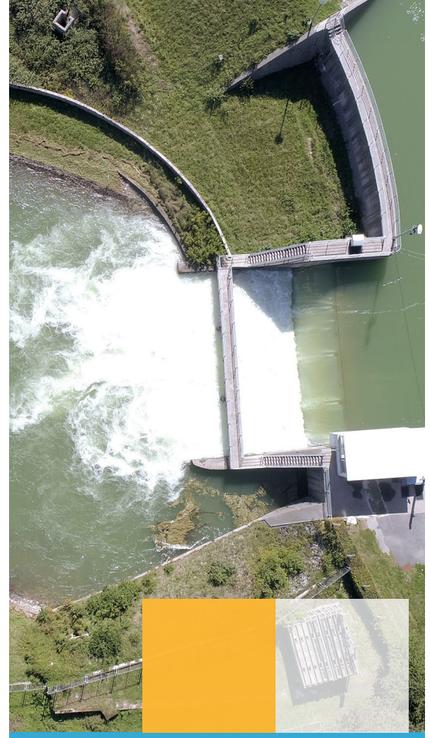
Following the requirements and expectations of all stakeholders, we improve the quality of our products and services. Our goal is the company's business excellence.

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 generate, 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 operations in accordance with the law and ethical norms, on the principles of sustainable development and social responsibility. As the issuer of the corporate bond, the company also applies most of the provisions of the Corporate Governance Code, drafted by the Zagreb Stock Exchange and the Croatian Financial Services Supervisory Agency. All members of the management and the Management Board are Croatian citizens, local experts from various Croatian regions.

Management structure of HEP during 2021

General Assembly

TOMISLAV ĆORIĆ
Member

Since 15 February 2018

Croatian Government released of duty the member of the General Assembly Tomislav Ćorić on 6 May 2022 and appointed Davor Filipović as the new member representing the Government

Supervisory Board

GORAN GRANIĆ President	JELENA ZRINSKI BERGER Member	LUKŠA LULIĆ Member	IVO IVANČIĆ Member	MERI UVODIĆ Member, employee representative
Since 7 December 2017	Since 7 December 2017	Since 29 October 2018	Since 29 October 2018	Since 4 December 2018

Management Board

FRANE BARBARIĆ President	PETAR SPRČIĆ Member	TOMISLAV ŠAMBIĆ Member
Since 1 January 2018	Since 1 January 2018	Since 1 January 2018
SAŠA DUJMIĆ Member	NIKOLA RUKAVINA Member	MARKO ĆOSIĆ Member
From 4 December 2014 to 31 December 2021	From 1 January 2018 to 31 December 2021	From 1 January 2018 to 31 December 2021

On 31 December 2021, at the proposal by the Croatian Government, the Supervisory Board appointed Frane Barbarić the President of the Management Board, Petar Sprčić and Tomislav Šambić members of the Management Board. The office duration is six months and started 1 January 2022.

GRI 102-18

Statement on the implementation of the Corporate Governance Code

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

In 2021, the Company implemented the Corporate Governance Code in the companies in which the Republic of Croatia has shares (OG 132/2017 and OG 52/2018).

The Company adheres to the provisions of the Code except for those which implementation 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. A 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, as the salaries and other remuneration made in favor of the president and members of the Management Board are defined under the Decision on determining salaries and other remuneration of the president and members of the management board (OG 83/2009, OG 77/2014).
- Remuneration paid to the members of the Supervisory Board is not defined according to the contribution to the company's performance 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 adopted pursuant to the Decision of the Croatian Government class 120-02/09-01/14, file no.: 5030105-09-1 dated 2 April 2009.
- The evaluation of the work of the Management Board, middle management and committees carried out by the Supervisory Board in terms of defined company targets during the previous period does not exist. However, some mechanisms acting as measures as defined in the Corporate Governance Action Plan are being set up. Said Plan also foresees the establishment 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 a portion of 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 Company authority 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 structure of the Management Board in 2021 consisted of six functions: president of the Management Board, Board member in charge of financial affairs, 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 management tasks and authorities, the Management Board carries out the following activities:

- it manages the business affairs of the Company;
- it establishes and implements the business policy, medium- and long-term plans;
- it carries out decisions passed by the Supervisory Board and the Shareholders Assembly, takes measures and issues instructions for their implementation;
- it passes Company internal rules as well as organizational rules;
- it represents and acts for the Company, and signs contracts within the framework of the law and these Articles of Association;
- it proposes decisions on matters from the scope of work of the Supervisory Board and Shareholders Assembly of the Company;
- it 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;
- it submits annual financial reports to the Company's Supervisory Board;
- it submits the report on the Company's state-of-affairs to the General Assembly once a year;
- it submits the written consolidated annual company report to the General Assembly;
- it appoints members of the Assembly and Supervisory Boards of the companies in which HEP d.d. has controlling interest or significant influence;
- it appoints and revokes Company's employees with special authorities and responsibilities;
- it adopts staff and employment plans;
- it proposes and takes necessary measures and issues direct orders to ensure operations of the Company, especially the safety and the operation of the electric power system;
- it 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. In 2021, the Supervisory Board consisted of five members, of whom four were appointed by the Shareholders Assembly and one by the Works Council. The Decision of the Shareholders Assembly on appointing and revoking Supervisory Board members enters into force on the day of its adoption.

The Supervisory Board supervises the management of Company's operations. 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 with regard to 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.

Evaluation of the Supervisory Board Work

During 2021, as part of the project to improve corporate governance, an evaluation of the work of the Supervisory Board was conducted. The evaluation was conducted using an online questionnaire to assess the general patterns of work and functioning of supervisory boards and a list of competencies of their members. Based on previous personal experience of participating in the work of the Company's Supervisory Board, its members were asked to assess the representation of practices described in the statements in the work of the Company's Supervisory Board on a five-point scale. The assessment covered four aspects of the functioning of the Supervisory Boards: the effectiveness of the Supervisory Board; the manner of work of the Supervisory Board; engagement of members of the Supervisory Board; cooperation between the Supervisory Board and the Management Board. The questionnaire was completed by all members of the Supervisory Board and the answers received reflect the opinion and assessments of all members of the Supervisory Board in 2021.

Of the examined desirable competencies of the members of the Supervisory Board, the most important were the knowledge on HEP's activities and services, as well as legal and regulatory framework. Related to the first competency there is a larger difference noted between the assessed importance and the representation among the present members of the Supervisory Board. In the second competency that difference is less significant. Financial and accounting operations along with reporting was also assessed as largely important, but the members of the Supervisory Board consider that the present representation is just slightly more significant than the assessed importance. Control functions of business operations and risk management is the only competency in which the representation matches the assessed importance. Competences of knowledge of the business environment, strategic planning and management and information technology and security were assessed as moderately important. These are competences in which the representation among the Supervisory Board members is higher than the assessed importance.

GENERAL ASSEMBLY

The General Assembly is composed of shareholders and/or their proxies. It decides on the 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 it 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 (127/2017) and the Act on the Internal Control System in the Public Sector (OG 78/2015, OG 102/2019), the Internal Audit Department falls under the jurisdiction of the Audit Committee.

AUDIT COMMITTEE OF THE SUPERVISORY BOARD (IN 2021)

Goran Granić, president

Professor Boris Cota, independent external member

Professor Boris Tušek, independent external member

Management according to the international standards

HEP Group companies and its parent company approach their impact management through integrated systems certified according to ISO standards.

Hrvatska elektroprivreda d.d. and HEP Upravljanje imovinom have introduced and certified integrated management systems for quality, environmental protection, energy and health and safety at work according to international standards ISO 9001: 2015, ISO 14001: 2015, ISO 50001: 2018 and ISO 45001: 2018.

HEP Proizvodnja has introduced and certified an integrated environmental, quality and energy management system in accordance with international standards ISO 14001: 2015, ISO 9001: 2015 and ISO 50001: 2018, and the established health and safety management system according to ISO 45001: 2018, whose certification is expected in 2022.

HEP ODS has introduced and certified management systems for the environment, energy and health and safety in accordance with international standards ISO 14001: 2015, ISO 50001: 2018, and ISO 45001: 2018.

HEP Toplinarstvo, in October 2021, has successfully conducted a recertification of management system for the environment protection and quality management in accordance with the international standards ISO 90001:2015, ISO 14001:2015 and ISO 50001:2018.

HEP Opskrba Customer Service has renewed the quality management system certificate according to the ISO 9001: 2015 standard, at the end of 2021.

Responsible and ethical operations

Pursuant to the provisions of the Code of Ethics, HEP Group companies have their own ethics commissioners who are their representatives in the Group's Ethics Committee, and members of the Ethics Committee may also be representatives of trade unions registered with HEP.

Ethics commissioners monitor the implementation of the Code of Ethics in the company in which they are appointed, promote ethical behavior in employee relations and customer relations, provide 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.

Employee education on anti-corruption was not conducted in 2021, but through their work and recommendations the ethics commissioners invest efforts to raise awareness on particular issues. The Ethical Code passed in 2019 was effective in 2021.

GRI 102-17

Structure of complaints filed in 2021.

	Total	Justified	Unjustified
Number of received complaints	142	68	74
Number of resolved complaints	142	68	74
- number of anonymous complaints	2	0	2
- number of non-anonymous complaints	140	68	72
Number of non-anonymous complaints by HEP employees	2	1	1
Number of non-anonymous complaints by suppliers	0	0	0
Number of non-anonymous complaints by other interested legal entities and private persons	138	67	71
Number of complaints by topic / issue			
- labor relations	2	1	1
- discrimination	0	0	0
- corruption	0	0	0
- conflict of interest	1	0	1
- nepotism	0	0	0
- public procurement	0	0	0
- customer relations	6	3	3
- calculation and billing	62	29	33
- connection to LV network	35	22	13
- unauthorized consumption	1	0	1
- other	35	13	22

Due to the fire with fatal outcomes in HPP Dubrovnik in January 2019, the County State Attorney Office filed an indictment at the Dubrovnik County Court against five Croatian citizens, including three persons who held responsible positions at HEP Proizvodnja at the time of the commission of the offense with which they were charged. An indictment was also filed against the legal entity, HEP Proizvodnja d.o.o. In June 2021, the Indictment Panel of the County Court in Dubrovnik confirmed the indictments.

Activity in associations

During 2020, HEP d.d. and HEP Group companies and individual experts from HEP participated in the work of a large number of national and international organizations, institutions and associations:

EURELECTRIC (Union of the Electricity Industry); CIGRE (International Council on Large Electric Systems) and Croatian Committee of CIGRE; ICOLD (International Commission of Large Dams); CIRED (Congres International des Réseaux Electriques de Distribution; International Electricity Distribution Conference); LWA (Live Working Association); EFET (European Federation of Energy Traders); IAEA (International Atomic Energy Agency); ENS (European Nuclear Society); UNICHAL (International Union of Heat Distributors); EUROHEAT & POWER; IIA GLOBAL (Institute of Internal Auditors, Florida, USA), via HIIR – Institute of Internal Auditors of Croatia; ISACA (Information Systems Audit and Control Association) through ISACA Chapter Croatia; ECLA (European Company Lawyers Association); Croatian Academy of Technical Sciences; Electrical Engineering Society; Croatian Energy 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 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.

GRI 102-13
GRI 102-14

4

STRATEGIC APPROACH TO SUSTAINABILITY

Business development

HEP Group defines its long-term business stability with steady growth in the revenue and profit through the realization of the following priority objectives:

- SUSTAINABLE AND FLEXIBLE ENERGY PORTFOLIO through investments in renewable energy sources (primarily wind farms and solar power plants), hydropower plant revitalization, and development of new ones, and a focus on the construction of high-efficiency cogeneration facilities. The availability of various technologies for electricity and heat generation and facilities for energy storage in the HEP Group portfolio may thus additionally optimize electricity and heat production costs depending on energy fuel availability and prices as well as the market price of electricity. Diversity of energy sources enables the system to adapt to various weather and hydrological conditions.
- INCREASING THE SHARE OF RENEWABLE ENERGY SOURCES in the production portfolio in order to achieve the goals of sustainable development of the UN until 2030, the Paris Agreement, the European Green Plan, the Energy Development Strategy of the Republic of Croatia until 2030, with a view to 2050, the Low Carbon Development Strategy of the Republic of Croatia until 2030 with a view to 2050, and the Climate Change Adaptation Strategy until 2040 with a view to 2070;
- DEVELOPMENT AND IMPLEMENTATION OF THE CONCEPT OF SMART GRIDS and projects of compatible advanced technologies;
- OPTIMIZATION AND IMPROVEMENT OF BUSINESS PROCESSES through a permanent enhancement of employees' competencies and innovation based on efficient corporate knowledge management and a parallel business process optimization.
- MARKET FLEXIBILITY through defining and creating new products and services on the energy fuel market in all wholesale and retail segments aimed at retaining the current share of Croatia's energy fuel market and increasing the stake in the regional markets.
- COOPERATION WITH ENERGY SECTOR STAKEHOLDERS by establishing a timely and active collaboration in various phases of the design and adoption of legal documents on the EU and national level, in which stakeholders are engaged.

Material topics

Considering the wide range of activities, the number of affiliated companies, the territorial representation of operations, and the strategic importance of the HEP Group's activities, it covers many material topics that need to be demonstrated.

GRI 102-46

In this the eighth cycle of sustainability reporting, the HEP Group conducted a process of verification of material topics with the involvement of stakeholders.

We grouped material topics into material areas for more extensive clarity in defining our impacts. We consider material topics as all those issues vital for a comprehensive presentation of the HEP Group's impact on stakeholders in the economy, market, environment, society, and management segments. Given the type of activities of the HEP Group and the interest of our stakeholders, particular importance in reporting and publishing data is given to environmental issues.

In the first step of determining materiality, we considered new EU regulations, especially the Green Plan and the EU Taxonomy, and national strategic documents such as the Energy Development Strategy of the Republic of Croatia until 2030 with a 2050 perspective, adopted in 2020, the Low Carbon Development Strategy of the Republic of Croatia 2030, with the 2050 perspective, and the National Recovery and Resilience Plan (2021-2026), both adopted in 2021. In determining the materiality, we used available statistics and research in specific economic, market, and social segments, analytical and other documents, recommendations, and guidelines of international specialized and professional institutions and internal sources.

In materiality assessment, we examined risks and opportunities within each thematic area, as many relate to multiple material issues. We reviewed stakeholder interests and expectations in the engagement process and considered the views, opinions, and concerns of key stakeholder groups that were made public. We studied the topics specific to the energy sector from several sources and considered the previously mentioned strategic documents. As in the previous period, we have evaluated environmental issues in the context of the EU Taxonomy. We have harmonized all areas to with the perspective of developing environmental, social, and governance risk management (ESG). Compared to the previous reporting period, we found it essential to update the list of material topics and descriptions of their aspects and boundaries, given the changes in economic and social trends, regulatory, and stakeholder requirements. We examined the contribution to the goals of the United Nations in a somewhat broader context, looking at individual sustainability goals in parallel with the strategic objectives of the HEP Group and material topics. We used the recommendations and guidelines of the Global Reporting Initiative and United Nations documents to compare contributions to the UN Sustainable Development Goals with GRI indicators. For the following reporting periods, we intend to introduce a comprehensive examination of the interdependence of our contributions to sustainable development goals.

We kept the connection of material topics with ESG impacts, and we put material issues more vigorously in the context of risk. We did not use double materiality checks for this report, which we will introduce in the next reporting period.

First, we reviewed the material topics, set their priorities internally within the Sustainability Reporting Team, and finally checked them with external stakeholders in a comprehensive online survey and interviews with representatives of key stakeholder groups. The research involved 70 representatives of various stakeholders: state administration or state organizations, local and regional self-government and administration, customers and service users, suppliers, financial institutions, trade unions, media, NGOs and associations, interest and professional associations, scientific and educational institutions, and the environmental protection experts. In addition to the materiality assessment, stakeholders were invited to share their suggestions to improve the sustainability of HEP Group's management and share their impressions of stakeholder relations.

In addition to stakeholders' involvement in determining materiality, HEP Group constantly involves its stakeholders in various forms of its business processes and activities. Stakeholders have collected opinions in legally prescribed forms when engaging the interested public in environmental impact assessment, ecological network procedures, and obtaining environmental permits. In addition, the customer's and buyer's opinions, their satisfaction, and the possibilities of improving the HEP Group business, are regularly sought. Communication with stakeholders is also applicable in various formats.

GRI 102-40
GRI 102-42
GRI 102-43
GRI 102-47

STRATEGIC GOALS HEP GROUP 2030.

Sustainable and flexible energy portfolio

Renewable energy use

Development and implementation of advanced networks

Optimization and improvement of business processes

Market flexibility

Cooperation with stakeholders

MATERIAL TOPICS OF HEP GROUP

Environmental topics
Climate change and greenhouse gas emissions
Energy efficiency
Sustainable waste management
Reduction emissions
Water use and protection
Biodiversity

Social topics
Attractive employer
Diversity and inclusion
Safe and healthy workplace
Dialogue with social partners
Stakeholders' engagement and collaboration
Community investments

Management, economic and market issues
Strategic planning
Investment planning and management
Diversified production mix focused on RES
Reliable and energy efficient production and distribution
Ensuring critical national infrastructure
Energy prices
Responsible corporate governance
Product and service development
Customer trust
Purchasing power and energy poverty
Responsibility in the supply chain
Energy prices
Innovation and digitalization

ESG CRITERIA

Greenhouse emissions
Emission intensity
Energy use
Intensity of energy use
Energy mix
Water use
Environmental use
Environmental impact management
Use of locations and environmental sensitivity

Pay equality
Employee diversity
New employees and employee turnover
Employee education
Non-discrimination
Health and safety at work
Injuries at work
Investing in community
Stakeholder involvement

Management structure
Management diversity
Collective negotiation
Ethics and anti-corruption
Data privacy
Newly created value
Responsibility in the supply chain
ESG Impact Reporting
Sustainability publications

UN SUSTAINABLE DEVELOPMENT GOALS

Material topics, risk management and stakeholder engagement

GRI 102-15
GRI 102-44

Given the wide range of HEP Group material topics, we have maintained the approach by which we have integrated specific related material topics into four thematic areas of economic and organizational management, market, environmental and social impacts.

For some material issues, it was challenging to determine their boundaries, which partly overlapped or adjoined several topics simultaneously, but we put them in one in which we recognized the dominant influences. This chapter brings an overview of the management approach, related sustainability risks of material importance for stakeholders' decision-making process and preferences, and HEP Group's sustainability management in these areas. The management approach, objectives, and results are presented in separate chapters of this report, together with publications on the relevant GRI indicators. Indicators of stakeholder assessments concerning their significance and reviews of how successfully and actively HEP Group manages its impacts are also listed here.

GOVERNANCE AND ECONOMIC IMPACTS have undergone the change in material topics, compared to the previous reporting period. Some have been merged into one, and some we have positioned as integrated parts of managing various material areas. In this area, we recognize six material topics: strategic planning, investment planning, and management, diversified production mix focused on RES, reliable and energy-efficient production and distribution, critical national infrastructure, and responsible corporate governance.

Strategic planning and investment planning and management ensure the management of HEP Group's key impacts and the stability and security of production, distribution assurance, and responsible portfolio management. We incorporate sustainability principles and ESG criteria into our business through strategic planning. Reliable planning and investment management are vital for the timely planning of new projects, reconstruction of existing ones, and ensuring production, distribution, and supply. The diversified production mix focused on renewable energy in the last three years, along with the over a century long tradition of HEP's hydropower electricity production, indicates the HEP Group's strategic direction and a solid commitment to sustainable development. Production of energy from RES was enriched by the generation from biomass sources (wooden pellets) a few years ago.

We store excess water for electricity production in reversible hydroelectric power plants, and excess thermal energy produced in cogeneration plants in heat accumulators, with the aim of ensuring energy supply when it is most needed, optimizing production costs, saving energy, rational use of natural resources and reducing the impact on the environment. To accept renewable energy sources, we are expanding and modernizing the transmission and distribution network by introducing the concept of advanced networks, and we are replacing existing meters with smart ones, and existing transformers with high-efficiency ones. The modernization of the thermal energy distribution infrastructure is underway in order to increase its efficiency, reduce losses and additionally ensure the supply of customers. We also produce energy in thermal energy plants that operate in accordance with the prescribed conditions from the environmental permits. We also monitor new technologies and initiate research and development into the possibility of using low-carbon fuels in our facilities, such as hydrogen. Such a diverse production mix and research and development into new technologies and new fuels enable more efficient management of risks caused by disruptions in the energy and energy market, risks caused by changes in weather and hydrological conditions, and increasingly strict requirements of regulations in the field of environmental protection. By stepping into e-mobility and installing charging stations for electric vehicles on highways and cities, we contribute to the decarbonization of road traffic and create new opportunities for tourism. By starting investments in the electric power system, research and development of new technologies, infrastructure for low-carbon transport and ESCO projects, we also influence the development of the economy of local communities in accordance with the goals of sustainable development.

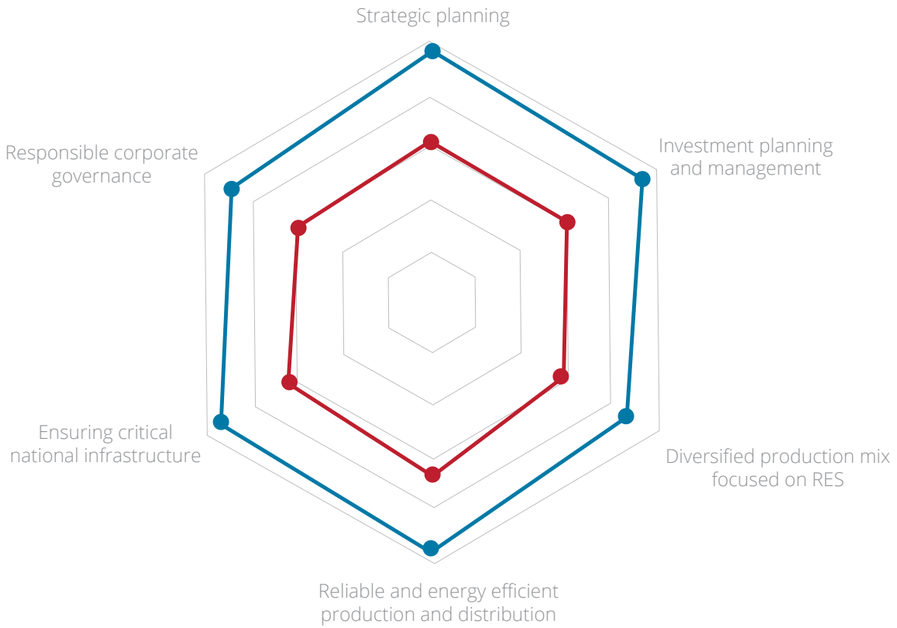
Securing the national critical infrastructure is an extremely important issue for the HEP Group, and it has been especially significant in recent years. The pandemic has shown the importance of preserving and improving the electric power system as a basic prerequisite for enabling the development of the economy and society. The HEP Group has also demonstrated the ability to quickly and effectively respond to the challenges caused by earthquakes by rehabilitating damaged infrastructure and restoring energy supply disruptions to their pre-earthquake state. Therefore, responsible corporate governance is extremely important for large systems whose activity is crucial for all other economic activities. It gains importance also with the introduction of ESG criteria in business, especially in management influences.

Successful strategic management includes long-term investment planning, adequate responses to dynamic regulatory changes, and changes in purchase prices. Furthermore, successful business is reflected in responsible corporate governance and the use of group synergies. As one of the country's financially most influential business organizations, which is 100% state-owned, HEP Group is aware of its strategic importance to the Republic of Croatia. Risks to business success and profitability arise primarily from the environment responsible for ensuring sustainable business for economic operators, such as legislation, regulations, and other environmental standards and expectations. We strive to manage these risks promptly and to identify opportunities. Through responsible management and operations, we ensure a positive financial result, which, as an extensive business system, has a positive impact on the realization of owners' profits, economic progress, and the development of local communities.

Even 93% of stakeholders consider the area of governance and economic influences essential. Most of them think reliable and energy-efficient production and distribution (99%), strategic planning (96%), and investment planning and management (97%) to be the most crucial material topics. Stakeholders' expectations in this material area are constantly growing, and consequently, their criticality in assessing HEP Group's management activities is increasing. One-third of stakeholders believe that this area is managed above or far above standards, slightly more than 40% believe that it is handled by standards, and 16% that HEP Group should make significant efforts to improve in this area. One-fifth of stakeholders were unable to assess the management activity, which, although an improvement over the previous year, still indicates the need for more assertive communication on the activities undertaken by HEP on these topics. Stakeholders recognize management's most significant success in reliable and energy-efficient production and distribution, and the highest expectations for progress were expressed in the issues of responsible corporate governance and diversified mix production focused on RES. Comparing the importance of the topic to stakeholders and their management assessments, we still notice a significant difference.

In the graph shown here, the priority is indicated by a blue line and the evaluation of management activities by a red line.

STAKEHOLDERS' ASSESSMENTS ON THE IMPORTANCE OF MATERIAL TOPICS AND ACTIVITIES IN GOVERNANCE AND ECONOMIC IMPACTS



MARKET IMPACT MANAGEMENT is another set of material topics that stakeholders consider significant influences on the HEP Group. There were no changes in issues in this materiality cluster compared to the previous reporting period. This area covers the following material topics: product and service development, customer confidence, purchasing power and energy poverty, supply chain responsibility, energy and energy prices, innovation, and digitalization.
In this segment, HEP Group ensures market sustainability through responsible management and influences the choice of stakeholders in the context of market relations. Energy markets are changing rapidly. In stable times, their changes are affected by technological, industrial, and infrastructural development, as well as changes in social trends and user habits. The impacts are subject to these changes in exceptional circumstances of disturbances in the economy and difficulties in the supply chain, as well as macroeconomic conditions that affect the population's purchasing power and the economy's financial potential. In a liberalized market, it is crucial to gain and maintain consumer confidence, adapt to new trends on time and act responsibly towards pricing policies.

HEP Group can manage market risks mostly related to adjustments to new regulations and market trends but also how well we are ready to respond to these changes and trends. Due to its activities, HEP Group is present in all households and companies in many ways. It is vital for us to improve relationships with customers and customers, especially in educating the market on responsible consumption, energy efficiency, and possible savings. Risks related to the prices of energy fuels for production, the prices of electricity purchased on the market, and the costs of carbon dioxide emission units are managed through timely contracts.

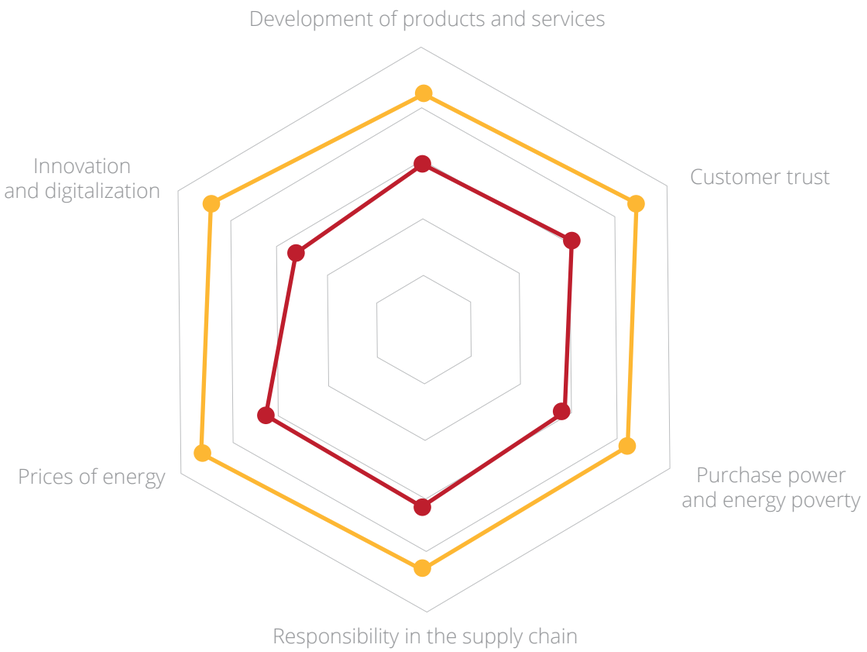
HEP Group manages the risks related to maintaining market shares by creating new products and services, strengthening the brand, market, and marketing communications, and improving the quality of customer relations. There is a particular risk of growing energy poverty, which we manage by adopting adequate measures and participating in projects that reduce the consequences of this phenomenon. We are responding to the challenges of the liberalized market by researching the possibilities of other business expansion models, positioning the HEP Group as a regional energy leader, and expanding our business in the region.

HEP Group also has significant influences in this material area, estimated by 83 percent of stakeholders. Energy and energy prices continue to be assessed as the most critical issues, with 88% of stakeholders deeming them essential. At the same time, 85% of stakeholders consider customer confidence, innovation, and digitalization consequential or very important.

Nearly half of stakeholders estimate that market effects are managed per standards, and 20% of stakeholders rate management as above average or significantly higher than an average. In this material area, stakeholders express a somewhat more critical attitude than economics and management because they have the impression that these topics are more directly reflected in their sustainability. Hence, a fifth of them expresses dissatisfaction with activities and leadership in this area. This indicates the need for more active impact management and transparent communication of HEP Group's efforts and activities on these topics. Estimates of all issues are very close, except for stakeholders' substantial progress in innovation, digitalization, product, and service development. On average, 11% of stakeholders could not assess the management approach to these topics.

In the graph shown here, the orange line indicates importance, and the red indicates the management activity.

STAKEHOLDERS' ASSESSMENTS ON THE IMPORTANCE OF MATERIAL TOPICS AND ACTIVITIES IN MARKET IMPACTS



SUSTAINABLE ENVIRONMENTAL MANAGEMENT includes material topics: climate change and greenhouse gas emissions, energy efficiency, sustainable waste management, reduction of air emissions, water use and protection, and biodiversity. We have modified material topics in this area to determine their boundaries and aspects more precisely. They continue to rely on the objectives of the EU Taxonomy.

The management approach to these topics, as well as risk management, is comprehensively described in the environmental management chapter. 88% of stakeholders consider the ecological set of material issues necessary or significant. For stakeholders, the most important topics are energy efficiency (94%), climate change, and greenhouse gas emissions (93%). All material issues in the environmental segment were assessed as very important, with stakeholders paying the slightest attention to biodiversity and waste management.

The management approach to these topics, as well as risk management, is comprehensively described in the environmental management chapter. 88% of stakeholders consider the ecological set of material issues necessary or significant. For stakeholders, the most important topics are energy efficiency (94%), climate change, and greenhouse gas emissions (93%). All material issues in the environmental segment were assessed as very important, with stakeholders paying the slightest attention to biodiversity and waste management.

According to stakeholder estimates, HEP Group manages environmental issues mostly very or moderately successfully. Half of the informed stakeholders believe that the HEP Group operates environmental impacts by the standards, and slightly less than a fifth that it manages above average. On average, 17% of stakeholders could not assess management activity in this area. A quarter of stakeholders believe that climate change and greenhouse gas emissions are managed above standard, and a fifth think water impact management is well organized. Stakeholders are more critical of other topics, although average ratings are set very close to all issues. Stakeholders assessed energy efficiency as high, so they have slightly higher expectations in this area. In the graph shown here, the green line indicates importance, and the red indicates the management activity.

STAKEHOLDER'S ASSESSMENTS OF THE IMPORTANCE OF MATERIAL TOPICS AND THE ENVIRONMENTAL IMPACT MANAGEMENT

RESPONSIBILITY IN SOCIAL IMPACTS is reflected in the management of internal topics: development of HEP Group as a desirable employer, diversity, and inclusion, ensuring a safe and healthy working environment and dialogue with the social partner but also managing external influences of cooperation with stakeholders and community investments.

HEP Group is one of the largest employers in Croatia and operates in all parts of the country, which has exceptional direct and indirect effects on many stakeholders. Circumstances from the environment, such as a dynamic and relatively narrow labor market and high competition among companies looking for talent, significantly affect the material theme of the desired employer. There are many risks associated with it, from the lack of workforce and increased challenges in specialized professions to the issue of ensuring succession. A safe and healthy working environment is a priority of large systems, especially the HEP Group, which in its diverse activities, should pay special attention to protecting the health and safety of its employees. We manage the risks in this segment by constantly investing in workers' education, protection, and security at work. In this way, we provide them with the possibility of professional development, sustainable career management, and a stimulating and healthy work environment. We faced management challenges with the arrival of a pandemic and the consequences of the earthquake, where it was vital to ensure a safe work environment and protect employees' health in the new conditions. In addition to constant internal development, we achieve this by forming external partnerships with educational and higher education institutions and investing in science and education. Cooperation with communities and various professional and institutional stakeholders is crucial. We manage it by creating and maintaining multiple partnerships with institutions and associations and local communities, including stakeholders on issues important to HEP Group's operations in various ways participating in policymaking. Furthermore, we manage the topic by showing special attention to marketing communications responsibilities and our publication of impact data. Investments in the HEP Group community are significant and diverse. We strive to contribute to the social development of communities, and we are recognized as responsible corporate citizens.

HEP Group shareholders consider this group of material topics to be somewhat less important for their decisions and selections than previous groups, so only 76% of stakeholders consider this area essential. The most critical issues are cooperation with stakeholders and partners (87%) and a safe and healthy working environment (81%). Half of the stakeholders believe that the HEP Group manages the topics from these fields per standards, and a quarter of them that the management is above the standards. Community investments are being assessed as the best, probably because of their visibility to the stakeholders. However, at the same time, stakeholders have the highest expectations regarding this topic. There is relatively little interest in the issue of diversity and inclusiveness, and the assessments suggest that stakeholders are generally unfamiliar with the subject. In the area of social influences, some stakeholders did not know how to assess the impacts, 17% of which can be explained by the fact that some topics relating to the internal environment of the HEP Group and that stakeholders do not have enough information. In the graph shown here, the importance is indicated in purple, and the assessment of management activities in red.

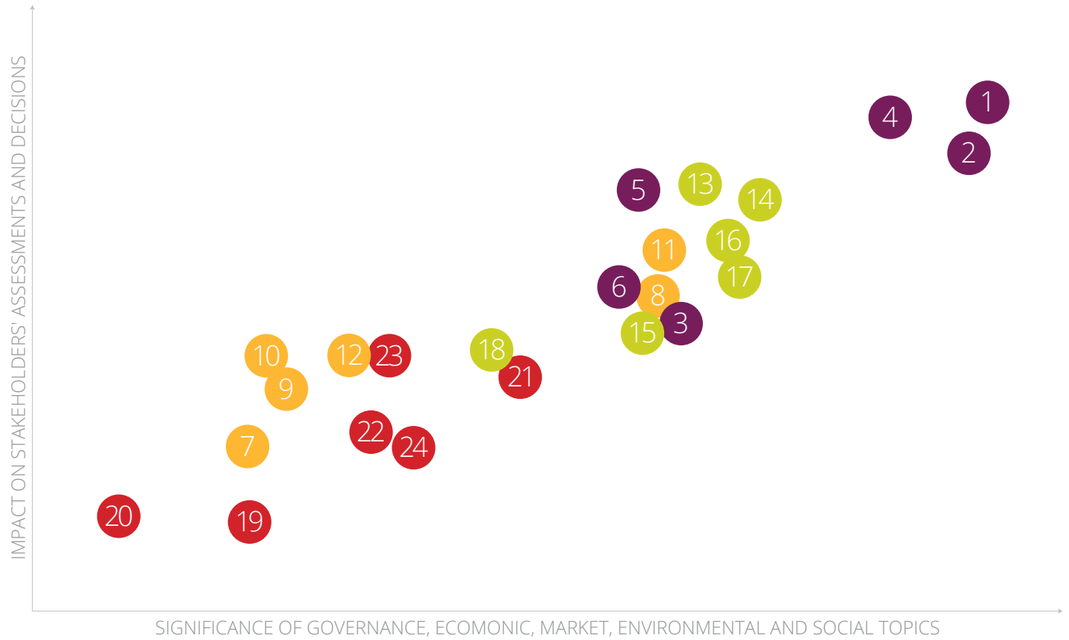
STAKEHOLDERS' ASSESSMENTS OF THE IMPORTANCE OF MATERIAL TOPICS AND SOCIAL IMPACT MANAGEMENT

Slightly more than two-thirds of the surveyed stakeholders read the HEP Group's sustainability reports. One-third of the stakeholders who read the report use it for a general understanding and information on HEP Group's operations, and a slightly smaller number of stakeholders to check the sustainability and social responsibility of HEP Group or to gain in-depth insight into specific sustainability topics. About a third of stakeholders who read the report choose only the parts of particular interest to them.

Materiality matrix

Comparative indicators of materiality, i.e., stakeholders' views on the importance of economic, environmental, and social impacts of the HEP Group and the impact of material topics on stakeholder assessments and decisions, are presented in the matrix of material issues. The GRI Standards guidelines developed the materiality matrix, resulting from the involvement of internal and external stakeholders. The materiality matrix shows that stakeholders attach particular importance to specific management and economic topics such as strategic planning, investment planning and management, reliable and energy-efficient production and distribution, and the provision of critical national infrastructure. Consequently, it can be concluded that the stakeholders significantly recognize the strategic importance of the HEP Group in ensuring the stability of the energy system in Croatia. Most environmental issues are also highly valued, while stakeholders, as expected, attach less importance to a specific market and social matters.

In the opinion of our stakeholders, individual material management, environmental, and social impacts of the HEP Group have somewhat different significance concerning their implications for stakeholder decisions and assessments. The materiality matrix also served us in defining the boundaries of the sustainability report. Separate thematic chapters present data on all relevant indicators within borders. The thematic chapters describe HEP Group projects and activities that reflect our approach to managing material issues and developing sustainability and accountability.



- Governance and economic impacts
  1. Strategic planning
  2. Investment planning and management
  3. Diversified production mix focused on RES
  4. Reliable and energy efficient production and distribution
  5. Ensuring critical national infrastructure
  6. Responsible corporate governance
- Market impacts
  7. Development of products and services
  8. Customer trust
  9. Purchase power and energy poverty
  10. Responsibility in the supply chain
  11. Prices of energy
  12. Innovation and digitalization
- Environmental impacts
  13. Climate change and greenhouse gas emissions
  14. Energy efficiency
  15. Sustainable waste management
  16. Reduction of emissions into air
  17. Water use and protection
  18. Biodiversity
- Social impacts
  19. Attractive employer
  20. Diversity and inclusion
  21. Health and safety in the workplace
  22. Dialogue with social partners
  23. Stakeholder engagement and dialogue
  24. Community investments

GRI 102-47

What did our stakeholders tell us?

