



We generate
the energy
of future



CEO's statement



Today we are at the stage, when technologies are constantly developing and within a short period they can radically change the whole sectors of economy, as well as transform the world and society. Development of renewable energy sources, including hydro-power, has become one of the drivers for advance modern

technologies. Considering these challenges, and in order to ensure sustainable development, PJSC UKRHYDROENERGO is following the way of constant self-improvement. Consequently, today the Company shows a good growth of financial production figures, introduces modern solutions and develops corporate social responsibility.



We emphasize that the main value of the Company is people in particular our employees, members of their families, the communities of those cities where our power plants are located and Ukrainian society in general. We set high standards of professionalism, as this relates to one of the main electricity production enterprises of Ukraine.

We are concerned about the safety and make every effort to prevent environmental damage. We respect and recognize the value of our stakeholders and partners. We are working in the interest of the state and the society as a whole.

IHOR SYROTA
Director General
PJSC UKRHYDROENERGO



Corporate
Social
Responsibility



Having approved the Strategy of corporate social responsibility, PJSC UKRHYDROENERGO demonstrates to the world social responsibility of our business and willingness to follow seventeen Goals of United Nations Sustainable Development, ten principles of the UN Global Compact, as well as other documents in the direction of sustainable development. The corporate social responsibility (CSR) strategy of PJSC UKRHYDROENERGO is aimed at voluntary integration of social and environmental aspects into production and economic activity of the company and their implementation in co-operation with the concerned parties. Joining this international initiative we declare that our activities are not only intended to receive commercial benefits, but also to solve important social issues of the society. These

"We generate green energy from water in a modern and reliable way".

principles are important and familiar to us.

Conscientious business and social responsibility to employees, partners, society, nature and future generations will always remain the main values of PJSC UKRHYDROENERGO. We are building up the Company focusing on them. The CSR strategy covers

all Company activities, and is not a separate direction; that means Company's responsibility for influence of decisions and operating results on both society and environment. It is implemented taking into account the

expectations of the concerned parties and contributes to the achievement of sustainable development goals. The CSR strategy is consistent with the main goals and priorities of PJSC UKRHYDROENERGO and is implemented according to its mission – "We generate green energy from water in a modern and reliable way."

The CSR strategy contributes to:

- increase of PJSC UKRHYDROENERGO's input into sustainable development of society in social, economic and environmental areas;
- enhancement of management effectiveness in the aspects of the Company's influence on social and environmental components of the life of society;
- development of hydropower industry of Ukraine in consideration of three-pronged economic, social and environmental component of sustainable development that will

- contribute to improvement of energy security of the country and ensure compliance with the current environmental requirements in the process of electricity generation at HPPs and PSPPs;
- development of corporate governance system and competitive growth;
- increase of investment attractiveness of the Company;
- effective Company adaptation to the new competitive energy market conditions and





synchronous work with European
ENTSO-E energy system;

- gradual Company transformation into a multi energy world-class company specialized in various types of low-carbon generation (including solar, wind energy etc.);
- creation of conditions for permanent personal and professional growth of UKRHYDROENERGO employees in the age of dynamic technological and managerial changes in the world energy industry;
- ensuring transparency of business and implementation of corporate social responsibility in the public sector of economy;
- Company transformation into one of the most active communication platforms in the industry;
- ensuring sustainable social and economic development in the nearby areas of the Company sites that will consequently help to economic and social stability in Central, Naddniprianska regions of Ukraine as well as its western regions.

Social and Educational Programs



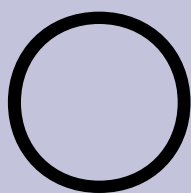
The Collective Agreement, drawn up and executed at the initiative of PJSC UKRHYDROENERGO's management, guarantees to keep up a decent payment rate and volumes of social guarantees, benefits and compensation to the employees of the Company. It ensures the right

of labor staff and trade union committees to participate in the Company governance. Relying on fair and up-to-date payment and motivation systems, material and non-financial rewards for employees, PJSC UKRHYDROENERGO is able to build up and develop permanent dynamic growth of the professional labor staff.

Social and Educational Programs implemented by PJSC UKRHYDROENERGO:

- Program on Transfer of European technologies to hydropower industry of Ukraine
- Insurance protection Program of PJSC UKRHYDROENERGO
- Health insurance Program for the staff
- Social Protection Program of the Company
- Training and Development Program
- Tourism and recreation development Program for the staff
- Territories development Program of PJSC UKRHYDROENERGO

HR Policy



Only active position as regards staffing oriented to the latest and purposeful staff selection systems, training of specialists and managers for the Company, assistance in employee development and professional growth, allows us to form a professional, advanced and effective labor staff.

The first stage of organizational structure changes took place in the Company in 2017, also the training and professional development program for PJSC UKRHYDROENERGO's employees was approved.

