



# COMMUNICATION ON PROGRESS

2021



HUMAN RIGHTS



LABOUR STANDARDS



ENVIRONMENT



ANTI-CORRUPTION



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# STATEMENT of continued support

September 2022

I am delighted to re-affirm the continued support of Kozloduy NPP EAD for the Ten Principles of the United Nations Global Compact on human rights, labour standards, environment and anti-corruption despite the extraordinary and volatile market conditions in 2021.

Our latest Communication on Progress asserts our intent to continue implementing those principles, making the UN Global Compact and its principles part of the strategy, culture and day-to-day operations of our company, and engaging in joint projects which advance the broader development goals of the United Nations, particularly the Sustainable Development Goals.

We support public accountability and transparency, and, therefore, commit to reporting on the progress annually according to the UN Global Compact COP policy and via the primary channels of communication.

Yours sincerely,

Georgi Kirkov  
Chief Executive Officer





## About Kozloduy NPP

[Kozloduy NPP EAD](#) is the only nuclear power plant in Bulgaria and the main electricity generating plant. This determines the particularly significant position the company holds - being a factor of economic sustainability, both nationally and regionally. Kozloduy NPP generates the cheapest electricity in the country, thus ensuring and maintaining affordable price of electricity for Bulgarian end-consumers.

Kozloduy NPP EAD is a single-owner shareholding company, with the Bulgarian Energy Holding EAD as the sole owner of capital.

Kozloduy NPP EAD operates two nuclear power units – Units 5 and 6, with WWER-1000 reactors, and two storage facilities for spent nuclear fuel – a spent fuel storage facility with underwater storage technology, and a dry spent fuel storage facility.

The operation of the nuclear facilities is subject to regulatory control on behalf of the Bulgarian Nuclear Regulatory Agency (NRA) at the Council of Ministers of the Republic of Bulgaria. Specialised oversight is exercised by the Ministry of Environment and Water, Ministry of Health, Ministry of Regional Development and Public Works, State Agency for Metrology and Technical Surveillance, and other government bodies.

Environmental protection is a fundamental element of the company's policy. The plant is monitoring the radiation gamma background in the 3 km site surrounding area through an automated information system. Due to the high safety standards, the gamma background within the plant area has not exceeded the levels measured prior to plant commissioning.

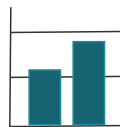
With its 3706 employees Kozloduy NPP is one of the major employers in Bulgaria providing a high standard of living for the company personnel and contributing greatly to the development of the country and the region.

The arrangements and strict application of the established measures for restricting Covid-19 spread ensured the reliable operation of the nuclear power units and performance of the maintenance activities to their planned extent.