In this reporting period, in addition to examining stakeholders' opinions, we conducted in-depth interviews with relevant and professional stakeholder representatives from various areas where HEP Group manages material topics.

Representatives of the Croatian Parliament's Committee for Environmental Protection and Nature, the Office for Non-Governmental Organizations of the Croatian Parliament, the Faculty of Electrical Engineering and Computing, University of Zagreb, Hrvoje Požar Energy Institute, WWF Adria, and Institute for Labor Market Development shared their opinions on sustainability management in various aspects of HEP Group's operations. We thank everyone for their cooperation, valuable feedback, and suggestions for improving sustainable development management and responsible business within the HEP Group.

In the dialogue, we gathered many opinions and made conclusions but also developed ideas for improving the strategic approach and practice. Considering the areas of expertise of our interlocutors, we spoke openly with them about the future of energy development and the role of the HEP Group in Croatia. We paid particular attention to the fight against climate change, the need for accelerated development of renewable energy sources, modern energy infrastructure, and energy efficiency. Essential topics covered were the protection of the environment and nature, emissions management, water protection, and the development of the circular economy. We also pay meticulous attention to the role of the HEP Group as an employer and responsible social stakeholder, labor market topics, investing in education, respect for diversity and inclusion, cooperation with stakeholders, and investing in the community.

All stakeholders commended HEP Group's efforts in sustainability management and emphasized its essential strategic role in the energy and economic sectors and its significant impacts on citizens' quality of life. Stakeholders see the new EU regulations, notably the Green Plan and the development of sustainable financing, as an excellent opportunity for the accelerated development of renewable energy sources, advanced distribution systems, infrastructure, and new technological solutions.

"The energy sector is facing many challenges and changes. HEP has a responsibility that goes beyond the usual framework of large companies and can and should dictate the pace of change in the energy transition in Croatia. In addition, HEP is the region's most developed and advanced energy system, and we see it as a carrier of change. "

"HEP has a unique role in the Croatian economy and energy system. We expect that in the coming years, the state will provide a framework for investment in research and development and make it easier for companies to move to sustainable business forms. The state, as the owner, should prescribe clear goals and instruments by the adopted strategies and enable HEP to fulfill its role as an energy leader. "

"Along with renewable energy sources, civic energy and customers with own production should be encouraged as well. HEP's role is to be a leader of the progress and accelerate new models by educating the market and realizing valuable ideas and innovations through partnerships with stakeholders. We think that cooperation should be more substantial and that HEP can develop joint projects with various stakeholders and use more European funds. For that, HEP should be a slightly more open company."

"Technological achievements and innovations enable us to observe energy development futuristically. We want to see the HEP Group as the leader of progressive projects, especially in developing renewable and alternative sources, for which there will be opportunities in the coming years."

"The HEP Group is trying to develop electricity solutions and environmental protection while reducing its impact on the climate. However, there is an impression that the visibility of these efforts needs to be increased while project development and vision should be communicated to the stakeholders."

"Education is an important term in various aspects. Investing in youth education and partnerships with educational institutions, but also educating citizens about energy development, new models, and energy efficiency. Energy is becoming more complex, but awareness of its importance is growing. HEP is expected to be active in informative and educational campaigns."

"HEP is an extensive system responsible for many of its employees, the communities in which it operates, and its employees live. Getting young people interested in the company is becoming increasingly complex, and this can only be achieved by actively participating in dialogue and social events. Not only as a donor but to bring employment in such a system closer to young people and make it attractive."

"Diversity and inclusion are no longer a matter of choice, but the exposure of culture and the employer's potential are assessed according to them. Developing a flexible culture, open to all, regardless of their characteristics, employing people with disabilities, and promoting gender equality is expected from all companies, including HEP."

"HEP is recognized for its tradition and importance of investing in communities. However, these processes can be modernized, and, with investments, partnerships can be developed with the civil sector and associations, especially with which the HEP Group has common topics."

HEP Group stakeholders

REPRESENTATIVES OF THE OWNERS: Assembly, Supervisory Bord

AUTHORITIES: Government of the Republic of Croatia, Ministry of the Economy and Sustainable Development, Ministry of Physical Planning, Construction and State Property, Ministry of Finance, Croatian Parliament, Fund for Environmental Protection and Energy Efficiency, Croatian Waters

REGULATORY BODIES: Croatian Energy Regulatory Agency, Croatian Competition Agency, Croatian Financial Services Supervisory Agency

CAPITAL MARKET: investors, creditors, joint venture partners, rating agencies, Zagreb Stock Exchange

MARKET: Croatian energy market operator, business entities, households, competition, business partners, suppliers, energy exchanges, and emission units

LOCAL COMMUNITIES: counties, cities, municipalities

INTERNAL STAKEHOLDERS: employees, managers, trade unions, works councils, HEP Veterans Association, HEP Pensioners' Association

ACADEMIC AND SCIENTIFIC INSTITUTIONS: faculties, scientific institutes, gymnasiums, vocational schools

ASSOCIATIONS (INTERNATIONAL AND DOMESTIC): professional associations, interest associations, Croatian Chamber of Commerce

CIVIL SECTOR: consumer protection associations, environmental protection associations, and other civil society organizations

MEDIA: national, local, specialized

GRI 102-40
GRI 102-42
GRI 102-43

5

HEP GROUP BUSINESS OPERATIONS IN 2021

Contribution to the UN Sustainability Goals:

Material topics:

Strategic planning
Investment planning and management
Diversified production mix focused on RES
Reliable and energy efficient production and distribution
Ensuring critical national infrastructure
Energy prices
Responsible corporate governance

Prosperity: ESG criteria in this section			page
Created value	Created economic value and investments	GRI 201-1 GRI 201-4	48-52, 67, 78, 93, 100, 107

Business operations

In the previous business year HEP's business operations were conducted in extremely complex, even crisis circumstances. Nevertheless, in the second year of the Covid-19 pandemic we showed great resilience and continued to launch a number of investments with a high national component. Along with the measures adopted by the Croatian Government, our activities contributed to a quick recovery of the Croatian economy and the historically record high GDP rise in Q3 2021.

The beginning of the year was marked by a catastrophic earthquake which struck the region of Banovina and the central part of Croatia on 29 December 2020.

The employees of HEP-Operator distribucijskog sustava d.o.o. (distribution system operator) contributed fully to the elimination of earthquake consequences from day one. In line with the conclusions of the Croatian Government, HEP Group's companies wrote off debt for energy consumed in households in the regions struck by the earthquake throughout 2021. The total of HRK 79.1 million was written off.

These crisis circumstances were followed by a rise of wholesale fuel and electricity prices. The upward price trend, noticeable since the middle of the year, intensified extremely in the last quarter of 2021 and was the main reason for decreased operating profit compared to 2020.

The operating profit amounted to HRK 1.17 billion, which is by HRK 989.8 million (45.8%) less than in 2020. The entire profit was earned from electricity, while all other activities made a loss. The consolidated net profit amounted to HRK 1.02 billion, ie HRK 444.3 million (30.4%) less than in 2020, when net profit reached HRK 1.46 billion.

According to the first estimated figures published by the Croatian Bureau of Statistics on 25 February 2022, total gross domestic product (hereinafter: GDP) in 2021 increased in real terms by 10.4 percent compared to the 2020 figures.

The greatest impact on such a high growth rate was exerted by tourism, the export of services and the increase in personal consumption. According to the GDP level, the Republic of Croatia is among the most successful members of the European Union (hereinafter: the EU), ie in the first three quarters of last year only Ireland achieved a more dynamic growth rate, while EU-wide growth was at a much lower 5.4 percent. The strong economic recovery also resulted in a 6.7% increase in industrial production in 2021. At the same time, the manufacturing industry, which accounts for more than 83 percent of total industrial production, grew by an average of 6.8 percent in 2021.

The 2021 average registered unemployment rate was 8.1 percent, down by 0.8 pp annually compared to the 2020 average of 8.9% unemployment rate. The growth of paid net and gross wages, both nominal and real (nominal wage reduced by the inflation rate) continued.

In 2021, kuna was a bit more volatile against the US dollar, primarily due to its relation to euro. Thus, the average exchange rate of kuna against the US dollar was by 3.2% lower on an annual basis (HRK 6.37 per USD in 2021 compared to HRK 6.58 per USD in 2020).

The biggest concern, both on the Croatian and world markets, is the accelerated growth of inflation, mainly due to rising energy prices, especially petroleum products, and a significant rise in food prices in the second half of the year. In mid-January 2022, the CBS announced that the prices of goods and services for personal consumption, measured by the consumer price index, increased in December by 5.5 percent compared to the same month in 2020, which marks the highest level of inflation since October 2008. The 2021 average annual inflation rate was 2.6 percent, an increase of 2.5 percentage points compared to 2020.

The eurozone recorded the record-high 5% annual inflation in December, the highest in Estonia and Lithuania, above 10 percent, and the lowest (2.6%) in Malta, Portugal (2.8%) and Finland (3.2%). More than half of annual consumer price inflation in the eurozone was the result of higher energy prices, while in Croatia the share of energy prices, which in previous months also hovered around 50 percent due to a significant rise in food prices, fell to 32 percent in December. However, in the Republic of Croatia the rise of energy prices was based on fuels, while the EU also experienced an average significant rise of electricity and gas prices for households. In some member states, gas prices have risen by more than 100 percent (Estonia, Greece, Belgium) followed by the 40% rise of electricity prices (Netherlands, Estonia, Spain, Belgium).

In late 2021, the annual inflation in the US market was higher than in the eurozone and with its 7 percent reached the record high level in the last forty years. In both the eurozone and the United States, the increase in energy prices (by 29.3%) significantly contributed to the accelerated rise of inflation.

The devastating earthquake that struck the region of Banovina on 29 December 2020 caused numerous breakdowns and damages to the electricity network and HEP's electricity and heat production facilities. 238 substations were destroyed or severely damaged, while the distribution network also experienced significant damage. Almost 140,000 customers were left without electricity. The elimination of damage and the re-establishment of supply to citizens in the affected area marked the very end of 2020 and early 2021. In accordance with the conclusions of the Government of the Republic of Croatia and in order to repair the damage to the earthquake-affected areas, Hrvatska elektroprivreda d.d. was committed to writing off the receivables from end household customers in the earthquake-affected areas in Sisak-Moslavina and Zagreb Counties, which arose from connecting the replacement facility to the electricity grid as well as electricity and heat receivables.

Other external factors that affected HEP's operations include the prices of electricity, energy fuels and carbon dioxide emission units. After a period of economic slowdown and the lockdown in 2020 accompanied by reduced consumption and electricity prices, the year 2021, despite relatively strict epidemiological measures, was not affected by decreased consumption and economic activity.

At the beginning of the year, electricity prices were stable due to mild winter, good hydrology and relatively stable prices of primary energy sources. The average price of base electricity on the spot market[1] in the first and second quarter of 2021 was 54.18 EUR/MWh and 66.85 EUR/MWh, respectively. Electricity prices rose significantly in the second half of the year, to 113.18 EUR/MWh in the third quarter and to 219.66 EUR/MWh in the fourth quarter. The increase in the price of electricity in the second half of 2021 was primarily due to the increase in the price of gas contained in production costs and in the price of carbon dioxide emissions (European Union Allowance - EUA).

Namely, in the second and third quarters of 2021 gas prices rose significantly due to increased demand for LNG in the Asian market, while the record high prices in the fourth quarter were impacted by the uncertainty surrounding the Nord Stream 2 as well as gas transit through Ukraine. At the end of 2021, the price of gas on the spot market[2] was 115.89 EUR/MWh, which was an increase of 507 percent compared to early 2021, when the average price of gas was 19.10 EUR/MWh.

The price of carbon dioxide emission units at the beginning of the year was around 33 EUR/t. In mid-2021 it increased to 55 EUR/t. Increased demand for emission units, causing the rise of prices, was due to increased production of coal-fired power plants (September 2021) which became profitable in conditions of high gas prices causing the rise of emission unit prices at the end of 2021 to about 80 EUR/t.

HEP sold 14.7 TWh of electricity (0.8 TWh more than in 2020) to domestic customers, and 2.7 TWh of electricity (0.5 TWh more than in 2020) in the neighboring markets. Revenues from elec-

1 Hungarian Power Exchange
2 Central European Gas Hub

tricity sale in Croatia rose by HRK 1.9 billion (16.7%) as a result of increased electricity consumption from March 2021 and an increase in the average selling price for business customers due to rising electricity prices on reference exchanges. The market share in the supply of electricity to customers in the Republic of Croatia accounted for 89 percent. Revenues from the sale of electricity abroad increased due to higher exports of surplus electricity produced in HEP Group power plants and trade, higher prices of exported electricity and an increased volume of supply to customers in the region.

Total electricity production and procurement by HEP Group amounted to 20.2 TWh, of which 68 percent was produced in power plants owned and partially owned by the Group (13.7 TWh, ie 1.2 TWh more than in 2020), while 32 percent of the required electricity was purchased off-system (6.5 TWh, 300 GWh more than in 2020).

The year 2021 was marked by favorable hydrology. A total of 6.8 TWh was produced in hydropower plants, which was by 1.5 TWh (27.5%) more than in 2020, while the production of thermal power plants and cogeneration plants reached 4.0 TWh, a decrease by 52 GWh compared to 2020. Krško nuclear power plant supplied 2.7 TWh, which was by 311 GWh (10.3%) less as the plant underwent its regular overhaul in April 2021. HEP's solar power plants and biogas CHP plants generated 23 GWh, while HEP's first wind farm, Korlat, which was put in regular operation in 2021, generated 173 GWh. 6.5 TWh of electricity was purchased on the market (including purchase from renewable sources and high-efficiency cogeneration), 300 GWh (4.9%) more than in 2020 which, together with a higher average import price, led to a rise in electricity purchase costs by HRK 1.2 billion (52.0%). Energy fuel costs increased by HRK 900.6 million (60.0%), which can be attributed to higher average prices of natural gas and coal as a result of higher prices of energy fuels on the market. The unit price of coal and natural gas increased by 97.5% and 68.5%, respectively. In addition, coal consumption rose by 21.5%, while natural gas consumption decreased by 5.6 percent.

HEP d.d. was the gas wholesale supplier until 31 March 2021. In the first quarter 2021 it earned HRK 19.5 million in revenue from the sale of gas to public service suppliers which supply gas to household customers.

Revenues from retail gas sale increased by 24.4 percent due to an increased volume of gas sale by 17.4 percent as a result of taking over the customers of newly acquired companies from 1 October 2021, but also as a result of increased gas sale after the merger of companies acquired in 2020. In 2021, HEP-Plin d.o.o. took over Gradska plinara Krapina d.o.o. and Darkom distribucija plina d.o.o.

Revenues from heat sale increased by 5.0 percent as a result of a 8.4 percent higher consumption due to colder weather and increased demand of large business customers.

Other operating income decreased by 13.8 percent compared to 2020, primarily due to the collection of HRK 326.0 million from gas receivables paid by a domestic industrial customer which was supplied gas by HEP d.d. in 2018.

Compared to 2020, the cost of staff increased by 4.7 percent due to the increase in the value of point for the calculation of salaries from 1 January 2021 based on the provisions of the Collective Agreement, new employment and taking over the employees of acquired companies. At the end of 2021, HEP Group had 11,778 employees, 110 more than at the end of 2020.

A profit of HRK 76.3 million was recorded from financial activities compared to a loss of HRK 344.4 million in 2020. In 2020, the largest part of financial expenses was related to the change in the fair value of cross-currency swap for bonds issued in 2015 (HRK 215.9 million), compared to financial income of HRK 299.2 million earned on that basis in 2021. One of the key indicators of the company's performance according to the EU Taxonomy is the presentation of the share of income from environmentally sustainable activities in the total income of the HEP Group. The description of the evaluation procedure of environmentally sustainable activities and the associated methodology is described in the chapter Key performance indicators of the HEP Group according to the EU Taxonomy. In 2021, 42.7 percent of income was generated from EU Taxonomy eligible activities, 17.6 percent of income from taxonomically aligned activities whose compliance with the CO_2 emission intensity criteria throughout the entire life cycle will be determined in the following reporting periods, and 39, 7 percent from taxonomically unaligned activities.

Throughout the year, all due liabilities were settled within the due date. The Group ended the business year with HRK 4.27 billion in cash and cash equivalents, which was an increase of HRK 751.4 million (21.4%) compared to the end of 2020. In 2021, HEP also repurchased its own bonds issued on the international capital market[3]. A dividend from the 2020 profit in the amount of HRK 840.6 million was paid to the State Budget.

In early October 2021, Standard & Poor's upgraded the company's rating to investment, from BB+ to BBB-. The agency's report states that the rating upgrade reflects HEP's performance in terms of strong credit indicators in the circumstances of volatile hydrological conditions and energy prices. Analysts point to HEP's ability to manage energy price exposures and lower implicit volatility more efficiently and robustly. It is stated that the very good results are proof of the company's commitment to maintaining financial strength.

3 Eurobonds issued in 2015 amounting to USD 550 million.

A number of investment projects started or continued in 2021 including hydropower plants, high-efficiency cogeneration, solar power plants, wind farms, the introduction of the smart network concept, projects of reconstruction and modernization of infrastructure for heat energy distribution, energy efficiency projects of our own business and production processes and our customers' processes, and electromobility development. All these projects confirm a clear direction of development and decisiveness in the implementation of the development strategy until 2030, UN SDGs, European Green Plan and the goals stated in national energy and climate strategies and plans. Through their implementation, as well as continuous business improvement, HEP strives to be a highly competitive and successful company, the leader of the energy transition, the driver of the Croatian economy and the support to the Government of the Republic of Croatia in implementing strategic goals of energy and economy. HEP Group continued to be one of the largest investors in Croatia in 2021, with investments of HRK 3.08 billion. Due to favorable business conditions, there was no need to contract new long-term loans for investments, which were financed by HEP's own funds, EU funds and the EBRD and EIB loans (construction of the EL-TO Zagreb CCPP).

Capital investments, i.e. the share of capital investments in environmentally sustainable activities in the total capital investments of the HEP Group, are another key indicator of the company's success according to the EU Taxonomy. In 2021, the share of HEP Group's capital investments in EU Taxonomy aligned activities was 39.3 percent, and 41.9 percent in eligible activities whose alignment will be determined in the next reporting periods, and 18.6 percent in taxonomically unaligned activities. Capital investments in taxonomically ineligible activities include the production of electricity and thermal energy from gas and the production of electricity from a nuclear power plant. For these two activities, the European Commission drafted a delegated regulation according to which they are taxonomically eligible, if they meet the prescribed criteria, but the delegated regulation did not enter into force in 2021. The production of energy from coal is not taxonomically eligible. Therefore, in order to modernize the thermal power plant Plomin 1 and examine the possibility of using alternative fuels for electricity production, in 2021 we launched a public procurement procedure for the project entitled "Selecting the best available techniques for the use of biomass and waste in the Plomin thermal power plant". The goal of the project is to preserve the security of electricity supply to customers by continuing production at the Plomin TPP site and HEP's contribution to the establishment of a comprehensive waste management system in Croatia, reducing the amount of waste disposed of in landfills, reducing greenhouse gas emissions from landfills, and utilizing waste for energy purposes, in accordance with the hierarchy of waste management. The implementation of the project will determine economic profitability and technical feasibility by applying the best available techniques to meet all requirements for environmental protection, and based on these results, a decision will be made on further activities. Our capital investments are described below.

The construction of the 150 MWe/114 MWh combined cogeneration unit in EL-TO Zagreb CCPP continued. The value of the investment is HRK 920 million. It is expected that at the 90% efficiency, more than 25 percent of gas savings will be achieved and 150,000 tons of carbon dioxide emissions reduced per year, as well as emissions of sulfur and nitrogen oxides and particles. By the end of the year, 88.5 percent of the EPC Contract (EPC) was carried out.

At its session held on 29 July 2021, the Government of the Republic of Croatia passed a decision declaring the Kosinj Hydropower System (HES Kosinj) project, worth HRK 1.54 billion, a strategic investment project of the Republic of Croatia. With the adoption of this decision, the Agreement on the preparation and implementation of the strategic HES Kosinj project, concluded on 12 July 2021 between the investor – Hrvatska elektroprivreda and the Ministry of Economy and Sustainable Development, entered into force. Along with Senj 2 hydropower plant, HES Kosinj is one of the two segments of the overall project of upgrading the existing Hydropower System Senj (HES Senj). With a total capacity increase of 412 MW and the investment of HRK 3.45 billion, this is HEP's largest project since Croatia's independence.

58 MW Korlat wind farm has been in regular operation since 2021. The solar power plant is under development at the same location, in which an additional HRK 590 million will be invested, providing Croatia its first renewable hybrid energy park. Also, the construction of Marići (1 MW), Kaštelir 2 (2 MW) and Kosore-Jug near Vrlika (2.1 MW) solar power plants was completed, while the construction of Obrovac (7.35 MW) and Stankovci (2.5 MW) solar power plants continued. In order to accelerate the realization of our renewable development scenario,

solar power plant projects are being developed in cooperation with municipalities and cities.

From the beginning of commercial operations on 1 January 2021 until the end of 2021, a total of 2,708,000 cubic meters of liquefied natural gas was transshipped to the LNG terminal, which was delivered by 19 LNG transport ships. In the same period, 1.6 billion cubic meters of natural gas were delivered to the gas transportation system of the Republic of Croatia. In the process turned into gas. All of the above proves the importance of the Terminal for the gas market in the Republic of Croatia and this part of Europe and the impact on regional gas flows.

The SINCRO.GRID related activities were completed in 2021. This connecting Europe Facility (CEF) co-funded project uses information on the production of power plants in the distribution network for optimizing the state of equipment in the transmission network in order to normalize the voltage conditions in the transmission system, which will result in greater ability to regulate voltage in the distribution system.

The introduction of EU co-funded smart networks pilot project continued in 2021. The total value of the project is HRK 176.8 million, of which the European Regional Development Fund grants, awarded under the Operational Programme "Competitiveness and Cohesion 2014-2020" account for 85 percent. In addition, HEP DSO will invest an additional HRK 52 million of its own funds reaching the total value of the smart networks investment of almost HRK 230 million.

At the end of 2020, HEP Toplinarstvo signed the HRK 700 m Grant Agreement awarded within the Operational Programme "Competitiveness and Cohesion 2014-2020", under which the co-funding for the revitalization of 68.5 kilometers of the hot water network in the city of Zagreb was secured. The total value of the project eligible cost is HRK 700 million, of which HRK 421.5 million is financed by the European Regional Development Fund grants. This is the largest EU allocated amount to HEP to-date.

The implementation of measures and the preparation of projects aimed at energy efficiency increase has been intensified. The implementation of the EU co-funded eMobility project has continued. In 2021, 43 public charging stations were set up, bringing the total number of EV charging stations within the ELEN network to 256. Additional 6 to the already existing 40 charging stations were also set up for internal needs of HEP Group.

As for gas-related investments, in addition to gas network investments, they primarily included the continuation of acquisition activities. In March, Gradska plinara Krapina was acquired, followed by Darkom distribucija plina in June. The expansion of HEP Plin was accompanied by the launch of Hepi plin, the household market supply product.

Equipment replacement, reconstruction and revitalization of existing production facilities and transmission and distribution networks were carried out continuously, in which domestic manufacturers and contractors were engaged to a large extent. The third key indicator of the success of the company's operations according to the EU Taxonomy is the share of operating costs of maintenance in environmentally sustainable activities in the total operating costs of maintenance of the HEP Group, which in 2021 amounted to HRK 1.08 billion. The share of operational costs of maintaining the HEP group in EU Taxonomy eligible and aligned activities was 28.4 percent, and 42.4 percent in taxonomically eligible activities whose compliance will be determined in the next reporting periods, and 29.2 percent in taxonomically ineligible activities.

Financial performance

According to financial indicators, HEP Group is one of the biggest business groups in the Republic of Croatia

In 2021, the Group generated operating profit of HRK 1,169.0 m, a decrease by HRK 989.8 m (45.8%) compared to 2020 despite increased revenue, due to increased variable operating cost. Financial activities generated profit of HRK 76.3 m compared to the loss of HRK 344.4 m from financial activities in 2020. Net profit of HEP Group amounted to HRK 1,019.5 m, of which HRK 1,017.4 m was attributable to equity owners, and HRK 2.1 m to non-controlling interest.

Operating income of HRK 15,969.6 m increased by HRK 1,597.0 m compared to 2020, primarily as a result of increased income from the sale of electricity by HRK 1,918.0 m (16.7%), income from the lease of LNG terminal capacity of HRK 174.2 m (the terminal became operational on 1 January 2021), and income from the sale of gas to gas supply customers by HRK 106.2 m (24.4%). Income from the sale of wholesale gas decreased by HRK 456.1 m (95.9%) since HEP d.d. performed the role of the wholesale gas market supplier until 31 March 2021, while other operating income was also lower by HRK 179.0 m (the written-off receivables for gas sold to a domestic industrial customer were collected in 2020).

Operating expenses of HRK 14,800.6 m increased by HRK 2,586.8 m compared to 2020. This increase was the effect of a higher purchase cost of electricity (52.0%) and a higher volume of import, higher fuel cost (60.0%), and higher cost of CO_2 emission units (78.3%), while the purchase value of gas for sale (38.3%) decreased.

Consolidated profit and loss account (abridged) HRK m	2020	2021	2021-2020	2021/2020 %
Operating income	14,372.6	15.969,6	+1,597.0	+11.1
Operating expenses	12,213.8	14.800,6	+2,586.8	+21.2
Profit from operations	2,158.8	1.169,0	-989.8	-45.8
Net profit of the Group	1,463.8	1.019,5	-444.3	-30.4
Net profit attributable to owners of the parent	1,465.1	1.017,4	-447.8	-30.6

Operating income

In 2021, the Group generated operating income of HRK 15,969.6 million, an increase of HRK 1,597.0 million (11.1%) compared to 2020 due to increased income from the sale of electricity, income from the lease of LNG terminal capacity, and income from the sale of gas to gas supply customers.

The Group earned 84% of its operating income (HRK 13.4 bn) from the sale of electricity. A 16,7% increase (HRK 1,918.0 m) compared to the year before is the result of increased income from billed energy to business customers and households along with higher prices of electricity supply to business customers and an increased volume of export of electricity at higher prices of exported electricity.

Income from the sale of electricity to customers in Croatia increased by 12.2% . The average price of electricity for customers under guaranteed service and for business customers of HEP Opskrba increased by 23.8% and 4.3%, respectively. The average price excluding the charge for network use for universal service customers rose by 0.1%, while it decreased for household customers of HEP Opskrba by 0.2%. 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 182.1 million. Income from the use of the transmission and distribution network increased by HRK 320.3 m as a result of increased electricity demand.

Income from the sale of electricity abroad increased by 72.3 percent as a result of increased export of electricity surplus abroad at higher prices of exported electricity and the increased volume of supply to customers in the region.

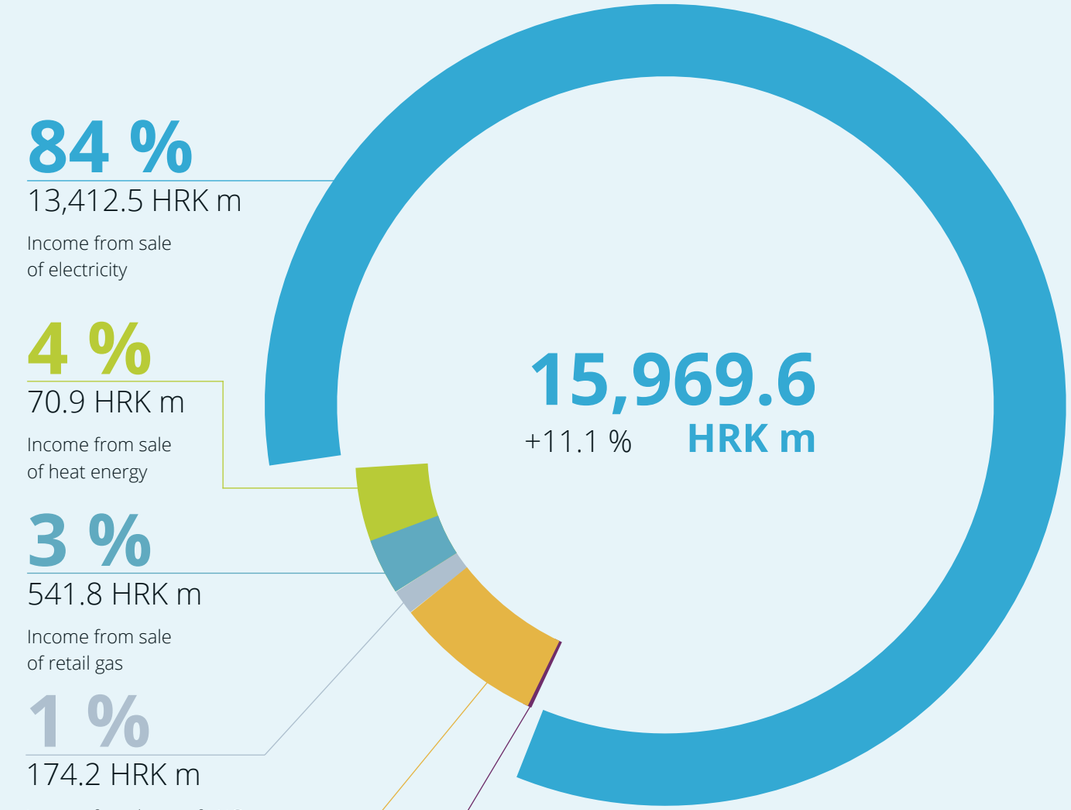
In the period between 1 April 2014 and 31 March 2021, HEP d.d. was the wholesale gas supplier (pursuant to the decision passed by HERA in October 2020) including the sale of gas to suppliers that supply gas to households as part of the public service. As per above, the Group generated income of HRK 19.5 million, a decrease of HRK 456.1 million compared to 2020.

Income from the sale of gas to end customers amounted to HRK 541.8 m accounting for 3% of operating income, an increase by HRK 106.2 m compared to 2020 as the result of increased gas sale (17.4%) due to supply expansion to other distribution areas and the acquisition of Gradska plinara Krapina d.o.o. and Darkom distribucija plina d.o.o. customers accompanied by increased sale to other distribution areas by 36.1 percent.

Revenue from the lease of the LNG terminal capacity, which operation started on 1 January 2021, amounted to HRK 174.2 million.

Income from the sale of heat energy amounted to HRK 707.9 million accounting for 5 percent of operating income. This HRK 33.8 million increase is the result of a 8.4% higher demand at a 3.1% lower average selling price.

Other operating income of HRK 1,113.7 million decreased overall by HRK 179.0 million (13.8%) compared to the year before as the result of the collected written-off receivables for gas sold to a domestic industrial customer in the amount of HRK 326.0 million and lower income from outsourced services by HRK 36.0 million. Income from EU grants for the LNG terminal, income from the sale of materials, collected value-adjusted receivables and income from the cancellation of provisions for raw materials, supplies and spare parts increased.



The structure of operating income (HRK m) and its share in overall operating income (%)

Operating expenses

The Group's operating expenses in 2021 increased by HRK 2,586.8 million to HRK 14,800.6 million.

overall costs amounting to HRK 6,040.4 million. The cost of electricity purchase on the market increased by HRK 1,244.2 m (52.0%) as a result of higher electricity purchase price and increased volume of imported electricity, while the cost of energy fuel in 2021 increased by HRK 900.6 m primarily as a result of higher coal and natural gas prices.

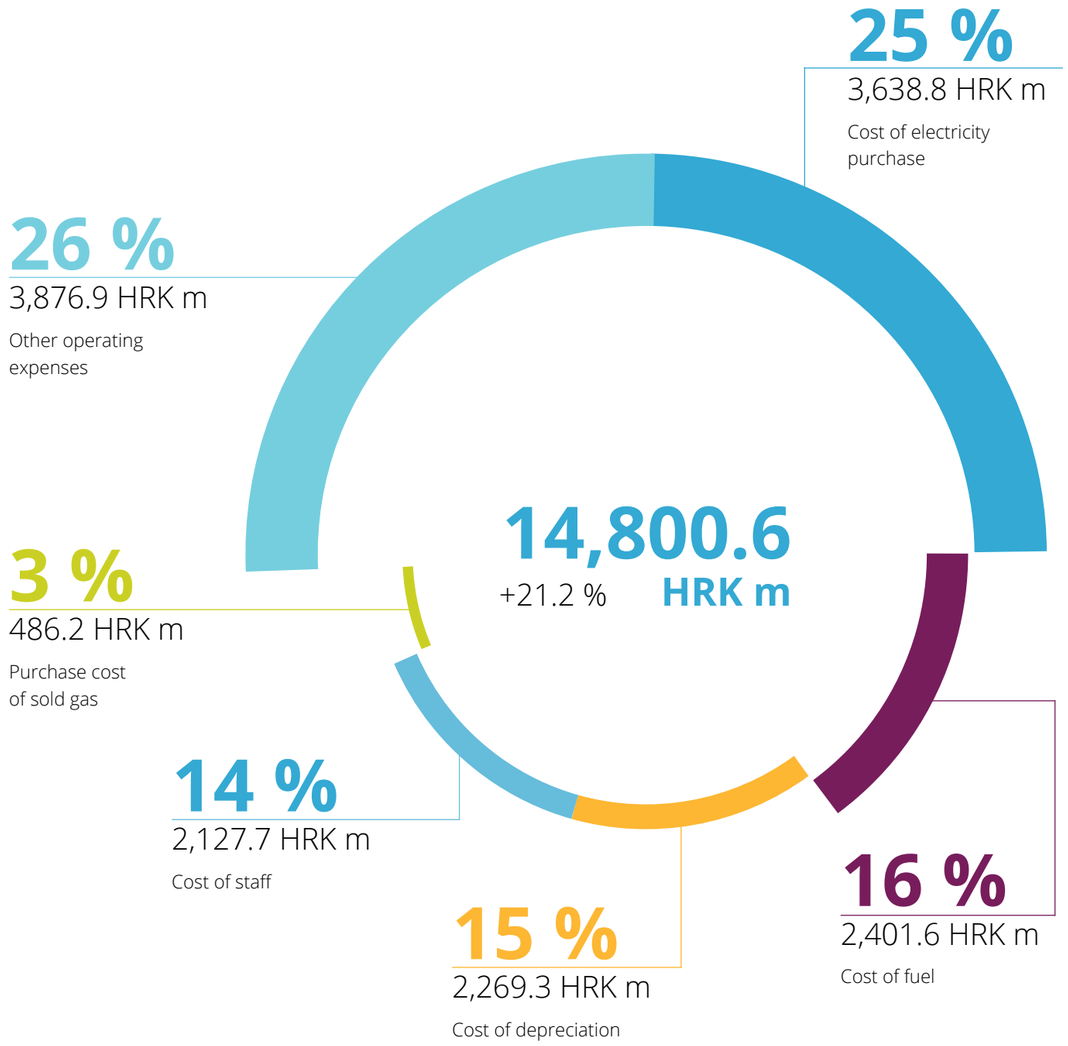
Electricity import increased by 160 GWh at a 56.6% higher purchase price than in 2020. 58 GWh more electricity was purchased from incentivized eligible producers. The electricity purchase from off-system producers and traders in Croatia increased by 9 GWh at a 47.8 percent higher price.

The cost of energy fuel increased by HRK 900.6 million (60.0%) compared to 2020 despite a 1.3% decrease of electricity production in thermal power plants and lower natural gas consumption. Higher energy fuel costs are primarily due to higher prices of coal and natural gas. The price of coal is 97.0 percent higher at 21.5 percent higher coal demand, while the price of natural gas increased by 68.5 percent at 5.6 percent lower natural gas consumption. The costs of forest biomass for the operation of BE-TO Osijek and BE-TO Sisak cogeneration plants are lower due to 16.9% less consumed quantities and 4.0% lower prices of wood biomass.

The cost of gas procurement for market supply amounted to HRK 408.4 million, which was by HRK 214.6 m more than in 2020 due to increased gas procurement volume at a higher average gas purchase price. Due to the termination of the wholesale gas market supplier activities after 31 March 2021 and the reduction of the number of suppliers in the public service obligation which chose to purchase gas from HEP d.d. after 31 March 2020, the purchase value of gas, the cost of gas transport and the cost of gas storage decreased by HRK 516.7 million compared to 2020 amounting to HRK 77.8 million.

The cost of staff amounted to HRK 2,127.7 m, an increase by HRK 94.9 million (4.7%) as a result of increased hiring in accordance with the adopted employment plans as well as a 3.13% increase in salary points as of 1 January 2021.

Compared to 2020, the 18.0% increase of other operating expenses was primarily related to the cost of carbon dioxide emission units of HRK 355.8 million due to a 67.0 percent higher price than in 2020 with 187 thousand tones larger quantities of emission units. Also, maintenance costs, costs of external services and materials, written off uncollected receivables and value adjustment of trade receivables increased, while the cost of value adjustment of real estate, plants and equipment, provisions for litigation and provisions for severance pay and jubilee awards decreased.



The structure of operating expenses (HRK m) and its share in overall operating expenses (%)

Results by activities

The largest share of operating revenues (89.7%) was generated from electricity. Operating profit amounted to HRK 1,679.7 million, which is HRK 381.8 million less than in 2020 due to a significant increase in variable costs, primarily the cost of electricity, energy fuel and carbon dioxide emissions. District heating accounted for 4.8 percent of operating revenues, with an operating loss of HRK 376.2 million. Compared to the previous year, the result was significantly worsened due to the increase in energy fuel costs as the result of rising prices of natural gas and carbon dioxide emissions. Heat sale increased by 8.4 percent. The share of gas activities (which includes retail and wholesale of gas and the service of leasing LNG capacity) in operating revenues accounted for 5.3 percent. The operating loss amounted to HRK 21.8 million compared to the 2020 operating profit of HRK 360.7 million. The amount of profit in 2020 was affected by the income from collected written-off receivables for natural gas from a domestic customer.

