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DTEK

Integrated report 2017

Financial and non-financial results

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Introduction



Oleg Popov

Chairman of the Supervisory Boards of DTEK ENERGY B.V.,
DTEK OIL&GAS B.V. and DTEK RENEWABLES B.V.,
CEO of SCM JSC

Dear colleagues and partners,

I am pleased to present the 2017 Annual Report of DTEK Group.

The Law of Ukraine on the Electricity Market was adopted in the reporting year. Above all, this law entails a large-scale transformation of the energy sector. Its implementation will make it possible to reform the industry and create a market of the European model. These changes are opening up opportunities for the energy sector to become a driver for the country's economic growth, for the consumers — free choice of the electricity supplier, and for Ukraine — to reach an independence from external suppliers. Thus they create a basis for future energy — efficient, clean and competitive.

DTEK, being a leader in the energy sector, has become a part of these changes. In 2017, the company invested UAH 10.4 billion in the industrial development of its enterprises, which is 34% more than in 2016. This allowed implementation of a number of significant projects that support the transformation.

In particular, we implemented our first project in solar generation — Tryfanivka SPP was built. This was the first step in the long-term development strategy in solar energy. The new solar power plant construction works have already commenced in Dnepropetrovsk region. Nikopol SPP will become the most powerful in Ukraine and will enter the top 3 in Europe. In renewable generation, DTEK will continue construction of wind power plants. In 2018, DTEK plans to introduce the first 100 MW of Prymorsk WEP in Zaporizhia region. Thus, the total capacity of DTEK Group in green generation will reach 510 MW. This means that the company is ramping up investments in renewable generation — the growth is huge, more than by 46 times, up to UAH 370 million.

We are confident that the development of different green energy creates a sustainable platform for the industry operation in the future and creates a new significance for domestic TPPs. And their ability to dynamically change the level of production will ensure the balancing of the entire energy system, which is important for the development of renewable generation.

Another important direction for the development: DTEK invests in the switch of its power units from coal of anthracite grades to coal of high-volatile steam grades. The increase in production of G-grade coal allowed the start of the programme. So the company neutralizes the impact of lost management of enterprises located in the temporarily uncontrolled territories of Donetsk and Luhansk regions. This would be impossible without a revision of the production and investment programme. In general,

capital investments in coal mining increased by 16% — up to UAH 4.6 billion, and for re-equipment of thermal power plants — by 160% up to UAH 1.5 billion.

DTEK Group retains the role of the driver of technological development in gas production and the leader in terms of production volumes among Ukrainian private companies. In this business, UAH 1.1 billion was invested, which is 23% more than in 2016. New technologies and implementation of the initiated programmes will reduce the share of coal and gas imports in the fuel balance of the country and, therefore, will contribute to strengthening Ukraine's energy security.

However, we are focused not only on business: DTEK will continue to systematically develop projects in the field of sustainable development, showing that business is the power of positive changes. The company's projects are not just aimed at finding actual solutions. Their goal is to develop public activity and initiative among the residents. DTEK strives to provide every resident with the opportunity to contribute to the improvement of the quality of life in their district, city, or village: making schools energy-efficient, equipping urban spaces and social facilities, developing the business environment and much more. Supporting the initiatives of the residents, the company helps everyone to realize their importance in the sustainable development of the community, and this finds a response. For example, the "Your Hometown Begins with You" project already covers 42 territories, and more than 800 educational institutions have joined the "Energy-Efficient Schools: New Generation" project. In general DTEK Group implements the Social Partnership Programmes in five key areas: energy efficiency in the utilities sector, health care, development of socially-important infrastructure, increasing local communities' activity and development of business environment. In 2017, investments in sustainable development projects amounted to UAH 3.5 billion, which is 14% more than in 2016.

Each employee of DTEK Group is a part of positive changes in the company, in the town, and therefore in our country. I would like to thank each and every employee for well-coordinated efforts and for their contribution to the development of DTEK. I am certain that the established strong team and the culture of changes will help us to achieve our common and main goal: to create the energy sector of the future — clean, efficient and competitive.



Maxim Timchenko

CEO of DTEK

Dear colleagues and partners,

I am pleased to present the 2017 Annual Report of DTEK Group. It is a great pleasure for me to note that our projects, our experts and our experience are bringing global trends and advanced technologies to Ukraine.

I would like to tell you about the achievements for the reporting year in each area of the 2030 corporate development strategy.

Energy

DTEK Group focuses on the projects that create a new energy. According to the Energy Strategy of Ukraine, annual electricity generated by renewable sources should reach 9 billion kWh by 2020. Currently, this figure is 1.9 billion kWh. We are constructing renewable energy power plants. This is our contribution to achieving the goals of the country's Energy Strategy.

In the reporting year, for the first time the company implemented a project in solar power. Tryfanivka SPP, which was put into operation in August 2017, allowed finding a number of solutions and forming a long-term vision of development in this generation segment. The implementation of our next project commenced — construction of the Nikopol SPP. A new 200 MW solar power plant will operate in Dnipropetrovsk region. The contract signed with China Machinery Engineering Corporation (CMEC), which will be an investor and construction contractor under this contract, provides for the release of the first kilowatt hours at the end of 2018. Our solar power plant will be one of top 3 largest plants in Europe. The project of the same capacity is under implementation in wind energy — the construction of Prymorsk WEP in Zaporizhzhia region. An agreement has already been signed with GE Renewable Energy for 26 wind turbines for the first phase of the wind farm which is planned for completion in 2018.

Joint projects on such a scale are impossible to be implemented without confidence and openness. I am pleased that the world's leading companies are building with DTEK Group. It means that we were able to restore the confidence of investors both in Ukraine and the energy sector. National energy has demonstrated particular demand for modernization and the creation of new capacities, for the implementation of which it is necessary to restore the investment attractiveness of the industry. The introduction of progressive technologies and innovations will reduce the distance between the energy sector of Ukraine and the EU.

In the next decade, the importance of coal in the energy balance of Ukraine will remain unchanged — one third of electricity will

be generated by coal thermal generation. In 2017, management of the enterprises located in the temporarily occupied territory in Donetsk and Luhansk regions was terminated. Thus, the main challenge for the energy sector was the loss of control over mines producing anthracite fired by half of the country's thermal generation plants. But we are certain that even under such trying conditions Ukraine can fully satisfy its demand for steam coal. We are focused on projects aimed at reducing the share of the imported resource in the fuel balance.