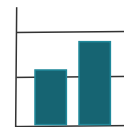
**34,6%**

Share of the national electricity generation for 2021



**16,486,894 MWh**

Electricity generated in 2021



**396,181,112 MWh**

Total electricity generated by both units from 1987 to the end of 2021



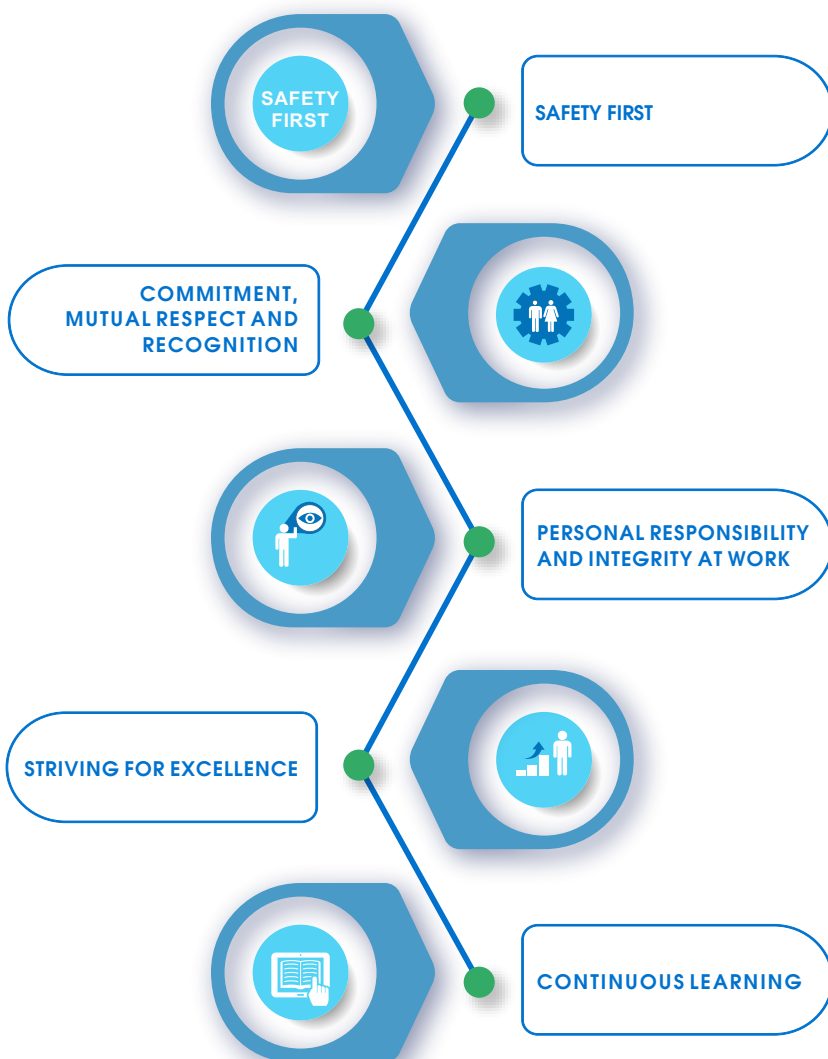
# About Kozloduy NPP

The principles of the UN Sustainable Development Goals are an important part of Kozloduy NPP performance and resonate through our MOTTO, MISSION, GOAL and CORE VALUES.

## OUR MOTTO

KOZLODUY NPP – CLEAN ENERGY

## OUR CORE VALUES



## OUR MISSION

is to reliably supply power to the country and the region through safe, efficient and environmentally friendly generation at affordable prices.

## OUR VISION

is to continue being a reliable and safe nuclear power plant in the long-term operation period, producing energy with care for the environment, and sustaining a reasonable balance among quantity, quality and prices.

## OUR GOAL

is safe, efficient and environmentally friendly generation of energy in the long-term operation period, ensuring quality and security of supplies, in compliance with the relevant national and international standards.



# HUMAN RIGHTS PRINCIPLES

## Principle 1.

Businesses should support and respect the protection of internationally proclaimed human rights

## Principle 2.

Make sure that they are not complicit in human rights abuses



We, the employees of Kozloduy NPP EAD, believe there is a close connection between high standards of ethical business practices and excellent financial results. As an industry leader, we obey the law, we embrace the spirit of integrity, and we uphold ethical business conduct in everything we do.

The Kozloduy NPP Code of Conduct and [Code of Ethics](#) published on our website, define how we treat others, engage in business, manage our corporate assets, and how we expect our suppliers and business partners to operate.

## Activities and results

Everyone in the Company is entitled to provide feedback on various issues – either online or through the suggestion and signal (complaint) boxes located on the site, to answer surveys and polls of the staff, and to participate in the selection of delegates for conventions and meetings with the management.