In other activities (energy efficiency, education, non-operating assets and tourism, development of a multipurpose hydrotechnical system, telecommunications, engineering and management activities), an operating loss of HRK 112.7 million was generated.

Operating result in HRK m	Electricity			Heat		
	2020	2021	%2021/2020	2020	2021	%2021/2020
Operating income	12,333.4	14,319.7	16.1	722.4	765.1	5.9
Operating expenses	10,272.0	12,640.0	23.1	869.6	1.141.4	31.3
Profit/loss from operations	2,061.5	1,679.7	-18.5	-147.2	-376.2	155.6

Operating result in HRK m	Gas			Other activities		
	2020	2021	%2021/2020	2020	2021	%2021/2020
Operating income	1,249.6	840.2	-32.8	67.2	44.6	-33.6
Operating expenses	888.9	862.0	-3.0	183.4	157.3	-14.2
Loss from operations	360.7	-21.8	-106.0	-116.2	-112.7	-3.1

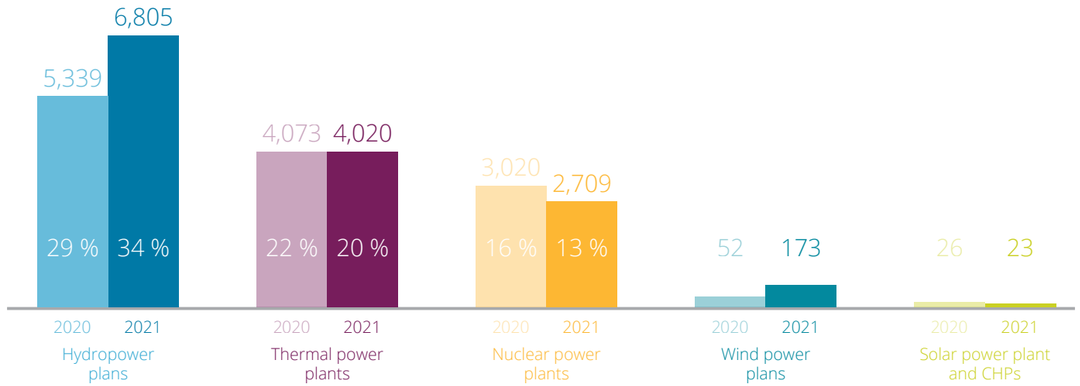
ELECTRICITY

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 14.7 TWh of electricity sold domestically, and 2,7 GWh more supplied to customers in Slovenia, Serbia, Bosnia and Herzegovina and as export of surplus electricity and resale. In 2021, the operating profit of HRK 1,679.7 m was generated, which was by HRK 381.8 million less than in 2020.

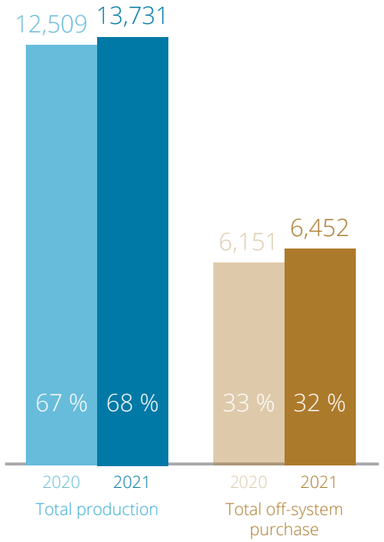
Income from the sale of electricity totaled at HRK 13,412.5 m, of which the sale to domestic customers accounted for 89% (HRK 11,939.7 m), and the sale abroad for 11 % (HRK 1,472.8 million).

Electricity generated by sources (GWh)



Note: In 2021, solar power plants (SPP) generated 7 GWh (in 2020 – 3 GWh), biomass cogeneration plants (BE-TO CHP) - 16 GWh (in 2020 - 23 GWh). In the structure of available electricity, the share of energy produced from Korlat wind farm Korlat accounts for 1.0% (in 2020 - 0.3%), and from solar and BE-TO CHPs for 0.1% (in 2020 – 0. 1%).

Available electricity by HEP Group (GWh)



HEP Group's total production and supply of electricity amounted to 20.2 TWh, of which 13.7 TWh (68%) was produced in power plants owned and partially owned by the Group. Compared to 2020, 1.2 TWh more was produced, primarily due to higher production of hydropower plants due to favorable hydrological conditions.

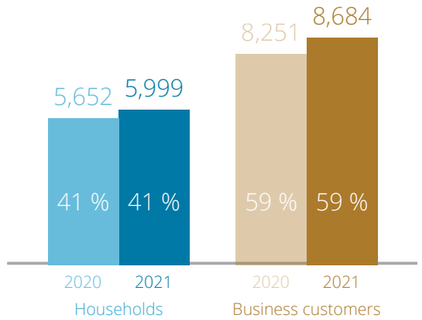
A total of 6.8 TWh (34% of available electricity) was produced in hydropower plants, which was by 1.5 TWh (27.5%) more than in 2020, the year characterized by dry hydrological circumstances.

Thermal power plants and thermal power plants produced 4.0 TWh (20% of available electricity), which is by 52 GWh (1.3%) less than in 2020. Krško nuclear power plant delivered 2,709 GWh, 311 GWh (10.3%) less than in 2020, given that in April 2021 a regular 18-month overhaul was performed.

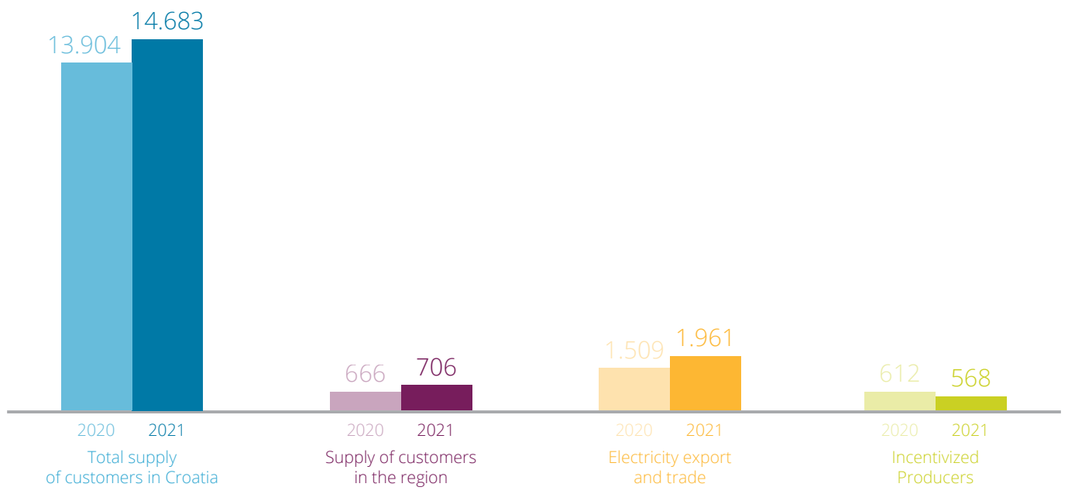
The remaining electricity production refers to the production of Korlat wind power plant (173 GWh), Osijek and Sisak BE-TO CHPs (16 GWh) and solar power plants (7 GWh). HEP's power plants in the incentive system produced 568 GWh, 44 GWh less than in 2020.

The off-system procurement was 6,452 GWh (32% of available electricity), which is by 300 GWh (4.9%) more than in 2020 due to increased demand. Of the total amount, 4,080 GWh refers to the import of electricity for the supply of customers. Furthermore, 1,247 GWh refers to the purchase of HEP Group from HROTE for production from renewable energy sources and high-efficiency cogeneration in the incentive system (58 GWh more), 670 GWh for purchase from retailers in the Republic of Croatia and 108 GWh for purchase from producers outside HEP Group. 347 GWh was procured off-system to cover losses in the transmission network, which was 73 GWh more than in 2020.

Customer supply in Croatia (GWh)



Sale of electricity (GWh)



A total of 14.7 TWh was sold to customers in Croatia, which is by 0.8 TWh (5.6%) more than in 2020. 433 GWh more electricity (5.2%) was billed to business customers, and 347 GWh (6.1%) more to households. HEP Group's market share covered 89.0 percent of total electricity sale to end customers in Croatia in 2021. 706 GWh were sold to customers in the region, which is by 40 GWh (6.1%) more than in 2020. The remaining sale abroad (2.0 TWh) increased by 451 GWh compared to 2020 and refer to the export of surplus electricity produced in HEP Group power plants and trading. In 2021, 568 GWh of electricity produced in power plants with the status of a privileged producer in the incentive system were sold.

Compared to 2020, income from the sale of electricity increased by HRK 1,918.0 (16.7%) to HRK 13,412.5 million. Income from the sale of electricity to customers in Croatia increased by HRK 1,299.8 million (12.2%) due to higher customer demand and higher electricity prices for business customers as a result of rising electricity prices on reference power exchanges. Income from the sale of electricity abroad amounted to HRK 1,472.8 million, which is an increase of HRK 618.2 million (72.3%) due to higher exports of surplus electricity and trade, higher prices of exported electricity and a higher volume of supply to customers in the region.

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 376.2 million in 2021. Compared to 2020, the loss increased by HRK 229.0 million due to higher costs of energy fuel costs caused by higher prices of natural gas.

In 2021, a total of 2,447 GWh of heat energy was produced, which is 140 GWh or 6.1 percent more than in 2020. 110 GWh of heat energy was produced in HEP-District Heating plants, and 2,338 GWh in cogeneration facilities of HEP Proizvodnja. Process steam accounts for 24 percent and heat for 76 percent in total generated volumes.

The sale of heat energy in 2021 reached 2,034 GWh i.e. a 8.4% or 167 GWh increase compared to 2020, of which households and business customers accounted for 56% (1,0147GWh) and 44% (888 GWh), respectively. Compared to 2020, total sale to households and business customers increased by 7.2 percent and 9.9 percent, respectively.

GAS

HEP Group carries out the activity of retail gas distribution and customer supply. In the period between 1 April 2014 and 31 March 2021 it was also a gas supplier on the wholesale market, the role it ceased to carry out based on the decision of the Croatian Energy Regulatory Agency.

These activities generated operating loss of HRK 21.8 million, compared to the operating profit of HRK 360.7 million in 2020. The 2020 profit was the result of income from collected written-off receivables for natural gas supplied to a domestic customer.

Retail gas distribution and supply is conducted in the Osijek-Baranja, Virovitica-Podravina. Požega-Slavonia and Vukovar-Srijem counties. Market liberalization has facilitated the expansion of HEP-Plin d.o.o. to other distribution areas.

On 31 March 2021, under the Purchase Agreement, HEP Plin acquired 100% ownership of business shares of Gradska plinara Krapina d.o.o., and on 14 June it took over 100% of business shares in Darkom distribucija plina d.o.o. The companies were merged with HEP Plin in January 2022. With these acquisitions, HEP Plin left the regional framework of eastern Croatia and expanded its gas distribution network to the Krapina-Zagorje and Bjelovar-Bilogora counties. This confirmed its position as one of the leading gas distributors and suppliers with more than 106 thousand customers and almost 4 thousand kilometers of gas distribution network.

The sale of gas in gas distribution and supply to retail customers increased by 20.4 percent in 2021 and amounted to 2.2 TWh. The sale of gas to household and business customers increased by 23.1 percent and 12.9 percent, respectively. Thanks to higher sale and increased average selling prices, revenues from gas distribution and supply grew by 24.4 percent.

The gas wholesale activity generated income of HRK 19.5 million, which was by HRK 456.1 million less compared to 2020 as a result of reduced gas sale due to the cessation of the wholesale gas supplier's activity after 31 March 2021 and a reduced number of public service suppliers who have chosen to procure gas from HEP d.d. after 31 March 2020. For the same reasons, the purchase value of sold gas, the cost of gas transport and the cost of gas storage decreased compared to 2020 by HRK 516.7 million and amounted to HRK 77.8 million.

Financial position

Consolidated balance (abridged)	31 December 2020		31 December 2021		% 2021/2020
	HRK m	share %	HRK m	share %	
Long-term asset	36,575.5	82	37,360.8	80	2.1
Short-term asset	8,064.0	18	9,545.6	20	18.4
Total asset	**44,639.5**	**100**	**46,906.4**	**100**	**5.1**
Capital and reserves	26,413.0	59	26,660.1	57	0.9
Long-term provisions	1,331.7	3	1,405.6	3	5.6
Long-term liabilities	11,693.5	26	8,264.5	18	-29.3
Short-term liabilities	5,201.3	12	10,576.2	23	103.3
Total liabilities and equity	**44,639.5**	**100**	**46,906.4**	**100**	**5.1**

ASSET

The value of HEP Group's total asset at the end of 2021 was HRK 46.9 bn, an increase by HRK 2.3 bn.

Long-term asset accounted for 80% of the Group's asset value, which marked an increase of HRK 785.3 m as a result of increased value of property, plants and equipment by HRK 729.3 m, increased intangible asset, fair value through other comprehensive profit, real estate investment and goodwill.

The value of short-term asset of HRK 9.5 bn represents an increase by HRK 1.5 bn due to increased cash and cash equivalent by HRK 751.4 million, trade receivables by HRK 463.9 m and other short-term receivables by HRK 292.6 million.

CAPITAL AND LIABILITIES

Capital and reserves at the end of 2021 amounted to HRK 26.7 billion, a rise of HRK 247.1 m in comparison with 2020 primarily due to retained profit.

Capital and reserves at the end of 2021 amounted to HRK 26.7 billion, a rise of HRK 247.1 m in comparison with 2020 primarily due to retained profit.

Long-term provisions increased by HRK 73.9 million primarily due to increased provisions for severance payments and other long-term provisions for impairment of tangible asset.

Long-term liabilities amounted to HRK 8.3 billion accounting for 18% of the Group's total liabilities and capital. The HRK 3.4 bn decrease thereof is primarily related to the 2015 bonds due in 2022 and the swap transaction-related liabilities, while the long-term loan liabilities increased by HRK 260.9 million due to the disbursement of the working capital loan.

Short-term liabilities amounted to HRK 10.6 billion, an increase by HRK 5.4 bn compared to early 2021. The current maturity of bonds issued in 2015 amounted to HRK 3.4 billion, while other short-term and trade liabilities increased by HRK 924.8 million and HRK 829.2 million, respectively.

Credit rating

HEP has credit ratings from Standard & Poor's and Moody's.

In early October 2021, Standard & Poor's upgraded HEP's credit rating from BB+ to BBB-.

HEP's credit rating grade is now equivalent to the sovereign credit rating and for the first time since 2009 it has returned to the investment grade. The Agency's report states that credit rating upgrade reflects HEP's success regarding robust credit metrics in volatile hydrological conditions and commodity prices. According to the Standard&Poor's analysts, this is a result of HEP's gradual evolution towards a market-oriented company with a more flexible cost structure. The Agency also states that in comparison to what was previously captured in the rating, HEP shows it is able to more effectively and more robustly manage its exposure to commodity prices and lower implicit volatility. The report concludes that a very good track record proves the company is committed to maintaining financial strength.

In November 2020, Moody's upgraded HEP's long-term credit rating from Ba2 to Ba1 with a stable outlook as well as HEP's stand-alone credit profile to ba1. In its report, Moody's stated that said upgrade reflected the expectation of HEP retaining its strong financial profile in line with its good financial performance during last several years, and of retaining strong credit metrics in the future. In January 2022, Moody's affirmed the long-term credit rating of Hrvatska elektroprivreda (Ba1) with a stable outlook.

Credit agency	Baseline credit assessment	Standalone credit quality
Standard & Poor's	BBB- (stable)	bbb-
Moody's	Ba1 (stable)	ba1

Business risks

The Group defines risk as a combination of the probability of an event and its consequences. For the HEP Group, risks are events and/or potential developments (internal or external) that have or could have a negative impact on the achievement of business goals. Regardless of the source of the risk, the Group manages the risk appropriately in order to reduce it or avoid it completely.

The Group is exposed to material risks, which are described below.

GRI 102-11
GRI 102-15

Risks of economic conditions of business and environment

The macroeconomic and economic environment is of particular importance for HEP's operations. For example, the risk of a decline in the country's credit rating affects the possibility and conditions of HEP Group's indebtedness. The Group cannot manage these risks directly.

LEGAL AND REGULATORY RISKS

Risk of business environment, regulation and compliance with EU regulations

The risk of the business environment is determined by the political, economic and social conditions in the country and region, which affect the operations and performance of domestic business entities. Despite its current dominant position on the market, the changing nature of competition (new regulations, the emergence of new players, mergers of existing players, etc.) may result in the loss of HEP Group's market share.

Furthermore, the legal framework on the basis of which the functioning of the energy sector is organized, as well as changes to that legal framework, may result in additional costs, be incompatible with the HEP Group's growth model, or change the competitive context within which the HEP Group operates. Through continuous monitoring of changes in the business environment, a timely and appropriate adaptation of the strategic orientation and business system to regulatory, legal and market changes, as well as continuous improvement of the efficiency of the business system, the HEP Group will be able to overcome the effects of the appearance of new competitors and the burden of new possible costs without reducing market share and profitability.

Requirements arising from legal regulations in the field of environmental protection

The activities of the HEP Group are subject to legal provisions on environmental protection, which are increasingly numerous and restrictive. Violating these provisions may result in additional costs and/or expose the HEP Group to significant legal proceedings.

Furthermore, national or European authorities may request the strengthening of these provisions, which would have a negative impact on the Group's activities and its financial results. For example, the expected trend of reducing the limit values

of emissions will lead to an increase in the production price from thermal energy facilities due to investments in technologies to achieve the limit values of pollutant emissions into the environment and energy efficiency, which is a risk to which all investors in such facilities in the EU are exposed. Since January 1, 2013, HEP has been in the European System of Greenhouse Gas Emission Units (EU-ETS). During the third trading period, the price of emission units changed and was significantly increased until the end of the period that ended on December 31, 2020. The growth in the prices of emission units continued at the beginning of the fourth trading period, and the risk of further price growth is present due to the EU policy that has the goal of significantly reducing greenhouse gas emissions by 2030, i.e., achieving decarbonization of the energy sector by 2050 (so-called "net-zero" CO_2 emissions). The increase in the price of emission units affects the production price of energy, and the operation of individual thermal energy plants depends on this. The lack of energy produced from TE and TE-TO is compensated by production from other sources, depending on meteorological conditions and/or imports. The Group manages the risk of volatility in the prices of emission units by choosing the method of their purchase in order to define the quantities and prices for a certain future period.

The proposal for a regulation on the establishment of a carbon border adjustment mechanism (CBAM) in 2026 introduces the obligation to purchase the so-called CBAM certificate for each MWh of imported electricity from countries outside the EU (BiH and Serbia), which will further increase the price of imported electricity produced from fossil fuels. The CBM certificate is comparable to EUAs, i.e. emission units that HEP is obliged to purchase for each ton of emitted CO_2 from HEP's plants in the EU-ETS system.

Furthermore, the direct consequences of the application of the provisions of the current legal regulations in the field of environmental protection to the operation of existing and the construction of planned electric power facilities are the uncertainty of extraction, i.e. a significant extension of the extraction period of location permits, an increase in costs and lower profitability of the facilities (European Ecological Network NATURA 2000, Water Area Management Plan, emission of pollutants into the air, climate protection, etc.).

Risks related to the implementation of regulations

In May 2018, the Law on Amendments to the Law on Water (Official Gazette 46/18) entered into force, which resolved the ownership status of water structures for the production of electricity, i.e., hydroelectric power plants built by HEP d.d., i.e., its legal predecessors.

HEP d.d. became the owner of the hydropower facilities by virtue of the law by establishing construction rights for the benefit of HEP, free of charge, for a period of 99 years. While the construction right in question lasts, HEP d.d. also manages the public good/land on which buildings for the production of electricity are built, as well as reservoirs and supply and drainage channels and tunnels (parts of hydropower plants where HEP's ownership is not acquired through the establishment of construction rights) on behalf of the Republic of Croatia.

In order to implement the provisions of the Law on Amendments to the Law on Water, that is, the Law on Water (Official Gazette 66/19, 84/21), whose provisions confirm the model for solving property-legal relations, HEP d.d. is obliged, in cooperation and with the participation of Hrvatske vode, to start the procedures for registering the above-mentioned rights in the land registers and to obtain the corresponding subdivision studies. The aforementioned studies will be the basis for the issuance of a tabular document by the competent municipal state attorney's offices for the registration of the right to build, or management on public water resources, which refers to the land on which hydropower facilities are located.

Bearing in mind the state of the land registers in the Republic of Croatia and the fact that it is a demanding and complex task of preparing and implementing the registration of the mentioned rights for the benefit of HEP, i.e. a large number of procedures, which does not depend exclusively on the engagement of HEP's expert services, but includes engagement Croatian Waters and the State Attorney's Office, a lengthy process of sorting out and registering the rights in question in land registers and other registers is expected. Completion of the entire subject process can be expected over a period of several years.

Regardless of the above, HEP d.d. in cooperation with affiliated companies, for the purpose of protecting its business interests, it actively participates in the proceedings in question, trying to speed up the implementation processes of the Water Act through cooperation with Hrvatske vode.

FINANCIAL RISKS

Market risks

The prices of energy fuels for the production of electricity and thermal energy (coal, gas), the price of electricity purchased on the market and the prices of carbon dioxide emission units are very sensitive to trends and disturbances in world markets, as well as to the available production capacities in the region. which can produce electricity at a competitive price in relation to the demand for electricity.

The Group reduces the risk of sudden changes in the prices of energy fuels, electricity and carbon dioxide emission units that it purchases on the market by concluding contracts that define quantities and prices for a certain period in the future, and partly provides the necessary energy fuel and electricity through semi-annual or annual contracts.

Financing of the investment plan

In order to realize the planned investment projects, the HEP Group will have to secure financial resources on the money and capital market in addition to its own funds in the coming period. For the timely realization and cost of the investment, it is of particular importance to implement a conservative financial policy in the sense that new favorable external sources of financing are considered and secured in time. Potential risks relate to the possibility of accessing appropriate markets and investors with a long-term investment horizon, which corresponds to the cycle of construction and exploitation of energy facilities, and the cost of financing such arrangements. Part of this risk can be mitigated by a satisfactory credit rating of the Group, and the Group continuously implements activities and measures to maintain an acceptable rating for favorable external borrowing.

The planned construction of new power plants also entails potential risks in implementation, which the HEP Group tries to minimize as much as possible. Potential risks relate to investment conditions in Croatia, the direction of development and integration of the Croatian energy market into the common European market, and macroeconomic, regulatory and other factors that affect the profitability and attractiveness of planned investment projects, which the HEP Group has no influence on.

The Group mitigates this risk with the flexibility of the plans, which enables, in the event that favorable means and methods of financing cannot be secured, to make a time shift in the realization of individual planned investment projects in accordance with their importance for the security of the energy system and customer supply.

Currency risk

The Group is exposed to currency risk in the event of a change in the exchange rate between the euro and the US dollar. Namely, the largest part of HEP's long-term liabilities, as well as the costs of fuel and purchased electricity, are linked to foreign currency exchange rates, primarily to the euro and the US dollar, while the largest part of the inflow is in the domestic currency. To protect against changes in currency exchange rates, the Group uses preferential forward exchange rates and currency swap transactions for fixed liabilities to banks and suppliers. Regardless of the activities undertaken, significant changes in foreign currencies or a possible depreciation of the kuna can significantly increase the cost of financial operations.

The currency risk related to the change in the euro exchange rate will be eliminated by the entry of the Republic of Croatia into the European exchange rate mechanism, when the euro will also become the official currency of payment.

Interest rate risk

The Group is exposed to interest rate risk because it concludes loan agreements with variable interest rates. It manages this risk in such a way as to maintain an appropriate ratio of loans with fixed and variable interest rates in its loan portfolio. Also, contracts on interest rate swaps are concluded, which protect the Group's exposure based on obligations at variable interest rates. The growth of EURIBOR and LIBOR rates affects the increase of interest costs for loans that do not have a fixed interest rate, which make up about 8.18 percent of the value of the total debt. For new borrowing, the state's risk premium as well as the credit rating of HEP are important, because they affect the margin that financial institutions demand above the level of reference interest rates.

Liquidity risk

Liquidity risk is expressed as the uncertainty that the Group will not be able to fulfill its obligations to creditors, in accordance with the agreed deadlines. The Group manages this risk by concluding framework agreements with banks in order to, in the conditions of a potential shortage of available funds from operations, quickly and under foreseeable conditions provide funds for the settlement of due obligations. According to the framework agreements, the Group can use short-term loans and approved current account overdrafts, issue guarantees and open letters of credit. In addition, realized and forecasted future cash flows are continuously monitored and the maturity profiles of receivables and liabilities are compared. To

overcome the risk of liquidity, a number of internal measures are continuously implemented to improve operations and reduce costs, the appropriate level of the investment plan and the annual dynamics of its realization are determined, and a proactive and conservative liquidity management policy is continuously implemented. The situation on the financial markets, globally and in Croatia, can be a limiting factor for refinancing existing and securing new credit arrangements.

Collection risk

Financial risk is also collection risk, which primarily results from the quality of the creditworthiness assessment, that is, the customer's credit risk. The collection function in subsidiaries manages the risk of collection through a system for evaluating the creditworthiness of customers, extending payment terms, paying debts in installments, etc.

OPERATIONAL RISKS

Risk of dependence on hydrological conditions

The Group has more than 50 percent of the installed capacity for the production of electricity in hydroelectric power plants, which makes it largely dependent on hydrological conditions and water inflows. Some of the hydroelectric power plants have reservoirs, which to a certain extent enables optimizing the use of the energy potential of water throughout the year. To reduce this risk, the existence of a diversified structure of electricity production is of particular importance, whereby the HEP Group does not rely exclusively on one form of electricity production or fuel for thermal power plants, in the event of their increased production due to deteriorating hydrology.

Risks related to competition

In the electricity market in the Republic of Croatia, during the past years, other suppliers outside the HEP Group became more active, and in 2021 they achieved a share of 11 percent in total sales to domestic customers.

The risk of possible loss of a large part of the market is managed by HEP by creating new products and services adapted to customer requirements with a strong marketing campaign and other activities aimed at strengthening HEP's brand and raising the quality of relations with customers, as well as intensifying activities aimed at generating income on the regional market.

RISKS OF HEP'S BUSINESS SYSTEM

Risks of organizational changes

In a dynamic and uncertain environment, systematic monitoring of its changes and adjustment of HEP's operations by implementing appropriate organizational changes is one of the fundamental tasks of HEP's management.

In order to reduce all the risks that such a complex operation entails, careful planning, execution and control, i.e. change management, is of crucial importance, in order to ensure the acceptable functioning of the organization during and after the transition. The Group will manage a defined personnel management system during the change, which will involve all employees and familiarize them with the change process.

Information and cyber security risks of HEP

The Group's information and cyber security risks are related to the continuity and integrity of industrial processes and plant operation reliability, information protection in business processes, public brand perception and HEP's reputation, as well as a number of other business areas.

In addition, other internal risks, which the Group is not currently aware of or which it considers to be of a non-material nature, may have the same negative effect. The Group reduces information and cyber security risks by systematically monitoring industrial and business processes and actively managing all business segments.

Investments

In 2021, the Group made investment in the amount of HRK 3,083.1 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 ones, and the construction of new transmission and distribution network infrastructure.

HEP's first wind farm Korlat is in regular operation, and a solar power plant is under development at the same location.

The construction of three solar plants was completed while the construction of several other solar power plants continued. The independent development of several RES projects continued with the aim of creating preconditions for their construction. Also, HEP concluded agreements with seven new municipalities and cities on cooperation in the development of solar power plant projects in 2021. In addition, investments were made in energy heating and gas distribution systems and in the upgrade of information and telecommunications infrastructure, as well as the development and expansion of the public EV charging station network in cities and on highways in Croatia.

Investments in HRK m	2019	2020	2021	% 2021/2020
Investments in property, plants and equipment	3,386.6	4,342.2	3,083.1	-29,0

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 the electricity sector, by taking current electricity consumption and the projection of its growth into consideration as well as the necessary decommissioning of thermal power facilities unable to meet the prescribed conditions of environment protection due to their technological old age.

Significant investments

- All revitalization works (reconstruction of the plant) of GHE Zakučac have been completed.
- Construction preparation and construction of HPP Kosinj/ HP Senj 2 continued. Construction permits were obtained for certain stages of HPP Kosinj construction. Environmental monitoring, archaeological research and the construction of a residential building in Perušić are ongoing. Activities on obtaining the remaining building permits and resolving property law relations continued. For the second part of the project, HPP Senj 2, project documentation for obtaining building permits for the main buildings and for connecting the plant to the transmission network is underway, as well as preparation for the establishment of monitoring.
- Construction of combined-cogeneration block L in EL-TO Zagreb continued.
- Construction of heat accumulators in EL-TO Zagreb and TE-TO Osijek and construction of three new steam boilers in TE-TO Osijek
- The preparation of documentation for obtaining a location permit for a new gas cogeneration at the TE-TO Osijek location - KKP Osijek facility continued.
- An operating permit was obtained for the first HEP wind power plant Korlat, which started its regular operation.
- The construction of the solar power plants Marići, Kaštelir 2 and Kosore – South was completed, and the construction of the solar power plants Obrovac and Stankovci continued.
- The location permit for the Korlat solar power plant was obtained, the location permit for the Unije solar power plant was revised, and the independent development of several RES projects continued with the aim of creating prerequisites for their construction in the next two years.
- In the distribution sector, the construction, reconstruction, strengthening of the transformation or extension of MV facilities in several power facilities 110/10(20)kV, 35/10(20)kV and the MV network was completed, the remediation of voltage conditions and the increase of power supply security in the distribution network continued, as well as investments in the replacement and arrangement of measuring points and connections.
- In the heating sector, activities continued on the implementation of projects co-financed by the European Union, which relate to the revitalization of the hot water network in Zagreb and the increase in the size of the connecting hot water pipeline from TE-TO Osijek to the heating plant Pogona Osijek.
- Investment activities continued in the planned revitalization of the hot water and steam network of the city of Zagreb, the reconstruction of the heating system in Zagreb, the construction of the hot water network in Velika Gorica, the revitalization of the hot water and steam network in Osijek and the revitalization of the hot water network in Sisak.
- In the gas distribution business, the planned construction of gas pipelines continued. In accordance with the strategic development policy, the companies Gradska plinara d.o.o. were purchased. Krapina and Darkom distribution gas d.o.o. Daruvar.
- Continuous investment is made in the development of telecommunications infrastructure, the construction of telecommunications connections that ensure the inclusion of important facilities and business infrastructure in HEP's telecommunications system, as well as in the implementation of the concept of advanced networks (Smart grids).
- Production testing, final adjustments, education of key users were successfully completed and the SAP IS-U system of HEP ODS was put into production.
- In 2021, the eMobility development project continued with the activities of setting up charging stations, creating conditions in the network, monitoring the operation of the infrastructure network and communication with existing and potential users of electric vehicles

Published financial statements

The annual meeting of the General Shareholders Assembly of HEP d.d. was held on 23 June 2022. The Assembly reviewed consolidated and unconsolidated annual financial statements of HEP d.d. and HEP Group for 2021 including the Independent Auditor's Report, the Annual Report on the state of affairs and the Report on operations of HEP d.d. and HEP Group in 2021 as well as the Report of the Supervisory Board on the supervision conducted in 2019. The acts of the members of the Management and the Supervisory Boards, respectively, were granted discharge for 2021.

The Annual Consolidated Financial Statements and the 2021 Independent Auditor's Report as well as the Annual Non-Consolidated Financial Statements and the 2021 Independent Auditor's Report were signed on 29 April 2022 and published on the HEP Group website. They are available on:

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

and

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

6

SUSTAINABLE AND RESPONSIBLE MARKET APPROACH

Contribution to the UN Sustainability Goals:

Material topics:

Investment planning and management
Diversified production mix focused on RES
Reliable and energy-efficient production and distribution
Product and service development
Customer trust
Supply chain responsibility
Innovation and digitization

Sustainable construction and power system development

Investment in increasing production capacity from renewable energy sources and diversification of production sources have proved necessary to ensure the security of energy supply in the face of soaring energy prices, energy, raw materials, construction materials and energy equipment, supply chain disruptions, the continuation of the COVID-19 crisis, complex geopolitical relations and the fight against climate change that we have faced during the last reporting period.

With its strategic determination to build 1,500 MW of new generation capacity by 2030, almost half (350 MW each) in the wind and solar power plants, HEP confirms its leading role in the green transition among energy entities in Croatia. In addition to independently developing projects and investing in renewable energy sources, HEP, based on a public call, purchases projects from interested partners and sets them in cooperation with local self-government units. Multiple positive economic, environmental, and social effects are achieved by involving various stakeholders and cooperating with domestic companies. The development of renewable energy sources will contribute to the fulfilment of the obligations of the Republic of Croatia in the implementation of the ambitious energy and climate goals of the European Union within the European Green Plan and the building of resilience of the Croatian economy in times of crisis.

Since adopting the HEP2030 development strategy in 2017, by the end of 2021, HEP has included two biomass cogeneration plants, five solar power plants, and one wind power plant in its production portfolio. By the end of the year, the development of an additional 60 projects of solar power plants and wind farms with a total capacity of about 1,400 MW and an investment value of HRK 11 billion has been launched. HEP Group also continues to invest in hydropower plants, the most important of which is upgrading the Senj Hydropower System. HEP also uses European funds to finance the renewable development scenario, and in the last three years, it has withdrawn funds in the amount of around HRK one billion from EU funds.

A long-term responsible, sustainable, and adaptable approach to market development of the HEP Group is determined by the strategic goals for the period until 2030.

Building a sustainable energy portfolio focused on renewable energy sources is a fundamental strategic determinant of HEP, which seeks to ensure sustainability and a high level of stability in the production, distribution, and supply of energy to citizens and the businesses in Croatia. To diversify electricity sources, HEP continuously and systematically invests in new sustainable projects, reconstruction, adaptations and modernization of the existing facilities and infrastructure to ensure the production, distribution and the supply of energy. HEP Group has been significantly focused on electricity production from solar and wind power plants in the past three years, alongside more than a century long tradition of production from hydropower plants. A few years ago, we added to the production of energy from renewable sources the production from bioenergy on wood chips. We store excess water for electricity production in reversible hydroelectric power plants, and excess thermal energy produced in cogeneration plants in heat accumulators, with the aim of ensuring energy supply when it is most needed, optimizing production costs, saving energy, rational use of natural resources and reducing the impact on the environment. To accept renewable energy sources, we are expanding and modernizing the transmission and distribution network by introducing the concept of advanced networks, and we are replacing existing meters with smart ones, and existing transformers with high-efficiency ones. The modernization of the thermal energy distribution infrastructure is underway in order to increase its efficiency, reduce losses and additionally ensure the supply of customers. We also produce energy in thermal energy plants that operate in accordance with the prescribed conditions from the environmental permits. We monitor new technologies and initiate research and development into the possibility of using low-carbon fuels in our facilities, such as hydrogen. By stepping into e-mobility and installing charging stations for electric vehicles on highways and cities, we contribute to the decarbonization of road traffic and create new opportunities for tourism. By starting investments in the electric power system, research and development of new technologies, infrastructure for low-carbon transport and ESCO projects, we also influence the development of the economy of local communities in accordance with the goals of sustainable development.

The regulatory and strategic framework within which we operate, market price disruptions, accelerated development of new energy trends and customer expectations, technological development, and an economy based on new technologies determine the challenges and opportunities for the HEP Group. Market flexibility and cooperation with stakeholders are necessary for successfully facing challenges and seizing opportunities in the conditions of rapid changes in modern energy markets. Long-term sustainability and business stability that contributes to national goals are achieved by continuous investment in numerous projects with social and environmental impact, from defining and designing new products and services in all market segments to developing smart grids to meet the standards of modern customers and users. This critical area of development of HEP's production, distribution, and supply system consists of several material areas related to reliability and energy efficiency of production and supply, diversification of energy sources with a focus on renewable energy sources, strategic and responsible approach to investment that contributes to the development of innovative and environmentally friendly products and services along the supply chain, improving the experience and building customer confidence, and securing critical national infrastructure.

Marići SPP

HES KOSINJ

At the end of July, the Government of the Republic of Croatia passed a decision declaring the Kosinj Hydropower System project worth HRK 1.54 billion a strategic investment project of the Republic of Croatia.

The realization of this project, which is part of the upgrade of the Senj Hydropower System, will increase the total electricity generation at HES Senj by 22% or 230 GWh, additional flood protection in the Kosinj plateau, improve the water supply of the southern branch of the adjacent Adriatic coast, improving road and other utility infrastructure. The quality of water resource use will also improve in terms of supporting the stability of the electricity system, with an increase in the share of energy from renewable sources in final consumption.

In 2021, works on the construction of access roads continued, 70 percent of the route of the Studenci - Sklope road was breached, a contract was signed with the contractor for the highway Kosinj most - Bakovac, a building permit for the tunnel and canal Bakovac - Lika was obtained, and a tender for construction is underway. Transformation station 10 (20) /0.4 kV Kosinjski Bakovac 4 and linking transmission line 10 (20) kV were built as part of the electricity distribution network reconstruction. Environmental monitoring, archeological activities, construction of a residential building in Perušić intended for accommodation of a part of the settlement's inhabitants around the future accumulation and relocation of mortal remains, and expansion of the cemetery in Perušić following the Ministry's Decision is in progress. Activities on resolving property relations resumed. The construction of the Kosinj Reservoir is expected to increase the level of water use of the Lika and Gacka rivers for electricity production by reducing overflow losses, and thus a high level of flood protection in the downstream area, Lipovo polje, and Kosinj valley, which flood almost every year. The upgrade of HES Senj with a total of HRK 3.45 billion is HEP's most significant investment project since Croatia's independence. The second part of the project also includes the construction of the Senj 2 hydropower plant next to the existing Senj HPP, which will increase the total capacity of the Senj HPP by 412 megawatts. In addition to the entire electricity generation, which will increase Croatia's energy self-sufficiency, the project will increase the share of renewable sources in meeting electricity consumption in Croatia. It will bring several economic benefits at the national and local level, from GDP growth, opportunities for domestic industry to engage in the construction of Kosinj HPP, mainly from the construction sector, through increased employment of the local population in tourism and other services, during and after system construction, to create the conditions for increasing agricultural production.

VE KORLAT

The Korlat Wind Farm, the first HEP wind farm, started operating in April.