22.9 million tonnes of G-grade coal were produced by our miners in 2017 — the highest annual production in the company's history. An important component of this record is the growth of capital expenditures of coal-mining enterprises by 16.4%, up to UAH 4.6 billion. Such effective support of the miners allowed the power engineers to commence the implementation of the programme for the replacement of anthracite with high-volatile steam coal. In the reporting year, two power units of DTEK Prydniprovsk TPP were transferred from burning A-grade coal into G-grade coal. In 2018, two more power units of DTEK Prydniprovsk TPP will be transferred to the burning of domestic coal. In addition, we plan to complete the work at Myronivska TPP — the plant will burn only high-volatile steam coal.

In the extraction of natural gas, DTEK Group remains the leader among private companies both in terms of production volumes and intellectual potential. In 2017, such terms as "sumpleless drilling", "snubbing", "determination of the content and physicochemical parameters of gas in real time mode", "gas sale measured in energy units" became ingrained in our everyday lives. These projects are another important step in the technological development of the domestic gas producers. The company constantly conducts the specialized conferences and training sessions which are available for all experts. For the progress of gas production in Ukraine, it is also important to share the experience gained, as well as to introduce modern technologies and equipment.

Consumers

Ukraine has no arguments for the preservation of the iron curtain in the energy sector. Ongoing reform is aimed at the creation of a competitive electricity market as per the European model. In Europe, the liberalization of energy markets started 15–20 years ago, and still that is not to say that it is fully completed. Ukraine has set up an ambitious goal — from July 1, 2019, to transfer to a new model of the market. This requires concentration of efforts and coordination of actions of all participants of the process, since a considerable amount of work is to be done. I hope that the road map for the reform will be fully implemented within the stipulated terms. This will open up a visa-free energy regime between Europe and Ukraine, and make the consumer a full participant in the market. It is important to inform the consumer that he is becoming a client. This opens up the main opportunities for the reform — the right to choose a supplier and high quality standards.

Since the company's establishment, the transfer to a competitive market model is under discussion, and today we are a strong supporter of the reform. According to the Law on the Electricity Market, the companies must complete the unbundling procedure no later than December 10, 2018, which means the separation of a distribution system operator from production, transmission and supply of electricity by establishing the corresponding business entities. DTEK Group introduces these changes into its activities. In 2017, we were the first among the energy companies of Ukraine to begin the process of transforming distribution companies into an electricity distribution system operator and supplier to consumers — Kyivenergo was reorganized. We have established an operational holding company for electricity distribution and grid operation — DTEK GRIDS B.V. It is planned to complete the formation of the target asset portfolio in 2018.

Investment programmes for developing the power grids form an integral part of improving the quality of electricity supply. The most part of Ukraine's power grids was built in 1960–1970, and they were designed according to regulations of the 1950s. Our projects promote solving the problems of high level of equipment wear, non-compliance of grids with modern technical requirements and allow eliminating the power deficit that has arisen in the process of town development. While communicating with the consumers, we also become men of today. In 2017, the construction of utility consumer service network was completed. The consumers can choose the most convenient channel for communicating with us: customer service centres, contact centres, websites and social networks.

Society

In the field of sustainable development, we maintain our basic principle — a systemic social partnership, so that the settlements in which our enterprises operate become comfortable for life. This is especially important for the cities with a mono-economy, where the enterprises of DTEK Group are city-forming.

DTEK develops and implements social partnership strategies that create new opportunities and are growing points for the economy and social sphere of the territories of the company's enterprises. The development of strategies involves local government bodies, communities and experts, whose representatives form the committees. Then the strategies are approved by local authorities, and the committees monitor their implementation. This allows involvement and uniting of the population in solving acute and urgent issues of sustainability. We see that this approach finds a high response — in 2017, 168 projects were implemented within the framework of social partnership programmes.

Sustainability includes the protection of the environment. Our strategic goal is to introduce modern technologies and practices to minimize the impact of production on the environment. We are ready to implement the best European practices, one of which will be the application of an international system for monitoring, reporting and verifying greenhouse gases. We are involved in the implementation of the requirements of Directive 2003/87/EC within the framework of the "Partnership for market readiness" project under the technical support of the World Bank. DTEK Zaporizka TPP has been chosen as the pilot site for this project implementation.

In general, our projects support the goals of the UN Global Compact where DTEK has been a party since 2007. This annual report shows the contribution of DTEK Group into the achievement of sustainability goals of the United Nations.

People

The company's primary task is to establish a culture of valuing one's own life. We would like to ensure that safe behaviour at production facilities is firmly established in the habit of every employee. At the second stage of the corporate development strategy the company's target is to reduce the rate of occupational injuries to level below 0.75. According to the results of 2017 this rate (LTAFR) was 0.57.

Our company's philosophy is "Be the best in everything we do", and we have been true to this for many years. Today, our key task is to prepare for work under the conditions of a new energy market in order to be better than any other companies. The ability of companies to compete and be a leader largely depends on the professionalism of employees. We provide and give everyone the opportunity to be trained — from workers to top management. We have already 8 specialized schools: business mentoring in production, the school of chief engineers, the school of foremen, the school of masters, the school of coal preparation engineers, the HR school, the school of finance for non-financial experts, the institute of project managers. Employees completed more than 63 thousand trainings in 2017 — this means that practically every employee of DTEK Group paid attention to his professional growth.

We share the gained experience. This also expresses our effective support for the renewal of the industry. In the reporting year, our corporate standards for working specialties and the state standards of vocational education developed on their basis received a positive expert assessment of the European Education Fund.

Efficiency

The implementation of a number of projects has been started. They will ensure further growth of production, investment and management efficiency. In 2017, mining machinery manufacturers were added in DTEK Group: Svet Shakhtyora, CORUM Druzhkovka Machine-Building Plant and ETC Mining Machines which are our old and main suppliers of machinery and equipment. This integration allowed completing the creation of a full production cycle in coal mining. Such shared centre for managing coal mining and equipment production in the future will allow us to work more effectively on improving and manufacturing new machinery, and will also improve the supply of spare parts.