- Opinions' section
- This week's question
- General meeting of employee representatives
- Meetings with plant management
- Suggestion and complaint boxes
- CEO reception day
- Surveys

## Working at Kozloduy NPP

- Knowledge and understanding of the Company's common objectives and values
- Safe, positive and excellent working environment
- Appropriate remuneration, as per job position, and benefits
- Career development opportunities
- Skills development training
- Regular assessments and self-assessments to improve performance
- Atmosphere of humanity, kindness, and mutual respect
- Two-way communication with the management



## LABOUR STANDARDS

### Principle 3.

Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining

### Principle 4.

the elimination of all forms of forced and compulsory labour

### Principle 5.

the effective abolition of child labour

### Principle 6.

the elimination of discrimination in respect of employment and occupation



Kozloduy NPP provides for excellent working conditions, positive work environment supportive of professional development. The social policy of the Company is aimed at maintaining the employees' loyalty and motivation regardless of the employee's ethnic origin, religion, political views, pregnancy or maternity, sex, age, nationality, language, sexual orientation, marital status or ability to perform, attracting and professional adaptation of young and highly educated specialists, equal opportunities for career growth based on personal performance results, support for the retired, while strictly adhering to the labour legislation. Women at Kozloduy NPP account for more than one third of the staff and are represented at various positions including responsible operator and management levels.

The sense of belonging to the professional community and the affiliation to the values of the Company is supported also by the annual 'Best performer in...' award, conferred on the occasion of the professional holiday – the Power Engineer Day. The plant employees choose the winners in the different categories based on criteria such as significant personal contribution to the work, implementation of effective and non standard approaches to resolving of issues, and the professional qualities demonstrated. Nominations can be made in the categories 'Best performer...' in the areas of Safety, Security and Quality, Reactor Equipment, Turbine Equipment, Electrical Equipment, I&C Systems, Reactor Operator, Physicist, Chemical Engineer, Economy, Finance and Administration, Engineering and Technical Support, and the Collective award in the category 'SafetyFirst'.



# LABOUR STANDARDS

## Activities and results

<b>3,706</b> Total number of employees at year-end 2021	<b>46 years</b> Average age	<b>17 years</b> Average work experience at Kozloduy NPP
<b>231</b> Newcomer specialists	<b>60%</b> Employees holding a higher education degree	<b>27%</b> Employees holding a secondary vocational education degree
	<b>31%</b> Female employees	<b>25%</b> Women in senior management roles

## RECRUITMENT PROCESS FOR WORKERS AND EMPLOYEES OF KOZLODUY NPP

- Compliance with the principles of the Law on Protection against Discrimination, and the Law on Protection of Personal Data;
- Application of the national requirements for professional recruitment at nuclear facilities, the Labour Code, as well as relevant internal documents;
- Transparent recruitment process and opportunities for online access to information;
- Explicit prohibition on hiring of individuals under the age of 18;
- Reduced working hours and benefit of additional paid annual leave for individuals working under specific working conditions;
- A collective bargaining agreement (effective over a 2-year period - 2021/2022) is signed between the Kozloduy NPP trade union organisations and the plant management, which guarantees protection of the personnel rights in respect of occupational and social security issues, and provision of additional social benefits;
- Equal rights for career development and growth.

## PERSONNEL TRAINING AND QUALIFICATION SYSTEM

The personnel training and qualification system is compliant with the relevant national requirements, international standards and recognised best practices ensuring the provision of competent personnel for the long-term operation period of the power units.

Kozloduy NPP has a Training Centre licensed by the Bulgarian Nuclear Regulatory Agency for conducting specialised training of staff to perform activities in nuclear facilities and work with ionising radiation sources (IRS). The Centre provides for classroom, hands-on and simulator training, on-the-job training and ESTRA-based online training used by plant and subcontractors' personnel.

**3,046**

plant employees trained in 2021

**3,361**

external organisations' employees trained

**49**

individual licences issued for work at nuclear facilities

**19**

individual licences issued for work with IRS





## LABOUR STANDARDS

Kozloduy NPP strives to apply the lifelong learning principle in order to achieve smart and sustainable growth through:

- Employees' training and qualification enhancement;
- Additional paid study leave;
- Supplying tools and materials for the practical skills classes at school;
- Cooperation agreements signed with higher education institutions;
- Awarding scholarships to students taking a degree per BA or MA programmes that are of priority interest to the plant, such as Thermal and Nuclear Energy or Nuclear Power Engineering;
- Paid and unpaid students' internships;
- Early career guidance: a programme for providing scholarships to students studying Nuclear Power Engineering, and Automated Systems in the nuclear energy vocational schools in the towns of Kozloduy and Belene;
- A dual training procedure (training through work) in the subjects of Nuclear Energy and Thermal Engineering, at the Igor Kurchatov Secondary Vocational School in Kozloduy;
- Participation in the 'Manager for a Day' initiative;
- Participation in career guidance forums and professional bazaars in secondary schools and universities focused on assisting young people in career choice;
- Joining the WANO Moscow Centre initiative for attracting young people to take part in WANO activities;
- In 2021, there were 136 young participants in youth-oriented programmes of Kozloduy NPP;
- Participation in a number of national and international conferences, workshops, technical meetings, missions, forums, professional practices and other activities organised by the International Atomic Energy Agency (IAEA), the World Association of Nuclear Operators (WANO), FORATOM, the Bulgarian Atomic Forum (BULATOM), the Bulgarian Nuclear Association, and other globally recognised nuclear organisations.

### HEALTH AND SAFETY

Maintaining health and safety at work is a major responsibility of Kozloduy NPP management. The plant has adopted a modern approach aimed at implementing highly effective health and safety measures, enhancing the safety culture of workers and building an awareness-based behaviour of adherence to the safety requirements. The provisions of the legislative regulations of the Republic of Bulgaria on occupational health and safety are strictly implemented, and the best international practices in this field are applied:

- Protection from and prevention of occupational hazards arising from work processes, work equipment and the working environment in all aspects of the nuclear power plant activities, such as operation, maintenance, repairs, etc.;
- Prevention and promoting of safety improvements at work: periodic training on safety at work, as well as delivering the necessary briefings – pre-job, on-the-job, periodic, daily, and extraordinary ones;
- Risk assessment at workplaces and laboratory measurements of working environment parameters;
- On-site Occupational Health Service with its medical emergency team providing round-the-clock medical aid;



## LABOUR STANDARDS

- Industrial injury factor - 0.05 (average value for the industry – 1.2, and average value for the country – 0.62);
- Full recreation at the Company's R&R holiday facilities located both in the mountains and at the seaside;
- Opportunities to attend various cultural life or sports events through classes and activities organised at the House of Culture, or to practise different sports at the Sports and Recreation Centre facilities.

### Safety – our utmost priority

Units 5 and 6 are operated according to the provisions of the operating licences issued by the NRA, the technical specifications requirements and the operating procedures,

All the necessary maintenance and repair actions have been implemented in accordance with the licensing obligations, the provisions for safe operation in the technical specifications, and the plant requirements. Together with them, within the scheduled annual outages, the measures planned in the programmes for long-term operation to increase safety and manage equipment lifetime were implemented.

All the scheduled investment activities were completed as needed for ongoing maintenance of the units, the major and auxiliary facilities and infrastructure, as well as the measures to uphold and strengthen the plant security and physical protection.

Specific indicators evaluating the safe and reliable operation of the nuclear power units have been adopted and widely used by the World Association of Nuclear Operators and the International Atomic Energy Agency. They permit monitoring the nuclear energy trends, and serve to draw a comprehensive evaluation of the achieved reliability and safety levels.

### Values of specific performance indicators of Kozloduy NPP in 2021

Indicator	Unit 5	Unit 6
LF - Load Factor, %	91,05	89,92
UCF - Unit Capability Factor, %	88,40	89,74
UCLF - Unit Capability Loss Factor, %	0,42	0,85

The excellent values of Kozloduy NPP performance indicators form a steady trend of high reliability and safety that allows the plant to retain its position among the well-performing nuclear power plants in the world.

In 2021, no breaches of the safe operation limits and conditions occurred. Six operating events have been registered and reported to the NRA. All of them have been evaluated zero level, below the INES scale (events without safety significance). Based on the analyses of the causes for those events, corrective measures were identified to prevent recurrence. Over the reporting year, there was one scram on Unit 5.