This 58 MW wind farm is the first in Croatia to produce without a guaranteed purchase at an incentive price. The project is worth HRK 500 million, and the expected annual production is 170 GWh, which is about 1 percent of annual electricity consumption in Croatia and is enough to supply more than 50 thousand households.

SOLAR POWER PLANTS

According to the renewable development scenario, HEP plans to provide around 350 MW in solar power plants by 2030.

Construction of solar power plants

In 2021, three of HEP's five non-integrated solar power plants were put into operation. SE Kaštelir 2, with a capacity of 2 MW, was also put into function. The second phase of SE Kaštelir will produce 2.9 million kWh per year. As part of the power plant on an area of approximately 40,000 m², 9,240 photovoltaic modules were installed. In May, SE Marići, with a total capacity of 1 MW, started operating, producing about 1.2 million kWh of electricity annually. The power plant covers 18,000 m², and 4,092 photovoltaic modules have been installed. In December 2021, SE Kosore Jug was the last solar power plant to be put into function, with an interconnected capacity of 2.1 MW. It is in the southern part of the Kosore Production Zone in the City of Vrlika. Almost 5,500 photovoltaic modules have been installed in the power plant on an area of about 2.6 hectares. The total value of these three projects is HRK 35 million.


SE Kosore jug

Last year, the construction of SE Obrovac and SE Stankovci in Zadar County was completed, which will start operating in 2022. SE Obrovac is an investment worth HRK 52 million and was built in the former alumina factory on a site of 117,137 m². The connected power of the power plant is 7.35 MW. 27,544 photovoltaic modules with a total installed capacity of 8.7 MWp were installed. The expected annual electricity production of about 11.3 million kWh will be able to meet the needs of more than 3,500 households. SE Stankovci, with a capacity of 2.5 MW, is in the Production Zone Stankovci on an area of 65,217 m². The expected annual electricity production of 4.6 million kWh will supply 1,500 households. 9,920 photovoltaic modules with a total installed capacity of 3.27 MWp were installed. The value of the investment is HRK 26.3 million.

Except in SE Kosore jug, all solar power plants have photovoltaic modules installed by a domestic manufacturer, the company Solvis from Varaždin. All the mentioned solar power plants produce, that is, they will produce electricity on a market basis, without a guaranteed purchase.

Solar power plants in preparation

In 2021, a contract worth HRK 58 million was prepared for design and construction of SE Donja Dubrava. The maximum output power of this solar power plant will be 9.9 MW, and the installed capacity is 12.35 MW, with an expected annual production of 14.8 million kWh. According to the Fund for Environmental Protection and Energy Efficiency, it is estimated that during the 30 years of SE Donja Dubrava, about 167 thousand tons less carbon dioxide will be released into the environment compared to the energy produced in conventional power plants. SE Dubrava will be located in the municipality of Sveta Marija in Međimurje County, next to the Hydroelectric Power Plant Dubrava.

Also, a location permit was obtained for the Korlat solar power plant, with a capacity of 75 MW and an estimated investment value of around HRK 600 million. The solar power plant will be located at the exact location of the Korlat WPP, giving Croatia its first renewable hybrid energy park. In addition to these two large projects, the expansion of SE Marići by an additional 2 MW is planned, and in 2021 the location permit was revised, the energy permit for SE Unije was obtained, and procedures for securing location permits for SE Kruševo and SE Sukošan were initiated.

Cooperation with cities and municipalities

HEP plans to realize almost half of the total power of solar power plants based on agreements with municipalities and cities. After concluding agreements with local self-government units on developing eleven solar power plant projects in 2019 and 2020, HEP also continued its cooperation with municipalities and cities last year. Based on seven newly signed agreements, another 60 MW of solar power plants will be built together with local self-government units. According to the signed agreements, the municipalities of Lovinac and Orle are preparing the project documentation for solar power plants with a planned linkage capacity of 9.99 MW until the location permit is obtained. Other local self-government units, the municipalities of Satnica Đakovačka (for the 15 MW power plant), Vrpolje (4 MW), Zdenci (9.99 MW), and Trpinja (5 MW), and the City of Valpovo (6 MW), are preparing the project documentation until the construction permits. After obtaining the permits, HEP will reimburse the local self-government units for the costs of preparing the project documentation.


Kaštelir SPP 1 and 2

Development of e-mobility

In addition to investing in renewable energy sources, HEP continued developing its public and internal ELEN electric car charging stations network

In October, the 300th charging station was put into operation in Trakošćan, and in 2021, 43 new public charging stations for electric cars were installed, bringing the total number of public charging stations in the ELEN network to 256 by the end of the year.

Also, an additional six charging stations have been set up for the internal needs of the HEP Group, and there is now a total of 46 at 31 locations. Users of ELEN charging stations are enabled to start charging electric vehicles more efficiently by using QR codes and applications for smartphones. Stickers with user instructions and QR codes are placed on the charging stations, and the ELEN application is available on Google Play and iStore.

Energy efficiency development projects for consumers

With the “HEP EE Solar Plus” program, HEP offers customers, together with energy efficiency measures, integrated solar power plants that produce the optimal amount of energy for their needs.

The program is implemented according to the ESCO model, the investment is paid out of the savings, and there is no technical or financial risk for the buyer. In 2021 eleven solar power plants to produce electricity for own consumption were put into operation by HEP Opskrba customers, with a total capacity of 7,306 kW: SE Ciprijanović (1.264,89 kW), SE Dodlek Agro (224,79 kW), SE Valipile (336 kW), SE TVIN (1.887 kW), SE HLAD Usluge (1.537,25 kW), SE Unifrut (268 kW), SE Javorović (145,20 kW), SE Koestlin (924 kW) and two SE Kutjevo on the locations of PS Sjemenarstvo (276 kW) and PS Vinogradarstvo (442 kW). The goal is for integrated solar power plants to produce the optimal amount of energy for the facility’s needs, thus reducing energy costs in the long run. Solar power plants are in parallel operation with the public distribution network. The produced electricity is primarily consumed at the customer’s location, and its surplus is delivered to the network through the same billing metering point through which companies buy electricity from HEP Opskrba. Cooperation with HEP Group customers on such projects aligns with the strategic goals of electricity and heat production predominantly based on renewable sources. By the end of 2021, 27 solar power plants with a total capacity of 13.89 MW have been built in the “HEP EE Solar Plus” program for customers in the industrial sector.

HEP implements the Customer Benefits Program according to the one-stop-shop principle, which combines electricity supply and several energy services in one place. We create added value and benefits for customers by providing comprehensive energy services. Through this program, customers are offered energy service packages in energy management and education to improve energy efficiency. One of the two service packages is available to customers during the electricity supply contract. Package 1 Systematic energy management enables entrepreneurs from the enterprise category to systematically monitor the dynamics of energy and water consumption, i.e., allows the user insight into consumption, analysis, and planning of consumption, and timely response to detected irregularities (for example, excessive consumption), savings with minimal investment and optimization energy and water consumption. This energy service includes determining the needs of users (what and how to measure), setting up a remote reading system (“Turnkey”), using the ESCO Monitor® system, and monitoring and analysis of electricity consumption. This package also includes preparation for the ESCO project - a consulting service on the potential of the project of energy efficiency and renewable energy sources according to the ESCO model, which includes a field trip and a meeting with the customer.

Optimal and comprehensive energy efficiency improvement relies on investment and non-investment measures. To use the full potential for improving our customers' energy efficiency, it is necessary to cooperate with them in educating all members of the organization. Package 2 Education and involving employees in energy management activities and raising awareness of energy efficiency within the customer's company aims to raise awareness of how small changes in behavior at the individual level can make significant changes at the organizational level. This package also includes the "Course for Energy Managers," intended for persons responsible for energy and persons responsible for managing facilities in the private and public sectors. In addition to one of these packages, customers can use the free online training "Green Office" for employees working in offices. The purpose of this course is to empower employees to contribute to the fight against climate change as part of their regular work activities.

Stability and security of production, distribution and supply of energy and energy sources

Ensuring a high level of stability and security of production, distribution and supply of energy and energy products to citizens and the economy in Croatia is the priority business and development goal of the HEP Group.

The biggest challenge in achieving this goal in 2021 was strong disturbances on the market, and the second half of the year was characterized by extreme volatility and strong price growth. Although this was to some extent expected in the context of the economic recovery after the COVID-19 pandemic and the easing of travel restrictions, 2021 saw an unprecedented increase in the prices of energy sources (oil, gas and coal), electricity and greenhouse gas emission units. In the past, these prices did not change by more than thirty percent for one year, but at the level of 2021, compared to 2020, the average purchase price of gas for HEP would increase by 68.5 percent, coal by 97 percent, and greenhouse gas emission units by 67 percent. Thanks to the strategic focus on the diversification of electricity sources, investments in increasing the share of production of renewable energy sources in the production portfolio of the HEP Group, the construction of high-efficiency cogeneration and energy storage facilities, and the increase in energy efficiency of production and business processes, the HEP Group mitigated the negative effects on its customers and provided them with uninterrupted supply with high reliability and quality of service. Developing resistance to market disruptions of the HEP Group is based on the continuation of strategic investments in the development of projects in wind power and solar power technologies, the introduction of advanced technologies and the reconstruction and increase of the efficiency of the existing infrastructure, which includes the reconstruction of hydropower plants and energy storage facilities. By replacing plants, equipment and devices at the end of their life and by increasing the efficiency of production and business processes, the risks of long-term work stoppages and the occurrence of major disruptions in the operation are reduced, thus preventing losses in production.

RECONSTRUCTION OF HYDROPOWER PLANTS

In 2021, the reconstruction and revitalization of 12 hydropower plants that started in 2012, with a total value of HRK 3.9 billion, has continued.

The renewal and reconstruction of five hydropower plants were in progress, of which HPP Senj stands out with a total investment of HRK 557 million. In May, HEP Proizvodnja and companies from the Končar Group signed an agreement on replacing pri-

mary equipment at the Senj Main Hydro Power Plant worth HRK 330 million. Reconstruction of Hidroelektrana Senj will increase its total available capacity, which currently amounts to 217 MW, by 20 MW, which will enable an increase in annual production of at least 50 million kWh. With increased reliability and availability of the plant, the life of the power plant will be extended for the next 50 years, and the costs of maintenance and operation will be reduced.

In 2021, all works on the reconstruction and revitalization of HEP's largest hydroelectric power plant HPP Zakučac were completed, which increased the total installed power of the power plant to 576 MW (4x 144 MW), and commercially available capacity to 538 MW. The revitalization of the oldest hydroelectric power plant in the continental part of Croatia, HPP Ozalj (1908), was also completed. The revival of the generator has been completed, and the last use permit has been obtained.

As part of the project for the reconstruction of HE Varaždin, works on the maintenance of the defensive embankment and drainage ditch along the supply channel have been completed. The project will extend the life of equipment and buildings with today's legislation. The replacement of the electrical equipment of production units, which will increase the installed capacity and electricity production has been prepared.

The preparation of documentation continued, and the procurement procedure for the main works for the construction of the Drežničko polje retention was initiated, which will improve the operating regime of HPP Lešće and enable an increase in production at HPP Gojak and HPP Lešće.

Preliminary activities for reconstructing HE Orlovac worth HRK 510 million have begun, including project documentation preparation, and obtaining the necessary permits. The reconstruction is planned to be done from 2024 to 2027.

In 2021, work was carried out on planned overhauls and maintenance of hydroelectric power plant buildings and equipment. The project of improving the water sustainability of the Buško Lake reservoir has been completed, which will provide additional production capacities for HE Orlovac. The overhaul of the unit is being conducted in the same power plant. Hydroelectric power plant Varaždin performed overhauls of both units, completed works on renovation and replacement of equipment in RHE Velebit, in HE Dubrovnik overhaul of units, in HPP Čakovec overhaul of units, and HPP Dubrava protection of embankments from waves due to more and more cases of wind storms.

THERMAL POWER PLANTS MODERNIZATION

The construction of replacement high-efficiency cogeneration plants at existing thermal power facilities is in building and maintaining a diversified and flexible production energy portfolio.

In addition to supplying heating systems in Zagreb, Osijek, and Sisak, HEP's highly efficient cogeneration plants have also proven to be very important for the electricity system. In dry years, in periods of large hydrological oscillations and conditions of a significant share of intermittent renewable sources, and the case of severe disturbances in the power system, they reduce interruptions in the supply of electricity and heat to a minimum. The plants are built following the best available techniques and conditions from the decision on the environmental permit.

The works continued on the construction of the KKE EL-TO Zagreb high-efficiency combi-cogeneration unit on natural gas, 150 MWe of electricity, and 114 MW of thermal power, which will replace two production units at the existing location to ensure long-term heat supply to more than 80,000 residents, and northern Zagreb and the supply of steam to industrial consumers. The new block will start operating in 2023. KKE EL-TO Zagreb will ensure greater power and reliability in the power system supply and reduce the environmental and climate change impact.

EL-TO Zagreb CCPP

A similar project is being prepared for the location of the Osijek Thermal Power Plant. The preparation of documentation for obtaining a location permit for new gas cogeneration - KKP Osijek plant - continued. The combi-cogeneration plant of a gas and steam turbine with a utilization boiler with a total power of 85 MWe and 75 MWt on the threshold will be connected to the central heating system of Osijek.

Among the works on existing facilities during 2021, significant is the reconstruction of the basic heating Block C and the liquid fuel supply system at the TE-TO Zagreb location. The reconstruction increased the efficiency of the burner, which directly contributes to the reduction of harmful gas emissions. Optimizing the production of electricity and thermal energy is achieved at the EL-TO Zagreb and TE-TO Osijek locations by building heat accumulators.

In order to modernize the thermal power plant Plomin 1 and examine the possibility of using alternative fuels for the production of electricity, in 2021 a public procurement procedure was launched for the project called "Selecting the best available techniques for the use of biomass and waste in the Plomin thermal power plant". The goal of the project is to preserve the security of electricity supply to customers by continuing production at the TE Plomin site and HEP's contribution to the establishment of a comprehensive waste management system in Croatia, reducing the amount of waste disposed of in landfills, reducing greenhouse gas emissions from landfills and utilizing waste for energy purposes, in accordance with the hierarchy of waste management. The implementation of the project will determine economic profitability and technical feasibility by applying the best available techniques to meet all requirements for environmental protection, and based on these results, a decision will be made on further activities.

ELIGIBLE ELECTRICITY PRODUCERS

In the Register of Guarantees of Origin of Electricity maintained by the Croatian Energy Market Operator (HROTE), in 2021, the registered users were HEP d.d., HEP Proizvodnja, Energetski park Korlat and HEP Opskrba.

The active user with the status of a producer in 2021 was HEP Proizvodnja with 20 hydropower plants and HEP Opskrba as a supplier. Each guarantee of origin represents 1 MWh of electricity, produced 100% from a renewable energy plant or a high-efficiency cogeneration plant. Eligible producers in the incentive scheme entitled to the incentive price are not permitted to participate in the origin system assurance. The user-supplier in the Register of Guarantees from the HEP Group is HEP Opskrba, which offers its services to the customers under the ZelEn brand electricity with certified origin from renewable sources. The electricity utilized by ZelEn customers is obtained exclusively from renewable sources, proven by the repeal of a sufficient number of guarantees of origin of electricity in the register of guarantees.

In 2021, HEP had concluded agreements with HROTE on the purchase of electricity with a guaranteed purchase price for the following production plants: high-efficiency cogeneration Block L in TE-TO Zagreb, bioenergy BE-TO Osijek and BE-TO Zagreb, small hydropower plants Prančevići, ABM Lešće and ABM Varaždin, solar power plant Kaštelir (Sabadin) and nine integrated solar power plants installed on their facilities. In 2021, HROTE paid HRK 325.5 million to HEP for the purchase of electricity.

GENERATION CAPACITIES OF HEP GROUP

Status on 31 December 2021

Hydropower plants			
Name	Available capacity [MWe]	Name	Available capacity [MWe]
Accumulation		Flow	
HE Vinodol	90	HE Varaždin	92.635
HE Senj	216	HE Čakovec	77.44
HE Sklope	0	HE Dubrava	79.78
HE Gojak	56	HE Zeleni Vir	1.7
HE Lešće	42.29	HE Rijeka	36.8
HE Orlovac	237	HE Ozalj	5.74
HE Peruća	61.2	HE Đale	40.8
HE Zakučac	538	HE Kraljevac	46.4
MHE Prančevići	1.15	HE Miljacka	22.0
HE Dubrovnik	108	HE Golubić	6.54
Reversible		HE Krčić	0.375
CHE Fužine	4.5 / -6.5	HE Jaruga	7.2
RHE Lepenica	0.8 / -1.2	HE Zavrelje	2
RHE Velebit	276 / -240		
CS Buško Blato	10.5 / -10.2		

CS: pumping station CHE: pumping HPP RHE: reversible HPP

Thermal power plants				
Name	Available capacity [MWe]	Thermal heat– nominal capacity [MWt]	Technological steam– nominal capacity kapacitet [t/h]/[MWt]	Fuel
TE-TO Sisak	235	0	133.5 / 100	light heating oil / natural gas
TE Rijeka	0	0	0	light heating oil
TE Plomin (A)	0	0	0	stone coal
TE Plomin (B)	199	0	0	stone coal
KTE Jertovec	76	0	0	natural gas / light heating oil
TE-TO Zagreb	300	508	334 / 272	light heating oil / natural gas
TE-TO Osijek	66	165	114 / 90	light heating oil / natural gas
EL-TO Zagreb	48	257.5	206 / 162	natural gas

Bioenergy plants				
Name	Available power [MWe]	Thermal heat – nominal capacity [MWt]	Technological steam – nominal capacity [t/h]/ [MWt]	Fuel
BE-TO Sisak	2.7	10	12 / 10	wooden biomass
BE-TO Osijek	2.7	10	12 / 10	wooden biomass

Nuclear power plant		
Name	Available power [MW]	Fuel
NE Krško	348	nuclear

HEP disposes of a half of the capacity of NE Krško

Wind power plant	
Name	Connection power [MWe]
VE Korlat	58

Solar power plants	
Name	Connection power [MWe]
SE Kaštelir 1	1
SE Kaštelir 2	2
SE Vis	3.5
SE Marići	1
SE Kosore jug	2.1
Integrated (9) - eligible electricity producers	0.2
Integrated SPP (53) at the customers with own electricity generation	2

In 2021, the average operating availability of hydropower plants was 85.0 percent, and the working availability of thermal power plants was 43.6 percent. With appropriate preventive maintenance of production facilities for producing electricity and heat, HEP Proizvodnja in 2021 maintained a high availability of most production units. The planned annual maintenance works of the production units were successfully performed, while the corrective maintenance works were completed within a reasonable time to cause breakdowns and eliminate operational disturbances and deficiencies.

Development of distribution system

HEP ODS performs the regulated activity of electricity distribution, and its main task is to ensure a reliable supply of customers with growing demands for the integration of the distribution of renewable electricity sources, electric vehicles, and electricity tanks.

HEP's strategic goals for developing the distribution system are to achieve interactivity with network users and market entities, the development of a system adaptable to change, optimize for efficient use of resources and equipment, and prevent and respond to crisis events.

To achieve these goals, HEP ODS should ensure, among other things, systematic renewal of the distribution network, construction of standardized, simple, and economically justified facilities, plants, and devices, harmonization, and optimization of technical solutions, automation of plants and networks, and application of modern technological solutions for advanced distribution network development. Moreover, it should ensure accelerated development of advanced metering systems, reduced electricity losses, and increased energy efficiency of the distribution network.

The harmonization of operations with several electricity regulations adopted in 2020 and the new Electricity Market Act from October 2021 significantly affected the operations of HEP ODS in 2021. In addition to the stated national legislative framework, the entire processes of HEP ODS are harmonized with the regulations of the European Union and strategic documents of the Republic of Croatia. Based on multi-annual plans, HEP ODS continuously maintains and invests in the distribution network. Special attention is paid to monitoring and improving supply quality indicators of voltage quality, power reliability, and service quality.

In 2021, 16 capital investments in connection points and main medium voltage lines were completed. Among the most significant projects, it is essential to highlight the completion of SS 110/20 kV Zamet, SS 110/10 (20) kV Zadar-East, completion of reconstructions of SS 110/10 (20) kV Osijek 3, and SS 110/35/10 (20) kV Beli The monastery and bringing TS 110/10 (20) kV Sućidar into the final phase of works. The 110/20 kV Zamet TS project is particularly significant because the results of the reconstruction and expansion of the KB outlet in the Rijeka area were carried out in parallel, and the MV plant was immediately put into operation at 20 kV voltage. The reconstruction project of SS 110/10 (20) kV Sućidar also follows a large project of reconstruction and expansion of the MV KB network in the area of the city of Split.

Among the projects in preparation, the construction of new SS 110/30 (20) - 30/10 (20) kV Kapela and SS 110/10 (20) kV Poličnik was contracted, as well as the complete reconstruction of SS 110/20 kV Petrinja, damaged in the earthquake at the end of 2020. The construction of the new SS 110/10 (20) kV Zamošće is in the final phase of public procurement, and it is crucial due to the reliable supply of the mainland - Pelješac bridge and access roads, but also due to increased safety and reliability of supply for the Pelješac - Korčula area.

The investment plan for 2021 also included numerous investments in the reconstruction and reconstruction of main and medium voltage transmission lines, including the completion of the rebuilding of six significant 35 kV cables and overhead lines with a total investment value of HRK 23.9 million.

In May 2021, the SAP EDM / ECM system was implemented, which will significantly improve the IT support of electricity distribution activities, especially related to the actions of distribution system operators in the electricity market.

In 2021, distribution network management optimization activities continued, and the first phase of integration of process information systems for monitoring and network management of 21 distribution control centers into four distribution dispatch centers - Zagreb, Rijeka, Split, and Osijek, was completed by integrating all distribution functions of networks for voltage levels 110 and 35 (30) kV. As part of the optimization of distribution network management, in 2021, a project was launched to develop and implement a system management application that aims to digitize distribution system management, increase the quality of records, and reduce parallel record-keeping of operating events and issued documents. Also, activities continued the ATTEST project co-financed by the European Union Horizon 2020 program. The project's primary goal is to develop an open and modular software platform with tools for optimal management, data exchange, planning and development, and advanced asset management of the transmission and distribution system. This aims to optimize the operation of transmission and distribution system operators. As of 2021, all software platform modules are in the final stage of development. After the first review, the project received highly positive evaluations from the European Commission.

SECURITY AND STABILITY OF DISTRIBUTION AFTER THE EARTHQUAKE

In the devastating earthquake that hit the central part of Croatia on December 29, 2020, the electricity network suffered enormous damage, and the direct damage to the electricity distribution system amounted to more than 200 million kunas.

HEP Group immediately initiated activities on the restoration and renewal of the network, which took place throughout the body in 2021. Investments in the transmission and distribution of electricity in the earthquake-affected area are estimated at around HRK 500 million. This amount includes the realized first phase of damage repair and the second phase, which is in progress and refers to the complete renovation, modernization, and revitalization of distribution and transmission network facilities to increase the reliability of electricity supply in the area. Damage repair in 2021 took place in three phases. The first was the intervention rehabilitation of demolished buildings necessary for the functioning of the electricity distribution network, which was carried out in the first ten days. The second phase included the reconstruction of demolished buildings, and the third was the complete rehabilitation of the electricity distribution network, which lasted the whole year.

By the end of 2021, HEP ODS has invested HRK 150 million in renovating the distribution network and facilities and temporary connections in the Sisak Distribution Area. 145 substations were built and renovated, while 58 are nearing completion. 71 kilometers of medium voltage lines and low voltage networks have been renovated, while works are being carried out on 62 kilometers of low and medium voltage networks.

DEVELOPMENT OF SMART GRIDS

In 2021, the implementation of a complex multi-year modernization project of the distribution network continued.

The aim was to equip all billing metering points of network users with advanced meters by the end of 2030. Around 50,000 new smart meters were installed in 2021, and the remote reading system currently reads 400,000 advanced smart me-

ters or 16 percent of the total number of meters in the distribution network. Almost all 45,000 billing metering points with a connected power above 20 kW (industry and small business), which measure just over 50 percent of total energy consumption, are equipped with smart meters (99 percent). The installation of advanced meters improves various processes: billing, temporary suspension, and establishment of electricity supply to control the connected power, asymmetry of consumption, control of the billing metering point, and determination of unauthorized energy consumption. In the small business category, about 65,000 measuring points with a connection power of less than or equal to 20 kW are equipped, which measure the load curve and enter the calculation of performance, and further reduction of market losses is expected.

In 2021, the Pilot project of introducing advanced networks in the distribution areas of Zagreb, Osijek, Split, Zadar, and Dubrovnik, co-financed with EU funds, continued. The project's total value is HRK 176.8 million, of which 85 percent are grants from the European Regional Development Fund, awarded under the Operational Program "Competitiveness and Cohesion 2014-2020." In addition to EU funds, HEP ODS will independently invest an additional HRK 52 million, bringing the total value of the investment in advanced networks to almost HRK 230 million. The project includes establishing an advanced metering infrastructure that will enable monitoring of electricity consumption, active management of consumption at the level of end-users, more accurate calculation of losses, and locating areas with increased losses in the distribution network. For this purpose, summary meters will be installed in 6,125 transformer stations, and 24,000 existing meters will be replaced by advanced meters at end customers. By the fall of 2021, more than 70 percent of old transformers had been replaced by new, energy-efficient transformers, and part of the equipment of double switching switches for overhead network automation had been delivered, installed, and introduced into the remote-control system (SDV).

Through 2021, activities on the SINCRO.GRID project, co-financed by the Connecting Europe Facility (CEF), which is the result of many years of successful cooperation between Slovenian and Croatian operators, has been completed. The project aimed to solve power system management challenges and eliminate congestion in the power network using advanced technology systems and algorithms. Information on the production of power plants in the distribution network is used to optimize the state of devices in the transmission network to normalize voltage conditions in the transmission system, resulting in a greater ability to regulate voltage in the distribution system and increase the transmission capacity of existing lines. The positive effects are better integration of renewable energy sources into the electricity system, increased security of supply to network users, reduced dependence on energy imports and the negative impact of fossil fuels on the environment, as well as increased cross-border transmission capacity and development of new technologies and the economy.

DISTRIBUTION NETWORK AND CUSTOMERS IN REGULATED SEGMENT

Length and category of distribution network lines on 31/12/2021

Voltage level	Overhead lines (km	Cables (km)	Submarine cables (km)	Total (km)
Lines 35(30) kV	2,987.4	1,406.4	144.6	4,538.4
Lines 20 kV	4,786.2	6,133.8		10,920.0
Lines 10 kV	15,542.0	11,608.7	255.1	27,405.8
Network 0.4 kV	43,998.9	18,670.1		62,669.0
Home connections (0.4 kV)	23,154.7	13,676.9		36,831.6
Total	**90,469.2**	**51,495.9**	**399.7**	**142,364.8**

Number of billing metering points in the distribution network on 31/12/2021

Description	Total
HV-110 kV	2
MV- 35 kV and 10(20)kV	2,475
Total high and medium voltage	**2,477**
LV-commercial (blue)	39,651
LV-commercial (white)	126,329
LV-commercial (red)	31,975
LV-commercial (yellow)	22,163
LV-residential (blue)	695,001
LV-residential (white)	1,561,850
LV-residential (red)	2,240
LV-residential (black)	2,887
Total low voltage	**2,482,096**

RELATIONS WITH CUSTOMERS AND SUPPLIERS

Given the nature of electricity distribution activities, HEP ODS provides users with the information necessary to use electricity services.

Users can access various communication channels, a single customer center telephone, e-mail, and direct contact at almost 80 locations in the Republic of Croatia. Since HEP ODS has more than 2.5 million users and given the complexity and diversity of their needs, it is necessary to continuously take care of ways to ensure optimal availability of services.

We are constantly working on improving business processes with market stakeholders. Through the interface for the implementation of the change of suppliers in 2021, 23,375 changes of suppliers were made, which is a decrease compared to 2020 by about 30%. 239,342 requests from suppliers for temporary suspension of electricity supply were received. In 2021, a total of 32,403 temporary suspensions of electricity supply were implemented, an increase of 17% compared to 2020.

ENERGY LOSSES IN DISTRIBUTION NETWORK

Description	2021	2020
Losses in GWh	1,212	1,355
% losses	7.2	8.56

Electricity losses are indicators of business efficiency and quality of electricity distribution activities in HEP ODS. Reducing electricity losses is one of the most critical business goals and is achieved through investments and operational measures. The ten-year investment plan in the distribution network amounts to around HRK 12.7 billion. This plan considers the obligations

and strategic commitment of the Republic of Croatia regarding the acceptance of renewable electricity sources, emphasizing measures to reduce losses in the electricity distribution network. The implementation of measures has ensured the trend of reducing the number of electricity losses over the years.

Electricity losses in the distribution network in 2021 amounted to 1,212 GWh, or 7.2 percent of net taken over electricity, which amounted to 16,877 GWh. Technical failures in 2021 account for 51 percent of total losses or 618 GWh, while non-technical (resulting from measurement errors, unauthorized consumption, etc.) account for 49 percent of total losses or 594 GWh. The absolute and relative losses in the distribution network are the lowest in the last ten years. In the previous reporting period (2020), losses of 1,355 GWh or 8.56 percent were recorded. The significant reduction in total losses in the distribution network compared to 2020 can be partly explained by the semi-annual billing period (advance system) and the impact of the COVID-19 pandemic (work from home) on the projected semi-annual consumption in 2021.

DISTRIBUTION NETWORK RELIABILITY

Persistent improvement of the quality of electricity supply and increase in the efficiency and security of the electricity system with a reliable electricity supply is one of the most important strategic goals of HEP ODS.

Power supply reliability indicators in 2021 for HEP ODS

Planned power outages – all voltages			Unplanned power outages – all voltages with force majeure			Total power outages		
SAIFI	SAIDI (min)	CAIDI (min)	SAIFI	SAIDI (min)	CAIDI (min)	SAIFI	SAIDI (min)	CAIDI (min)
0.82	125.99	154.06	1.79	125.32	70.02	2.61	251.31	96.38

HEP ODS keeps electronic records on planned and unexpected power outages and their frequency. SAIFI - the average annual number of power outages per customer in 2021 was 1.61 for the cable network and 4.25 for the overhead network. The frequency of power outages for 2021 totaled 2.61 and 0.82, respectively, for planned outages and 1.79 for unplanned outages (all high-voltage voltages). The average duration of long-term power outages (SAIDI) is a general indicator of the total time of long-term power outages per network user. The average duration of power outages per network user at the annual level was 251.31 minutes - 125.99 minutes for planned outages and unplanned breaks 125.32 minutes. The average duration of long-term power outages for the cable network was 122.29 minutes, and for the overhead network, 462.22 minutes. The average time required to restore power (CAIDI) in 2021 totaled 96.38 minutes, 154.06 minutes for planning, and 70.02 minutes for unplanned outages. Re-establishment of the power supply for the cable network was performed in 76.11 minutes, and for the overhead network, 108.87 minutes. With the normalization of the economy in 2021, the activities of regular and preventive maintenance have intensified, as well as investments in automation at a depth of the network and the transition of the medium voltage 10 kV network to the 20 kV voltage level.

The suspension of planned works due to the coronavirus pandemic in certain distribution areas during 2020 led to an increase in the number of breakdowns during 2021 due to equipment deterioration or failure to maintain the forest average. In addition, the increased number of unplanned power outages is due to equipment failures due to the transition of part of the medium voltage 10 kV network to 20 kV voltage level (Zadar and Zagreb) and construction works of utilities (construction of sewers, renovation of the hot water network, etc.) in many distribution areas. The weather conditions in 2021 were relatively favorable and did not cause an increased number of unplanned power outages compared to previous years. In 2021, the trend of decreasing the duration and number of power outages continued.

By continuous investment in electric power plants and the network, as well as systems for automation of network elements, it has been possible to improve the reliability indicators of the power supply. Special attention is paid to the organization and coordination of works and the improvement of software for monitoring the reliability of the power supply.

Development of distribution and delivery of thermal energy

With a share of 80 percent in the heating sector, HEP Toplinarstvo is the largest distributor of thermal energy in the Republic of Croatia. The company's primary business goal is to maintain the position of a leader in the distribution and delivery of thermal energy to end customers with as small energy loss as possible and to be recognized as a modern, environmentally conscious, and socially responsible organization.

The development goals include the continuation of the implementation of projects financed by the European Union: the revitalization of the hot water network in Zagreb and the increase of the dimension of the connecting hot water pipeline TE-TO Osijek - Toplana.

The project of revitalization of the hot water network in the Zagreb area is implemented in the mechanism of integrated territorial investments in the urban agglomeration of Zagreb to increase the efficiency of the heating system and includes revitalization of 68.5 km long sections, which makes almost a third of the existing hot water network. During the revitalization, the modern technology of channel-less laying of pre-insulated pipes is used, which will increase the reliability and safety of the central heating system of the city of Zagreb. The project will reduce heat losses by approximately 28 percent, refueling losses by roughly 47 percent, and the number of emergency interventions on reconstructed hot water sections by 90 percent. Also, the reduction of heat losses will reduce the need for heat production and consequently reduce emissions of pollutants into the environment. It is predicted that in 2025, CO_2 emissions will be reduced by 11,104 tons compared to the situation before the revitalization. The total value of the project is HRK 700 million, of which 421.5 million is a grant, and work on the revitalization of the hot water network, which supplies more than 100,000 customers, began in May 2021. The opening of new construction sites was slowed down due to the global disruption in the procurement of materials, which is why in 2021, 9.15 km of the hot water pipeline route was replaced out of the total planned 25.6 km. The project is expected to be completed in 2023.

The project of replacing the connecting hot water pipeline from TE-TO to the Osijek Plant heating plant is worth HRK 78.91 million, and the European Union is co-financing it in the amount of HRK 46 million. It includes the replacement of a 4.4 km long connecting hot water pipeline from the Thermal Power Plant - Osijek heating plant to the HEP Toplinarstvo Osijek heating plant. The realization of this project envisages a reduction of heat energy losses from the current 7.66 percent to 6.58 percent, which will result in savings in primary fuel consumption of 6,151 MWh. Creating more favorable hydraulic conditions in the hot water network will enable new consumers' future connection and will reduce pump operation's electricity consumption by 2,534 MWh. This will result in additional savings in the consumption of primary fuel for electricity production in the Republic of Croatia at 6,205 MWh. These savings will result in a reduction in annual carbon dioxide emissions by 4,378 tons. The contract for the start of work was concluded in September 2021. Since the project is changing the leading hot water pipeline, it was possible to perform a small part of the work due to the heating season and climatic conditions.

In addition to the works on revitalizing hot water and steam water networks in Zagreb and Osijek, in 2021, the construction of the central heating system in Velika Gorica continued, and the consumption of hot water and steam-water networks increased.

Customer oriented business

Trends in user experience in the energy markets indicate changes in customer habits that are becoming increasingly demanding, especially in demand for multi-utility products, digital channels, and the growing interest in renewable energy sources.

HEP Group's strategic goals include improving the quality of service and communication with customers as critical stakeholders.

The direction of the user experience development implies that companies, whether performing market or regulated public service activities, strengthen their focus on customers and users. HEP Group will achieve this by constantly educating employees who do business with customers and customers and involving them in dialogue to proactively explore customer preferences and ensure the development of new services.

HEP ELEKTRA

HEP Elektra is the only energy entity authorized to provide public electricity supply services in the Republic of Croatia.

Public supply service means the supply of electricity is a universal service for customers in the household category, and the supply of electricity is a guaranteed supply for customers in the entrepreneurship category. In 2021, HEP Elektra opened four new customer centers in Karlovac, Požega, Virovitica, and Makarska to provide information and resolve inquiries, requests, and complaints of existing and potential customers. Providing this type of service represents an additional value to HEP Elektra, which with this approach is more accessible to customers for support, questions and/or assistance, and submission of requests, which gives customers additional confidence in the supplier. With another presence in smaller regional areas, personal contact is established with customers accustomed to direct contact, especially for retirees and customers for whom electronic communication is not an acceptable option.

To improve customer relations, HEP Elektra is constantly analyzing existing processes and introducing the necessary improvements. In 2021, we launched the refinement of the application system, which will enable the sending of invoices to customers in the household category by e-mail, which, in addition to reducing the impact on the environment, HEP Elektra will also reduce operating costs. Terms of reference for refining the web form were also prepared. The web form following the GDPR guidelines enables significantly better protection of the personal data of HEP Elektra customers.

All HEP Elektra customers can contact us regarding any inquiry, including complaints, by free phone, e-mail, in person at customer centers, or in writing by mail. In 2021, HEP Elektra received 293,140 e-mails and 561,126 toll-free telephone numbers. The inquiries mostly referred to invoice complaints, requests for transfer and refund of overpaid funds, requests for installment payment of a debt, information on debts and expenses, the application "My Account," change of customer, and general information. HEP Elektra resolves the received inquiries within the legal deadline. For inquiries not determined in the first step, customers contact the Consumer Protection Commission; in 2021, 161 objections were recorded, of which 16 were adopted, and 145 were rejected or dismissed.

HEP Elektra is one of the suppliers of the electricity market, but as the holder of the public supply service, it does not have the possibility of free contracting with customers. HEP Elektra's price list is publicly available on the official website and is the same for all customers. Information related to the supplier change is also clearly stated, and HEP Elektra has no reports of conduct contrary to the principle of free competition, antitrust and monopolistic practices.

In 2021, HEP Elektra submitted 14,482 requests for the re-establishment of electricity supply to the end customer after the reason for the temporary suspension of the electricity supply. As many as 14,171 requests were resolved within one day, representing 97.85 percent of the total requests. In 2021, 2,141 complaints were received, and 1,995 complaints were resolved within 15 days, which is 93.18 percent. In 2021, the Data Protection Officer of HEP Elektra received 137 requests for the correction of customers' data and three proposals or objections for insight into using and processing personal data. The processing manager provided the respondents with the requested information without delay within the deadline. In the reporting period, there were no justified complaints in the operations of HEP Elektra regarding violations of customer privacy or loss of personal data about the customer.