I am pleased to note that the Novator project promoted operational improvement which became part of our production culture. The economic effect of this project as per the results of

the year has already reached UAH 2 billion. Most significantly, we managed to involve the employees in increasing efficiency. We granted them the opportunity to take the initiative and implemented the best of the proposed projects.

The company was able to build an internal environment that is ready to take part in the changes and to develop new directions. This new direction will be iHub, the innovation centre of DTEK Group. We plan to concentrate on working out and financing of internal and external ideas, developments, cooperation with accelerators. Our goal is to create an updated DTEK that can extract strategic and operational values from modern technologies. I will warrant you that in the modern world, industrial companies are the source of innovation.

Ukraine "plus"

Energy reform also means the synchronization of the United Energy System of Ukraine with the Continental European Synchronous Area within the European energy system — ENTSO-E. The main difference of our energy systems is the applicable frequency stability requirements. To comply with the European standards, we have to retrofit the transmission networks and implement modern automation systems at the generating capacities.

In 2017, we completed the reconstruction of the systems of autonomous regulation of frequency and power at 11 power units. This means that these power units can automatically support the ENTSO-E frequency in automatic mode. In 2018, such work will continue at other power units of our thermal stations. We have a significant amount of work to do, but this will lead to an improvement in the quality of Ukrainian electricity and will create healthy competition for European companies. After all, the synchronization of energy systems does not only open up wide opportunities for the export of Ukrainian electricity. This also means that European energy companies will have access to Ukrainian consumers, and this will contribute to increased competition and quality of service delivery.

Ukraine began the transformation of energy. We are ready to use this opportunity to build a new Ukrainian energy sector: clean, efficient, and competitive. DTEK Group implements the projects that support these changes. I am confident that we will create an updated DTEK: innovative and modern, where energy leaders outside Ukraine can learn a lot.

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01 About DTEK Group

DTEK Group develops business streams in the energy sector. DTEK Group companies produce coal and natural gas, generate electricity at thermal power plants and renewable energy power plants, transmit and supply heating and electricity to end consumers and provide energy services. Production facilities are integrated into operating holdings with companies managing day-to-day activities in each of the business streams.

The company is the largest domestic investor. DTEK's Euro-bonds are listed on the Irish Stock Exchange.

DTEK Group companies have 73,000 employees. DTEK is one of the best employers in Ukraine according to international audit firm EY and Ukrainian business publications.

DTEK follows the principles of sustainable social development and is a part to the United Nations Global Compact. Building a relationship of trust with society lies at the foundation of

the company's activities. This objective is achieved by forming sustainable social partnerships with local government bodies and communities. The company's contribution to the level of corporate social responsibility is highly valued: DTEK has been holding top positions in the Transparency and CSR Index since 2012.

DTEK is part of the financial and industrial group SCM. The shareholder of the group is Rinat Akhmetov.