## Principle 7.

Businesses should support a precautionary approach to environmental challenges

## Principle 8.

Undertake initiatives to promote greater environmental responsibility

## Principle 9.

Encourage the development and diffusion of environmentally friendly technologies

### **Kozloduy NPP takes responsibility for protection of the environment applying the relevant national and international standards in this field.**

In fulfillment of the Company's policy and strategic goals for safe and environmentally clean electricity production, the planned measures and activities for environmental protection were implemented in 2021.

All the permits issued to Kozloduy NPP pursuant to the Environmental Protection Act, the Act on Waters, and the Waste Management Act have been maintained up-to-date. Extension to 2023 was obtained of the validity period of the permit for wastewater discharge from the Ledenika Health and Recreation Complex.

Over the reporting year, a planned review and assessment was carried out on the environmental aspects and their three-year management programme was updated for the 2022 – 2024 period.

## Activities and results

- Within the in-plant non-radiological monitoring, samples of surface, underground and waste waters were collected and analysed in 2035 tests according to the 'Programme for in-plant monitoring of waters during the operation of Kozloduy NPP' and the 'Programme for monitoring of the landfill for non-radioactive household and industrial waste';

- All the analyses have been performed by accredited laboratories in Kozloduy NPP and the Vratsa Regional Laboratory of the Executive Environment Agency;

- The data resulting from the mandatory in-plant non-radiological monitoring confirmed the trend of full compliance with the specified individual emission limits;

- As a result of the system applied for separate collection of non-radioactive waste, the own landfill for non-radioactive household and industrial waste is filling up at a slower rate than planned and stage II of the landfill has a residual capacity of 77.7%;

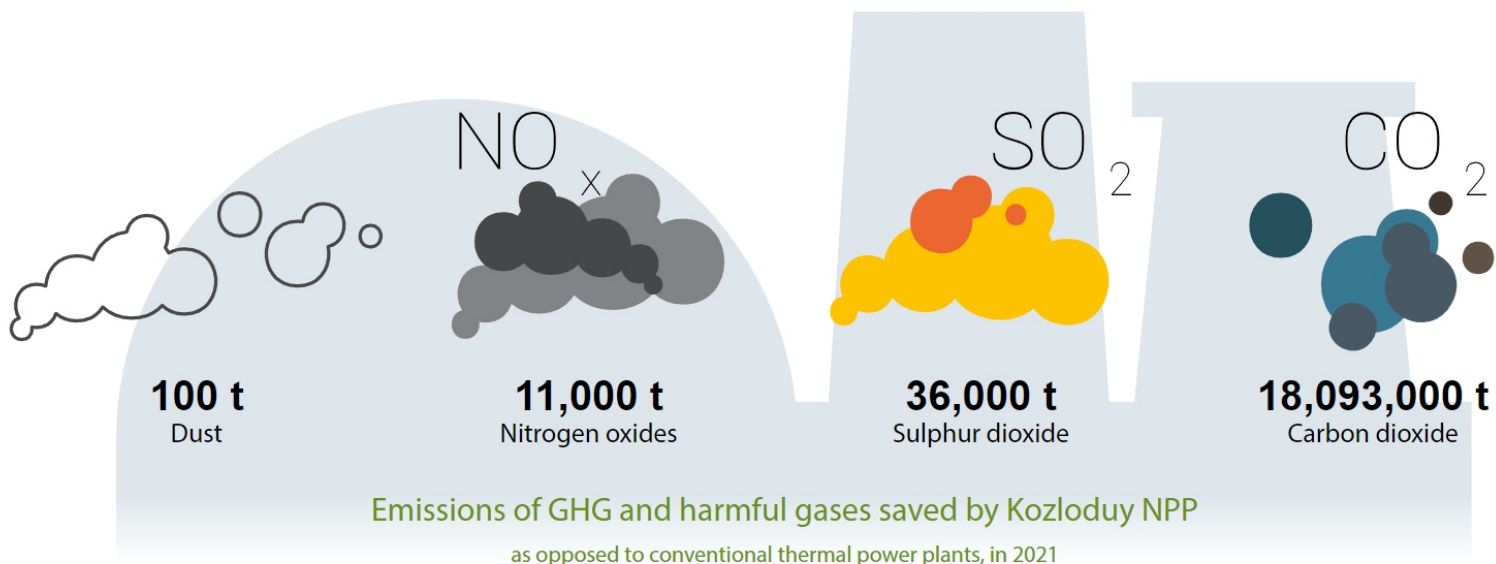
- Four inspections were performed by the Vratsa Regional Inspectorate of Environment and Water, and one inspection by the 'Varna Black Sea Region': these inspections reported no non-conformances and issued no prescriptions;