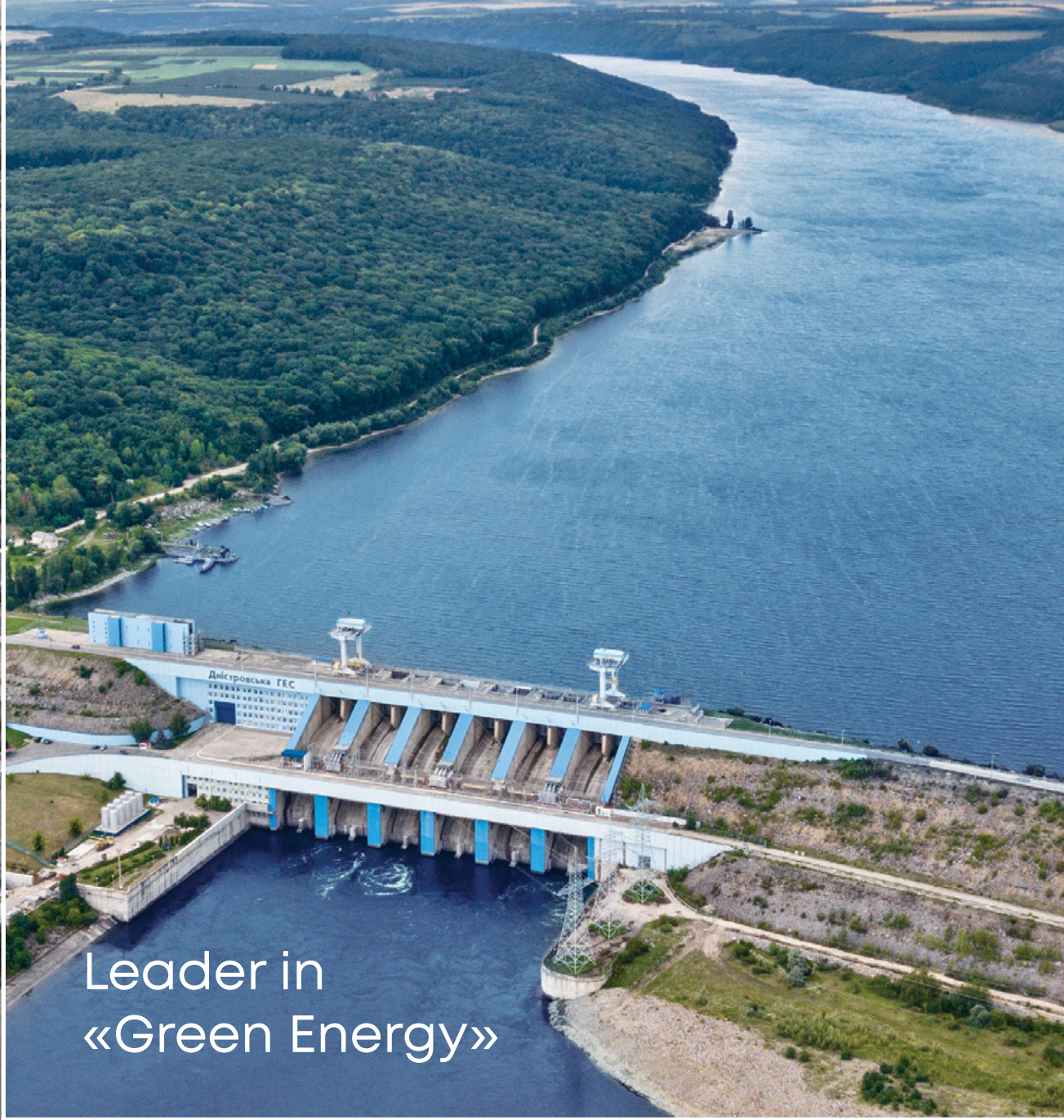
Today the program of labor pool formation and career management is being implemented for administrative staff and further on will be introduced at the Company's Affiliates. As of today,

more than 3000 professionals work in the Company. The staff is one of the most important Company's resources and it needs constant training and development. Considering its own capabilities, the Company creates the most favorable conditions to engage young professionals and support the existing talent density. We cooperate with a number of educational institutions in order to attract young specialists while studying to undertake an internship in the Affi-

**People are
the main value
of the company!**

liates of the Company. The employees attend practical training and advanced training both in state educational institutions of Ukraine and abroad. Taking into account the active participation of the Company in the Program on Transfer of state-of-art European technologies to hydropower industry of Ukraine, further development and training of the staff becomes more significant due to participation of the world leaders in the field of power industry.





Leader in
«Green Energy»

PJSC UKRHYDROENERGO is the leading producer of electrical power from renewable sources in Ukraine. The Company ensures peak load ba-