27.7

million tonnes
of coal produced

73,000

employees

1,655.3

million cubic meters
of gas produced

Key Production and Financial Indicators of 2017

36.5

billion kWh
generated by TPPs and CHPPs

637.8

million kWh
generated from RES

43.2

billion kWh
of electricity distributed

Revenue
145,070 million UAH

EBITDA
37,195 million UAH

Net profit
4,628 million UAH

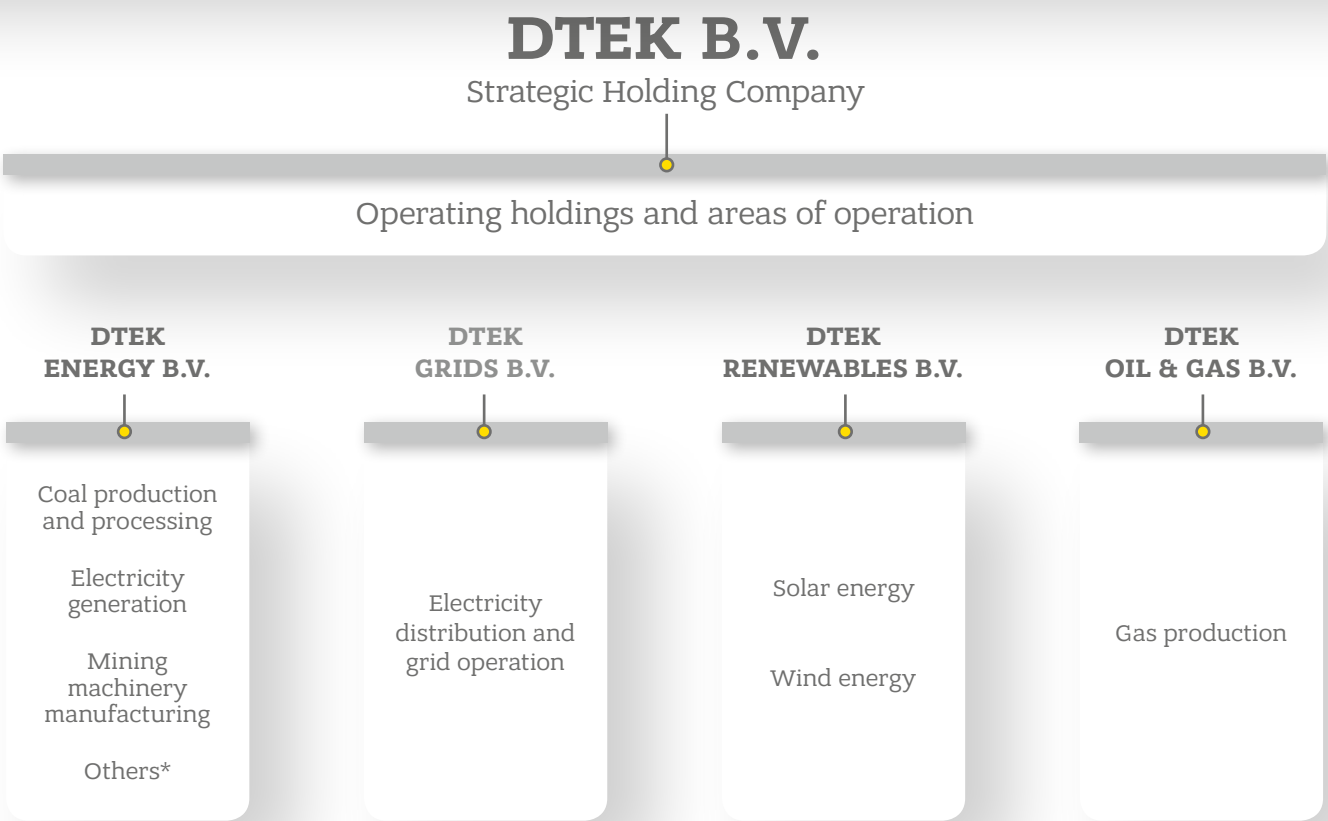
Assets
152,492 million UAH

Capital investments
10,388 million UAH

Taxes paid
22,517 million UAH

Structure of DTEK Group

DTEK B.V.’s Corporate Centre is responsible for long-term planning and management of the entire business. Operating holdings serve as centres of industry-related expertise and focus on operating activities. This management structure facilitates the effective development of each business line and contributes to the growth of investment attractiveness. DTEK B.V. is the owner of all operating holdings.



Business areas of DTEK Group’s operating holdings

DTEK Energy

The main product of DTEK Energy is the kilowatt hour. The company’s enterprises operate in the areas of coal production and processing; heat and electricity generation.

DTEK Energy performs operational management of the mines that produce steam and coking coals of G-grade. The company processes coal at its own and third-party CCMs. The coal is mainly consumed by thermal power plants in Ukraine.

In the area of heat and electricity generation, the company manages nine thermal power plants and two combined heat and power plants. TPPs and CHPPs supply heat to the cities they are located in. At the same time, the heating pipelines are mostly owned by municipalities.

All generated electricity is supplied to the United Energy System (UES) of Ukraine and simultaneously sold to the Wholesale Market. DTEK Burshtynska TPP operates on an isolated energy island that is synchronized with ENTSO-E, the European energy system. Thus, DTEK Zakhidenergo successfully operates in the Ukrainian and European energy systems.

856,188,000 tonnes commercial reserves of high-volatile steam coals at the company’s deposits

Company	Coal grade produced
DTEK Pavlogradugol	G, DG
DTEK Dobropolyeugol	G, DG
Mine Bilozerska	G, DG

17.5 GW installed capacity of TPPs and CHPPs

Company	Fuel
DTEK Skhidenergo	
DTEK Kurakhivska TPP	coal grade G, DG
DTEK Luganska TPP	coal grade T, A
DTEK Dniproenergo	
DTEK Zaporizka TPP	coal grade G, DG
DTEK Kryvorizka TPP	coal grade A, T
DTEK Prydniprovsk TPP	coal grade A, T, G, DG
DTEK Zakhidenergo	
DTEK Burshtynska TPP	coal grade G, DG
DTEK Dobrotvirska TPP	coal grade G, DG
DTEK Ladyzhynska TPP	coal grade G, DG
DTEK Donetskoblenergo	
Myronivska TPP	coal grade T, G
Kyivenergo	
CHPP-5	natural gas
CHPP-6	natural gas

DTEK Grids: electricity distribution and grid operation

The company actively participates in the implementation of the best European practices in the energy sector of Ukraine.

DTEK has begun the process of dividing distribution companies into a distribution system and grid operator, as well as a supplier of electricity to consumers. These changes are an integral part of the energy reform, which is aimed at establishing an electricity market as per the European model.

DTEK Grids focuses on developing enterprises for electricity distribution and grid operation. It is planned to complete the formation of target asset portfolio in 2018.

Distribution companies purchase electricity at the Wholesale Market for supply to their customers. The companies serve 3.6 million customers: steelworks and machine-building plants, mines and factories, as well as social facilities and households in Kyiv, Donetsk and Dnipropetrovsk regions.

3.6 million customers receive electricity from the distribution companies

Company	Licensed territory
Kyivenergo	Kiev
DTEK Dniprooblenergo	Dnipropetrovsk region
DTEK Donetskoblenergo	Donetsk region*
DTEK Power Grid	Donetsk region*
DTEK Energougol ENE	Donetsk region*

* Excluding the temporarily occupied territories.

DTEK RENEWABLES: renewable energy

DTEK Renewables is one of the three largest investors in the Ukrainian renewable energy sector. The company is implementing projects in solar and wind energy.

210 MW installed capacity
1 000 MW project portfolio till 2020

200 MW Botievo wind farm is DTEK Renewables project in wind energy sector. Today the wind farm is the largest one in Ukraine. The environmental impact from the wind farm operation is an annual emission reduction of 600,000 tonnes of CO₂ equivalent.

DTEK OIL&GAS: gas production

The company ranks first among private companies in Ukraine in terms of natural gas production volume. DTEK Oil&Gas has also become a sector leader in terms of intellectual potential.

25 billion cubic meters proven gas reserves

The company efficiently drills very deep wells, which became possible due to investments in up-to-date equipment and innovative technologies. A consistent build-up of gas production in Ukraine is possible only through intensive development of the depths of over 5,000 to 6,000 meters.

The main operating asset is Naftogazvydobuvannya. The company produces gas and gas condensate at the licensed sites of Semyrenkivske and Machukhske fields from the depth of over 5,400 meters. As of January 2018, the company operates

The second project of the company in the wind energy sector is the construction of 200 MW Prymorsk WEP. The first stage (100 MW) is planned to be completed by the end of 2018.

The next promising business line in the renewable energy sector being developed by the company is solar energy. In 2017, 10 MW Tryfaniivka SPP was put into operation, which will contribute to an annual emission reduction of 12,000 tonnes of CO₂ equivalent. This pilot project of the company in solar energy showed the expediency of further development of this direction. DTEK Renewables plans to build a 200 MW solar power plant in the Dnipropetrovsk region in 2018.

23 wells. The extracted gas is processed and brought to the standard requirements at gas processing facilities: Olefirivka preliminary gas processing terminal (PGPT), Semyrenky complex gas processing facility (CGPF) and Machukhy gas processing facility (GPF).

Neftegazrazrobotka was established to explore and develop new sites. The company majors in geological exploration works and develops the Khoroshevsk site in Kharkiv region.

DTEK Oil&Gas explores opportunities for business expansion. The company’s strategy envisages both participation in sub-soil use auctions and acquisition of already operating promising assets. The company is also ready to use its experience and expertise to manage projects of other companies, the licensed sites of which are characterized by complicated mining and geological conditions.