- Plant employees participate in a number of environmental initiatives; there is increased use of bicycles, separate waste collection and striving to reduce the personal carbon footprint.

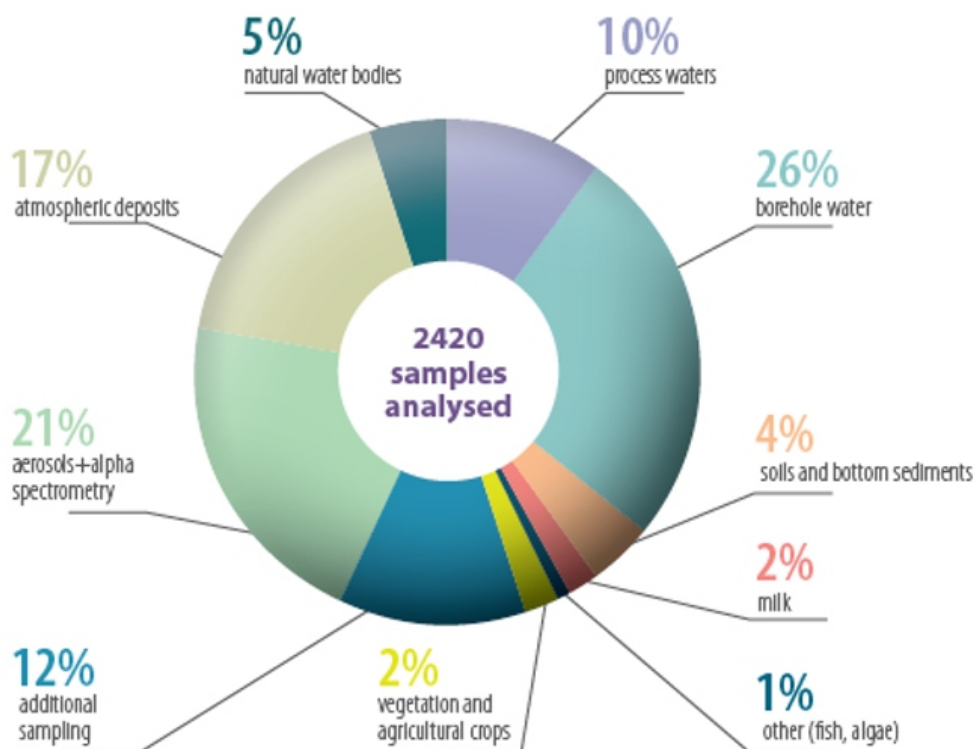


## ENVIRONMENT

### Emissions of greenhouse and harmful gases spared in 2021 by Kozloduy NPP compared to conventional thermal power plants



In 2021, more than 1,280 measurements of the gamma background, and more than 4,160 analyses of over 2,400 samples from different environmental areas were performed. The results were fully consistent with the data from preceding years and did not deviate from the natural gamma background levels typical for the region.