Number of billing metering points of HEP Elektra customers by voltage levels on 31/12/2021

Customer category	2021	2020	2021/2020 %
High voltage	**0**	**1**	**-100.0**
Medium voltage	**323**	**257**	**25,7**
Low voltage - commercial	84,935	84,881	0.1
Low voltage – public lighting	3,960	1,374	188.2
Total commercial	**89,218**	**86,513**	**3.1**
Low voltage - residential	2,042,784	2,047,012	-0.2
Total low voltage	**2,131,679**	**2,133,267**	**-0.1**
Total	**2,132,002**	**2,133,525**	**-0.1**

Number of billing metering points by customer category on 31/12/2021

Customer category	2021	2020	2021/2020 %
Residential	2,042,784	2,047,012	-0.2
Commercial	89,218	86,513	3.1
Total	**2,132,002**	**2,133,525**	**-0.1**

HEP Opskrba's business goals focus on the company's commitment to meet all the electricity market requirements in Croatia while protecting the interests of the HEP Group, maintaining market share, and ensuring planned revenue.

The priority in HEP Opskrba's operations is to maintain a high level of professionalism, confirmed by examining customer satisfaction. The goal is to maintain high customer satisfaction and conducting qualitative and quantitative research provides regular feedback. Social responsibility is part of the organizational culture of HEP Opskrba, which is reflected in the positive and valuable ways in which we get involved in the community. Above the primary business interests and legally prescribed obligations, we balance and take care of all stakeholders, i.e., our economic, social, and environmental impact. That is why it is also included in our plan to encourage social responsibility among employees in 2021.

In 2021, HEP Opskrba improved the process of purchasing, recording, and paying surplus electricity from producers from plants that use renewable energy sources. Business processes are harmonized with the new General Terms and Conditions for Network Use and Electricity Supply. The provision of charging services for electric vehicles has been commercialized, i.e., setting for users has been introduced, and all technical preconditions for charging at all publicly available ELEN charging stations in the Republic of Croatia have been met, meeting customers' needs. Hepi product, the tariff model for households was redesigned to accommodate the customers' needs. HEP Energija's business processes have been improved to increase competitiveness, the number of customers, and market share in the Slovenian market. Maintaining regular communication with customers and providing timely information essential for their business is a priority of HEP Opskrba.

Various communication channels are used to provide customers with easy and fast access to the necessary information: the company's website, ZelEn, Hepi, newsletter, Facebook page of Hepi, and LinkedIn profile. Customers in the region are informed on the HEP Energija website for Slovenia, Serbia, and BiH. Within the HEP Opskrba website, customers of the entrepreneurship category can use the My Account application to monitor the account balance, have an insight into their account at any time, and watch the proportion of overdue liabilities and unpaid bills, interest, and the like. The My Hepi account and m-hepi mobile applications are available to household customers.

To ensure the highest quality of service, we communicate with stakeholders in Customer Service, where in 2021, a total of 89,033 incoming calls were recorded. Of the total number of calls, 79.27 percent referred to the household category. At the end of 2021, the ISO 9001: 2015 certificate for Customer Service was renewed for the fifth time to confirm the high quality of services, especially concerning customer relations.

In its daily engagement in improving customer relations, HEP Opskrba pays special attention to maintaining close customer relations by organizing customer meetings in Croatia and Slovenia. After last year's virtual Customer Meeting, this year's jubilee 10th HEP Supply Customer Meeting was held in four Croatian cities - Rijeka (Opatija), Osijek, Split, and Zagreb. The meeting for HEP Energija customers in Ljubljana has been postponed. This year's program was attended by more than 500 prominent businessmen, the largest electricity buyers from all over Croatia. In 2021, given the pandemic, HEP Opskrba continued to organize a virtual HEPI Trader workshops for its key customers in the entrepreneurship category.

In 2021, a customer satisfaction survey with HEP Opskrba services for the household segment was conducted. On the part of private users, more than 1,000 users of the Happy service were surveyed. The results of market research show that private users of HEP Opskrba most often pay their electricity bills online or use mobile banking, as many as 85 percent of them. A large share of respondents (93 percent) is generally satisfied with HEP Opskrba's services. Most are satisfied with the possibility of paying the bill online and with the My Happy Account application.

In 2021, due to non-payment at the request of HEP Opskrba, 200 exclusions were carried out, of which 109 exclusions of customers in the household category and 91 exclusions of customers in the entrepreneurship category. In the meantime, the contract with some customers was terminated with 28 customers in the household category and 44 entrepreneurs in the entrepreneurship category. The share of timely submitted suppliers' requests for re-establishment of electricity supply to the end customer, after the cessation of reasons for temporary suspension of electricity supply, in 2021 is 100 percent, i.e., of the total number of requests which were 181, within one day 181 were resolved.

During the reporting period, there were no legal proceedings in progress or completed during the reporting period, related to conduct contrary to the principle of freedom of competition and violation of regulations governing prohibited agreements of undertakings (trusts) and monopolies in which the organization was identified as a participant. As well as non-compliance with laws and voluntary codes regarding marketing communications, including advertising, publicity, and sponsorship. Also, no complaints related to customer privacy breaches or loss of personal customer data have been reported. There were no cases of non-compliance with laws and regulations in society and the market and no cases of corruption.

Number of customers of HEP Opskrba by category on 31/12/2021

Customer category	2021	2020	2021/2020 %
Customers - commercial	33,128	34,142	-3.0
Customers - residential	72,865	66,152	10.1
Total number of customers	**105,993**	**100,294**	**5.7**

Number of billing metering points of HEP Opskrba customers by voltage levels on 31/12/2021

Customer category	2021	2020	2021/2020 %
High voltage	**147**	**145**	**1.4**
Medium voltage	**1,638**	**1,771**	**-7.5**
Low voltage – commercial	89,976	94,043	-4.3
Low voltage – public lighting	16,139	17,483	-7.7
Low voltage – residential	72,865	66,152	10.1
Total low voltage	**178,980**	**177,678**	**0.7**
Total	**180,765**	**179,594**	**0.7**

Electricity sales on international markets

Electricity is sold on the Slovenian market by HEP Energija Ljubljana, a subsidiary of HEP Opskrba, in Serbia by HEP Energija Belgrade, and in BiH by HEP Energija Mostar, both subsidiaries of HEP Trgovina.

Number of customers and sales of electric power by market

Slovenija	Unit	2021	2020	2021/2020 %
Sales EP	GWh	637	615	3.6
Customers		630	654	-3.7

Serbia	Unit	2021	2020	2021/2020 %
Sales EP	GWh	43	28	53.6
Customers		8	6	33.3

Bosnia and Herzegovina	Unit	2021	2020	2021/2020 %
Sales EP	GWh	26	24	8.3
Customers		2	2	0.0

HEP TOPLINARSTVO

During 2021, HEP Toplinarstvo ensured continuous and reliable delivery of thermal energy.

Aditionally, it realized the accurate and timely monthly reading of thermal energy meters, the accuracy of calculation of delivered thermal energy, regular billing to end customers, and the availability of all communication channels for inquiries, complaints, and contact with workers. After the business had to adjust to working conditions in 2020 due to the COVID-19 pandemic and the devastating earthquakes that hit Zagreb and Sisak-Moslavina County, in 2021, the trend of increasing HEP Toplinarstvo's communication with end customers via info phone and e-mail continued, reducing the number of personal contacts in the End-Customer Reception Center. In 2021, more than 75,000 phone calls were made on the accessible info phone, and approximately 26,500 e-mails with various customer inquiries and requests were received by e-mail.

Special attention is given to the relationship with customers and increasing the efficiency of business processes. In April 2021, the existing NAPTOP application was upgraded. The new mSaldo application solution has improved the balance accounts module, which enables faster, and simpler posting of all business events related to issued heat bills, as well as improved the system for monitoring receivables collection and preparation of business reports. For the fifth year in a row, HEP Toplinarstvo conducted a customer satisfaction survey to assess the quality of work and services. Customers in Zagreb, Osijek, and Sisak gave high marks to HEP Toplinarstvo this year, and numerous positive comments were recorded regarding the speed of responding to inquiries and complaints availability of information on services and professionalism and expertise.

In 2020, HEP Toplinarstvo started introducing a system for remote measurement of thermal energy consumption using an NBIoT communicator, which is connected by M-Bus to a thermal meter located in a thermal substation and sends data to ESCO Monitor, a system for visualization and data displays every hour. In the ESCO Monitor system, it is possible to analyze the heat consumption and monitor the parameters at the transmitting part of the heat substation (temperature, flow, and power). The data is automatically transferred from the ESCO Monitor system to the heat billing application for heat billing purposes. In 2020, remote reading equipment was installed for 1,800 measuring points, and an additional 1,800 were equipped during 2021. In 2021, no cases were initiated for conduct contrary to the principle of freedom of competition, antitrust and monopolistic practices. In 2021, HEP Toplinarstvo adopted the Criteria for operations compliance with the general regulation on data protection. During the reporting period, there were no cases of justified complaints regarding violations of customer privacy or loss of personal data of customers, as well as non-compliance with regulations and codes related to marketing communications.

Number of HEP Toplinarstvo end customers on 31/12/2021

Customer category	2020	2021	2021/ 2020 %
Residential	123,183	124,194	0.8
Industry and business premises	6,452	6,340	-1.7
Total	**129,635**	**130,534**	**0.7**

Number of end customers of HEP Toplinarstvo by cities on 31/12/2021

	Residential			Commercial			Total		
	2020	2021	2021/ 2020 %	2020	2021	2021/ 2020 %	2020	2021	2021/ 2020 %
Zagreb	99,289	100,404	+1.1	4,720	4,632	-1.9	**104,009**	**105,036**	+1.0
Osijek	10,527	10,564	+0.3	1,288	1,283	-0.4	**11,815**	**11,847**	+0.3
Sisak	4,068	3,927	-3.5	85	73	-14.1	**4,153**	**4,000**	-3.7
Velika Gorica	5,660	5,661	0	242	241	0	**5,902**	**5,902**	0
Samobor	1,357	1,356	0	26	27	0	**1,383**	**1,383**	0
Zaprešić	2,282	2,282	0	91	84	-7.7	**2,373**	**2,366**	-0.3

HEP PLIN

HEP Plin's long-term plans are focused on building a new and renovating the existing gas network and introducing new technologies, such as remote reading and smart gas meters.

That will provide the basis for strengthening competitiveness, further increasing the number of customers, quantity of distributed gas and service quality. In 2021, the HEP Group continued with strategic acquisitions of local gas distributors aimed at further development of the gas business and active participation in the consolidation process of the Croatian gas market. In March, HEP Plin took over one hundred percent of the business shares in the company Gradska plinara Krapina from the company Krakom, thus acquiring ownership of over 457 kilometers of the gas distribution network in Krapina-Zagorje County. In 2021, the City Gasworks Krapina had 5,500 users, of which 5,000 were from the household category, to whom it delivered about 70 GWh of gas. In June, a one hundred percent stake in Darkom Gas Distribution was purchased from the Darkom utility company from Daruvar for 3.5 million, which supplied 6,000 users through a 166-kilometer distribution network in the southeastern part of Bjelovarsko-bilogorska County of which 5,300 from household categories. The average annual gas supply was about 12 million cubic meters. With these acquisitions, HEP Plin has further strengthened its position as the largest distributor in Croatia, with almost 4,600 kilometers of the gas grid in Osijek-Baranja, Požega-Slavonia, Virovitica-Podravina, Vukovar-Srijem, Krapina-Zagorje County and Bjelovar-Bilogora County, through which more is supplied. 100,000 users. The companies were merged with HEP Plin at the beginning of 2022.

HEP Plin previously retained the supply of household customers in its distribution area and after HERA at the end of 2020, based on the new Gas Market Act, conducted a public tender for the selection of suppliers in the public gas supply service for the period from 1 April 2021 to 30 September 2024. In this process, gas suppliers were determined for all 33 distribution areas, and their number was reduced from 32 to 13. HEP Plin was ready to welcome changes in the market and offer the market product Hepi gas to households, and gas customers, regardless of the place of residence or the distribution area to which they belong, during 2021 offered the best prices on the market. Increasing the number of customers and expanding business to other areas in Croatia brings new challenges in communication with customers, in which it uses several channels such as free consumer phone 08008813, direct contact at HEP Plin's headquarters in Osijek, and regional offices in Vukovar and Virovitica, then written and electronic communication, HEP Plina website, and mobile application. In 2021, 55,400 consumer calls were recorded, mostly related to the delivery of gas meter balances, debt balances, bill corrections, and forced collection procedures. 9,400 direct (counter) contacts were made with customers in the same period, and 18,222 written inquiries, requests, and complaints were received. In the reporting period, the implementation of the SAP application system was completed, which improved operations in the distribution and supply activities. By implementing the new system and its tools, the relationship with gas consumers has improved, and the quality of customer relations has improved.

In 2021, due to the COVID 19 pandemic, exclusion due to non-payment was avoided. The number of gas suspension orders was 238, mainly at the customer's request or distribution. In 2021, HEP Plin's Consumer Protection Commission received no complaints. In 2021, no proceedings were instituted for conduct contrary to the principle of free competition, antitrust and monopolistic practices. In 2021, HEP Plin received one justified complaint about violating personal data. When transferring data from SAP to the MPLIN application, the user noticed another respondent's data. The mistake was caught by the end customer, the user of the MPLIN application. Immediately after the discovery of the personal data violation and upon receipt of the e-mail to the address of the personal data protection officer, the mistake was rectified by the person in charge of IT support of the application. The risk to rights and freedoms, in this case, may be unlikely.

Number of customers on 31/12/2021

Customer category	2021	2020	2021/2020 %
Residential TM1-TM4	98,559	88,092	12
Commercial TM1-TM8 (up to 1 mil. m³)	6,723	5,696	18
Commercial TM9-TM12 (over 1 mil. m³)	25	4	525
Total	**105,307**	**93,792**	**12**

Number of customers according to supply areas on 31/12/2021

Supply area	2021	2020	2021/2020 %
Osijek-Baranja County	**64,355**	**61,779**	**4**
Požega-Slavonia County	**8,636**	**8,659**	**3**
Virovitica-Podravina County	**11,897**	**11,821**	**1**
Vukovar- Srijem County	**10,249**	**9,854**	**4**
Krapina-Zagorje County	**3,997**		
Bjelovar-Bilogora County	**4,164**		
Other counties	**2,009**	**1,983**	**1**
Total	**105,307**	**93,792**	**13**

Note: With the acquisitions of Gradska plinara Krapina and Darko gas distribution, and the offer of Hepi plin products to households outside its distribution area, HEP Plin increased the number of customers in 2021. Based on the new acquisitions, data on the number of customers are shown separately for Krapina-Zagorje and Bjelovar-Bilogora counties for the first time in 2021. Therefore, the total number of customers in the category "Other counties" has decreased compared to the previous reporting period.

GAS WHOLESALE

Under the Gas Market Act and the decisions of the Government of the Republic of Croatia and the Croatian Energy Regulatory Agency (HERA), from April 1, 2014, to March 31, 2021, HEP operated as a supplier in the wholesale gas market, which includes the sale of gas to public suppliers, and service of supplying household gas.

The supplier on the wholesale market was obliged to sell gas to suppliers in the public service obligation with whom it terminated a gas supply contract under regulated conditions and at a price less than or equal to the reference gas price for the needs of end customers from the household category using the public service, as well as to ensure a reliable and secure supply of gas to suppliers with the public service obligation. Following legal changes in the Croatian Gas market in 2020, from April 1, 2021, there are no more supplier functions on the wholesale market. In 2021, eight customers in the supply activity on the wholesale gas market (until the cessation of activities) bought 523.4 GWh of gas.

LNG TERMINAL ON THE ISLAND OF KRK

At the beginning of 2021, a floating liquefied gas terminal (LNG) was put into operation in the municipality of Omišalj on the island of Krk with a technical capacity of 2.6 billion cubic meters per year, which was realized by LNG Croatia and co-founded by HEP.

The Terminal consists of the FSRU ship LNG Croatia (floating unit for reception, storage, and gasification) and the mainland part of the Terminal.

In 2021, the LNG terminal received a total of 2,708,000 cubic meters of liquified natural gas, transported by 19 LNG ships. At the same time, a total of 1.6 billion cubic meters of natural gas was delivered to the transport system of the Republic of Croatia. The LNG terminal on Krk has a geopolitical and strategic dimension for the Republic of Croatia and the European Union within the framework of strengthening the European energy market and increasing the security of gas supply to EU countries, especially Central and Southeast Europe, with the purpose of securing a new reliable gas supply route. The Terminal is included in the list of EU projects of common interest (PCI) and has been awarded a grant of more than HRK 750 million.

Apart from being a co-founder of LNG Croatia, HEP d.d. also appears in the liquefied natural gas terminal as a capacity lessee. In the first year of operation, the Terminal proved to be an essential additional gas supply direction. HEP procures gas for the needs of its gas portfolio, i.e., electricity and heat production in its thermal power plants and the supply of HEP Plin's customers. We procure the required quantities of gas within Croatia and on gas exchanges in Austria and Hungary. HEP d.d. is a member of the CEGH exchange, which allows us direct access to the liquid Western European gas market and the Hungarian CEEGEX exchange through which we have access to the regional gas market.

CENTRAL CHEMICAL TECHNOLOGY LABORATORY

The Central Chemical Technology Laboratory (CKTL) is the only recognized testing laboratory for the certification of pellets and wood chips in the region and Southeast Europe.

In 2021, the development of new methods, the expansion of accreditation to new examination areas, the increase in the total number of tests, and the acquisition of new clients in Croatia and Europe continued. Thanks to the membership in the European certification schemes EN Plus and Good Chips as an examination body for determining the quality of wood pellets and wood chips, in 2021, the laboratory significantly expanded the base of its external clients to certification companies outside Croatia. In August, the Croatian Accreditation Agency (HAA) re-accredited the laboratory according to HRN EN ISO / IEC 17025: 2017, thus entering the laboratory's third accreditation cycle. The laboratory has expanded the scope and accreditation of its tests to waste analysis and can now conduct tests of waste intended for landfill disposal under applicable legislation.

Responsible procurement management

HEP d.d. is, as a sectoral contracting authority, obliged to apply the Public Procurement Act. Procurement procedures are carried out under the current Public Procurement Act and by-laws, internal acts of companies, and the acquis communautaire.

GRI 102-9
GRI 102-10

Procurement planning is one of the preconditions for quality and timely implementation of procurement procedures.

Given the number of procurement procedures performed in the HEP Group, it can be concluded that the process is successful. Further progress is possible by frequently monitoring the achievement of critical objectives in the procurement business, such as: finding the best procedures for the procurement of goods, works, and services; timely insurance of goods, employment, and services with the best value for money; ensuring the accuracy and lawfulness of the conduct of procedures in compliance with the principles of public procurement; unification of several procurement procedures (at the level of companies and the HEP Group itself); increasing the level of procurement management or reducing risk during the execution of contracts and the use of modern e-tools.

In 2021, HEP issued a Decision approving the use of the Electronic Public Procurement Notice of the Republic of Croatia for simple procurement procedures. This decision was made to reduce the number of persons coming to HEP's offices, which would largely avoid close contact to reduce the risk of COVID-19 and speed up simple procurement procedures. As a result of the pandemic, in 2021, there were specific difficulties in deliveries or deadlines for the provision of services, and contract supplements were concluded so that all contractual obligations would be implemented as soon as the conditions were met.

In 2021, the HEP Group conducted 623 public procurement procedures, of which 43.3 percent related to the procurement of goods, 20.4 percent to works, and 36.3 percent to services. The total value of the performed procedures amounts to HRK 3,684,529,930.32, of which 20.3 percent refers to the procurement of goods, 60.1 percent to the procurement of works, and 19.6 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 2021, amounted to a total of HRK 460,759,801.57. Out of the total amount, the largest share belongs to the procurement of goods in the amount of HRK 194,826,851.33. In 2021, 100 procurement procedures were carried out based on exemptions from the application of the Public Procurement Act with a total value of HRK 60,507,350.80, while in 2020, 116 procurement procedures were carried out based on exemptions with a total value of HRK 708,206,761.

In 2021, the "green procurement" of photocopy paper was contracted and carried out, and the procurement of electric forklifts was initiated. The total number of suppliers for the HEP Group in 2021 was 8,776, of which 8,601 were domestic and paid a total of HRK 11,503,978,877.23, and 175 foreign suppliers were paid HRK 9,186,134,548.33. By cooperating with domestic suppliers from all Croatian counties, HEP indirectly influences the development of the economy in these local communities. Economic entities may complain about public procurement procedures to the State Commission for the Control of Public Procurement Procedures (DKOM).

Representation of domestic suppliers by county and value of procurement in 2021

County	Total number of partners	Procurement value in mil. HRK
City of Zagreb	1,960	7,865.4
Vukovar-Srijem County	251	1,048.0
Split-Dalmatia County	680	659.6
Brod-Posavina County	184	365.9
Varaždin County	382	229.5
Zagreb County	409	227.8
Primorje-Gorski Kotar County	649	205.7
Osijek-Baranja County	645	140.9
Karlovac County	296	130.4
Istria County	453	118.7
Zadar County	302	105.9
Lika-Senj County	189	97.4
Krapina-Zagorje County	249	71.5
Sisak-Moslavina County	219	61.9
Dubrovnik-Neretva County	340	45.8
Međimurje County	224	43.9
Šibenik - Knin County	231	21.5
Požega-Slavonia County	253	21.1
Bjelovar-Bilogora County	215	17.9
Virovitica-Podravina County	242	12.8
Koprivnica-Križevci County	228	12.7

7

ENVIRONMENTAL PROTECTION

Contribution to UN Sustainable Goals:

Material topics:

Climate change and greenhouse gas emissions
Energy efficiency
Sustainable waste management
Reduction of emissions into air
Water use and protection
Biodiversity

Planet: ESG criteria in this chapter			page
Environmental impact management	Environmental impact management policies and strategic approach	GRI 201-3	158,160
Climate change	Calculation of greenhouse gas emissions (Scope 1 and 2)	GRI 305-1 GRI 305-4 GRI 305-5	107
Water protection	Water use and water protection	GRI 303-3 GRI 302-2 GRI 303-5	120-122
Air pollution	Solid particles Impact of air pollution	GRI 305-7 NCP ISO 14008	115-119
Waste management	Waste disposal	NCP ISO 14008	123-124
Energy use	Directly and indirectly used energy and used energy according to sources	GRI 302-1 GRI 302-3 GRI 302-4	110-114
Loss of biodiversity	Land use	GRI 304 -1	88

We presented the impact of HEP's operations on the environment in 2021, as we did last year, according to the six environmental goals of the EU Taxonomy. This year, we evaluated the activities according to the criteria of significant contribution to climate change mitigation and adaptation to climate change, as well as the requirements of "do no significant harm" principle (DNSH) to other environmental goals - prevention and control of pollution, sustainable use and protection of water and sea, transition to the circular economy and protection and restoring biodiversity and ecosystems. Activities were also assessed against minimum safeguards on human rights and labor rights. A description of the assessment of the compliance of our activities with the EU Taxonomy can be found in the chapter Key performance indicators of the HEP Group according to the EU Taxonomy.

We have described the impact of the HEP Group's operations in 2021 with each of the six environmental goals. Impacts on individual components of the environment are managed through environmental and energy management systems that are an integral part of certified integrated quality, environment, energy, and occupational health and safety management systems according to international standards ISO 9001:2015, ISO 14001:2015, ISO 50001:2018 and ISO 45001:2018. The companies HEP d.d., HEP Upravljanje imovinom, HEP Proizvodnja, HEP ODS and HEP Toplinarstvo have introduced environmental and energy management systems. Within these systems, companies set goals that are regularly monitored and evaluated, and based on these evaluations, the necessary measures are implemented, goals are set, and further activities are planned. Environmental goals are also achieved through the implementation of the priority goals of the HEP 2030 Development Strategy, which are described in the chapter Strategic approach to sustainability.

Business risks related to the environment as well as the way to manage these risks are described in the chapter Business risks. The projects and activities that we carry out in order to modernize the electric power system and harmonize it with the sustainable development goals of the UN until 2030, the Paris Agreement of the European Green Plan and national strategies for energy development, reduction of the impact on climate change and adaptation to climate change have been described in the Strategic Approach chapters sustainability and Sustainable and responsible market development.

In the reporting period, there were no deviations from fulfilling the requirements arising from regulations in the field of environmental protection.

Climate change mitigation and adaptation

As a member of the European Union, Croatia, by planning and implementing measures in strategic and planning documents for sectors that affect the climate, contributes to achieving the goals of the Paris Agreement and the European Green Deal, as well as strategies.

At the UN Climate Change Conference in Glasgow - COP26, Croatia pledged to reduce CO_2 emissions by 45 percent by 2030 compared to 1990, achieve a 39 percent share of renewables in final consumption and, by 2033 at the latest, stop using coal. This challenge of the accelerated realization of the renewable development scenario is HEP's as it is the bearer of the energy transition and the most crucial factor in achieving Croatia's energy self-sufficiency. We plan to achieve these goals by building and acquiring renewable energy sources as well as revitalizing existing ones, especially hydropower plants, by continuing activities to introduce advanced networks and electromobility, energy storage tanks, production and use of hydrogen and other advanced technologies.

GREENHOUSE GAS EMISSIONS IN 2021

Greenhouse gases of importance for the HEP Group's operations are carbon dioxide (CO_2) and sulphur hexafluoride (SF_6).

In the process of producing electricity and heat in plants that use fossil fuels, carbon dioxide is released. HEP's CO_2 sources are thermal power plants (TPP), thermal power plants (TE-TO and EL-TO), bioenergy (BE-TO) and boiler rooms for city heating. The operator of TPP, TE-TO, EL-TO and BE-TO is HEP Proizvodnja, and the operator of the boiler rooms for city heating is HEP Toplinarstvo.

A total of 2,765,723 tons of CO_2 were emitted from HEP's TPP, TE-TO, EL-TO, BE-TO and city heating boilers during 2021. Out of that, 2,681,081 tons of CO_2 were emitted from HEP's plants, which are, as of January 1, 2013, included in the EU-ETS. CO_2 emissions from the EU-ETS plant for 2021 were certified by an authorized verifier, and GHG emission reports were submitted to the authorized Ministry of Economy and Sustainable Development (MESD). In 2021, HEP's EU-ETS plants that produce thermal energy were entitled to the allocation of 96,150 emission units (EUA), i.e., 3.59 percent of the total CO_2 emissions from the EU-ETS plants. Free EUAs were awarded on the basis of verified Reports on Free Emission Units submitted to MESD.

For the emitted 2,584,931 tons of CO_2, HEP purchased EUA and submitted them to the European Union Register within the legally prescribed period (1 tCO_2 = 1EUA). Both BE-TOs are listed in the EU-ETS, but there is no obligation to purchase EUAs for these plants. HEP Toplinarstvo's city heating boilers are not in the EU ETS, and they pay a fee to the Fund for Environmental Protection and Energy Efficiency for CO_2 emissions.

Table below shows the CO_2 emissions of the HEP Group in 2021 and the comparison with 2020, while the following table shows the emission allowances allocated free of charge to HEP's EU-ETS plants.

CO_2 emissions of HEP Group in 2021 and comparison to 2020

Operator	Outlet	CO_2 emission t/y - 2021	CO_2 emission t/y - 2020	% 2021/2020
HEP Proizvodnja				
Thermal power plants for electricity generation	TE Plomin 1*	133	203	-44.33
	TE Plomin 2	1,221,234	1,021,564	19.55
	TE Rijeka	0	1	0.00
	CPP Jertovec	8,938	10,961	-18.46
Thermal power plants – heating plants for electricity and heating energy generation	TE-TO Zagreb	755,894	773.758	-2.31
	EL-TO Zagreb	215,723	201,302	7.16
	TE-TO Sisak	408,729	487,333	-16.13
	TE-TO Osijek	70,430	57,232	23.06
Total thermal power plants and thermal power plants – heating plants		**2,681,081**	**2,552,354**	**5.04**
Bioenergy plants for electricity and heating energy generation	BE-TO Sisak	21,437	42,752	-49.86
	BE-TO Osijek	36,903	30,516	-20.93
Total bioenergy plants		**58,340**	**73,268**	**-20.37**
Total HEP Proizvodnja		**2,739,421**	**2,625,622**	**4.33**
HEP Toplinarstvo				
City heating boilers	Bregana	258	202	27.48
	Samobor	2,868	2,739	4.73
	Velika Gorica	14,228	13,866	2.61
	Zaprešić	3,840	3,538	8.53
	Zagreb	4,306	8,691	-50.45
	Osijek	802	746	7.52
Total city heating boilers		**26,302**	**29,782**	**-11.68**
Total HEP Toplinarstvo		**26,302**	**29,782**	**-11.68**
Total HEP Group		**2,765,723**	**2,655,404**	**4.15**

* TE Plomin 1 ceased operation in May 2017, but the auxiliary boiler room, which uses gas oil as fuel, produces thermal energy for heating the administration building and workshops.

HEP Group's total CO_2 emissions in 2021 increased by one percent compared to 2020. At the same time, total emissions from TPPs, CHP and EL-TO grew by five percent due to increased production of electricity and heat and optimization of fuel procurement costs due to a significant increase in price compared to 2020. Total CO_2 emissions from BE-TO have been reduced by 20 percent, and from urban heating boilers by 10 percent due to reduced production compared to 2020. All HEP plants that emit more than 450 tons of CO_2 per year enter emissions data into the Environmental Pollution Register (ROO) maintained by MESD.

Free emission units in total CO_2 emissions from HEP's EU-ETS plants in 2021

Operator	Plant	Free emission units in 2021	Share of free emission units in total CO_2 emissions in the EU-ETS, %
HEP Proizvodnja	EL-TO Zagreb	32,060	1.20
	TE-TO Zagreb	43,847	1.64
	TE-TO Osijek	10,872	0.41
	TE-TO Sisak	9,371	0.35
Total		**96,150**	**3.59**

HEP ODS switchgear, i.e., high-voltage appliances and assemblies, contain sulphur hexafluoride gas, for which HEP regularly reports to the competent Ministry of the Economy and Sustainable Development. Table below shows data on equipment containing SF_6 for 2021 and a comparison with 2020.

Equipment containing SF_6

Switchgear and control gear - high-voltage appliances and assemblies SF_6	2021	2020
Amount of switchgear (pcs)	13,814	13,143
Filling the switch gear with SF_6 gas (t)	35.86	34.60
Leakage of SF_6 from equipment in operation (kg)	38.53	60.12
SF_6 gas handling and switching equipment after service life (kg)	69.5	55.4

INTENSITY OF GREENHOUSE GAS EMISSIONS CO_2 IN 2020

Electricity in 2021 was produced from TPPs, CHPs, EL-TOs, BE-TOs, hydropower plants, solar power plants, wind farms and Krško NPPs (50% owned by the Republic of Croatia).

Intensity of emissions for the electricity generation from sources owned or partially owned by the HEP Group and purchases from renewable sources in 2021 was 164 gCO_2/kWh. In 2021, thermal energy was produced by TE-TO, EL-TO, BE-TO and boiler rooms for heating cities. The intensity of emissions from TE-TO, EL-TO and BE-TO in the process of thermal energy production in 2021 was 211 gCO_2/kWh, and from urban heating boilers 239 gCO_2/kWh. The intensity of emissions from TPP, TE-TO, EL-TO and BE-TO in the process of electricity production in 2021 was 557 gCO_2/kWh. The total intensity of CO_2 emissions for the production of electricity and heat from all HEP sources, including the purchase of energy from the guarantee system of origin

produced from renewable sources in 2021 was 154 gCO_2/kWh, which is 14 percent less than the intensity of emissions in 2020. Electricity procured on the market outside the guarantee of origin system was not taken into account.

OZONE DEPLETING SUBSTANCES

Pursuant to the Law on Climate Change and Ozone Layer Protection, collection, leak testing, installation and maintenance and servicing of refrigeration and air conditioning devices and equipment as well as stationary fire-fighting systems and fire extinguishers containing controlled substances or fluorinated greenhouse gases located in HEP are performed by companies and entities that have a license from the Ministry of Economy and Sustainable Development to perform this activity.

ENERGY MANAGEMENT

By increasing the energy efficiency of our business and production processes and achieving energy savings through the implementation of ESCO projects with our customers, we save energy, fuel and water, reduce emissions into the environment and contribute to mitigating climate change.

Energy savings for our customers are described in the chapter Energy efficiency development projects for consumers. The companies HEP d.d., HEP Upravljanje imovinom, HEP Proizvodnja, HEP ODS and HEP Toplinarstvo have implemented energy management systems.

System of energy efficiency obligations

In 2021, activities related to the system of energy efficiency obligations continued. Within the HEP Group, HEP ESCO is in charge of coordinating the system of energy-saving obligations, and the obligors are HEP Elektra, HEP Opskrba, HEP Toplinarstvo and HEP Plin, i.e., energy suppliers. The first cumulative period in which the HEP Group achieved all prescribed energy savings was successfully completed. Our obligation in 2021 was 133.2 GWh and we fully fulfilled it, while we submitted the report on the realized savings of the HEP Group to the authorized ministry (MESD).

Energy management at the headquarters of the HEP Group

At the headquarters of the HEP Group, the consumption of electricity, thermal energy and gas is monitored, the data is displayed through the computer-business system for energy management ESCO Monitor® and is available to employees, business partners and all other visitors to the location. In 2021, electricity consumption increased by 4 percent compared to 2020 due to an increase in the average daily temperature in June and July 2021. Thermal energy consumption increased by 10 percent due to a lower average daily temperature in February, March and April.

Total energy consumption on location of HEP Group HQ in 2021

Energy source	2021	2020	2021/2020 index
Electricity [kWh]	1,870,422	1,800,056	1.04
Thermal energy [kWh]	2,176,378	1,980,217	1.10

Energy management in HEP Proizvodnja

HEP Proizvodnja conducted an analysis of energy indicators for 2020 and 2021. Energy indicators are based on monitoring and measurement and, to a lesser extent, on assessment. The indicators of energy efficiency or energy performance (EnPI) for 2020 and 2021 and their comparison are presented in table below, and in following table the analysis of energy efficiency indicators.

Energy and environment indicators in 2021 and comparison with 2020

	2020	2021	2021/2020 index
Total energy consumption (all energy sources, including fuel for vehicles, water energy at HE) / kWh	16,985,127,131.15	18,344,221,349.02	1.080
Energy consumption for the production process (including water energy at HPP and fuel for auxiliary units, etc.) / kWh	16,949,202,899.32	18,313,092,554.16	1.080
Energy consumption outside the production process (lighting, heating, air conditioning, vehicle fuel) / kWh	35,924,231.83	31,128,794.87	0.867
Consumption of process water in thermal power plants / m^3	203,827,063.96	225,308,575.19	1.105
Sanitary water consumption / m^3	88,047.62	76,631.02	0.87
Total energy produced / kWh	12,392,856,635.20	14,148,346,488.72	1.142
Total energy delivered at OMM / kWh	12,006,537,384.78	13,527,453,874.55	1.127
Total number of employees	1,987	1,979	0.996
Total area [m^2] (spaces in which people occupy and work in)	127,110.25	127,110.25	1
Total fuel consumption for vehicles / kWh	2,648,028.77	2,644,794.98	0.999
Planned energy production – EEB / kWh	11,906,400,000.00	12,001,739,000.00	1.008
Total land used / m^2 of constructed space	7,246,675.31	7,303,161.31	1.008

* The table includes the production and consumption of unit B in HPP Dubrovnik

Fuel consumption in HEP Proizvodnja

Fuel type	2021	2020	2021/2020 index
Coal / t	528,204	434,588	121.54
Forest biomass / t	49,708	54,816	83.10
Gas oil and fuel oil light / t	5,599	2,776	509.36
Natural gas / MWh	7,245,813	7,673,135	94.43

Indicators of energy efficiency in 2021 and comparison to 2020

Energy indicators	2020	2021	2021/2020 index
Energy consumption consumed kWh / delivered kWh	1.25088	1.24708	0.997
Energy consumption (lighting, heating, air conditioning) kWh / employee	17,301.71	16,760.55	0.969
Energy consumption (lighting, heating, air conditioning) kWh / m^2	392.71	341.6	0.87
Sanitary water consumption m^3 / employee	38.99	38.08	0.977
Water consumption per delivered kWh (only for TE) -m^3/kWh	0.02646	0.02444	0.924
Realization of planned energy production in relation to energy delivered at OMM	0.98849	1.12671	1.14

The data indicate the stability and improvement trend of energy efficiency indicators in 2021 in relation to 2020, but also in relation to the energy basis set by the Energy Review. The increase in certain indicators is directly related to the increase in total consumption and production, which is why their increase has occurred. The indicators "total energy consumption" and "energy consumption for production process" indicate an increase compared to 2020. In itself, total energy consumption is not a relevant parameter because it is largely dependent on production; the higher the consumption, the higher the production is. The most important indicator in the energy management system "energy consumption per delivered kWh" records a decrease compared to 2020 and compared to the energy base. The indicator "energy consumption outside the production process" and the indicators related to this indicator show a decreasing trend in relation to the energy basis and the year 2020. The positive trend in relation to the given energy base is directly related to the realization of numerous investments in energy efficiency in recent years (construction of new more energy-efficient buildings, reconstruction of existing buildings, installation of new heating and air conditioning systems, installation of LED lighting). Pursuant to the Law on Energy Efficiency, HEP Proizvodnja, as a large company, is obliged to provide the Ministry of Economy and Sustainable Development with proof, i.e., a certificate, of the introduced and certified energy or environmental management system, which includes the obligation to regularly carry out energy audits issued by an accredited independent body. In July 2021, the recertification of the energy management system according to the ISO 50001:2018 standard was successfully carried out, and the new certificate with the prescribed documentation was submitted to MESD.

Energy management in HEP Toplinarstvo

Recertification of the energy management system in accordance with ISO 50001:2018 was successfully completed in 2021. An external independent certification company confirmed the compliance of the energy management system with the ISO 50001:2018 standard.

In 2020, HEP Toplinarstvo started with the project Introduction of a system for remote measurement of thermal energy consumption via the NBIoT communicator. The mentioned system is connected to the thermal energy meter located in the thermal substation and sends data to ESCO Monitor every hour. In the ESCO Monitor system, it enables the analysis of thermal energy consumption, as well as the monitoring of indicators on the transmission part of the thermal substation (temperature, flow and power). For the necessary thermal energy calculations, the data from the ESCO Monitor system is automatically transferred to NAPTOP - an application for thermal energy calculations. In 2020, Phase 1 was implemented, where remote reading equipment was acquired and installed for 1,800 measuring points. At the end of 2020, the equipment for the second phase was acquired to equip an additional 1,800 measuring points, and the installation was completed in 2021.