Mine Office Obukhovskaya

Mine Office Obukhovskaya in engaged in high-quality anthracite production and processing. The company’s products are supplied to Russian Federation, Ukraine, Europe, Asia, North America and Africa.

Corporate rights to Mine Office Obukhovskaya belong to DTEK B.V. (Netherlands).

Operating geography of DTEK Group

Those companies, which are not under the company's operational management, are not represented in the map.

Kyiv:
Electricity and heat generation and distribution
Kyivenergo

Mining machinery manufacturing
ETC Mining Machines

Vinnitsia region:
Electricity generation
DTEK Zakhidenergo: Ladyzhynska TPP, Ladyzhynska HPP, Ladyzhynska SPP (under construction, capacity – 1 MW)

Dnipropetrovsk Region:
Coal production and processing
DTEK Pavlogradugol: Pershotravenske Mine Office, Pavlogradske Mine Office, Dniprovske Mine Office, Ternivske Mine Office, Geroiv Kosmosu Mine Office
CCM Pavlogradska

Electricity generation
DTEK Dniproenergo: Kryvorizka TPP, Prydniprovsk TPP
Solar Farm 1: Nikopol SPP (construction started in 2018, capacity – 200 MW)

Electricity distribution
DTEK Dniprooblenenergo

Mining machinery manufacturing
Pershotravenskyi Repair and Engineering Plant

Donetsk region:
Coal production and processing
DTEK Dobropolyeugol and Mine Bilozerska: Bilozerske Mine Office, Dobropilske Mine Office
DTEK Dobropilska CCM
CCM Kurakhivska
DTEK Oktyabrskaya CCM

Electricity generation
DTEK Skhidenergo: Kurakhivska TPP
DTEK Donetskoblenenergo: Myronivska TPP

Electricity distribution
DTEK Energougol ENE*
DTEK Donetskoblenenergo*
DTEK Power Grid*

Mining machinery manufacturing
CORUM Druzhkovka Machine-Building Plant

Zaporizhia Region:
Electricity generation
DTEK Dniproenergo: Zaporizka TPP

Wind Power: Botievo WPP
Primorskaya WEP and Primorskaya WEP 2: Prymorsk WEP (under construction, capacity – 200 MW)
Orlovka Wind Electric Plant: Orlivka WEP (promising project, capacity – 100 MW)

Ivano-Frankivsk region:
Electricity generation
DTEK Zakhidenergo: Burshtynska TPP

Luhansk region:
Electricity generation
DTEK Skhidenergo: Luganska TPP

Lviv region:
Electricity generation
DTEK Zakhidenergo: Dobrotvirsk TPP

Poltava region:
Gas production
Naftogazvydobuvannya

Kharkiv region:
Mining machinery manufacturing
Svet Shakhtyora

Gas production
Neftegazrazrabotka

Kherson Region:
Electricity generation
Tryfanovka Energy: Tryfanivka SPP

Russian Federation:
Coal production and processing
Mine Office Obukhovskaya, Donskoy Anthracite, Sulinanthracite: Mine Office and CCM Obukhovskaya

- Coal Production and Processing
- Gas production
- Thermal generation
- Electricity distribution
- Wind energy
- Solar energy
- Mining machinery manufacturing
- Under construction

* In the part of grids located in the controlled territory of the Donetsk region.

02 Key indicators of 2017

February

The President of Ukraine awarded the energy workers of DTEK Power Grid – Vladimir Pobezinsky and Sergei Grechka – with the orders “For Courage” of the 3rd degree. The awards were presented for heroism shown during restoration of power transmission lines in the Avdiivka area. From January 30 to February 5, during military hostilities, the company’s energy workers reconstructed 110 kV high-voltage lines that apply voltage to Avdiivka, Avdiivka Coke Plant, Donetsk filtering station and city distribution grids.

March

DTEK lost control over the companies located in the ATO area. The company considers the demand to re-register the companies in the territories temporarily uncontrolled by the Ukrainian government unacceptable. On March 15, the company lost control over DTEK Mine Komsomolets Donbassa PJSC, DTEK Sverdlovanthracite LLC, DTEK Rovenkyanthracite LLC, Mospino CPE LLC, Zuivska TPP, as well as DTEK Donetskoblenenergo PJSC, DTEK Energougol ENE PJSC and DTEK Power Grid LLC in the part of the grids located in the ATO area. Upon the loss of control, the company applied to the central governmental authorities of Ukraine. In case of unlawful use and sale of the company’s products, the company initiates measures against the guilty parties in accordance with Ukrainian and international law. The employees of these companies were offered employment in other enterprises of DTEK located in the area controlled by the Ukrainian government.

An agreement was concluded with financial institutions on the long-term restructuring of DTEK Energy’s loans. This fact balanced the company’s financial capacity to service its loan portfolio and develop its business. The need for restructuring arose because of geopolitical and macroeconomic circumstances in Ukraine. A successful completion of the negotiations allowed restoration of investors’ confidence in the company and the country. The terms for the majority of previously opened credit facilities were unified and the repayment period was extended until June 30, 2023. The interest rate is floating and linked to Libor/Euribor + 5% per annum.

May

DTEK took first place in the Website Transparency and CSR Index. CSR Development Centre has compiled the Website Transparency Index for 100 largest Ukrainian companies. The index is based on an international methodology developed by the Centre in cooperation with Beyond Business (Israel) and has been published since 2012. This is the only one tool for monitoring the development of corporate social responsibility in Ukraine. The DTEK’s contribution is highly valued: the company enters the top 3 each year, and was No. 1 in 2013 and 2016.

July

DTEK Academy, INSEAD business school (France) and IE Business School (Spain) concluded a memorandum to develop and implement joint training programmes in Ukraine. The training programmes will be focused on the development of key managerial skills: creation of a successful team, critical thinking, ability to see opportunities, and decision-making in challenging situations. The basis of cooperation is the methods of business schools developed for training of managers of international companies. The decades of experience of DTEK Academy will allow to consider the challenges and needs of Ukrainian business.