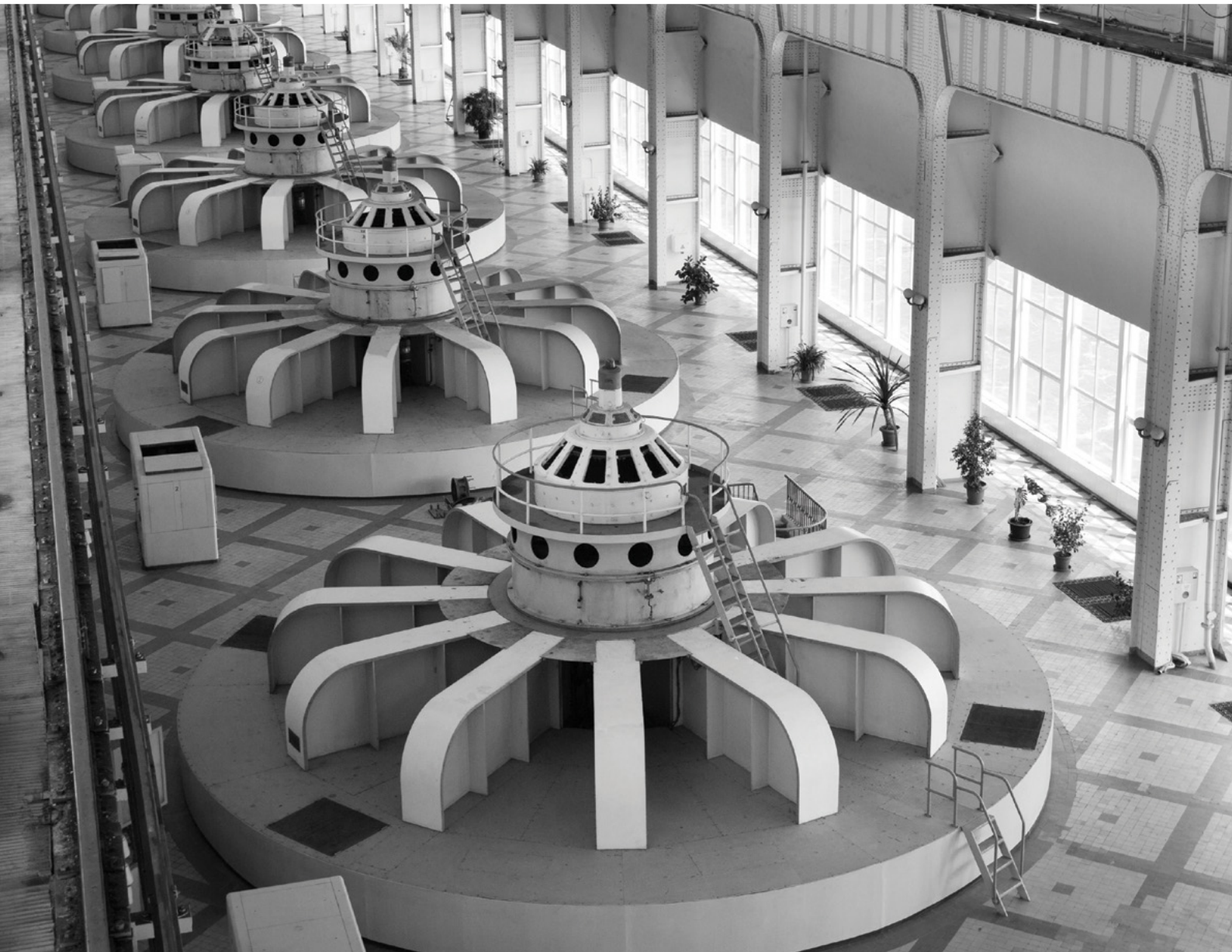
lancing, frequency and power control in the electrical grid, availability of flexible emergency reserve of the domestic united power system.

Industrial indicators

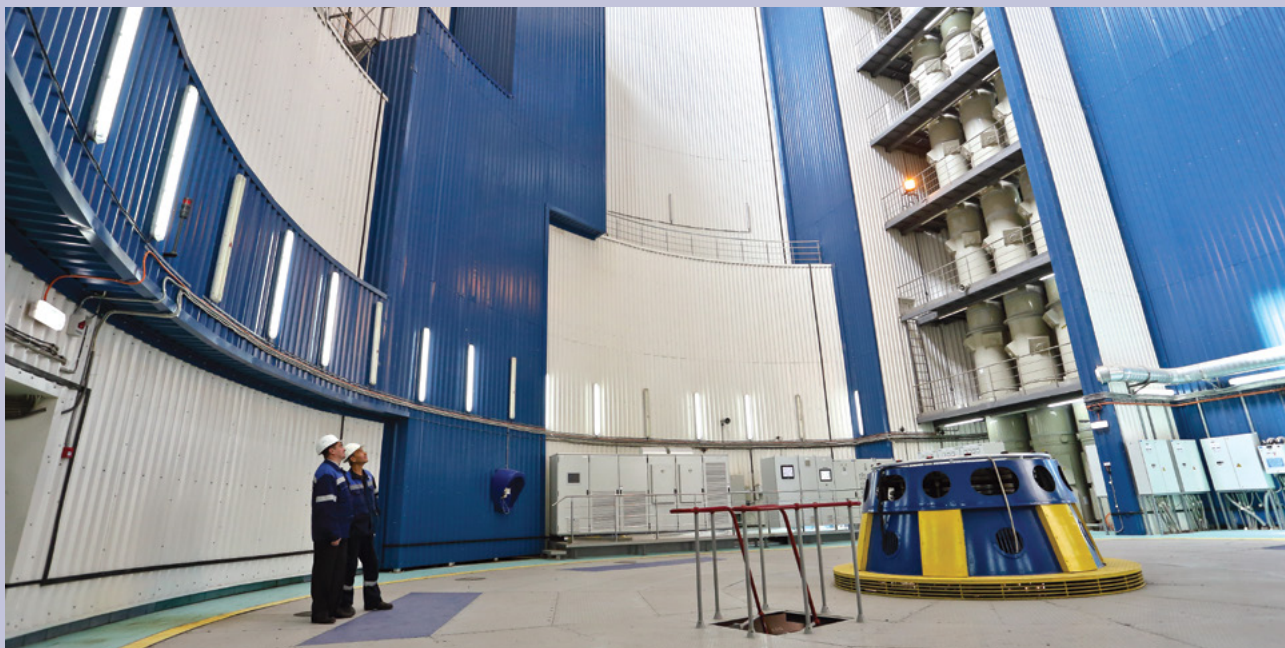
Indicator	2014	2015	2016	2017	2018
Quantity of hydro units, pcs	102	102	103	103	103
Rehabilitated hydro units, pcs	62	65	67	68	70
Total installed capacity, MW	5027,0	5384,7	5411,0	5744,8	5758,1
Electricity output, million kWh	8 702	6 425	8 711	9 969	11 368