In the boiler rooms of HEP Toplinarstvo, the consumption of electricity, energy and water is monitored. The table contains indicators for 2021 and their comparison with 2020.

Energy consumption in boiler rooms

Energy source	2021	2020	2021/2020 index
Electricity consumption (kWh)	1,060,793	1,070,959.00	0.99
Natural gas consumption (kWh)	107,599,029	130,724,192	0.82
Extra light fuel oil consumption kWh)	18,549,990	20,412,862	0.91
Water consumption (m^3)	3,122	2,720	1.15

In its regular work, HEP Toplinarstvo strives to reduce losses in the network and increase the efficiency of thermal energy transmission, while investments are planned accordingly. Savings follow the projects in accordance with the investment plan, and as an obligee of savings in final consumption, the projects (measures) taken are also monitored through the national system for monitoring, measuring and verifying energy savings. In the system for monitoring, measuring and verifying energy savings, newly realized savings for 2021 have been reported according to the following measures:

- Energy savings of 4,260,391.66 (CO_2 savings: 1,160.91 t/CO_2) were achieved through the complete reconstruction of the thermal substations.
- Revitalization of the distribution network (hot water) resulted in energy savings of 144,255.01 kWh (CO_2 savings: 815.79 t/CO_2),
- The introduction of advanced (smart) measuring systems for monitoring the consumption of thermal energy resulted in energy savings of 3,531,617.28 kWh (CO_2 savings: 1,166 t/CO_2),
- The introduction of the energy management system resulted in an energy saving of 1,203,774.14 kWh (CO_2 savings: 259.58 t/CO_2).

The Ordinance on the System for Monitoring, Measuring and Verifying Energy Savings (Official Gazette 98/21) defines the conditions under which the bond party can submit proof of a reduction in income due to a natural disaster. The final customers of thermal energy in the area of Sisak-Moslavina County were written off for the delivered thermal energy due to the earthquake, and accordingly, HEP Toplinarstvo was able to report savings as a measure for 2021 on the basis of reduced income due to the natural disaster, which achieved savings in the amount of 5,125,016 kWh.

Energy management in HEP ODS

Total energy consumption by years (in kWh)	2021	2020	2021/2020 index
Electricity	15,969,066	14,808,502	1.08
Thermal energy	4,201,181	4,916,324	0.85
Gas	11,227,263	10,206,456	1.10
Fuel	23,874,194	25,213,424	0.95
Significant energy consumption	44,708,490	41,211,896	1.08

A significant increase in energy consumption in 2021 is visible, due to the expansion of the volume of significant energy consumption (new energy audits of the process). The share of significant consumption in total energy consumption increased from 70 to 76 percent. An additional reason for the aforementioned increases is the pandemic year 2020, in which energy consumption was reduced due to Covid-19, as workers worked from home for two months. Other business activities were reduced to a minimum, necessary for the maintenance of the distribution network and security of electricity supply. For the same reason, the consumption of electricity in 2021 has also increased compared to the previous year 2020.

The increase in gas consumption in 2021 was due to the construction of new gas-fired boilers for own heating, instead of fuel oil, which was previously used.

Comparison of energy consumption in HEP ODS

Comparison of energy consumption by year - without network losses (in kWh)	2021	2020	2021/2020 index
Total significant energy consumption	44,708,490	41,211,896	1.08
Energy consumption in the two largest buildings per DP	24,892,541	22,499,634	1.11
Fuel consumption	23,874,194	25,213,424	0.95
Total HEP ODS	**51,070,523**	**50,228,382**	**1.02**

An increase in energy consumption was recorded in 2021 compared to the previous pandemic year 2020, when the volume of activities was reduced, and most of the workers worked remotely for two months.

Energy consumption for own needs, i.e., for the performance of all business activities in electricity distribution in 2021, is approximately on the basis of various energy sources of EnB 2019.

Investments in energy efficiency measures

In 2021, HEP ODS invested HRK 25,219,500 in the purchase of 13 trucks and HRK 5,357,268 in 46 different energy efficiency measures in commercial buildings, which is 62.3 percent more than in 2020. The purchase of new trucks resulted in savings of 531,510 kWh and 142 kg of CO_2. By implementing energy efficiency measures in office buildings, a total of 2,348,952 kWh, 50,830 kWh of primary energy and 646 kg of CO_2 were saved.

Energy Performance Indicators (EnPI) in HEP ODS in 2020 and 2021

Average value of energy performance indicators in HEP ODS by years	2021	2020
Diesel - passenger cars (l / 100 km)	6.44	6.87
Diesel - trucks (l / 100 km)	14.09	12.48
Petrol - passenger cars (l / 100 km)	7.76	5.93
Cooling - electricity (kWh / SDH *)	130.89	299.8
Heating - gas (kWh / SDG **)	102.26	86.59
Heating - electricity (kWh / SDG)	64.23	69.87
Heating - electricity, hot water, steam, gas and heating oil (kWh / m³***)	41.12	31.40

* The number of cooling degree days (SDH) represents the sum of the temperature differences between the internal design temperature and the average daily external temperature for all days of the cooling season, and the energy performance indicator kWh/SDH represents the energy consumed per SDH, for cooling in the cooling season.

** The number of heating degree days (SDG) represents the sum of temperature differences between the internal design temperature and the average daily outdoor temperature for all days of the heating season, and the energy performance indicator kWh/SDG represents the energy used per SDG, for heating in the heating season.

*** The volume of heated space in m³ is the volume of business premises that are heated, and the energy performance indicator kWh/m³ represents the energy consumed per m³ of the heated volume of business premises.

Diesel fuel is used for passenger and cargo vehicles, work machines, ships and aggregates, while gasoline fuel is used for passenger and cargo vehicles, snowmobiles and aggregates and others (motor mowers, trimmers, chain saws etc.). The share of diesel fuel in total energy consumption without losses increased from 38.36 percent to 41.82 percent, and in some locations the share is over 50%. Such a high share of diesel fuel in the total significant energy consumption indicates the need for continuous analysis, additional effort in more accurate recording and better monitoring of diesel fuel consumption, recording of kilometers travelled and working hours, finding, proposing and implementing measures to improve and optimize the fleet.

All energy performance indicators (EnPI) for heating in 2021 have increased compared to the previous year 2020 but are still lower than in the energy base year EnB 2019.

Pollution prevention and control

ENVIRONMENTAL PERMITS

All HEP thermal power plants and thermal power plants – heating plants with nominal thermal power of more than 50 MWt possess environmental permits, which are a precondition for the operation of the plant. In 2021, environmental permits were aligned with Implementing Decision 2017/1442 (EU) establishing conclusions with the best available techniques for large combustion plants.

Therefore, in 2021, for all thermal power plants, except for KTE Jertovec and TPP Rijeka, which are exempted from this obligation, the prescribed documentation was submitted to MESD. TE-TO Sisak, TE-TO Zagreb and TPP Plomin 2 have obtained decisions on amendments to the environmental permit. The process of reviewing the environmental permit for TE-TO Osijek is ongoing. In May 2021, a decision on the environmental permit for the new block "L" in EL-TO Zagreb was obtained, and at the same time, the decision on the environmental permit for the existing EL-TO Zagreb plant was harmonized. All procedures for reviewing environmental permits for existing plants and decisions on amendments to environmental permits, as well as obtaining a decision on environmental permits for a new block in EL-TO Zagreb, are published on the MESD website.

Procedures for impact assessment on the environment and the ecological network

The procedures for impact assessment on the environment and the ecological network, as well as the results of the above-mentioned procedures in which HEP was the project owner, are published on the MESD website. In 2021, procedures were conducted for solar power plants, a small hydropower plant, transmission lines and switchyards. Environmental and ecological network impact assessment procedures conducted by the authorities in local self-government units are published on the websites of counties, cities and municipalities.

SO_2, NO_X, PARTICULATE MATTER AND CO EMISSIONS

HEP's sources of nitrogen oxides (NO_x), sulfur oxide (SO_2), carbon monoxide (CO) and PM_{10} particulate matter are thermal energy production facilities as well as city heating boilers.

Emissions from HEP's thermal sources (TPPs, TE-TO and EL-TO) are measured continuously, by automatic measuring systems (AMS), and data are transmitted via a computer network to the Information System on Monitoring of Pollutant Emissions from Stationary Sources managed by MESD. In 2021, there were no exceedances of pollutant emissions into the air during normal operation of the plant and all measures prescribed by environmental permits were implemented. Emissions from BE-TO and boiler rooms for city heating are measured by periodic measurements, and reports are submitted to the MESD. All HEP plants that emit more than 3 tons of SO_2, 0.6 tons of NO_x, 0.2 tons of CO and 0.2 tons of PM_{10} particulate matter per year, also submit emissions data to the Environmental Pollution Register maintained by MESD. All HEP plants that emit more than 3 tons of SO_2, 0.6 tons of NO_x, 0.2 tons of CO and 0.2 tons of suspended particles PM_{10} per year also submit data on emissions to the Envi-

ronmental Pollution Register maintained by MOESD.
In 2021, a total of 190.90 tons of SO_2, 1,634.51 tons of NO_x, 36.62 tons of PM_{10} suspended particles and 136.59 tons of CO were emitted from HEP's TPP, TE-TO and EL-TO. In 2021, a total of 0.67 tons of SO_2, 41.55 tons of NO_x, 25.36 tons of PM_{10} and 8.87 tons of CO were emitted from BE-TO, while a total of 16.53 tons of SO_2, 15.11 tons of NO_x, 0.13 tons of PM_{10} and 2.19 tons of CO were emitted from city heating boilers.
The tables below show SO_2, NO_x, particulate matter and CO emissions in 2021 and a comparison with 2020. SO_2 and NO_x emissions in TPP, EL-TO and TE-TO were higher in 2021 compared to 2020 due to increased production of electricity and heat and optimization of fuel procurement costs due to a significant price increase compared to 2020. Emissions of PM_{10} and CO suspended particles were lower than in 2020. Total emissions in BE-TO of all pollutants in 2021 were lower compared to 2020 due to fewer hours of operation of BE-TO Sisak. SO_2 and PM_{10} emissions from urban heating boilers were higher than in 2020, while NO_x and CO emissions were lower.

SO_2 emissions from HEP sources in 2021 and comparison with 2020

Operator	Outlet	SO_2 emissions t/y - 2021	SO_2 emissions t/y - 2020	2021/2020 %
HEP Proizvodnja				
Thermal power plants for electricity generation	TPP Plomin 1	0.06	0.00	0.00
	TPP Plomin 2	156.51	105.93	47.75
	TPP Rijeka	0.00	0.00	0.00
	CPP Jertovec	0.13	0.17	-25.43
Thermal power plants – heating plants for electricity and heating energy generation	TE-TO Zagreb	10.54	11.18	-5.75
	EL-TO Zagreb	3.67	3.48	5.43
	TE-TO Sisak	5.83	7.02	-16.90
	TE-TO Osijek	14.16	0.83	1,605.54
Total thermal power plants and thermal power plants – heating plants		**190.90**	**128.61**	**48.43**
Bioenergy plants for electricity and heating energy generation	BE-TO Sisak	0.13	14.84	-99.13
	BE-TO Osijek	0.54	0.42	28.10
Total bioenergy plants		**0.67**	**15.26**	**-95.63**
Total HEP Proizvodnja		**191.57**	**143.87**	**33.15**
HEP Toplinarstvo				
City heating boilers	Bregana	0.39	0.37	5.46
	Samobor	0.00	0.00	0.00
	Velika Gorica	10.79	9.79	10.26
	Zaprešić	2.54	0.18	1,311.27
	Zagreb	2.81	2.57	9.20
	Osijek	0.00	0.00	0.00
Total city heating boilers		**16.53**	**12.91**	**28.05**
Total HEP Toplinarstvo		**16.53**	**12.91**	**28.05**
Total HEP Group		**208.10**	**156.78**	**32.73**

NO_x emissions from HEP sources in 2021 and comparison with 2020

Operator	Outlet	NO_x emissions t/y - 2021	NO_x emissions t/y - 2020	2021/2020 %
HEP Proizvodnja				
Thermal power plants for electricity generation	TPP Plomin 1	0.06	0.00	0.00
	TPP Plomin 2	510.76	482.89	5.77
	TPP Rijeka	0.00	0.00	0.00
	CPP Jertovec	32.99	42.80	-22.93
Thermal power plants – heating plants for electricity and heating energy generation	TE-TO Zagreb	318.08	255.52	24.48
	EL-TO Zagreb	480.85	446.75	7.63
	TE-TO Sisak	225.78	274.83	-17.85
	TE-TO Osijek	66.00	28.52	131.42
Total thermal power plants and thermal power plants – heating plants		**1.634.51**	**1,531.31**	**6.74**
Bioenergy plants for electricity and heating energy generation	BE-TO Sisak	12.09	24.89	-51.42
	BE-TO Osijek	29.46	22.95	28.38
Total bioenergy plants		**41.55**	**47.84**	**-13.14**
Total HEP Proizvodnja		**1,676.07**	**1,579.15**	**6.14**
HEP Toplinarstvo				
City heating boilers	Bregana	0.09	0.31	-71.97
	Samobor	1.24	4.37	-71.66
	Velika Gorica	9.42	20.02	-52.95
	Zaprešić	1.35	5.6	-75.80
	Zagreb	2.47	13.29	-81.38
	Osijek	0.53	1.19	-55.25
Total city heating boilers		**15.11**	**44.78**	**-66.27**
Total HEP Toplinarstvo		**15.11**	**44.78**	**-66.27**
Total HEP Group		**1,691.17**	**1,623.93**	**4.14**

PM_{10} emissions from HEP sources in 2021 and comparison with 2020

Operator	Outlet	PM_{10} emissions t/y – EP Toplina2021	PM_{10} emissions t/y - 2020	2021/2020 %
HEP Proizvodnja				
Thermal power plants for electricity generation	TPP Plomin 1	0.06	0.00	0.00
	TPP Plomin 2	26.04	29.67	-12.22
	TPP Rijeka	0.00	0.00	0.00
	CPP Jertovec	0.07	0.08	-15.48
Thermal power plants – heating plants for electricity and heating energy generation	TE-TO Zagreb	3.27	3.10	5.38
	EL-TO Zagreb	1.20	1.05	14.19
	TE-TO Sisak	1.67	1.85	-9.99
	TE-TO Osijek	1.52	0.86	76.40
Total thermal power plants and thermal power plants – heating plants		**33.83**	**36.62**	**-7.62**
Bioenergy plants for electricity and heating energy generation	BE-TO Sisak	7.56	15.31	-50.65
	BE-TO Osijek	13.23	10.05	31.64
Total bioenergy plants		**20.79**	**25.36**	**-18.04**
Total HEP Proizvodnja		**56.61**	**61.98**	**-11.88**
HEP Toplinarstvo				
City heating boilers	Bregana	0.00	0.00	0.00
	Samobor	0.00	0.00	0.00
	Velika Gorica	0.75	0.13	474.15
	Zaprešić	0.00	0.00	0.00
	Zagreb	0.10	0.00	100
	Osijek	0.00	0.00	0.00
Total city heating boilers		**0.84**	**0.13**	**548.85**
Total HEP Toplinarstvo		**0.84**	**0.13**	**548.85**
Total HEP Group		**55.46**	**62.11**	**-10.71**

CO emissions from HEP sources in 2021 and comparison with 2020

Operator	Outlet	CO emissions t/y - 2021	CO emissions t/y - 2020	2021/2020 %
HEP Proizvodnja				
Thermal power plants for electricity generation	TPP Plomin 1	0.00	0.00	0.00
	TPP Plomin 2	64.60	62.24	3.79
	TPP Rijeka	0.00	0.00	0.00
	CPP Jertovec	1.25	1.63	-23.53
Thermal power plants – heating plants for electricity and heating energy generation	TE-TO Zagreb	26.39	70.96	-62.81
	EL-TO Zagreb	30.14	29.54	2.02
	TE-TO Sisak	12.11	24.23	-50.05
	TE-TO Osijek	2.11	2.01	4.88
Total thermal power plants and thermal power plants – heating plants		**136.59**	**190.62**	**-28.34**
Bioenergy plants for electricity and heating energy generation	BE-TO Sisak	7.51	14.84	-49.37
	BE-TO Osijek	1.27	1.00	27.00
Total bioenergy plants		**8.78**	**15.84**	**-44.55**
Total HEP Proizvodnja		**145.37**	**206.46**	**-29.59**
HEP Toplinarstvo				
City heating boilers	Bregana	0.01	0.12	-90.83
	Samobor	1.17	1.91	-91.14
	Velika Gorica	0.79	8.26	-90.41
	Zaprešić	0.89	2.44	-63.57
	Zagreb	0.31	5.69	-95.55
	Osijek	0.02	0.52	-95.82
Total city heating boilers		**2.19**	**18.94**	**-88.42**
Total HEP Toplinarstvo		**2.19**	**18.94**	**-88.42**
Total HEP Group		**147.56**	**225.40**	**-34.53**

AIR QUALITY IN THE VICINITY OF EL-TO ZAGREB AND TPP PLOMIN

EL-TO Zagreb has installed an automatic measuring station Vrhovec for monitoring air quality in the vicinity of the plant where continuous measurements are performed. In 2021, there were no exceedances of limit values related to air quality.

The measuring network of TE Plomin consists of four measuring stations: Plomin town, Ripenda, Verbanci and Sv. Katarina, and the data from measurements station are submitted to the competent authorities.

Sustainable use and protection of water and sea

WATER AND SEA USE

HEP uses water to produce electricity from hydropower plants.

The quantities of water that hydropower plants can use to produce electricity are prescribed by concessions and concession conditions. In April 2021, a request was sent to MESD to amend the Concession Agreement for the use of hydropower in the HPP Dubrovnik plant due to the increase in plant capacity and water flow. HEP's company Crpna stanica Buško blato, located in neighbouring BiH, was issued a new permit for the use of water in the Cetina River Basin for the production of electricity in HPP Orlovac for a period of ten years after the expiration of the 2016 Water Permit. The settlement of property-legal relations between Hrvatske vode and HEP is in progress, which is a condition for the continuation of the procedure for obtaining concessions for the use of hydropower for the production of electricity in HPP Golubić, HPP Jaruga and HPP Ozalj. The determination of public water supply lines for the mentioned plants and for the reservoirs Dubrava, Lokve, Sabljaci and Peruća was also carried out. The preparation of geodetic studies of the derived condition of water structures follows the issuance of instructions on the preparation of studies and registration in the cadaster for which the State Geodetic Administration is responsible. Water is also used in the process of production of electricity and heat in thermal power plants that use surface water, groundwater and wells, as well as from the public water supply. All HEP's thermal power plants have valid water permits for water abstraction. TPP Plomin and TPP Rijeka have obtained concessions on the maritime domain for the purpose of economic use and special use of the sea. Data on the intake of water are submitted to Hrvatske vode. The following table provides data on water intake.

Water is also used in the production of thermal energy from boiler rooms for heating cities and in business premises and restaurants. Boilers for heating cities that produce thermal energy use water from public water supply systems, for which a water use permit is not required. The water used in business premises and restaurants is also from public waterworks, which does not require obtaining permits.

WATER AND SEA PROTECTION

Technological, cooling, precipitation and sanitary wastewater are discharged from HEP's thermal power plants for the production of electricity and heat.

Wastewater is treated before being discharged into the receiver. Hydropower plants, except for HPP Vinodol and HPP Senj, are not subject to the Ordinance on limit values for wastewater emissions, but the quantities of water used are shown as the amount of electricity produced. HPP Vinodol and HPP Senj have a water permit for the discharge of sanitary wastewater. Testing of the quality of drinking, waste, surface and groundwater is carried out in accordance with the requirements prescribed by environmental permits, water permits and concession conditions at all locations. Data on discharged water and water analysis are submitted to Croatian Waters. Table 8 provides data on discharged wastewater and treatment techniques. In 2021, there were no exceedances of the permitted limit values for pollutant emissions into water.

Regular tests of physical-chemical and biological indicators are carried out on the reservoirs of hydropower systems of PP HPP North, PP HPP West and PP HPP South, and at some locations also ichthyological indicators in accordance with the Regulation on water quality standard. Based on the Regulation, the ecological status of waters is presented until the establishment of the methodology of ecological potential, and the type of water bodies according to the valid Water Management Plan 2016 to 2021.

Affected water and water intakes in 2021

Plant	Source	Quantity of water (m^3)	Wastewater	Treatment system	Discharge	Quantity of water (m^3)
TPP Plomin	Bubić Burrow	484,295	technological waters	treatment of waste waters neutralization and depositing device	Čepić Canal - sea	70,834
				neutralization		25,888
	Public water supply system	10,394	sanitary waters	BIO device w/o treatment		3,571
	Sea (cooling waters)	200.649.191	cooling waters	no treatment		222,302,664
TPP Rijeka	Public water supply system	19,732	technological waters	treatment of waste waters, neutralization	Sea	0
			oily waters	BIO device		16,125
			sanitary waters	no treatment		413
	Sea (cooling waters)	0	cooling waters	no treatment		0
TE-TO Sisak	Sava River	224,856	technological waters	treatment of waste waters, neutralization	Sava River	5,874
			oily waters	oil separation		0
	Public water supply system	3,597	sanitary waters	no treatment		5,530
	Sava River (cooling waters)	77,620,860	cooling waters	no treatment		65,364,675

Plant	Source	Quantity of water (m^3)	Wastewater	Treatment system	Discharge	Quantity of water (m^3)
TE-TO Zagreb	Wells	1,343,533	technological waters	treatment of waste waters, neutralization	City sewage system	538,303
			oily waters	oil separation		
	Public water supply system	2,025	sanitary waters	no treatment	Sava River	81,343,200
	Sava River (cooling waters)	127,937,000	cooling waters	no treatment	Savica Lake	20,335,800
EL-TO Zagreb	Wells	868,206	technological waters	treatment of waste waters, neutralization and depositing device	City sewage system	117,376
			oily waters	oil separation		
	Public water supply system	10,752	sanitary waters	no treatment		
TE-TO Osijek	Drava River	202,883	technological waters	neutralization	City sewage system	102,760
			oily waters	oil separation		
	Public water supply system	7,910	sanitary waters	no treatment	Palčić Canal	13,079
			clean rainfall waters and rainfall waters from liquid fuel management system	oil separation		
KTPP Jertovec	Krapina River	25,224	technological waters	treatment of waste waters, neutralization and depositing device and precipitation	Jertovec Stream	10,293
			oily waters	oil separation		
	Public water supply system	726	sanitary waters	BIO device		
HPP Vinodol	Public water supply system	419	sanitary waters	Imhof precipitator	Dubračina Stream	453
HPP Senj	Public water supply system	1,066	sanitary waters	BIO device	Sea	816

We will continue to use water in accordance with the concessions and concession conditions and water permits and treat waste water before discharge, follow the prescribed indicators, water permits and tests of physical-chemical and biological indicators as well as ichthyological indicators where applicable in accordance with the requirements of the Regulation on water quality standards. We will report on the quantities of captured and released water and analysis results on the quality of waste water to the relevant authorities, as we had in the past.

Waste management and the transition to a circular economy

Waste generated in the HEP Group is separated at the place of generation according to type and properties and is managed in accordance with the order of priority of waste management in order to prevent waste generation and reduce the amount of waste disposed of in landfills.

All waste is handed over, in accordance with legal regulations, to companies that have a waste management permit or are registered in the appropriate register. In addition to the waste, an accompanying sheet and, where applicable, an analysis of the waste is be submitted to the authorized companies. Depending on the type of waste and the existing management system in Croatia, waste is handed over for further preparation, recovery, disposal and export. Until the arrival of authorized companies, waste is temporarily stored, for a maximum of one year, in warehouses that are arranged in accordance with the provisions of the Ordinance on waste management. In this way, efficient waste management is ensured. In 2021, the inspections carried out by the State Inspectorate of the Republic of Croatia did not reveal any irregularities.

HEP's only landfill is located in Plomin. It disposes exclusively of its own production non-hazardous waste generated at TPP Plomin (slag, sludge from industrial wastewater treatment, fly ash from coal combustion and gypsum), when companies that have a permit for waste recovery cannot take over the waste. The landfill for non-hazardous waste in Plomin has a permit for waste management.

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 e-ONTO, an electronic database on waste maintained by MESD. The obligor of filling in the e-ONTO in HEP is the landfill for non-hazardous waste in TPP Plomin. All organizational units of the HEP Group that produce more than 500 kilograms of hazardous and 20 tons of non-hazardous waste in a calendar year, enter data into the electronic database Register of Environmental Pollution (ROO) maintained by MESD.

QUANTITIES OF HAZARDOUS AND NON-HAZARDOUS WASTE IN 2021

In 2021, HEP Group produced a total of 69,361.90 tons of non-hazardous waste and 2,040.96 tons of hazardous waste.

Compared to 2020, the amount of non-hazardous waste increased by 17 percent, and hazardous waste by 39 percent. The amount of non-hazardous waste in 2021 is higher due to the increase in electricity production in TPP Plomin. The largest share of the produced non-hazardous waste refers to fly ash (48,804.15 tons), gypsum (10,176.3 tons), slag (3,982.26 tons) from TPP Plomin and ash from BE-TO plant (1,691.36 tons). Although the amount of non-hazardous waste has increased, almost all the ash, gypsum and slag from TPP Plomin has been handed over to the company Holcim from Koromačno, which has a permit for waste recovery or has been exported to cement plants in neighbouring countries. Therefore, in 2021, this waste was not disposed of in the internal landfill in Plomin. Holcim uses this waste in its production process and thus replaces the primary raw materials, thus contributing to the goal of transition to a circular economy. The amount of hazardous waste varies within each reporting year depending on the implementation of reconstructions in plants and infrastructure for the production and distribution of electricity and heat and gas distribution and the replacement of existing equipment with high-efficiency equipment and materials that have less impact on the environment. The largest share in hazardous waste had metals contaminated with hazardous substances (953.46 tons), various waste oils and oily water from the separator (684.41 tons) and waste electrical and electronic equipment (111.42 tons).

AMOUNT OF LOW (LILW) AND MEDIUM AND HIGH RADIOACTIVE WASTE (LRAW) PER KWH FOR 2021

Krško Nuclear Power Plant is co-owned by HEP d.d. and GEN Energija (50%: 50%), so Hrvatska elektroprivreda takes over 50% of the annual electricity produced on the threshold of the Krško NPP, while the Republic of Croatia has the obligation to manage half of the waste generated by the nuclear power plant.

Quantity of radioactive waste RAW / kWh in 2021

Electricity generation energy in 2021 on the threshold of NPP Krško / MWh	5,418,641.895
277 LILW with a volume of 78.7 m^3 and net weight of 40,198.60 kg were stored	
LILW (volume): 78.7 m^3/5,418,641.895 MWh	1.452 x 10^{-8} m^3/kWh
LILW net (weight): 40,198.6 kg / 5,418,641.895 MWh	7.418 x 10^{-6} kg/kWh or 7.418 µg/kWh
VRAO - spent fuel – replacement of 56 combustible elements in 2021	48.7 t U *56/121 element in the core = 22 538,84 kg U
VRAO: 22,538.84 kg U / 5,418,641.895 MWh	4.16 * 10^{-6} kg U/kWh

Protection and restoration of biodiversity and ecosystems

HEP's TPP, EL-TO, TE-TO, BE-TO and city heating boilers are located within urban or industrial areas and are not within the Natura 2000 ecological network area or protected areas at the national level. However, some protected areas are located near production facilities, such as the significant landscape Savica near TE-TO Zagreb, and the border of the Mura-Drava Regional Park near TE-TO Osijek.

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

Compared to the previous reporting period, there was no expansion of the ecological network area or protected areas near HEP's hydropower plants.

PROCEDURES FOR ASSESSING THE IMPACT OF INTERVENTIONS ON THE ECOLOGICAL NETWORK

The construction of new facilities and infrastructure as well as the modernization and increase of the capacity of existing facilities and infrastructure, are carried out in accordance with the requirements of the Environmental Protection Act, the Decree on Environmental Impact Assessment and the Nature Protection Act, which regulates the procedures for the impact of interventions on the NATURA 2000 ecological network. The interested public was included in the procedures, and the results of the procedures conducted by HEP were published on the pages of MOESD and the competent authorities of the regional self-government units, depending on the location of the implementation of the intervention and the competent authorities that implemented the procedures. During the implementation of the intervention, all the prescribed measures specified in the Decisions on the acceptability of the intervention on the environment and the ecological network are implemented. In this way, we contribute to the achievement of the goals of the Strategy and Action Plan for Nature Protection of the Republic of Croatia for the period from 2017 to 2025.

Among the projects implemented in 2021 related to the preservation of biodiversity, we highlight the Life Danube Free Sky project and the activities of protection against electrocution of griffon vultures on the island of Cres, which are described below.

LIFE DANUBE FREE SKY PROJECT. The project officially started on 1 September 2020, and funding from the European Union's LIFE program has been approved. During the planned five years of project implementation, 15 partners from seven countries will participate. The Croatian participants are Public Institution Nature Park Kopački rit, Croatian Transmission System Operator (HOPS) and HEP ODS. The application of protective measures on transmission lines will increase the visibility

of bird guides to more than 245 km of sections of the highest priority transmission lines. Also, more than 3,200 of the riskiest transmission line towers within the project area will be adapted to ensure bird safety. The main result of the project will be a significant reduction and partly complete elimination of the threat of electrocution and collision on the electricity infrastructure in the wider area of the Kopački rit Nature Park, as one of the most ornithologically important areas in Croatia.

PROTECTION AGAINST ELECTROCUTION OF GRIFFON VULTURES ON THE ISLAND OF CRES. The pillars of the distribution network with griffon vultures often serve as elevations for resting, sunbathing, and surveying the terrain in search of food. Thanks to the contribution of HEP ODS, these birds will certainly be able to do so on the island of Cres, and by 2025 on all Kvarner islands. A self-supporting cable assembly is placed on the transmission line, which means that all wires are insulated and there is no danger of electric shock. In 2021, four kilometres of transmission lines were buried. Insulation has also been placed on the conductors located near the pole so that the bird does not touch the wire when it takes off. We will continue with the activities and measures prescribed by the decisions on the acceptability of interventions on the ecological network in order to preserve biological diversity in the areas that our business has an impact on.

Key performance indicators of the HEP Group according to the EU Taxonomy

Investments in sustainable activities are the key to continuance of increase of the share of energy produced from renewable sources, upgrade of the transmission and distribution network for its reception and delivery to customers, increase of energy efficiency and energy savings of our production and business processes, application of circular economy principles, reduction of pollution, protection of water and sea and the conservation of biological, geological and landscape diversity.

By investing in charging stations for electric vehicles, we are contributing to the reduction of emissions in road traffic. Through the implementation of ESCO projects, we support our customers in the transition to renewable sources and energy savings. In this way, we continuously harmonize our operations with the UN SDGs until 2030, the goals of the Paris Agreement and the European Green Deal.

The EU Taxonomy has provided us with a methodology for assessing our activities that are considered environmentally sustainable. In 2021, we determined the contribution of our activities to climate change mitigation and an insight into the degree of adaptation of activities to climate change. At the same time, we evaluated our activities according to the "do no significant harm" criterion (DNSH) to other environmental objectives and identified enabling and transitional activities. We also assessed whether our activities complied with the minimum safeguards set out in the UN Guiding Principles on Business and Human Rights, including the principles and rights set out in the International Labor Organization Declaration on Fundamental Principles and Rights at Work and the International Charter of Human Rights.

The following describes the process of application of EU Taxonomy legislation in assessing the alignment of our activities with environmental objectives and criteria for DNSH and minimum protection measures on human rights and labor rights. It describes the methodology for calculating revenues, capital investments and operating expenditures related to environmentally sustainable activities, as well as the results of these processes.

SHARE OF HEP GROUP ACTIVITIES CONSIDERED ENVIRONMENTALLY SUSTAINABLE ACCORDING TO THE EU TAXONOMY

The process of determining the share of our activities that are considered environmentally sustainable consists of five steps.

The image below shows the division of HEP Group's activities into taxonomy-eligible and taxonomy-non-eligible. The table "Taxonomy eligible and Taxonomy aligned HEP group activities" shows the assessment of taxonomy-eligible and taxon-

omy-aligned activities of the HEP Group with criteria for significant contribution to climate change mitigation and the assessment of compliance with the "do no significant harm" criteria to environmental objectives for significant contribution to climate change adaptation, sustainable use and protection of water and marine resources, circular economy, pollution prevention and control, and the protection and restoration of biodiversity and ecosystems. Enabling and transitional activities that meet the criteria in accordance with Annexes I II of the Delegated Regulation 2021/2139 are also listed, while table "Taxonomy eligible and non-aligned activities of HEP Group" shows the assessment of taxonomy-eligible but not aligned activities.

DETERMINATION OF TAXONOMY-ELIGIBLE AND TAXONOMY-NON-ELIGIBLE ACTIVITIES OF THE HEP GROUP

Taxonomy-eligible and taxonomy-non-eligible activities are determined according to the National Classification of Activities (NKD) which is harmonized with the European Statistical Classification of Activities (NACE).

We analyzed all activities listed in Annexes I and II of the Delegated Regulation 2021/2139 and determined the activities related to the HEP Group and divided them into taxonomy-eligible and taxonomy-non-eligible.

The main activities of the HEP Group are the production, distribution and supply of electricity, and the distribution and supply of thermal energy and natural gas to customers. HEP has also made a step towards in e-mobility in order to contribute to the decarbonization of road traffic, by setting up charging stations for electric vehicles.

Distribution of HEP Group activities to taxonomy-eligible and taxonomy-non-eligible

Taxonomy eligible activities	Taxonomy-non-eligible activities
production of electricity and heat electricity generation by solar photovoltaic technology production of electricity from wind energy production of electricity from hydropower cogeneration of energy for heating / cooling and electricity from bioenergy **transmission and distribution of electricity** **energy storage** electricity storage heat storage **heat distribution** distribution of district heating / cooling **e-mobility** transport by motorcycles, passenger cars and commercial vehicles infrastructure for low-carbon road and public transport installation, maintenance and repair of charging stations for electric vehicles in buildings (and in parking lots connected to buildings) **other** installation, maintenance and repair of renewable energy technologies installation, maintenance and repair of equipment and instruments for energy efficiency data processing, server services and related activities education construction of new buildings, renovation of existing buildings collection and transport of non-hazardous waste in fractions separated at the source	**production of electricity and heat** production of electricity from coal production of electricity and heat from liquid fossil fuels and gas energy production from a nuclear power plant gas distribution **LNG leasing services** **import and export of electricity** **supply of customers with electricity that is not in the system of guarantee of origin** **greenhouse gas emission allowance trading** **resort accomodation services**

ANALYSIS OF THE ALIGNMENT OF TAXONOMY-ELIGIBLE ACTIVITIES OF HEP GROUP WITH CLIMATE GOALS

Taxonomy-eligible activities of importance to HEP Group were assessed according to the technical screening criteria for significant contribution to climate change mitigation.

Activities were also assessed against technical screening criteria for significant contribution to climate change adaptation. Although the activities of HEP Group also contribute to this environmental goal, due to the avoidance of double calculation of the share in revenues, capital investments and operating expenditures from taxonomy-eligible and taxonomy-aligned activities in total revenues, capital investments and operating expenditures of HEP Group, a significant contribution to climate change mitigation was taken into account. The exception is the activity of education for which criteria are prescribed for a significant contribution to climate change adaptation. The procedure for the assessment of taxonomy-eligible activities and the separation of activities in line with the EU Taxonomy is described in points a. to e.

a. Production of electricity and heat

- **production of electricity by solar photovoltaic technology** is aligned with the EU Taxonomy and refers to all HEP's independent (non-integrated) solar power plants and all solar power plants on the roofs of HEP buildings (integrated)
  - the activity of installation, maintenance and repair of technologies for energy from renewable sources is included in the presentation of data related to the activities of electricity production from integrated photovoltaic solar power plants and is EU Taxonomy aligned
- **Production of electricity from wind energy** is EU Taxonomy aligned and refers to HEP's onshore wind farm
- **Production of electricity from hydropower**
  - The EU Taxonomy aligned activity includes all HEP flow hydropower plants and hydropower plants with energy density accumulations greater than 5 W/m^2, and hydropower plants with an energy density equal to and less than 5 W/m^2; reversible hydropower plants and pumping stations are excluded
  - for hydropower plants with an energy density of less than 5 W/m^2, the calculation of the intensity of CO_2 (eq)/kWh emissions in the life cycle of the plant will be made and the alignment with the EU Taxonomy will be determined
  - Reversible hydropower plants and pumping stations are involved in electricity storage activities
- **Cogeneration for heating / cooling energy and electricity from bioenergy** is EU Taxonomy aligned and refers to HEP's bioenergy plants that use untreated wood chips as fuel because they meet the criteria of Directive 2018/2001 on the promotion of the use of energy from renewable sources

b. Transmission and distribution of electricity

- **Electricity transmission**
  - Is EU Taxonomy aligned as it is a part of the interconnected European system
- **Electricity distribution**
  - as a subsystem of electricity transmission activity, the activity is aligned with the EU Taxonomy
  - In order to further modernize, we voluntarily further analyzed the infrastructure and equipment for electricity distribution according to the following criteria:
    - construction and operation of direct line or extension of existing direct line from a plant for low-carbon electricity production below the threshold of 100g CO_2e/kWh and a plant with an energy density lower than 5 W/m^2
    - construction/installation and operation of equipment and infrastructure to increase the production or production of electricity from renewable sources
    - installation of equipment to increase the control and monitoring of the power system and the development and integration of renewable energy sources
    - installation of equipment that includes smart metering systems
    - replacement of existing 10 (20) 0 / 0.4 kV transformers by energy-efficient transformers
    - o construction of ancillary electricity infrastructure for electrification of transport.

c. Storage of electricity and heat

- **electricity storage**
  - reversible hydropower plants, pumping stations and batteries aligned with EU Taxonomy are included
- **heat storage**
  - heat accumulators are considered a taxonomy-eligible activity that is not taxonomy-aligned because energy produced from gas and gas oils is stored, for which it is necessary to determine whether it meets the criterion of emission intensity in the whole life cycle lower than 100 gCO_2/kWh

d. distribution of district heating/cooling is taxonomy-eligible, but a non-aligned activity

- activities are underway that will result in the modernization of the centralized heat distribution system in order to reduce losses, as well as research and development of a new fourth-generation district heating system, as a low-temperature system, which should replace the existing third generation

e. E-mobility includes the following taxonomy-aligned activities

- electric means of transport for the transport of employees and electric working machines
- installation and operation of charging stations for electric vehicles that enable low-carbon road transport
- installation and operation of filling stations in outdoor and indoor car parks which are an integral part of HEP's buildings

f. Other

- **installation, maintenance and repair of energy efficiency equipment and devices** includes Taxonomy aligned activities
  - installation and replacement of energy efficient light sources
  - installation and maintenance of energy efficiency equipment and devices
- **data processing, server services and related activities** include Taxonomy aligned activities
  - storage, handling, management, movement, control, display, switching, exchange, transmission, data processing via data centers and computer peripherals
- **education** includes Taxonomy-aligned activity
  - education at all levels and for all occupations
- **o construction of new buildings and renovation of existing buildings** includes
  - Taxonomy-aligned construction of new buildings
  - The largest part of the renovation of existing buildings in 2021 was related to the rehabilitation of buildings damaged in the Zagreb (March 22, 2020) and Petrinja earthquake (December 29, 2020), for which alignment with the EU Taxonomy will be determined
- **collection and transport of non-hazardous waste in fractions separated at source** includes a taxonomy—aligned activity
  - separation of waste at the place of origin and transport of waste to temporary waste storage facilities and/or authorized companies for taking possession of waste

"DO NO SIGNIFICANT HARM" (DNSH) ANALYSIS OF HEP'S ACTIVITIES ACCORDING TO ENVIRONMENTAL GOALS

For taxonomy-eligible activities of the HEP Group harmonized with the criteria of significant contribution to climate change mitigation and adaptation to climate change, an DNSH analysis was conducted for sustainable use and protection of water and marine resources, transition to circular economy, pollution prevention and control and protection and restoration of biodiversity ecosystem, in accordance with Annexes I and II of the Delegated Regulation 2021/2139.