August

DTEK implemented its first solar energy, which allowed to form a long-term vision of development in this segment. 10 MW Tryfanivka SPP was put into operation and connected to the United Energy System of Ukraine. The power plant will generate 11–12 million kWh annually, which will help to reduce CO₂ emissions by 12,000 tonnes. EUR 7.1 million was raised from Ukrgasbank to finance the construction.

At public hearings of the local community in Primorsk, Borysivka village and Botievo joint local community, the construction of Prymorsk WEP was agreed. The installed capacity of the wind farm will be 200 MW; the planned investment volume will exceed EUR 300 million. During 2018 GE (General Electric) will supply 26 wind turbines for stage 1 during 2018; the whole project involves the installation of 52 wind turbines. The wind turbines will be installed in forest belts, so as not to affect agricultural activities. The first stage of construction works on Prymorsk WEP is expected to be complete in late 2018, and connection to the United Energy Systems of Ukraine and electricity supply is planned for early 2019.

September

DTEK ESCO launched a set of energy-efficient products under the Smart WATT brand at the retail market. This is the first comprehensive solution for households in Ukraine to improve energy efficiency. The set includes a two-zone energy meter, LED lamps, smart outlets, a brochure with tips for rational use of electricity, and an energy manager badge. The sets are available for all regions of Ukraine. A quick installation of the meter is additionally provided to customers of Kyivenergo, DTEK Dniprooblenergo and DTEK Donetskoblenenergo.

According to the survey of employers’ attractiveness conducted by the international audit company EY, DTEK is one of the top 10 in Ukraine. EY considered the image, corporate culture, remuneration, management practices and other indicators when ranking companies. According to the survey, the companies from the top-10 list are deliberately building a strong employer brand and pay special attention to the professional development of employees, providing them opportunities for growth.

October

DTEK signed a partnership agreement with the Climate Bonds Initiative. It is a non-profit international organization that promotes the implementation of projects in sustainable energy and infrastructure through the development of a debt capital market. The partnership is aimed at developing financial solutions for green energy projects. The company’s initiative supports Ukraine’s goals to increase the share of renewable energy sources in the energy balance and opens up the opportunities for fundraising at the international market.

DTEK Prydniprovsk TPP has converted its Unit 7 to burn high-volatile steam coal instead of anthracite. Similar works at Unit 8 were completed in December. A transition to G-grade coal allows to minimize supplies of the imported anthracite by 80,000–90,000 tonnes per month, thereby increasing the use of domestic coal. The company plans to conduct such works at other units too. DTEK Prydniprovsk TPP was originally designed to burn anthracite. Due to the lost control over anthracite mines located in the ATO zone, the company imports this coal grade and works on switching the plant to high-volatile steam coal, the production of which is not affected by the hostilities.

DTEK Trading obtained a license for electricity supply at unregulated tariff. Entering the domestic electricity trading market is one of the preparation stages for the company to start working in a new market environment, the transition to which will be a result of the energy reform. The license enables the company to sell electricity in all regions of the country. According to the company’s estimate, about 10% of Ukrainian industrial consumers are already interested in electricity purchase from independent suppliers.

DTEK Oil&Gas has completed the reconstruction of the Machukhy gas processing facility. It is now one of the most technologically-advanced oil and gas facilities in Ukraine. Reconstruction was completed in a record-breaking six months. The project’s realisation has led to a doubling of the plant’s capacity from one to two million cubic metres of gas per day and the integration of modern production solutions. Prime Minister of Ukraine Volodymyr Groysman was present for the official opening of the upgraded Machukhy GPF.

November

The General Meeting of Shareholders of Kyivenergo PJSC decided to reorganize the business by establishing two companies. The first company will distribute the electricity and operate the grids, and the second company will supply the electricity to end consumers. These changes are an integral part of the Ukrainian energy reform. The reform aims to create a market by implementing a number of European Union directives in the energy sector and obliges companies to separate a distribution system operator from the production, transmission and supply of electricity.

DTEK and Tavria State Agrotechnological University (TSATU, Zaporizhia region) concluded a cooperation agreement. The document provides for the training of specialists in renewable energy with the possibility of their employment at the company’s enterprises; joint research and development projects; the development of innovations. Wind energy is a new industry for Ukraine, which created a demand for new professions and requires relevant experts.

December

DTEK Energy acquired CORUM Druzhkovka Machine-Building Plant LLC, Mining Machines Engineering and Technical Centre LLC and 61.2% of shares in Svet Shakhtyora PJSC. The integration of mining equipment manufacturers allows creating an effective platform for the development and improvement of coal mining technologies, as well as ensuring consistent warranty and post-warranty service. Ukraine needs to increase G-grade coal production for maximum possible conversion of thermal generation to domestic resources, and this acquisition will positively affect the result.

The Ministry of Education and Science of Ukraine approved 12 standards of vocational education developed by DTEK. In 2017, the standards for specialties were approved: underground electrical fitter, electric locomotive operator, electrician for repair and installation of cable lines, repairman for maintenance of heating substations, truck-mounted platform and hydraulic ram operator, a chemical water treatment technician, a power unit operator, miner for repair of mine workings, field service team electrician, steam and gas turbine equipment repairman, electrician for maintenance of electrical equipment of power plants. The company’s participation in the development of standards is aimed at improving the quality of education. The vocational schools can incorporate these standards in their curricula.

03 Mission, vision and values

Mission

We are working in the name of progress and social prosperity. Our energy brings light and warmth to people.

Vision

We are a dynamically developing Ukrainian company that strives for leadership in the European energy markets. Our success is based on people, efficiency and advanced technologies.

Values

Professionalism

Our employees have extensive professional knowledge, carry out their duties responsibly and diligently, and accomplish their tasks in a timely and workmanlike manner.

We strive to achieve the best results while making the best possible use of human, natural and financial resources.

Responsibility

We are building our business on the understanding that all of our efforts should serve the interests of society. We bear responsibility for the quality of our work and the observance of corporate standards, for meeting our obligations, for using resources prudently, and for protecting the environment. We are responsible for the people who make the success of our company possible – our employees.

Pursuit of excellence

We create the right conditions for the development of talents and abilities of our employees, implement the latest technologies, and improve production and management processes. As we expand our business, we strive to instill confidence in our employees and contribute to the successful development of Ukraine.