## **INFORMATION TO THE PUBLIC LIVING IN MUNICIPALITIES WITHIN THE 30-KM ZONE SURROUNDING KOZLODUY NUCLEAR POWER PLANT**

- Automated information system for radiological monitoring with 14 local measuring stations installed in different populated areas;
- Data visualisation on information boards put up in public places, and data transmittal via wireless on-line connection to the central station at Kozloduy NPP, and thenceforth to the Executive Environment Agency;
- Background gamma radiation levels – typical for the natural background of the region;
- Values of the atmospheric air human-induced activity – close to the background ones;
- Radiation status of water from natural water bodies and of drinking water – meets the health sanitary norms;
- Radioactivity of the staple foods produced/obtained in the region (milk, agricultural crops, fish, etc.) – within normal background radiation levels.

### **The radioecological monitoring results do not deviate from the natural gamma background levels typical for the region.**

-The environmental radioecological monitoring carried out by Kozloduy NPP fully complies with the national and European normative requirements in this field and covers the requirements of Article 35 in the Euratom Treaty, and Recommendation 2000/473/Euratom.





## ANTI-CORRUPTION

### Principle 10.

Businesses should work against corruption in all its forms, including extortion and bribery

Kozloduy NPP EAD opposes all forms of company or public corruption and/or corrupt practices or other illegal activities in conformity with the UN Anti-corruption Convention to which the Republic of Bulgaria has been a party since 2006.

[The Code of Ethics of Kozloduy NPP EAD](#) covers specific information regarding conflict of interest, personal benefits and gifts, fair and equal treatment of suppliers and compliance with the UN Global Compact principles.

Investigations, legal cases, resolutions or other events connected with corruption and bribery are conducted according to the requirements of relevant legislation and company documents.

### Activities and results

Some of the countermeasures taken by the Company against corrupt practices are as follows:

- Regulated internal procedure for receiving and providing of donations;
- Strict accounting, subject to internal and external auditing;
- Restricted cash payment and payments only by bank transfers;
- Reinforced awareness of anti-corruption issues with the Company employees, and ensuring opportunities for them to send signals on the hot phone line [+359 973 76262](tel:+35997376262); through boxes for collecting signals in writing, located at different places across the plant site; or via a dedicated e-mail address: [signal@npp.bg](mailto:signal@npp.bg).



# KOZLODUY NPP AND THE UNGC NETWORK BULGARIA

## Member of UN GCNB since 2012

## Member of the Monitoring Board since 2019

Kozloduy NPP took an active part in the initiatives of the UNGC Network Bulgaria such as webinars. Information campaigns, etc.

The 'Games For Good' project of the Network aims at demonstrating that in responsible companies the good health of employees, sports and charity causes can go hand-in-hand. To this effect, the Network organizes sports tournaments where each participating company struggles in the name of a social cause it has chosen. Thus, the winning team also has its winning cause toward which the collected prize fund goes. 'Games for Good' forms part of the 'Healthy at Work' collective programme of the UNGC Network Bulgaria in pursuance of the 2015+ Strategic Plan for work on the UN Goals for sustainable development, in particular Goal 3 'Ensure healthy lives and promote well-being for all at all ages'.

In March 2021, for the third time Kozloduy joined the popular initiative 'Games for Good'. Virtual platforms were used to organize tournaments in various video games/sports among teams of different companies who once again stood behind a cause they believed in.

By participating in the online chess tournament, the plant power engineers defended the cause of supporting the education of parentless children through the 'Ready for Success' scholarship programme. The tournament took place on March 20, when the 'Games for Goodness' began.

Kozloduy NPP also joined the Network events organized to mark the World Environmental Day on 5 June with the Leading theme for 2021 'Ecosystem Restoration' #GenerationRestoration.

The UN GCNB supported the 'True Honey' initiative focused on providing actual assistance to the bee-keepers in the country. Ten of the companies, members of the UN GCNB, including Kozloduy NPP set up a common apiary by each of them adopting two hives. The expected annual effect is 50 kg of honey, 120,000 new bees and 720 million pollinated flowers.

At the end of 2021, ecological initiatives of Kozloduy NPP and three other Bulgarian companies were included in the first joint publication of the UN Global Compact Network Eastern Europe – in the report 'Future is Green and Inclusive'.

Further information about the activity of Kozloduy NPP can be obtained from the plant [Annual Report for 2021](#).



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