Capacities



Plant	Quantity of hydro units, pcs	Refurbished hydro units, pcs	Installed capacity, MW
Kyiv HPP	20	20	440
Kyiv PSPP	6	3	235,5
Kaniv HPP	24	16	493
Kremenchuk HPP	12	5	639
Seredniodniprovska HPP	8	6	388
Dnipro HPP	18	11	1553,8
Kakhovka HPP	6	6	334,8
Dniester HPP	6	3	702
Dniester PSPP	3	-	972
Total	103	70	5758,1



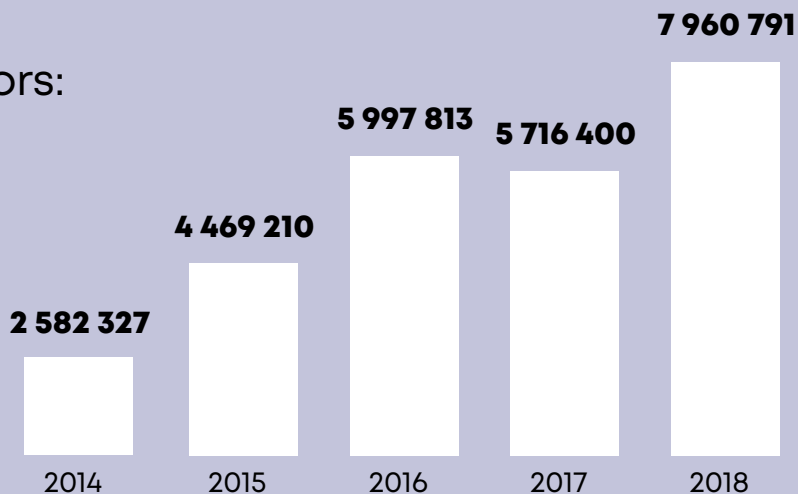
Financially successful Company

PJSC UKRHYDROENERGO annually
increases its financial and investment
indicators.