Unity

We value team spirit, unity and solidarity. We can only achieve strong results as a team. We enjoy both working and socializing together. Our common potential comes from the diverse experience and knowledge of each employee. Our unity comes from the common pursuit of the same ideas and goals while understanding and supporting each other.

Openness

We are open and keep our employees, partners, shareholders and other external parties informed about important issues regarding our development, creating a foundation for working together in a spirit of trust. We conduct our business on the basis of principles that are clear to our employees and partners.

04 DTEK Group's 2030 Development Strategy

DTEK Group's Development Strategy is consistent with Ukraine's energy strategy. The company is actively engaged in promoting the best European practices aimed at reforming the energy industry, modernization of enterprises and creation of new facilities, and social development of regions where it operates. It's contributing to the accomplishment of the country's key tasks: energy independence, energy efficiency and development of renewable energy.

Development Concept

DTEK will actively develop in Ukraine and enter the markets of neighboring countries as a diversified energy company with secured fuel resources.

DTEK will focus on the sale of electricity to all categories of consumers while maintaining high standards of service and building a strong retail brand.

DTEK will support and develop key success factors: the talents and potential of its employees and efficiency of production, investments and management.

DTEK will participate in the reform and modernization of Ukraine's economy, social development of regions where it operates, and promotion of best standards in industrial and environmental safety.

Six strategic vectors of development

Energy sector

DTEK’s energy business is based on the extraction of coal and gas, and electricity production at thermal and renewable generation plants.

The company intends to maintain at least a 25% share of the electricity market until 2020. The company plans to continue developing the renewable energy assets, first of all, wind energy assets by implementing the Pryazovskyi Wind Park construction project, and in solar generation — creation of new facilities.

The key tasks of coal mining are to meet the company’s thermal power plants’ fuel needs and the creation of safe working conditions.

It is expected that in 2018, an RAB-based tariff will be introduced in the distribution segment, which will increase the investment attractiveness of the business and create favorable conditions for further development.

In gas production, the company will focus on active drilling of wells at the Semyrenkivske and Machukhske fields under a long-term development programme. An exploration survey will be carried out in the Khoroshevska area, and the company will participate in auctions to purchase new licensed sites from the unlicensed site list.

Society

The company has a zero-tolerance policy in respect of injuries caused by industry, for that reason establishing a culture of valuing one’s own life is a critical task. DTEK intends to reduce the workplace injury rate by introducing safety control parameters and creating modern production facilities where complex sections will be automated.

DTEK promotes comprehensive development of Ukraine with the primary focus on the regions where the company’s facilities operate. One of the company’s primary goals is to establish partnership with society, to promote joint initiatives with local residents for urban development and to facilitate an understanding by local communities of the challenges the business faces.

The company implements large-scale social programmes to improve living standards in the cities and towns where the company operates, including those targeting environmental protection. For this purpose, DTEK has developed and is implementing an environmental strategy. In general, the programmes include five main directions: energy efficiency in the utilities sector, healthcare, support of socially important infrastructure, development of the business environment, and encouraging the initiatives of local communities.

Customers

Liberalization of the energy market means that consumers have the right to choose their suppliers. In order to effectively operate in a free market, the transition from an electricity supply company to a customer-oriented business has become DTEK’s key task.

The company is developing common customer management standards for all distribution companies by replacing the obsolete service system with Western standard service. The network of CSC is already expanded and its operating principles are unified. Online services are replacing consumer billing books. In the next few years, it is planned to introduce a common centralized billing system, thus establishing the foundation for the large-scale deployment of Smart Grid and Smart Metering technologies.

The company is expanding its range of services by adding energy efficiency services: implementation of pilot projects started in the industrial and budgetary spheres with the use of energy service mechanisms. Further diversification of high quality products and services will allow an increase in customer satisfaction to 90% by 2030.

The company will be actively developing DTEK’s retail brand to make reliability and innovations available to everyone.

People

People are the backbone of the company and the source of its competitive advantages. DTEK will continue to invest in the development of our personnel and promotion of an innovation culture.

People are the company’s intellectual capital, so a system of continuous personal development for employees is created; all managers are trained in personnel management processes. The focus is on the formation of a corporate culture that creates conditions for efficient achievement of business goals, employee engagement, building loyalty to the company and adopting the company’s values.

DTEK plans to use state-of-the-art IT technologies in the areas of human resources, benefits and incentives, and organizational

management, which will help organize personnel management business processes in the most efficient manner, as well as cultivate and attract talents to the company.

DTEK will continue with large-scale investments in the development of its personnel and will promote an innovation culture in production and management. The company’s goal is to use the Human Capital instead of Managing People philosophy according to which employees act as business partners.

Efficiency

DTEK strives not only to reduce costs, but to explore new opportunities to obtain maximum return from used resources. DTEK’s competitive ability and leadership are based on the three pillars: efficiency of management, efficiency of production and efficiency of investments.

Efficiency of production is impossible without timely modernization of our production companies, which requires investment efficiency. DTEK Energy’s enterprises were established in the 1950s–1970s. Today they need total renovation. The company determines investment priorities and chooses the best engineering solutions to minimize human involvement in the coal production process, upgrade and construct new power units and create modern grids.

For production efficiency, the company is implementing the Novator continuous improvement system and developing a culture of lean production. Novator becomes the basic model for employee behavior: each employee has the right to make a reasonable suggestion for improving efficiency at his/her workplace. The best proposals are implemented, and their authors are awarded. This approach is conducive to business development and has advantages

for consumers and the economy in general. From the point of view of consumers, DTEK’s efficiency means lower electricity consumption; for partners this means a lower energy component in product cost, while for Ukraine this means increased energy security, the implementation of innovations, a favorable investment climate, and increased effectiveness of the entire economy.

Business efficiency is a prerequisite for a sustainable long-term development.