ANALYSIS OF COMPLIANCE OF HEP'S ACTIVITIES WITH THE MINIMUM SOCIAL SAFEGUARDS

HEP Group is a national energy company that performs most of its activities in Croatia. The companies operating abroad are subsidiaries of HEP Trgovina - HEP Energija Mostar (Bosnia and Herzegovina), HEP Energija Belgrade (Serbia) and HEP Energija Priština (Kosovo), as well as a subsidiary of HEP Opskrba, HEP Energija Ljubljana (Slovenia). HEP Proizvodnja in the territory of Bosnia and Herzegovina has a subsidiary CS Buško blato, and in Slovenia NPP Krško operates in co-ownership of HEP and GEN Energija (50%: 50%).

In 2019, HEP adopted a Diversity and Non-Discrimination Policy for companies in Croatia, which promotes equality, diversity and organizational culture that actively values differences and recognizes people of different personalities and experiences and their equal individual contributions to improving the work environment and business. An in-depth analysis of HEP Group's compliance with the minimum safeguards set out in the UN Guiding Principles on Business and Human Rights, including the principles and rights set out in the International Labor Organization Declaration on Fundamental Principles and Rights at Work and the International Charter of Human Rights.

The first table provides an assessment of taxonomy-eligible and taxonomy-aligned activities of HEP Group, and the following table an assessment of taxonomy-eligible activities of HEP Group that are not aligned with the EU Taxonomy. For some of the activities that fell into the category of non-aligned with the EU Taxonomy in this reporting period, a calculation of the intensity of CO_2 emissions over the whole life cycle will be made, where applicable. Criteria for assessment with environmental objectives are not prescribed for taxonomy-non-eligible activities and these activities are listed in the image above.

Taxonomy-eligible and taxonomy-aligned HEP Group activities

	Name of activity according to Annexes I and II of Delegated Regulation 2021/2139	Description of activities according to Annexes I and I of Delegated Regulation 2021/2139	Alignment assessment
Electricity and heat production	Production of electricity by solar photovoltaic technology Installation, maintenance and repair of renewable energy technologies	Electricity generation using solar photovoltaic technology (4.1) Installation, maintenance and repair of renewable energy technologies (7.6.)	100% of the installed capacity of photovoltaic solar power plants is taxonomy-eligible and aligned activity because: • they contribute significantly to the goal of climate change mitigation without additional technical screening criteria • are in line with the "do no significant harm" criteria (DNSH) for the transition to circular economy and the protection and restoration of biodiversity and ecosystems • are in line with minimum social safeguards for human and labor rights Installation, maintenance and repair of integrated solar photovoltaic systems and auxiliary technical equipment are taxonomy-eligible and taxonomy-aligned activities because: • they significantly contribute to the mitigation of climate change by performing activities on-site within the technical systems of buildings • are in line with minimum social safeguards for human and labor rights Installation, maintenance and repair of integrated solar photovoltaic systems and auxiliary technical equipment is taxonomy-aligned and also an enabling activity.
	Production of electricity from wind energy	Electricity generation from wind power (4.3.)	100% of the installed capacity of wind power plants is taxonomy-eligible and aligned activity because: • they contribute significantly to the goal of climate change mitigation without additional technical screening criteria • are in line with the "do no significant harm" criteria (DNSH) for the transition to circular economy and the protection and restoration of biodiversity and ecosystems • are in line with minimum social safeguards for human and labor rights
	Production of electricity from hydropower	Electricity generation from hydropower (4.5)	93.5% of the installed capacity of hydropower plants is taxonomy-eligible and aligned because: • all flow-through hydropower plants without accumulation contribute significantly to the goal of climate change mitigation • all hydropower plants with daily / hourly energy density accumulation greater than 5 W/m² significantly contribute to the goal of climate change mitigation • are in line with "do no significant harm" (DNSH) criteria for sustainable use and protection of water and marine resources because existing hydropower plants operate in accordance with concessions, concession conditions and water permits and criteria for protection and restoration of biodiversity and ecosystems when reconstructing existing facilities. construction of new plants • are in line with minimum social safeguards for human and labor rights

	Name of activity according to Annexes I and II of Delegated Regulation 2021/2139	Description of activities according to Annexes I and I of Delegated Regulation 2021/2139	Alignment assessment
Electricity and heat production	Cogeneration for heating / cooling energy and electricity from bioenergy	Cogeneration of heat/cool and power from bioenergy (4.20)	100% of the installed capacity of bioenergy plants that use untreated wood chips as fuel is taxonomy-eligible and aligned activity because: • they meet the criteria of Directive 2018/2001 on the promotion of the use of energy from renewable sources and make a significant contribution to the goal of climate change mitigation • comply with "do no significant harm" (DNSH) criteria for pollution prevention and control • are in line with minimum social safeguards for human and labor rights
Transmission and distribution of electricity	Transmission and distribution of electricity	Construction and operation of electricity transmission systems interconnected by a very high and high voltage transmission network (4.9) Construction and operation of electricity distribution systems for high-voltage, medium-voltage and low-voltage distribution systems (4.9)	Electricity transmission is taxonomy-eligible and aligned activity because: • it contributes significantly to the goal of climate change mitigation as part of an interconnected European transmission system • complies with "do no significant harm" (DNSH) criteria for the transition to circular economy, prevention and control of pollution and protection and restoration of ecosystem biodiversity when planning the expansion and restoration of transmission networks • is in line with minimum social safeguards for human and labor rights Electricity distribution is taxonomy-eligible and aligned activity because: • it contributes significantly to the goal of climate change mitigation as a transmission system subsystem that is part of an interconnected European transmission system • complies with "do no significant harm" (DNSH) criteria for the transition to circular economy, prevention and control of pollution and protection and restoration of ecosystem biodiversity when planning the expansion and restoration of distribution networks • is in line with minimum social safeguards for human and labor rights Additionally, the analysis includes infrastructure for connection and distribution of electricity from renewable sources, charging stations for electric vehicles to meters, smart meters, advanced networks, submarine and underground cables and high-efficiency transformers in order to further modernize electricity distribution. The activity of transmission and distribution of electricity as activities aligned with the EU Taxonomy are also enabling activities.
Electricity storage	Electricity storage	Construction and operation of plants in which electricity is stored and later returned in the form of electricity - the activity includes energy storage in reversible hydropower plants (4.10.)	Electricity storage in reversible hydropower plants is taxonomy-eligible and aligned activity because: • it contributes significantly to the goal of climate change mitigation without additional technical screening criteria • complies with "do no significant harm" (DNSH) criteria for sustainable use and protection of water and marine because existing reversible hydropower plants and pumping stations operate in accordance with concessions, concession conditions and water permits and criteria for protection and restoration of biodiversity and ecosystems when reconstructions and criteria for the transition to a circular economy • is in line with minimum social safeguards for human and labor rights The activity of electricity storage as an activity aligned with the EU Taxonomy is also an enabling activity.

	Name of activity according to Annexes I and II of Delegated Regulation 2021/2139	Description of activities according to Annexes I and I of Delegated Regulation 2021/2139	Alignment assessment
e-mobility	Transport by motorcycles, cars and commercial vehicles Infrastructure for low-carbon road and public transport Installation, maintenance and repair of charging stations for electric vehicles in buildings (and in parking spaces connected to buildings)	Procurement, financing, leasing and rental and management of vehicles of categories M1 and N1 which are within the scope of Regulation (EC) no. 715/2007 of the European Parliament and of the Council (234) or category L (two- and three-wheel vehicles and quadricycles) (6.5) Construction, modernization, maintenance and management of infrastructure required for zero-emission road transport from exhaust pipes and transshipment and urban transport infrastructure (6.15.) Installation, maintenance and repair of charging stations for electric vehicles in buildings (and in parking spaces connected to buildings) (7.4)	Transport by motorcycles, passenger cars and commercial vehicles (6.5) is taxonomy-eligible and aligned activity because: • it contributes significantly to the goal of climate change mitigation by meeting the emission criteria from electric vehicles of 0 gCO_2/km and hybrid ones below 50 gCO_2/km • complies with "do no significant harm" (DNSH) criteria for the transition to circular economy and the prevention and control of pollution Transport by motorcycles, passenger cars and commercial vehicles as an activity aligned with the EU Taxonomy is also a transitional activity. Infrastructure for low-carbon road and public transport (6.15) is taxonomy-eligible and aligned activity because: • it significantly contributes to the goal of climate mitigation because it relates to charging stations and upgrading the electricity network for charging stations • complies with "do no significant harm" (DNSH) criteria for the transition to circular economy and the prevention and control of pollution • is in line with minimum social safeguards for human and labor rights Infrastructure for low-carbon road and public transport as an activity aligned with the EU Taxonomy is also an enabling activity. Installation, maintenance and repair of charging stations for electric vehicles in buildings (and in parking spaces connected to buildings) (7.4) is taxonomy-eligible and aligned activity because: • it contributes significantly to the goal of climate change mitigation without additional technical criteria • complies with "do no significant harm" (DNSH) criteria for adaptation to climate change • is in line with minimum social safeguards for human and labor rights Installation, maintenance and repair of charging stations for electric vehicles in buildings (and in parking spaces connected to buildings) as an activity aligned with the EU Taxonomy is also an enabling activity.
Other activities	Collection and transport of non-hazardous waste in fractions separated at the source	Separate collection and transport of non-hazardous waste in separately collected or mixed fractions to prepare for reuse or recycling (5.5.)	The collection and transport of non-hazardous waste in fractions separated at source (5.5) is taxonomy-eligible and aligned activity because: • all waste is separated at the place of origin according to the types and properties of waste and handed over to authorized waste management companies and the criterion for significant contribution to the goal of climate change mitigation is met • complies with "do no significant harm" (DNSH) criteria for adaptation to climate change and the transition to a circular economy • is in line with minimum social safeguards for human and labor rights

	Name of activity according to Annexes I and II of Delegated Regulation 2021/2139	Description of activities according to Annexes I and I of Delegated Regulation 2021/2139	Alignment assessment
Other activities	Construction of new buildings	Organizing the execution of projects for residential and non-residential buildings by combining financial, technical and physical resources for the execution of projects for buildings for later sale, construction of entire residential or non-residential buildings, for own sale or on a fee or contract basis (7.1)	The construction of new buildings (7.1) is taxonomy-eligible and aligned activity because: • buildings are constructed according to criteria that contribute to the goal of climate change mitigation • complies with "do no significant harm" (DNSH) criteria for adaptation to climate change • is in line with minimum social safeguards for human and labor rights
	Installation, maintenance and repair of energy efficiency equipment	Individual renovation measures consisting of the installation, maintenance or repair of energy efficiency equipment - (d) installation and replacement of energy efficient light sources (7.3.)	Installation and replacement of energy efficient light sources (7.3) is taxonomy-eligible and aligned activity because: • it contributes significantly to the goal of climate change mitigation by installing and replacing energy efficient light sources • complies with "do no significant harm" (DNSH) criteria for adaptation to climate change • is in line with minimum social safeguards for human and labor rights The installation and replacement of energy efficient light sources as an activity aligned with the EU Taxonomy is also an enabling activity.
	Installation, maintenance and repair of instruments and devices for measuring, regulating and controlling the energy efficiency of buildings	Installation, maintenance and repair of instruments and devices for measuring, regulating and controlling the energy performance of buildings - (b) installation, maintenance and repair of building automation and control systems, building energy management systems, lighting control systems and energy management systems (7.5.)	The installation, maintenance and repair of building automation and control systems, building energy management systems, lighting control systems and energy management systems (7.5) is taxonomy-eligible and aligned activity because: • it contributes significantly to the goal of climate change mitigation without additional technical criteria • complies with "do no significant harm" (DNSH) criteria for adaptation to climate change • is in line with minimum social safeguards for human and labor rights Installation, maintenance and repair of building automation and control systems, building energy management systems, lighting control systems and energy management systems as an activity aligned with the EU Taxonomy is also an enabling activity.

	Name of activity according to Annexes I and II of Delegated Regulation 2021/2139	Description of activities according to Annexes I and I of Delegated Regulation 2021/2139	Alignment assessment
Other activities	Data processing, server services and related activities	Storing, handling, managing, navigating, controlling, displaying, switching, exchanging, transmitting, or processing data via data centers, including edge-edge computing (8.1)	Data processing, server services and related activities (8.1) are taxonomy-eligible and aligned activities because: • in the reporting year, modern available equipment was procured from product manufacturers who are responsible for the compliance of the equipment they place on the market • Complies with "do no significant harm" (DNSH) for the transition to circular economy and the prevention and control of pollution • is in line with minimum social safeguards for human and labor rights Data processing, server services and related activities as an activity aligned with the EU Taxonomy is also a transitional activity.
	Education	Public or private education of any level or for any occupation (11.)	Education (11) is taxonomy-eligible and aligned activity because: • is in line with the criteria of significant contribution to climate change adaptation • is in line with minimum social safeguards for human and labor rights Education as an activity aligned with the EU Taxonomy is also a transitional activity.

Assessment of taxonomy-eligible but taxonomy-non-aligned activities of HEP Group

	Name of activity according to Annexes I and II of Delegated Regulation 2021/2139	Description of activities according to Annexes I and I of Delegated Regulation 2021/2139	Alignment assessment
Electricity production	Production of electricity from hydropower	Construction or operation of a plant for the production of electricity from hydropower (4.5)	6.5% of the installed capacity of hydropower plants is taxonomy-eligible, but in this reporting period it was assessed as non-aligned with the EU Taxonomy because: • the energy density of hydropower plants with hourly/daily accumulation is below 5 W/m^2 • the calculation of emission intensities in the whole life cycle of gCO$_2$/kWh is planned for the next reporting period according to the methodology from Delegated Regulation 2021/2139
Heat storage	Heat storage	Construction and operation of plants in which thermal energy is stored and later returned in the form of thermal energy or other energy carriers	The storage of thermal energy in heat accumulators in which thermal energy is stored is taxonomy-eligible, but in this reporting period it was assessed as non-aligned with the EU Taxonomy because: • energy produced from gas and gas oil is stored • the calculation of emission intensities in the whole life cycle of gCO$_2$/kWh is planned for the next reporting period according to the methodology from Delegated Regulation 2021/2139
Distribution of electricity	Distribution of electricity	Construction and system operation for distribution electricity by high, medium and low voltage distribution systems	Electricity distribution is also taxonomically eligible and taxonomy aligned activity, but we additionally voluntarily distributed this activity so that the infrastructure for connection and distribution of electricity that does not originate from renewable sources of energy is assessed in this reporting period as an activity which is not aligned with the EU Taxonomy, and where it is applicable, a calculation of the intensity of CO_2 emissions will be made throughout life cycle.
Distribution of central heating / cooling	Distribution of central heating / cooling	Construction, renovation and operation of pipelines and associated infrastructure for the distribution of heating and cooling energy terminating in a substation or heat exchanger	Distribution of district heating / cooling is a taxonomy-eligible but taxonomy-non-aligned activity. Activities are underway that will result in modernization in order to reduce losses and thus reduce fuel consumption and emissions into the environment. Research and development of a new fourth generation district heating system, as a low-temperature system, will also be underway, which will replace the existing third generation.

DESCRIPTION OF THE METHODOLOGY FOR CALCULATING THE SHARE OF REVENUES, CAPITAL INVESTMENTS AND OPERATING EXPENDITURES IN ENVIRONMENTALLY SUSTAINABLE ACTIVITIES

The key indicators of success in the announcements of non-financial companies according to the EU Taxonomy are revenues, capital investments and operational maintenance costs in accordance with the Delegated Regulation 2021/2178.

The share of revenue from environmentally sustainable activities in the total revenues of HEP

The share was calculated by dividing the revenue of a particular activity (numerator) with the total consolidated business revenue of the HEP Group realized in 2021, which amounted to HRK 15.97 billion (denominator). In 2021, 42.7 percent of revenue was generated from taxonomy-eligible and taxonomy-aligned activities, 17.6 percent of income from taxonomy-eligible activities whose alignment with the CO_2 emission intensity criteria throughout the entire life cycle will be determined in the following reporting periods, and 39.7 percent of taxonomy-non-eligible activities.

Revenues generated in the electricity sector

The production and procurement of electricity is carried out by the companies HEP d.d., HEP Proizvodnja, NE Krško, Solar Power Plant Vis, Solar Power Plant Poreč and Energy Park Korlat. The sources of electricity are electricity produced in HEP's power plants (HPP, TPP, TE-TO, EL-TO, BE-TO, WPP and SPP), electricity purchased from NPP Krško (in accordance with the long-term contract), electricity energy purchased from the Croatian operator of the electricity market - HROTE (privileged producers in the incentive system) and electricity purchased on the market (import and other purchases) and make up the total HEP's available electricity.

Revenues from the sale of electricity are realized by sales to customers within the framework of universal service and guaranteed supply through the supplier HEP Elektra, sales to business and household customers by HEP Opskrba, export and sales in the region through the subsidiaries HEP Trgovina and HEP Opskrba.

When calculating the share of the HEP Group's revenue from taxonomy-eligible and taxonomy-aligned activities, taxonomy-eligible but non-aligned activities and taxonomy-non-eligible activities in the total revenue of the HEP Group, we took into account the following facts:

- electricity for sale to customers and electricity to cover losses in the power grid originates from the same sources, i.e., from the energy mix consisting of production in own power plants, purchase from partially owned power plants, purchase from HROTE and purchase on the market
- revenues from sales of electricity to end customers are not recorded by source of production or acquisition of energy, but are recorded by accounting elements (i.e., energy fee, fee for use of the transmission network, fee for use of the distribution network and supply fee)

From the total revenues from electricity activities in the amount of HRK 14.3 billion, we subtracted the sum of revenues that consisted of the following items:

- total consolidated revenue from electricity transmission in the amount of HRK 1.8 billion (activity aligned with the EU Taxonomy)
- revenue from the distribution of electricity which, as a subsystem of electricity transmission, is considered aligned with the EU Taxonomy, but we additionally evaluated it voluntarily according to the criteria from Annexes I and II from Delegated Regulation 2021/2139, so revenue in the amount of HRK 1.4 billion comes from activities aligned with the EU Taxonomy, and the rest from eligible activities whose alignment will be assessed according to the prescribed methodology in the following reporting periods
- revenues that HEP Proizvodnja power plants and SPP Poreč generate from the sale of electricity to HROTE as privileged producers, which we distributed to taxonomy-aligned activities (ABM Varaždin, ABM Lešće, BE-TO Osijek and BE-TO Sisak, integrated solar power plants), taxonomy-non-aligned activities (mHPP Prančevići) and taxonomy-non-eligible activities (L block in TE-To Zagreb)
- revenue from electricity trading, which pertains to taxonomy-non-eligible activities

By deducting the sum of the previously mentioned revenues from the total revenues realized in the electricity sector, there are another HRK 8.1 billion left to distribute. Revenues are distributed according to individual thermal and hydropower plant, bioenergy, solar power plants, wind power plant and nuclear power plant, purchase from HROTE, imported energy and other procurement as follows:

- from the total sources of electricity in the electricity bal-

ance expressed in GWh, we excluded the production of HEP's power plants in the incentive system and electricity trading, and we calculated the share (%) of each source of electricity in the total available energy
- HRK 8.1 billion revenue was distributed by sources based on the calculated shares of each source in the remaining electricity produced and purchased.

Revenues from heating, gas and other activities

Revenues generated in heating, gas and other activities are taken from the audit report (consolidated data). We assessed the revenue of HEP ESCO (income from energy efficiency projects) and HEP Telekomunikacije (providing telecommunications services) and the revenue of HEP NOC Velika (education and training of HEP group workers for the technology of working under voltage) as eligible revenue.

Share of HEP Group's revenue in 2021 from taxonomy-eligible, taxonomy-eligible and aligned, and taxonomy-non-eligible activities

Activity	x 10^3 HRK	Revenue from EU taxonomy-aligned activities %	Revenue from EU taxonomy-eligible, but non-aligned activities %	Revenue from EU taxonomy-non-eligible activities %
Electricity	14,319,654	42.5	16.1	31.1
Heating	765,130	0.0	1.5	3.3
Gas retail sale	530,366	0.0	0.0	3.3
Gas wholesale	43,063	0.0	0.0	0.3
LNG	266,771	0.0	0.0	1.7
Other activities	44,603	0.3	0.02	0.0
Total consolidated business revenues of HEP Group	**15,969,586**	**42.7**	**17.6**	**39.7**

Share of capital investments in environmentally sustainable activities of the HEP Group

The share was calculated by dividing capital investments into individual activities (the numerator) with the total capital investments of the HEP Group in 2021, which amounted to HRK 3.1 billion (the denominator).

The investment activities of the HEP Group are included in the investment plan according to the order of priority, taking into account the contribution to the basic activity and security of the system and the expected financial effects. The annual Investment Plan includes activities from the currently valid five-year Consolidated Financial Plan of the HEP Group for the 2021-2025 period. Capital investments express expenditures for investments in the development and construction of new and reconstruction of existing facilities, replacement and renovation of plant parts, equipment and devices and other tangible and intangible assets. Capital investments in the HEP Group are planned on the basis of the Strategy and Implementation Program of the Energy Development Strategy of the Republic of Croatia, the Strategic Document HEP 2030 and the multi-year development and construction plans (three-year, five-year) of the companies of the HEP Group. The investment plans of HEP Group companies are based on techno-economic validity, multi-year development and construction plans, elaboration of the macro process of capital investments in production facilities and projections of possible sources of financing for each planning period. In the period until 2025, the HEP Group's investment activities are focused on the construction of new (HES Kosinj/Senj II) and the modernization and reconstruction of existing hydroelectric power plants as an important part of the Croatian electricity system, the construction and acquisition of facilities for the production of energy from renewable sources (solar power plants, wind power plants) and energy storage, the construction of new high-efficiency cogeneration plants for the production of electricity and thermal energy with the analysis of the possibility of using low-carbon fuels (synthetic gas, hydrogen, etc.). Planned investments in the future five-year period are also focused on the continuation of the project of introducing advanced networks in HEP ODS, the revitalization of the heat networks of HEP Toplinarstvo, and e-mobility (HEP d.d.), which are co-financed with funds from EU funds.

In 2021, the share of HEP Group's capital investments in taxonomy-eligible and taxonomy-aligned activities was 39.3 percent, 41.9 percent in taxonomy-eligible activities whose alignment will be determined in the following reporting periods, and 18.6 percent in taxonomy-non-eligible activities. At the same time, capital investments in taxonomy-non-eligible activities include the production of electricity and thermal energy from gas and the production of electricity from a nuclear power plant. For these two activities, the European Commission drafted a delegated regulation according to which they are taxonomy-eligible, if they meet the prescribed criteria, but the delegated regulation did not enter into force in 2021.

Share of HEP Group capital investments in 2021 in taxonomy-eligible, taxonomy-aligned and taxonomy-non-eligible activities

Activity	x 10^6 HRK	Share of capital investments into EU taxonomy-aligned activities %	Share of capital investments into EU taxonomy-eligible but non-aligned activities %	Share of capital investments into EU taxonomy-non-eligible %
Production and storage of electricity and heat	795.5	6.4	2.9	16.6
Transmission and distribution of electricity	1,821.3	26.1	33.1	0.0
Heat distribution	129.5	0.0	4.2	0.0
Gas distribution	47.1	0.0	0.0	1.5
LNG	13.6	0.0	0.0	0.4
e-mobility	5.0	0.2	0.0	0.0
Other activities	266.1	6.8	1.8	0.0
Share in total HEP Group's capital investments	**3,077.9**	**39.5**	**42.0**	**18.5**

Share of operating costs in the environmentally sustainable activities of the HEP Group

The share was calculated by dividing the maintenance costs of individual assets (the numerator) with the total maintenance costs of the HEP Group's assets realized in 2021 in the amount of HRK 1.08 billion (denominator).

In the EU taxonomy-eligible and taxonomy-aligned maintenance costs we included the maintenance costs of solar power plants, wind power plants, bioenergy plant, 93.5 percent of the installed capacity of hydroelectric power plants and reversible power plants for energy storage, the cost of maintaining the transmission network and the cost of maintaining the distribution network in the amount of 9.35 percent the share of power of new producers in the total power of users.

Asset maintenance costs of 6.5 percent of the installed capacity of hydroelectric power plants and asset maintenance costs for electricity distribution, for which the intensity of CO_2 emissions throughout the life cycle of the plant will be calculated and published in the following reporting periods, the cost of maintaining heat accumulators and heat energy distribution have been included in the taxonomic activities that are eligible and not aligned with the EU Taxonomy.

Asset maintenance costs for the production of electricity and thermal energy from fossil fuels, the production of electricity from a nuclear power plant, the distribution of gas and LNG, have been included in taxonomy-non-eligible activities.

In 2021, the share of operating expenses for the maintenance of the HEP Group in taxonomy-eligible and taxonomy-aligned activities was 28.4 percent, 42.4 percent in taxonomy-eligible activities whose alignment will be determined in the following reporting periods, and 29.2 percent in taxonomy-non-eligible activities.

Share of operating maintenance costs in HEP Group in 2021 for taxonomy-eligible and aligned, taxonomy eligible but non-aligned and taxonomy-non-eligible activities

Activity	x 10^3 HRK	Share of operating costs for EU taxonomy-aligned activities %	Share of operating costs for EU taxonomy-eligible but non-aligned activities %	Share of operating costs for EU taxonomy-non-eligible %
Production and storage of electricity and heat	373,024.9	10.7	2.1	21.7
Transmission and distribution of electricity	592,259.0	17.6	37.2	0.0
Heat distribution	33,327.5	0.0	3.1	0.0
Gas distribution	3,714.4	0.0	0.0	0.3
LNG	76,649.7	0.0	0.0	7.1
e-mobility	487.0	0.05	0.0	0.0
Share in total HEP Group's operating costs	**3,077.9**	**28.4**	**42.4**	**29.2**

8

RESPONSIBILITY IN THE WORKPLACE

Contribution to UN Sustainable Goals:

Material topics:

Health and safety in the workplace
Attractive employer
Diversity and inclusion
Dialogue with social partners

People : ESG criteria in this chapter			page
Dignity and equal rights	Equal pay according to gender - the ratio of salaries of women and men in the organization	GRI 405-2	153
	Diversity and inclusiveness - representation according to diversity categories	GRI 406-1	152
	Entry-level salaries by gender	GRI 202-1	159
	Freedom of association and collective bargaining	GRI 102-41	146
Health and safety	Number of injuries at the workplace Number of lost hours	GRI 403-2	154-156
Skills and knowledge for the future	Training and education hours and average hours per employee	GRI 404-1	149
Employment and value creation	Number of new employees and employee turnover	GRI 401-1	157

Continuous care for human resources in various organizational units of the HEP Group is extremely important for the long-term sustainable business development of the group and the organization of business processes.

At HEP, we want to attract and retain qualified experts in various areas of our activities, especially the talents among technical professionals that are necessary for the smooth operation and development of the power system. Therefore, we are committed to creating an engaged and motivating work environment that provides equal opportunities for all current and future employees in employment and professional development and that does not allow any form of discrimination based on gender, age, sexual orientation, disability, or ethnicity, religion and the like. In addition, we care about the well-being of our employees and respect the need to achieve a balance of business and private life. On this basis, we are creating an excellent work experience that contributes to the sustainable functioning of the power system and increases the efficiency of HEP's operations.

With the long-term human resources development strategy of the HEP Group for the period 2017-2030, we have established guidelines to ensure the sustainability of human resources management. Continuous targeted training and development, transfer of knowledge from employee to employee and succession are priority measures for managing the working structure of the HEP Group, which ensures the transfer, retention and improvement of specific knowledge important for the smooth running of business processes. In addition to the strategy, the area of human resources management is regulated by the Diversity and Non-Discrimination Policy, the Mamforce Company Standard which ensures active implementation of gender and family responsible management policies and the Ordinance on procedures and measures to protect the dignity of workers. HEP Group companies have appointed commissioners or commissions for the protection of dignity authorized to receive and resolve complaints related to harassment.

Considering health and safety at work, HEP d.d., HEP Upravljanje imovinom and HEP ODS have a certified health and safety management system introduced according to ISO 45001:2018. HEP Proizvodnja has introduced health and safety management system introduced according to ISO 45001:2018, while the certification is expected until the end of 2022. Safety system management in all HEP Group companies is guided by the obligations set by the Occupational Safety and Health Act, and each HEP company has its own regulations on occupational safety and health, which further regulate this area. Health and safety issues related to the protection of life, health and dignity of workers and ensuring their health and safety are also covered by the Collective Agreement.

Survey on organizational climate as well as job satisfaction within exit questionnaires helps us collect feedback from employees on the basis of which we plan and undertake activities aimed at further improving the work environment. Given the extremely low turnover rate, HEP Group, even in extraordinary circumstances such as a pandemic, successfully balances between business requirements and needs and expectations of employees, managing to maintain a secure framework and structure for work and stable operations in extremely changing circumstances.

However, changes in the field of business organization and flexible working arrangements that enabled uninterrupted business processes in compliance with prescribed epidemiological measures during the COVID-19 pandemic, led to a change in expectations from certain, especially highly competitive talent groups. This poses the challenge of harmonizing the organization of business optimal for a specific area of activity and retaining and attracting new talent from many employers, including HEP Group. Flexible work arrangements are thus an increasingly motivating factor in choosing an employer and, due to the specifics of HEP Group's activities, may in the long run appear as one of the risks of retaining a new, highly competitive workforce. In addition, we recognize the unfavorable age structure of the HEP Group as a risk in the field of human resources management, which we take into account when drafting employment plans. When planning, we emphasize the need to timely express the need for employment, which depends on the time required to transfer knowledge from employee to employee and the time required for introduction to the specifics of the workplace. Another risk we face is the low interest of young people in the field of technical professions to work in the HEP Group. We respond to this challenge by providing scholarships to full-time graduate students and full-time high school students, who become HEP Group employees after completing their education.

Business continuity in the challenges of a pandemic

We continued to address the challenges of the COVID-19 pandemic during 2021.

Management Team continued to lead the management of work organization and safety at work, ensuring continuous communication with all companies and the activation of occupational safety experts. recommendations and act on the measures adopted by the team.

In accordance with the measures and recommendations of the National Civil Protection Headquarters, the Crisis Management Team provided hand sanitizers in all areas in front of the elevators. Likewise, workers were first given the use of a washable face mask, after which they were continuously given disposable masks, and were informed of the measures to be followed. Continuous disinfection of space and frequently used items and temperature measurement of workers and visitors is carried out, and the Crisis Management Team communicates with organizational units on a daily basis about specific situations and activities they can undertake, monitors and records the number of infected workers and workers in self-isolation.

In addition to healthcare challenges, the education system also faced a major challenge during the pandemic. At the global level, the digitalization of education has been launched, and in accordance with that, there have been changes in the HEP Group. It was necessary to reduce physical contact and to temporarily suspend all trainings and meetings that are not necessary for the smooth operation of the HEP Group. Therefore, increased activity in the HEP Academy e-learning system and independent enrolment in available courses was noticed, as well as the need to continue this approach to internal education of employees.

We communicated with our employees in a timely and transparent manner and provided them with a number of additional benefits and support programs in order to facilitate the challenging period. Thus, during the pandemic, and especially in the period after the earthquakes in Zagreb and Central Croatia employees were offered psychological help. Encouraged by the mental health of our people, we amended the HEP Academy plan for 2022 with the development of education on psychological resilience and mental health. We started with the digitalization of education for employees during the first wave of the pandemic, and we continued to update the e-learning HEP Academy during 2021.

Workplace conditions and collective bargaining

GRI 102-41

The Collective Agreement concluded on October 30, 2019, for 2020 and 2021 between the Association of Employers of Hrvatska elektroprivreda, members of HEP Group companies, and representative unions of employees, defines working conditions for all employees of the signatory companies.

In July 2021, the employer and the representative unions signed amendments to the Collective Agreement, agreeing to extend its application until 31 December 2023.

Regardless of the status of employment, i.e., whether they have a fixed-term or permanent employment contract, all employees exercise the same level of rights from the Collective Agreement. Also, the Collective Agreement provides for part-time workers:

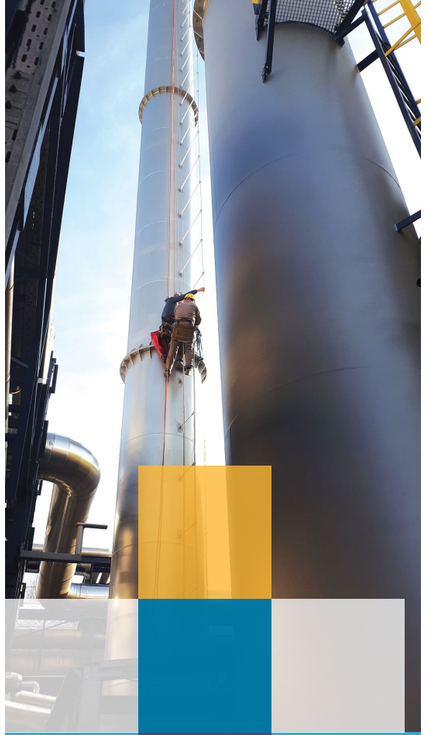
- full amount for transportation costs
- reward for long-term work with the employer (according to the conditions set out in this Collective Agreement)
- extraordinary assistance (according to the conditions set out in this Collective Agreement)
- the full amount of the holiday allowance
- the full amount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

The Collective Agreement stipulates that before determining certain material rights of workers that are not provided for in the Collective Agreement (recreation and vacation of workers, insurance of workers, scholarships for children of deceased workers, assistance to retirees, reward for successful business, etc.), the employer informs them of the decision made. In addition to the prescribed legal deadlines for notifying of significant changes in operations, the employer undertakes to inform the unions in a timely manner and at least once every two months about the progress of preparations for plans for restructuring and privatization of the employer and their impact on the economic and social position of workers.

In order to ensure social dialogue, if the workers' council is not established with the employer, the trade union commissioner has all the rights and obligations of the workers' council determined by the Labor Act before the adoption of any intended decision (adopting ordinances, employment plan and development and employment policy, dismissal decisions, vacation plan, working hours, measures related to safety and security at work, introduction of new technology and changes in organization and manner of work, transfer of enterprise, part of enterprise, economic activity or part of economic activity, collective redundancy, etc.). In order to protect and promote the rights and interests of workers, the Workers' Council cooperates with trade unions and is obliged to regularly inform workers and trade unions about their work and receive their incentives and proposals.

By signing the addendum to the Collective Agreement, an agreement was signed on the continuation of incentive measures for termination of employment for employees of companies older than 63 years and six months, which were adopted in 2016 by HEP Group companies.

According to that decision, the age limit for exercising the right to incentive measures for retirement is 63.5 years, and workers who meet this condition can initiate the conclusion of an agreement to terminate the employment contract with the employer.



Education and professional development

HEP's employees are the greatest value and competitive advantage in the increasingly challenging business conditions on the market.

Accordingly, we advocate, encourage and invest in their lifelong education and development of competencies, ensuring that they attend postgraduate studies, further education, retraining, vocational training and advanced training.

Thus, in 2021, the HEP Group invested a total of HRK 10,699,529 in employee education, of which HRK 5,489,390 for professional advancement and HRK 3,575,602 for professional training. On average, HRK 1,007 per worker was invested in education, and 38.92 percent of workers were engaged in some form of education. According to the development needs of HEP Group companies, 38 employees were sent for additional training with the aim of supplementing and acquiring a certain level of education or title, and the progress and obligations of employees attending postgraduate specialist or doctoral studies were continuously monitored. As in previous years, organized by HEP and the Teaching and Education Centre in Velika, employees attended specialist training programs in the field of live operation verified by the Ministry of Science and Education and other professional training and professional training related to electrical and legal regulations. HEP Group does not currently have formal skills acquisition and lifelong learning programs that support continued employment opportunities and help to successfully end employment. In addition to professional training according to legal regulations and professional exams, investments were made in the professional and personal development of workers by referring them to professional training - workshops, seminars, conferences, professional gatherings (CIGRE, CIRED, MIPRO), counselling and specialist certified training programs in accordance with workplace needs.