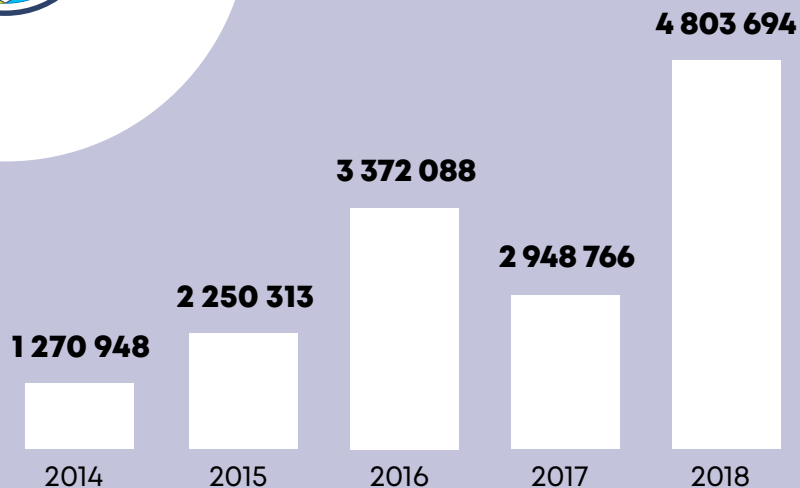


Financial Indicators:
thousand UAH

**NET
PROFIT**



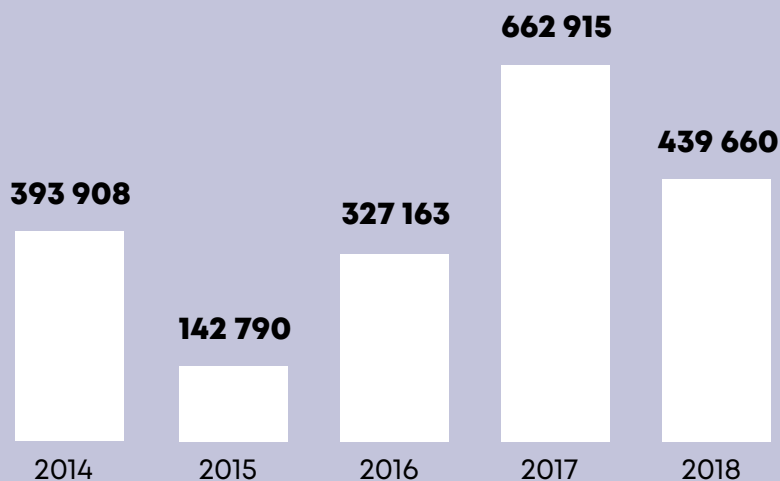
**GROSS
PROFIT**



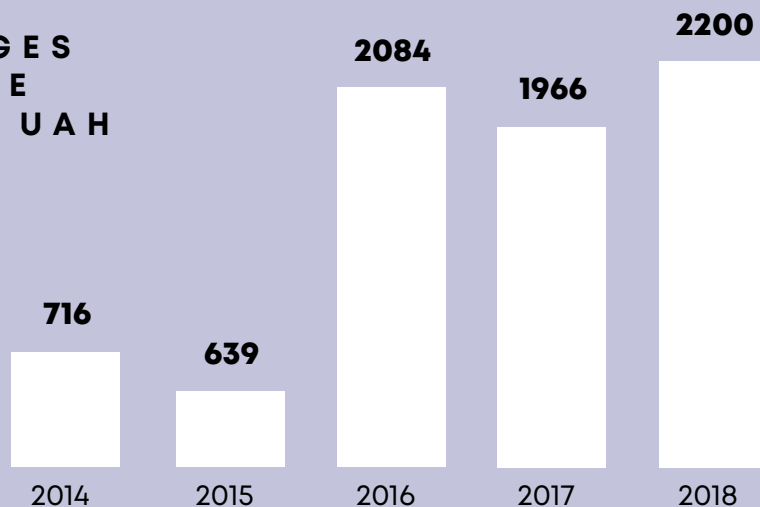


Financial
Indicators:
thousand UAH

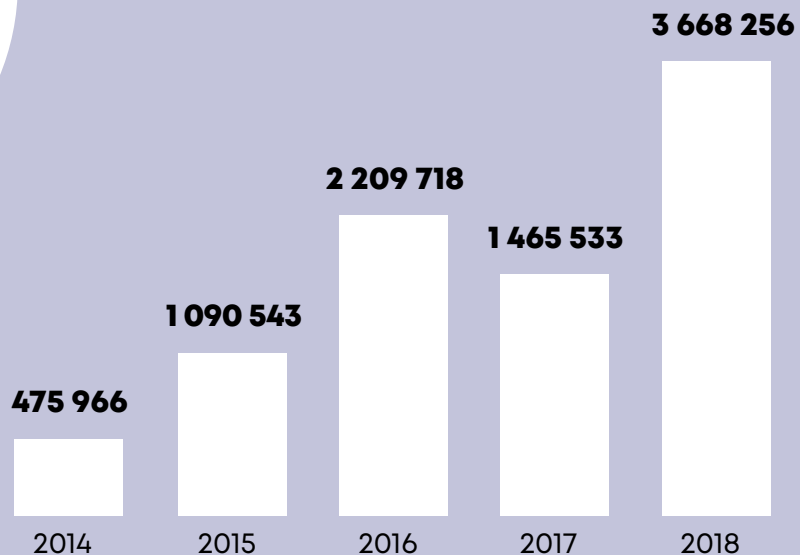
**DIVIDENDS PAID
TO THE STATE
BUDGET**



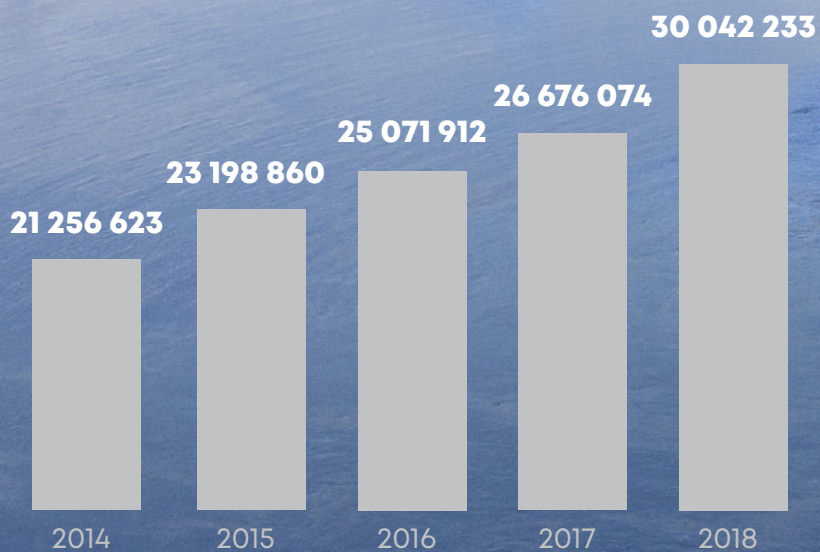
**TAXES AND CHARGES
PAID TO THE STATE
BUDGET, MILLION UAH**



**NET
PROFIT**



VALUE
OF ASSETS,
THOUSAND
UAH





PJSC UKRHYDROENERGO has many-years experience of cooperation with the leading world companies:



**Electricite de France
(EDF),**
France



FICHTNER GmbH & Co. KG,
Germany



Andritz Hydro GmbH,
Germany,
Austria



ABB Switzerland Ltd,
Switzerland



Nari Corporation Group,
China



General Electric,
USA



Alstom T&D,
France



Areva T&D SA,
France



Emerson,
USA



Leica Geosystems,
Switzerland

The Company is actively working to extend its international cooperation:

**Andritz Hydro GmbH
(Germany, Austria)**



Jointly with UKRHYDROENERGO, a number of projects are being implemented: the contract for rehabilitation of three hydro units at Dnipro HPP Affiliate, fulfillment of Program on Transfer of European technologies to hydropower industry of Ukraine along with promotion of hydropower industry in general.