In 2021, employees also had the opportunity to attend live training, but, primarily due to prescribed epidemiological measures and the pandemic, they attended more intensive online training through the HEP Group's internal training center - HEP Academy, which is based on Moodle. Within the HEP Academy, we actively manage the knowledge, information and ideas proposed by our employees and identify, select and share key knowledge that is inside and outside the organization. The selection of training is based on qualitative and quantitative research and analysis of markets and trends, but also according to the needs of organizational units, and the procurement process is directed accordingly. The Academy is already recognized as a place that organizes and creates training for the entire HEP Group. We also organized business foreign language courses, and employees showed special interest in education in the field of energy, environmental protection, internal audit, controlling, finance, accounting, public procurement, law, human resources, office operations, information and communication technologies, project management, leadership skills, teamwork and stress management.

We continued to work on the development of a mentoring system for monitoring trainees with the aim of standardizing the process of introducing new employees in the HEP Group, as well as preserving and optimally using existing key knowledge.

In addition to regular entry and updating of data on completed educational activities at the employer's expense, a new scholarship report was created in the Education Record application, and the activity of supplementing the post-graduate study and continuing education module with new data entry fields was launched.

In 2022, it is planned to continue providing education to employees according to the education plan and organizing business foreign language courses. Activities related to the development of the HEP Group as a desirable and socially responsible employer (employer branding) in cooperation with the scientific and educational community (professional internships, career fairs, student scholarships...) and activities related to the introduction of a unique mentoring system for HEP companies are also planned. groups outside the headquarters with the aim of training interns for independent work.

Trainings of the employees in 2021

	TOTAL HOURS		Change (%)	Number of employees		Change (%)	Average hours per employee		Change (%)
	2020	2021		2020	2021		2020	2021	
Total	**427,425**	**406,825**	**-4.82**	**10,504**	**10,559**	**0.52**	**40.69**	**38.53**	**-5.31**
According to the type of workplace									
Executive	409,000	387,603	-5.23	10,380	10,436	0.54	39.40	37.14	-5.74
Managerial	18,425	19,222	4.33	124	123	-0.81	148.59	156.28	5.18
According to gender									
Men	350,822	310,733	-11.43	8,150	8,175	0.31	42.72	38.01	-11.03
Women	76,603	96,092	25.44	2,354	2,384	1.27	33.69	40.31	19.65

Year	Total hours of internal education (*including digitally	Total hours of external education	Hours of internal education per employee	Hours of external education per employee	Total number of employees
2021	30,038	376,787	2.84	35.68	10,559
2020	76,603	350,822	7.29	33.40	10,504

Retaining and attracting talents

To ensure the stability of the power system, we need the best employees. Therefore, we continuously carry out activities that attract talent from the labor market, but also internal activities that enable existing employees to develop their potential and personal competitiveness, which at the same time ensures the achievement of HEP's strategic goals.

We will continue to invest in the development of the best human resource management practices in order to further support the realization of the mission, vision and strategic goals of the HEP Group.

Although we do not yet have a formal talent development system in place at the HEP Group level, in accordance with our human resources development strategy for the period 2017-2030, the introduction of talent identification and development system at all levels is planned. At the same time, in order to respond to business needs and act preventively in the context of the availability of professional employees in the labor market, we are proactive in hiring new talent. We cooperate with the scientific and educational community by participating in career fairs, providing scholarships to students in positions crucial to the functioning of the power system and HEP Group, providing internships to students and promoting professions in the technical field. Thus, through strengthened cooperation, continuous dialogue and exchange of information between educational institutions and HEP, we achieve a common goal - development and economic growth. By developing a stimulating work environment and working on the integration of social responsibility into various segments of HEP Group's operations, we also take care of HEP Group's reputation as a desirable employer.

In 2021, we participated in the virtual student career fair Business Matchmaker 2021, organized by the Faculty of Economics in Zagreb. By participating in career fairs, along with other prominent companies, we make contact with potential employees, but also create an opportunity to exchange ideas about potential joint projects by talking to faculty representatives and students themselves. We have awarded 19 scholarships to full-time graduate students for the academic year 2021/2022 (contracts with students were signed), as well as 12 scholarships to regular students in the final grades of secondary schools for the school year 2021/2022. The contract provides financial support to scholarship holders during their studies and employment in the HEP Group as an intern for an indefinite period after graduation or completion of secondary education. In the wider social and demographic context, HEP thus contributes to the retention of young and talented people in the Republic of Croatia.

We are also involved in professional internship programs at the Faculty of Electrical Engineering and Computing in Zagreb - FER, industrial internships at the Faculty of Mechanical Engineering and Naval Architecture in Zagreb - FSB (Atlantis system), Faculty of Electrical Engineering, Computing and Information Technology Osijek - FERIT Osijek (portal Stup). Based on the agreement on business cooperation, we also realized the professional practice of EFFECTUS students. In 2021, 310 interns completed internships in HEP Group companies - 228 students of technical, craft-industrial technical, electrical engineering (including computer science), mechanical and economic schools and 82 students of primarily technical colleges (mechanical engineering, electrical engineering, chemical engineering and technology, computing and information technology), polytechnics and university departments and students in the field of social sciences.

In addition, we continuously provide monthly financial support and scholarships for the children of our deceased employees, and by participating in the humanitarian program "Step into Life", we award scholarships to children without adequate parental care.

Diversity and equal opportunities

We are aware of the importance of diversity, inclusivity and an approach based on equal opportunities as the foundation of our company's success, so through our approach to diversity, we want to create a framework that will promote this.

Back in 2017, we signed the Diversity Charter, which aims to encourage the implementation of diversity policy in the business sector. The Charter is based on a set of principles voluntarily accepted by the signatory's employer for the purpose of promoting diversity, non-discrimination, inclusiveness and equal opportunities in the workplace.

The diversity and non-discrimination policy of the HEP Group, which we regularly review, was officially adopted in 2019. In accordance with the Action Plan that followed the Diversity and Non-Discrimination Policy, we have been working since then on implementation activities and policy promotion in our communication channels. We organize training on diversity and non-discrimination for management, but also for other employees for whom training on the topic of diversity and non-discrimination is available at HEP Academy.

Regardless of marital and family status, pregnancy and motherhood, sexual orientation and any other grounds, all jobs in the HEP Group are available to qualified persons under equal conditions, which we emphasize when designing job advertisements. In the documentation on the selection or promotion of candidates, we emphasize and care that companies in the HEP Group seek and provide equal access to all candidates. The issue of discrimination was regulated by the Ordinance on the procedure and measures for the protection of the dignity of workers for each company of the HEP Group and the Code of Ethics. We are proud to be among the companies that have started to introduce better working conditions for working parents for which we have been awarded the advanced Mamforce standard. We are constantly striving to improve working conditions for working parents and continuously promote gender equality and family-responsible business. We also encourage greater involvement of fathers in the upbringing of children by strengthening their right to maternity leave, as well as greater flexibility of working hours.

During 2021, HEP Group companies did not receive any complaints of violations of the Code of Ethics, nor were there any cases of discrimination, either internally or by end customers and other stakeholders. In 2021, there were two complaints regarding employment, one of which was unfounded.

In HEP Group companies, the range of coefficients for calculating salaries is defined by the Collective Agreement, and below is an overview of the structure of employees and salaries.

Ratio of average minimum and starting gross salaries in 2021 by gender and comparison with 2020

Gender	Average minimal salary	Average entry-level salary	Ratio
M	7,836.90	8,984.35	-13 %
F	6,293.85	7,222.47	-13 %
Ratio 2021/2020	**Average minimal salary**	**Average entry-level salary**	
M	9 %	5 %	
F	0 %	-12 %	

Data on initial gross salaries in HEP Group companies show the highest initial salaries of all new hires, not just the salaries of interns. Some of the new employees were not trainees but employees with longer work experience, whose salary is higher due to a higher bonus for seniority and a higher coefficient. In all HEP Group companies, there is no gender discrimination in trainee coefficients, as they are the same for all trainees with the same professional qualification. The data shown in the table refer to the average lowest paid salary in the companies of the HEP Group.

Health and safety in the workplace

At work in the office and at other locations of the employer, HEP Group employees are provided with the highest standards of safety and health protection.

We implement the strictest measures to encourage the improvement of safety and health at work, prevention of injuries at work, occupational diseases and protection of the working environment. The quality of our occupational health and safety management system is confirmed by ISO 45001:2018 certificate, which is a part of the integrated H&S management system according to norms ISO 9001:2015, ISO 14001:2015 and ISO 50001:2018, for the ruling company HEP d.d. and subsidiaries HEP ODS and HEP Upravljanje imovinom.

During 2021, supervisory audits of the system were conducted, which concluded that:

- the management system is in accordance with all requirements of the audited standard
- the organization successfully implemented the planned activities
- the management system is capable of implementing the organization's policies and objectives
- an assessment of the operation of the management system ensures that the organization meets applicable legal, regulatory and contractual requirements.

In addition to the obligations from the Occupational Safety and Health Act, each HEP Group company also has its own regulations on occupational safety and health, which additionally regulate the employee safety management system. Health and safety issues related to the protection of life, health and dignity of workers and ensuring their health and safety are also covered by the Collective Agreement. It also determines the ways of protecting employees with a high frequency or high risk of disease, as well as other employees who are subject to high risks in business and performance of work tasks. HEP employees are represented through the Occupational Safety and Health Committee, and the Occupational Safety and Health Commissioner has been elected in all organizational units where working conditions require it.

RISK IDENTIFICATION AND TRAINING. The hazard identification and risk assessment procedure regulate the procedures for hazard identification, necessary controls and investigation of accidents at work. The procedure defines the methods and techniques of risk assessment, the mandatory content covered by the assessment and the data on which the risk assessment is based on the classification of hazards, hazards and work-related work. Risk assessment is not a one-time procedure, but an ongoing process that must be harmonized with the changes that occur during the work process, or when performing work tasks. Familiar with all the elements of hazards and risks they encounter in their daily work, employees themselves participate in the risk assessment for particular jobs.

For each accident at work, a detailed investigation is carried out to determine whether the accident was due to negligent work, unprofessional and improper use of means of work or for some reason that the worker could not influence 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.

In order to prevent accidents at work, we also conduct regular education and training of employees during onboarding, changes in workplaces, changes in work technologies and after an injury at work. For low-risk jobs and jobs with special authorities, training programs designed for distance learning are used, while for all other trainings, training is conducted in a theoretical and practical way. Furthermore, distance training programs have been developed for the Occupational Safety and Health Commissioner and the Employer's Authority, and an educational program has been developed to address the earthquake. We regularly review and harmonize training and education programs for the successful avoidance and treatment of injuries at work with all changes in the law and applicable regulations. We regularly inform employees through work instructions about all the dangers in the workplace and possible negative impacts on their health and safety. In all companies of the HEP Group, regular supervision over the application of measures and rules in the field of occupational safety and fire protection is carried out.

Injuries at work in the HEP Group in 2021

	Number of injuries		Injuries/ no. of employees %		Lost hours		Lost days	
	2020	**2021**	2020	**2021**	2020	**2021**	2020	**2021**
Injuries at work	99	**113**	0.95	**1.07**	51,880	**39,624**	4,823	**6,485**
In the work process	73	**76**	0.7	**0.72**				
Outside work process	26	**37**	0.25	**0.35**				

Injuries at work according to companies in 2021

Company	2020	**2021**
HEP d.d.	1	**3**
HEP Proizvodnja	3	**14**
HEP ODS	92	**91**
HEP Toplinarstvo	2	**1**
HEP Plin	0	**3**
HEP Elektra	1	**1**
Total	99	**113**

HEALTHCARE SERVICES. Annual healthcare check-ups and supplementary health insurance are part of the health care of our employees. In addition, all employees working in high-risk jobs undergo additional periodic examinations to determine their health status and ability to perform jobs. To perform such work, the worker must obtain a doctor's certificate that he is capable of performing them, and in the event that a worker has limited working capacity, a procedure is initiated to deter-

mine whether the worker can use aids (glasses, hearing aids, etc., for which the selected doctor specializing in occupational medicine gives consent) to continue to perform these tasks.

PROMOTING HEALTH. Due to epidemiological measures in force during 2021, we were unable to organize Health Day at HEP Group locations. In order to provide employees with new insights into the importance of sports activities, 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, if public health circumstances allow, we intend to continue this activity in 2022 at as many locations as possible. In 2021, we focused more on online training and short stretching exercises in the office through the e-course "Exercise in the workplace" available to employees through HEP Academy. The Multisport card, co-financed by HEP Group since 2019, was used in 2021 by 1,100 employees. By regularly informing about the options offered by the Multisport card, we encourage employees to exercise regularly as a way to strengthen their psychophysical health.

HEP people in numbers

GRI 102-8

Total number of employees in 2021

Year		2021	% of the total number of employees	2020	% of the total number of employees
Age group	<30	**903**	8.6	911	8.7
	30 - 50	**4,883**	46.2	4,912	46.8
	50>	**4,774**	45.2	4,681	44.5
Total		**10,560**	**100**	**10,504**	**100**
Year		**2021**	% of the total number of employees	2020	% of the total number of employees
Gender	Men	**8,175**	77.4	8,150	77.6
	Women	**2,385**	22.6	2,354	22.4
Total		**10,560**	**100**	**10,504**	**100**

New employment rates and employee turnover

	Under 30		30 - 50		Over 50	
Gender	M	F	M	F	M	F
Arrivals	115	32	125	53	9	5
Departures	14	5	29	11	210	46

Number of employees eligible for retirement in the next five years

Year	2022	2023	2024	2025	2026	TOTAL
Number	79	184	330	373	376	**1,342**

Composition of governing bodies and structure of employees by categories by sex and age group

		Total	GENDER		AGE		
			M	F	UNDER 30	30 - 50	OVER 50
2021	Management	106	91	15	0	49	57
	All employees	10,560	8,175	2,385	903	4,883	4,774
2020	Management	115	97	18	0	65	50
	All employees	10,504	8,150	2,354	911	4,912	4,681

Employees by type and type of contract

Gender	Contract type	Number of employees
F	Fixed term	70
M		183
F	Permanent	2,315
M		7,992
TOTAL		**10,560**

Employee educational structure

Educational degree	Women	Men
Dr	4	16
Mr	49	136
VSS	882	1,556
VŠS	285	593
SSS	1,061	3,940
NSS	41	49
VKV	2	855
KV	34	932
PKV	5	25
NKV	22	73
Total	**2,385**	**8,175**

Average gross salaries (HRK) in 2021 by level of education

	Annually			Monthly		
Educational degree	Women	Men	Ratio M/F %	Women	Men	Ratio M/F %
DR	248,391.56	263,078.16	6	20,699.30	21,923.18	6
MR	247,429.88	254,139.20	3	20,619.16	21,178.27	3
VSS	183,449.83	194,573.34	6	15,287.49	16,214.45	6
VŠS	141,721.12	155,806.85	10	11,810.09	12,983.90	10
SSS	121,114.97	127,726.21	5	10,092.91	10,643.85	5
NSS	95,656.43	98,387.82	3	7,971.37	8,198.99	3
VKV	123,956.31	146,357.33	18	10,329.69	12,196.44	18
KV	107,012.76	116,680.17	9	8,917.73	9,723.35	9
PKV	82,261.91	104,863.85	27	6,855.16	8,738.65	27
NKV	87,669.15	100,022.17	14	7,305.76	8,335.18	14
		Total ratio	**9**		**Total ratio**	**9**

Persons with disabilities

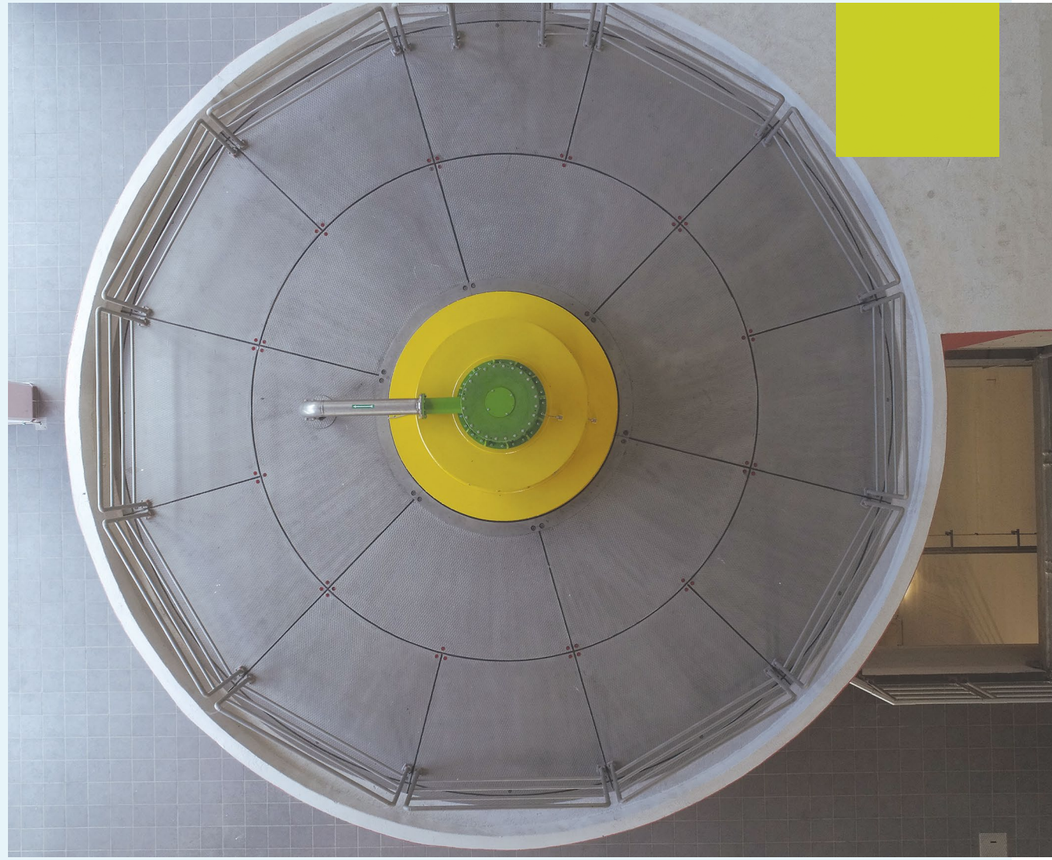
Age	M	F
Under 30	2	1
30-50	78	22
Over 50	326	72
Total	**406**	**95**

Parental leave in 2021

Men	64
Women	154
Total	**218**

Fringe benefits and rewards

Cash rewards
Cash prize on the occasion of HEP Day, Christmas and Easter
Gift for child
Vacation bonus
Reward for many years of work with the employer
Salary bonus for continuous employment with the employer and total length of service
Incentive salary bonus
One-off financial assistance (birth of a child, in case of death, serious illness of a worker and / or close family member)
Multiple cash support during parental leave
Transportation fee
Fee for meals
Credit cards (authorized persons)
Severance pays above the legal minimum
Scholarships for the children of deceased workers
Non-monetary rewards
The third pension pillar
Accident insurance (outside the legal minimum)
Health check-ups (outside the legally prescribed)
Supplementary health insurance
Using cell phones for a part of the employee
Paid leave (1 to 7 days for different purposes)
Special offers for employees in the banks with which HEP operates
Subsidized meals (better prices in some restaurants)
Subsidized sports activities (Multisport card)
Discounts for employees (for customers and business partners)



9

OUR SOCIAL IMPACT

Contribution to the UN Sustainable Goals:

Material topics:

Cooperation with stakeholders and partners
Community investments

Prosperity: ESG criteria in this chapter			page
Communities and social well-being	Community investments, including supported infrastructure, donations, charity work in the community	GRI 203-1 GRI 413	77-82, 115, 120, 125, 166
	Stakeholder engagement	GRI 102-43	31
Sustainability reporting and data release	Publication of sustainability reports, reporting according to sustainable development goals	UNGC 8	33

As a large business entity, HEP significantly influences a wide range of stakeholders, and given its size and importance, one of its tasks is to constantly encourage the growth and development of society.

With humanitarian projects and a series of donations aimed at repairing the consequences of the pandemic and earthquake in Zagreb, HEP contributed to mitigating the crisis and speeding up recovery. At the end of 2020 and the beginning of 2021, all HEP on-duty services worked day and night in the field to eliminate damage and ensure the normalization of electricity supply as soon as possible after the devastating earthquake in Sisak-Moslavina, Karlovac and Zagreb counties.

In 2021, the implementation of donation programs continued. Support for projects to promote sports, recreation and a healthy lifestyle continued, as well as support for national and regional projects in the field of culture and tradition preservation. An annual tender was held to support projects and programs in five categories: youth, environment, arts and cultural heritage, science and society, and humanitarian action.

Procurement of IT equipment for pupils in primary schools in order to encourage IT literacy has been continued. The total amount of donations in 2021 was HRK 14.6 million.

In 2021, HEP also awarded journalists for the best work in the field of environmental protection in order to encourage monitoring of the impact of the project and activities on the environment and informing the public. In order to encourage community investment in energy efficiency and renewable energy projects, HEP continued to implement donation projects within the ZelEn program.

Furthermore, cooperation with the local community continued with the aim of faster realization of investments in the field of renewable energy sources. On the other hand, thanks to such cooperation, municipalities and cities have the opportunity to engage more strongly in the development of sustainable energy infrastructure in their area, which will contribute to their economic and overall development.

For new and existing projects for which it is necessary to conduct an assessment of the need to assess the impact of the project on the environment and the procedure for assessing the impact of the project on the environment and the ecological network, public information procedures were carried out. The most significant risk relates to the uncertainty of the duration of the mentioned procedures in which the public and the interested public are involved, and this risk is beyond HEP's influence.

Involvement of communities in HEP development projects

SOLAR POWER PLANTS AND COOPERATION WITH THE LOCAL COMMUNITY. HEP is exploring the possibility of integrating ready-made or renewable energy (RES) projects at a high level of development into its production portfolio. Starting from the strategic development goals and the need for diversification of RES projects, HEP regularly publishes public invitations for partners to express interest in the development and sale of RES projects in the Republic of Croatia. Based on the evaluation of registered projects in the public call from 2020, in October 2021 HEP concluded agreements on cooperation in the development of solar power plant projects with the municipalities of Vrpolje, Lovinac, Orle, Zdenci, Satnica Đakovačka and Trpinja and the City of Valpovo. The seven new agreements are a continuation of cooperation with municipalities and cities, with which HEP concluded agreements on the development of 11 solar power plant projects in 2019 and 2020.

RESOLVING PROPERTY-LEGAL RELATIONS FOR THE KOSINJ HYDROPOWER SYSTEM CONSTRUCTION PROJECT. The future HES Kosinj covers an area of about eight thousand cadastral parcels on an area of 4,749 hectares, located in five cadastral municipalities. For most of the plots, the land registers were not established or were destroyed in the Homeland War, and the data in the cadaster were unorganized. Based on the agreement with the State Geodetic Administration (SGA), HEP first fully financed the new cadastral survey carried out by the SGA, which was a precondition for the development of a new cadaster and the establishment of land registers for the cadastral municipality of Kosinj. The new cadastral survey enables real estate owners to clear up their long-standing unsettled ownership situation, which usually requires a lot of time and considerable financial budgetary resources. About 2,000 plots from the first zone of the new survey, in June 2021, were entered in the newly established land register. By the end of 2022, the exposure of the remaining 6,000 plots of the second and third zones is expected to be completed, and their entry in the land register at the beginning of 2023.

In 2021, expropriation and/or sale of real estate from the owner began, and the entire procedure will take two to three years. Real estate owners who do not want to wait for the expropriation procedure can immediately enter into a purchase agreement with HEP, in which case the value of the real estate purchase is determined in the same way as for expropriation (by the assessment of authorized experts). Therefore, at the end of 2020, HEP informed the interested public about the initiation of the real estate purchase procedure with an invitation to citizens to contact HEP's services with the aim of concluding a purchase agreement. The call was well received by some owners and direct communication and cooperation were established with them. In this procedure, HEP engaged law firms that, among other things, provide operational support to residents in the preparation of documentation required for concluding real estate purchase agreements, and provide information on expropriation procedures to owners who have not decided to conclude a contractual sale with HEP.

Pursuant to the Law on Expropriation and Determination of Compensation, HEP made a decision to purchase illegal real estate at the same prices and procedures, i.e., on an equal footing with legal real estate. Such a decision was made understanding the legal position of real estate users in the area of the project in which due to the reservation of space in the spatial plans for the planned project HES Kosinj for many years was not possible legal construction.

In 2021, in cooperation with the Municipality of Perušić, the construction of a residential building in Perušić continued, which is fully financed by HEP. The building is intended for property owners from the area of HES Kosinj who prefer a replacement property (apartment) instead of monetary compensation. The apartments will be available for life to those residents who are not entitled to the real estate that is the subject of the purchase.

As part of the HES Kosinj project, the communal infrastructure in the wider area of the project will be significantly improved. Several new roads with a total length of 17 kilometres are under construction, and new water supply, electricity distribution and telecommunications infrastructure are being withdrawn along most of the routes of these roads. In the area of the Municipality of Perušić, the electricity distribution network is additionally reconstructed and upgraded with the aim of strengthening the network and increasing the security of electricity supply to the population. The investment value of the mentioned projects, together with the building in Perušić, is around HRK 150 million, which does not directly refer to the hydropower part of the project. Therefore, this is the amount that HEP will directly invest in improving the living conditions of the local population even before the start of production.

INVESTMENTS IN THE DISTRIBUTION SYSTEM ENCOURAGE THE SUSTAINABLE DEVELOPMENT OF THE ISLANDS. The Islands Act 2018 is intended to encourage the sustainable development of islands, which includes their stable economic development, equitable distribution of social opportunities for all islanders, environmental protection and increased resilience to climate change. The islands encourage investment in competitive and innovative sectors that are environmentally, spatially, economically, technologically and socially sustainable. The law obliges public bodies to pay special attention to their impact on the development of islands when planning and implementing projects, measures and activities within their competence. HEP ODS throughout Croatia, including the islands, develops, builds and improves the distribution network for the purpose of safe, reliable and efficient operation of the distribution system and electricity distribution. Investments in islands in 2021, realized in the area of coastal counties, total HRK 79.9 million. The most significant are the investments in the construction of submarine cables Rivanj 2-Sestrunj 1, and major reconstructions of transformer stations, for example, for the Orlec solar power plant and the Cres-Hrasta transmission line.

WORKSHOPS ON THE FEATURES AND BENEFITS OF THE PROJECT OF INTRODUCING ADVANCED NETWORKS. As part of a pilot project for the introduction of advanced networks in five distribution areas, HEP ODS is investing in three functional areas of an advanced electricity distribution network: advanced metering infrastructure, development and optimization of a conventional network and automation of a medium voltage network. In the previous period, workshops were held with the aim of informing the public about the importance and features of this project. The host of the first virtual workshop at the end of 2020 was DP Elektroslavonija Osijek, where HRK 32.2 million will be invested in advanced networks. At the beginning of March 2021, a workshop was held at DP Elektra Zadar, in which HRK 24.1 million will be invested in advanced networks. The third workshop was on March 24, 2021, in Zagreb, where the project activity Advanced Measurement Infrastructure will cover 420,000 network users. In April and May 2021, two more virtual workshops for the public were held, in Split and in Dubrovnik.

FEES FOR THE USE OF SPACE

In 2021, HEP paid the local self-government units (municipalities and cities) in whose area its power plants are located a total of HRK 107.8 million in fees for the use of space occupied 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 any other economic purpose. The main purpose of using the funds raised is to finance the preparation of projects from European funds to increase energy efficiency and renewable energy sources, 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 projects to help vulnerable customers.

Support to education

Cooperation with the education system continued with the implementation of two established socially responsible projects.

AWARD IMAM ŽICU! is the longest running socially responsible project in Croatia that connects the economy with primary and secondary education. Since 1995, HEP has been awarding awards to primary and secondary school students, winners of national competitions in mathematics, and physics, with a public exhibition of experimental works in physics for the previous school year. The award is also given to students at secondary vocational schools in the sector of electrical engineering and computing, who won the first three places in national competitions.

Considering that, due to the epidemiological situation, the state knowledge competitions for the school year 2019/2020 were held in October and November 2020, the individual award ceremony for students at HEP's headquarters was held in February 2021. In March, a visit was organized by the HEP CEO to the 15th Gymnasium in Zagreb, whose students regularly win the most such awards. Due to unfavorable epidemiological circumstances, the usual public award ceremony was not held for the school year 2020/2021 either. Once again, in October, the individual award ceremony was held, and the public event of the Imam žicu award was organized the same month as part of the visit of the President of the Management Board of HEP to Varaždin County.

The realization of the project of donating computers to primary schools FOR OUR LITTLE GENIUSES in 2021 also included two cycles. First, in February, computers were distributed to schools according to a tender conducted in 2020, so that a new competition cycle would be conducted from September to December 2021. In that cycle, HEP decided to donate 100 new computers to 34 primary schools in Croatia. Within this project, since 2015, HEP has been donating to primary schools that have a large number of students per computer, or inadequate and obsolete computer equipment. In this way, it contributes to the development of computer and information literacy in the Republic of Croatia. By the end of 2021, HEP had allocated 550 computers for students in 164 primary schools throughout Croatia. The total value of donated IT equipment is HRK 2.3 million. Cooperation has been initiated or continued with other organizations and institutions dealing with children and youth in all segments of education, assistance or preparation for life, and specifically last year to overcome the consequences of the earthquake.

Green stories

AWARD CEREMONY FOR THE BEST JOURNALIST WORK IN THE FIELD OF ENVIRONMENTAL PROTECTION VELEBITSKA DEGENIJA. The awards were presented in September 2021 for the best journalistic work in the field of environmental and nature protection in written, radio and television journalism and newspaper photography. In the category of articles published in the press and on the Internet, the winner of the Velebitska degenija is Petra Somek, for the report "Protected Nature of Međimurje", published in the Meridijani magazine. The same magazine published awarded photo report "Spring on Velebit - the awakening of the giants", by writer and photographer Krunoslav Rac. The winner of the award in the category of television works is Ana Trcol for the segment "Raising the sea level and climate change", which was broadcast on RTL television. In the category of radio reports, the award was presented to Tajana Petrović Čemeljić, a journalist from HRT, Radio Rijeka, for the documentary radio drama "Sound Collector - Ivo Vičić". HEP has been following the Velebitska degenija journalist award project for many years as a partner of the Croatian Journalists 'Association's Environmental Journalists' Section, which will not be possible in the future due to the need to harmonize cooperation modalities with Croatian regulations and HEP's internal acts.

ZELEN PROJECT AT THE SECONDARY VOCATIONAL SCHOOL IN VARAŽDIN. In August 2021, the implementation of the energy efficiency project at the Secondary Vocational School in Varaždin was completed. The project was donated by HEP and financed from the ZelEn fund, which raises funds from the sale of electricity obtained exclusively from renewable sources to business customers of HEP Opskrba. Projects are donated to public sector institutions on the basis of a public call. The project at the Secondary Vocational School included two subprojects with a total value of almost HRK 700,000 - the upgrade of a solar power plant by increasing the power from 10 to 30 kW and the installation of an 84 kW heat pump.

VOLUNTEER ACTION "OUR GREEN STORY" IN EASTERN CROATIA. "Our Green Story" of HEP Opskrba for 2021 was held at the Kopački rit Nature Park. In cooperation with the employees of the Nature Park, the employees of HEP Opskrba helped to rehabilitate the entrance part of the promenade, made preparations for painting and painted a part of the promenade in length of one kilometer. A bench for visitors was set up in the Alley of Danube Parks, which was donated to the park by HEP Opskrba.

ELEKTRA ZAGREB IN THE EUROPEAN PILOT PROJECT FLEXIGRID. Together with fourteen partners across Europe, HEP ODS is participating in the FLEXIGRID pilot project. The project proposes to improve the operation of the distribution network by making it more flexible, reliable and cost-effective, developing four hardware solutions consisting of a secondary substation of the future, a new generation of smart meters with improved feeder mapping capabilities, high-renewable protection and a multi-purpose hub called the Energy Box. The project envisages the development of four additional software modules: for locating fault location and self-repairing network, forecasting and managing the network, managing network congestion and optimizing heat storage. Four demonstration sites have been selected to implement FLEXIGIRD solutions: a rural and suburban network in Spain, a hotel resort on the Greek island of Thassos, an urban network in the city of Zagreb and an isolated valley in South Tyrol in Italy. In cooperation with Elektra Zagreb and the Faculty of Electrical Engineering and Computing in Zagreb, on May 26, 2021, the first virtual workshop on the contribution of end consumers to the flexibility of distribution system operators was held. In the dynamic panel discussion, with their ideas on how to contribute to the flexibility of the distribution system, end-users also participated as future potential providers of flexibility services to the distribution system operator.

COMMUNITY ENGAGEMENT

MURALS ON TRANSFORMER STATIONS. Murals of academic artists from the Croatian Society of Fine Artists have once again refreshed and beautified transformer stations in Zagreb and for the first time in Zaprešić. In the area of Elektra Zagreb - HEP ODS, as part of the "Transformer Stations" project, eight power facilities have been painted so far. Those who have been given the trust in 2021 to display public, playful and imaginative works available to every passer-by are Helena Klakočar (TS Dubravkin put) and Tea Jurišić (TS Krapinska ulica, Trešnjevka) for HEP's facilities in Zagreb, as well as Melinda Šefčić for TS in Zaprešić.

Struggling against energy poverty

REHABILITATION OF EARTHQUAKE CONSEQUENCES IN SISAK-MOSLAVINA COUNTY. In the devastating earthquake that hit Sisak-Moslavina, Karlovac and part of Zagreb County on December 29, 2020, 238 substations were destroyed or severely damaged, and 136 thousand users were left without energy supply. Damage repair in 2021 on the electricity distribution network has been taking place in three phases. The first phase is emergency remediation, which includes emergency remediation of demolished buildings necessary for the functioning of the electricity distribution network. This rehabilitation was carried out in the first ten days thanks to the round-the-clock work of 150 HEP ODS installers, who already 48 hours after the earthquake connected to the network all facilities in which it was technically possible to establish supply. After the arrival of the first mobile facilities for the temporary accommodation of the injured population, HEP workers immediately started connecting them to the network and by mid-March they had introduced electricity in about two thousand containers.

Connections and disconnections from the network for the purpose of security of access to the facilities where HEP ODS works were carried out free of charge and the prescribed fee. As an emergency measure to help the affected population, on January 4, HEP decided to suspend foreclosures and power outages to its customers in the earthquake-affected area of Sisak-Moslavina County for the first three months of 2021, which also refers to the settlement of regular advance payments. Subsequently, the deadline for this decision was extended four times a year, until the end of the calendar year 2021. By the end of 2021, HEP wrote off a total of energy receivables and fees for temporary electrical connections in the amount of HRK 79 million.

SOCIALWATT IN THE FIGHT AGAINST ENERGY POVERTY. HEP ESCO participates in the implementation of the international energy efficiency project SocialWatt, and HEP Elektra is an associate member. The project is funded by the HORIZON 2020 program, started in September 2019 and lasts 43 months. The project aims to build the capacity of energy suppliers and utilities and enable them to use the decision support tools developed under the project to effectively target energy-poor households and implement energy efficiency programs.

In Croatia, the Decree on Criteria for Acquiring the Status of Vulnerable Energy Customers from Networked Systems defines that the end customer from the household category may have the status of the vulnerable customer, provided that he is a beneficiary of the guaranteed minimum benefit or personal disability allowance or is a household member. HEP Elektra and HEP Opskrba pay into the State Budget funds in the name of a solidarity fee set in the amount of three lipas per kilowatt hour, in accordance with the decree, which is in force since 1 October 2015. The solidarity fee is part of the price of electricity and as such is stated on the end customer's account. The solidarity fee does not represent an additional burden for the customers of HEP Elektra and HEP Opskrba, since they are granted a discount in the same amount, whereby the solidarity fee does not affect the total amount of the invoice. In 2021, HEP Group companies paid HRK 182 million to the State Budget in the name of solidarity fee.

Donations and social responsibility

Support for projects to promote sports and recreation, i.e., a healthy lifestyle, continued. In the field of culture and tradition, strong support was maintained for national and regional projects, projects of Croatian national theatres and regional and local cultural organizations. In 2021, stronger cooperation was established with the scientific community, monitoring the project activities of scientific research institutions.

LIGHT ON THE COMMON PATH. In 2021, a tender was held for the award of donations to institutions, associations and other civil society organizations Light on the Common Path. Following the application evaluation procedure, a decision was made to allocate funds for the implementation of 222 projects and programs of associations, institutions and civil society organizations.

HEPI FOR THE BLIND AND VISUALLY IMPAIRED. Five computers, a specially designed keyboard and an electronic Braille notebook were donated to the Zagreb Association of the Blind. The new equipment of the Association's IT classroom will help make basic and advanced IT courses easier and the accessibility of web content for blind and partially sighted people will be tested.

The new equipment will serve to enable better customization of the website. Five members of the Association have been trained to check web accessibility and, as end-users, test the accessibility of the websites of institutions and companies that request them to do so. Many members of the association, over 1,200 of them, can now read the contents of the screen via a Braille notebook, which is a new technology that allows the text on the screen to be felt tactilely.

In April 2021, the HEPI website of HEP Opskrba was presented, adapted to blind and partially sighted people, which was created in cooperation with the Association of the Blind Zagreb as part of the "Network for All" project.

10

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11 ABOUT THIS REPORT

The HEP Group's annual and sustainability report includes a description of financial and non-financial impact management. It also includes the eighth Sustainability Report in accordance with the Global Reporting Initiative (GRI) Standard. It provides goals, strategies, risks and activities of the HEP Group in planning and implementing sustainable and responsible operations. The report is compiled according to the core option of the GRI Standard and includes data in accordance with the indicators of the Sectoral Supplement for Energy. The report used contributions to the UN's sustainable development goals. The Sustainability Report is not subject to an external verification process, but we are considering this option for future reporting periods.

The previous Annual and Sustainability Report was published in 2021 for the previous one and is available on the website: https://www.hep.hr/about-hep-group/publications-2521/sustainability-reports/2539

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IMPRESSUM

PUBLISHED BY

Hrvatska elektroprivreda d.d. Zagreb, Ulica grada Vukovara 37

EDITORS-IN-CHIEF

Tamara Tarnik and Darko Alfirev

REPORTING CONSULTANTS

Hauska & Partner

DESIGN AND LAYOUT

Katal media d.o.o.

PHOTOS

HEP Group archive, Nikša Stipaničev / Cropix (page 4), Krunoslav Rac (page 169)

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