Riko d.o.o. (Slovenia)



The experience in development and promotion of projects on hydraulic structures construction in the Balkans, as well as the procedure for solution of social tasks, environmental and cultural issues and cooperation with local communities are being studied.

A group of Chinese companies



The experience in PSPP construction in China and other countries as well as applying the latest technologies in hydropower facilities operation, natural and rational use of water resources, and solution of social issues of the employed staff are being studied. A number of memorandums of collaboration have been signed.

Dogush Group (Turkey)



UKRHYDROENERGO and Dogush have signed a memorandum of collaboration on construction of hydropower facilities in Ukraine. The experience of forming a consortium with the leading European companies along with the procedure and feasibility of their establishment are being studied.



Sustainable
Development



The strategic objective of the Company is to provide electrical energy and power reserve to power system of Ukraine using water resources of the Dnipro and the Dniester rivers. For this pur-

pose, PJSC UKRHYDROENERGO will keep on providing a reliable condition and quality operation of equipment and hydraulic structures, as well as constructing generating capacities on the Dnipro and the Dniester rivers.

Short and Medium Term Strategic Projects:

- Dniester PSPP construction, rehabilitation of the Dnipro cascade HPPs, construction of Kaniv PSPP and Kakhovka HPP-2.
- Rehabilitation of existing plants and construction of new hydropower facilities will allow the Company to achieve 11.5 billion kWh of annual electricity output in 2020, and bring the proportion of flexible capacities of HPPs and PSPPs in the total industry balance to 16% by 2035.
- Implementation of the Strategic Development Plan of the Company will allow to increase the level of security, reliability and stable operation of hydropower industry, to strengthen sustainability and performance of the United Power System of Ukraine by means of the balanced structure of capacities, as well as to reduce consumption of traditional energy resources and to decrease technology-related load on the environment.

A white seagull is captured in mid-flight, its wings spread wide, showing the intricate details of its feathers. The bird is positioned in the center-right of the frame, facing right. Its beak is a bright yellow-orange, and its legs are tucked under its body. The background is a soft-focus landscape featuring a dense layer of green trees in the middle ground. In the far background, several tall, dark industrial structures, possibly power line towers or chimneys, rise against a clear, light blue sky. The overall scene suggests a juxtaposition of nature and industry.

Our View on Environment

PJSC UKRHYDROENERGO is one of the major users of water utilization system of Ukraine and carries out its activity on the main rivers of the country – the Dnipro and the Dniester. This sets a great responsibility on the Company in the use of water resources and obliges it to give full attention to the environmental issues.

The activity of the company is based on the principle that each facility of the hydropower industry has already become or will be a part of a complicated complex of arrangements for harmonious interaction between man and nature. Our task is to ensure that this harmony would be a part of sustainable development and valuable species of flora and fauna would be able to exist and reproduce.

PJSC UKRHYDROENERGO supports the necessity of preservation and reproduction of natural ecosystems and directs its efforts to achieving the following goals:

- Greening of modern electricity production, including implementation of energy-efficient and energy-saving technologies, as well as refurbishment and rehabilitation of the obsolete equipment;
- improvement of the environmental health;
- enhancing the effectiveness of water resources management and distribution of river flow;
- cooperation to improve the regulatory and legal framework on environmental protection;
- providing proper scientific support of the activities.

Ways to achieve the environmental objectives

Upgrading of technological equipment

- hydro units rehabilitation;
- Improvement of oil-filled equipment tightness to prevent release of oil into the river.



Environmental monitoring

- quarterly quality monitoring of return waters;
- quarterly monitoring of radiation status of the Dnipro water;
- annual atmospheric air quality monitoring;
- quarterly monitoring of CO2 in exhaust emissions of automobile transport.

**Management of HPPs
and Dnipro and Dniester
reservoirs operation for
the benefit of all water
users**

- maintenance of hydraulic structures drainage system proper operation;
- restriction in use of phosphate washing agents;
- celebration of the Environment Day and participation in voluntary Saturday work and bank areas improvement;
- celebration of the Dnipro Day and co-organization of historical swimming across the river;
- raising of public awareness regarding HPPs / PSPPs influence on the environment.

**Decrease
of production
wastes**

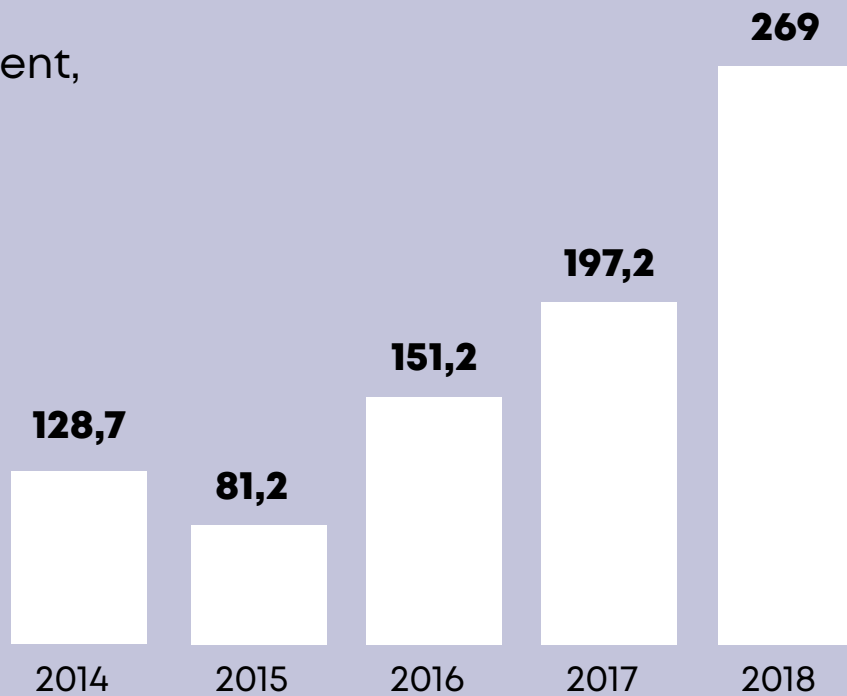
- waste sources inventory;
- wastes transfer to the specialized organizations for scrapping;
- replacement of luminescent lamps with LED-based ones.

- compliance with water reservoirs operation mode (ensuring certain water discharge and fluctuation of water levels) approved by the Interdepartmental Commission;
- compliance with regulations for environmental flows and minimum water discharge.

**Carrying out
of environment
protection measures**

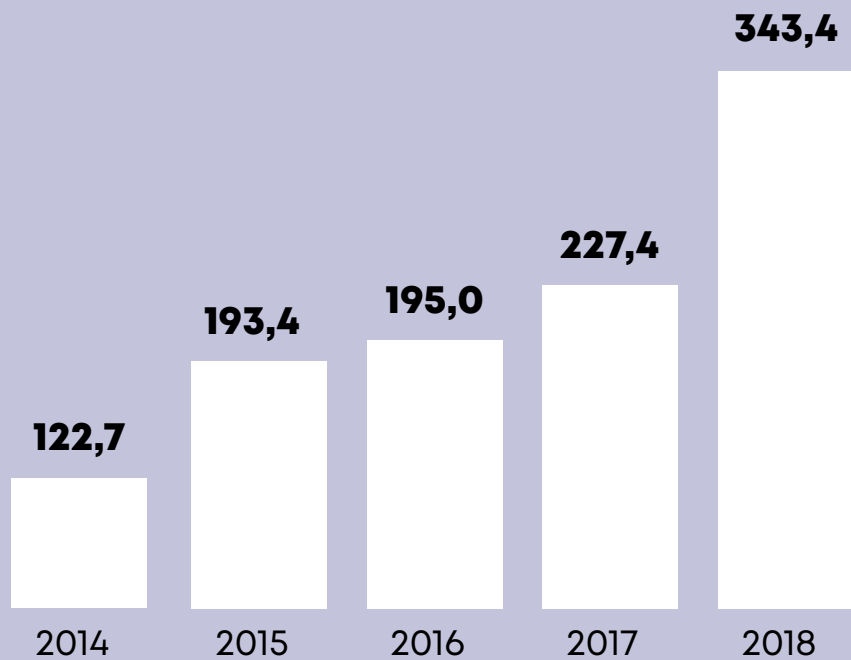


Special Water Use Rent,
million UAH

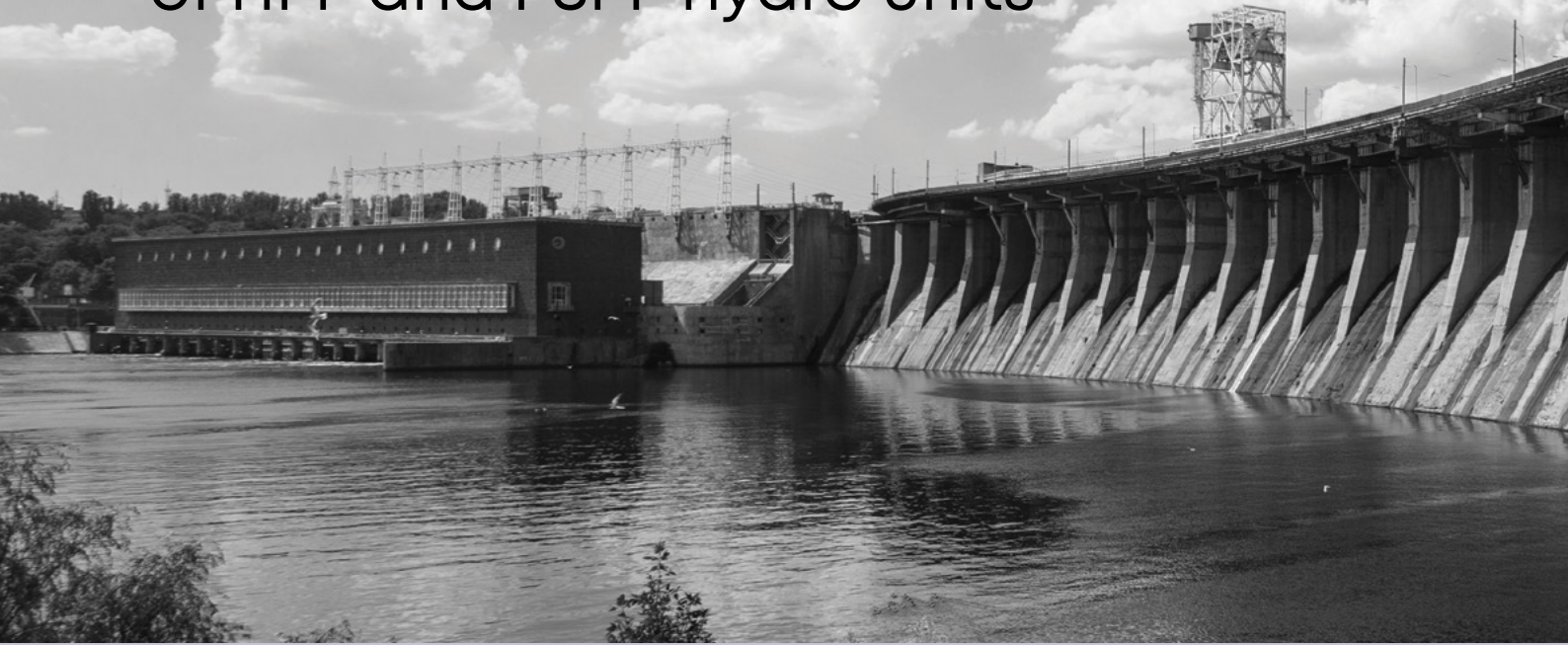




Environmental
Protection Costs,
thousand UAH



Reconstruction of HPP and PSPP hydro units



According to the approved 2018 investment program, investment in rehabilitation accounts for 49.7% of the total capital investment constituting about UAH 1,714 billion. In 2019, financing of "Reconstruction Stage II" Project provides for UAH 2,218 billion, UAH 1,448 billion of which is the loan of the EBRD. This year rehabilitation of hydro

units No.1 and No.3 of Kaniv HPP at the cost of about UAH 188 million has been completed.

**Capacity gain reached
7 MW, that is
3.5 MW
(15.9%) per unit.**

Total capacity gain of the plant on the whole is 1.4%. Two blocks of Kaniv HPP are under rehabilitation (and this is eight units and auxiliary equipment)



stipulated by one contract for the amount of UAH 1, 717 billion within the framework of the loan of the EBRD and the EIB. Upon completion of rehabilitation of two blocks at Kaniv HPP, which will continue till 2021, total capacity gain will be 12%. Hydro turbine equipment is being refurbished to prolong operation time of hydro unit No.1 at Kakhovka HPP, the Company is financing it at its own

expense in the amount of UAH 92 million.

Completion of hydro unit No.2 at Kyiv PSPP rehabilitation is scheduled in 2019 with capacity gain of 5 MW. Capacity gain of the plant will reach 12%. Rehabilitation of Kyiv PSPP (hydro units No s.2,4,6) is carried out thanks to the loans of the EBRD and the EIB. The cost of works at Kyiv PSPP is UAH 562,5 million with the completion scheduled in 2021.



Dnipro HPP



Dnipro HPP is the first and the most powerful among six hydro power plants constructed on the Dnipro river. Its construction started in March 1927. The first hydro unit was put in operation on May 1, 1932. During the war, the facilities of hydro power plant were ruined and hydro units were damaged and out of operation. During restoration of Dnipro HPP some fundamentally new scientific and technical solutions were applied. The intention to improve the effective use of hydropower resources of the Dnipro river, as well as deficit of peak capacity in the united power system of the south, brought about the extension of Dnipro HPP. In 1980, when the last eighth unit was put into operation, construction of Dnipro HPP-2 with overall capacity of 887,6 MW was completed. The total capacity of 18 hydraulic units of Dnipro HPP at that time was 1538, 2 MW. As of today, eleven out of 18 hydro-units have already been refurbished. Installed capacity of the power plant is 1553,8 MW. At present, rehabilitation works are still going on at Dnipro HPP.

**We annually
enhance
capacity
due to rehabilitation!**

An Austrian manufacturer Andritz Hydro was contracted to rehabilitate three hydro units at Dnipro HPP. In August 2018, unit No.3 was decommissioned. It has been in operation for 71 years and generated about 18 billion kWh. On September 28 hydro unit No.2 was also decommissioned, and dismantling of equipment was commenced. All three

hydro units of Dnipro HPP were manufactured by General Electric. Andritz Hydro is in charge of their rehabilitation. Operating lifetime of new units manufactured by the Austrian company will not be shorter than that of their American predecessors. What is more, they have better environmental characteristics in compliance with the latest world standards and operating capacity increased by 15%. The capacity of these three hydro units will increase from 65 to 75 MW.

**Rehabilitation of three
units will result in capacity
growth of 30 MW**



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