Ukraine “plus”

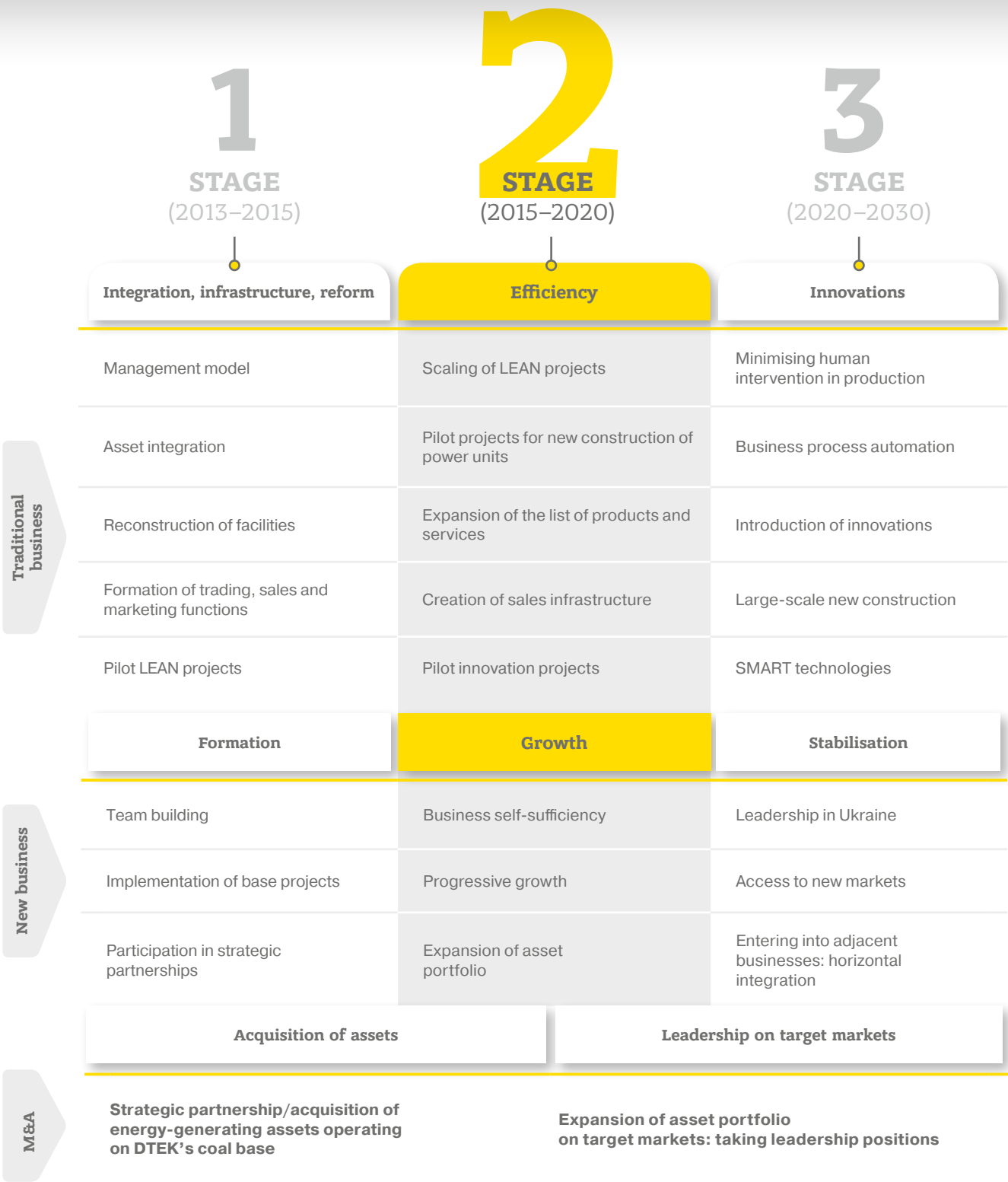
Ukraine is the key priority for DTEK’s development. The company’s largest investments are channeled into the development of Ukraine’s energy sector and economy. New capacities are built, new technologies are introduced and new businesses are set up. Effective operation on external markets is impossible when there is no strong production base at home.

DTEK tries to develop commercial relations with external markets. One of our main tasks is to expand technical and business opportunities to export electricity, implement modern and innovative commercial mechanisms, and reach end consumers on the European markets. DTEK is ready to take part in the project for synchronization with ENTSO-E, and will do everything necessary to get its power units and grids ready for integration into the European energy system.

The company has become the face of Ukrainian business for foreign partners. DTEK strives to represent the Ukrainian business sector to international partners as a transparent, responsible and efficient company that is oriented toward a long-term sustainable development.

Stages and priorities of DTEK Group's development strategy

The long-term corporate strategy determines key areas of business development, management projects and technologies.



05 DTEK Group's top management



Maxim Timchenko

CEO of DTEK

Mr. Timchenko has been heading DTEK since July 2005.

Under his leadership, DTEK has become the largest Ukrainian company. Since 2005, DTEK's portfolio has grown to 31 mines, 10 TPPs, 2 CHPPs, and 6 distribution companies. In 2013, DTEK became a major shareholder of Naftogazvydobuvannya, the largest private gas producing company in Ukraine. In 2014, DTEK completed the construction of 200 MW Botievo Wind Farm, which is one of the five largest wind farms in Central and Eastern Europe. In 2015, DTEK successfully implemented a new corporate governance structure, which provides for effective unbundling of strategic planning and operational functions. In 2016, DTEK restructured the loan portfolio of its operating holdings. This allowed the company to balance its financial capabilities with respect to loan servicing and future development. In 2017, a pilot project in solar energy was implemented — Tryfanivka SPP was constructed.

Along with 20 other leaders of the world's largest energy companies, Mr. Timchenko was a co-founder and signatory of Energy for Society, a global initiative of the World Economic Forum.

From 2002 to 2005, Mr. Timchenko worked as a senior manager at SCM, where he was responsible for SCM's energy business until it was spun off into DTEK. Mr. Timchenko began his career as a consultant at PricewaterhouseCoopers (1998–2002), where he advanced to a senior auditor position.

He is a member of the Association of Certified Chartered Accountants (ACCA).

He received a degree in Production Management with honours from the Donetsk State Academy of Management in 1997. He continued his education at Manchester University and received a BA degree in Economics and Social Sciences with honours.



Dmitry Sakharuk

CEO of DTEK Energy

Mr. Sakharuk has been heading the company since October 2017.

He joined DTEK in March 2010 as the Deputy Legal Director. In May 2011, he was appointed as the head of DTEK legal support directorate. From August 2014, he held the position of executive director at DTEK Energy. In October 2016, he was appointed as acting CEO of DTEK Energy.

From 2008, Mr. Sakharuk worked for Squire, Sanders & Dempsey LLP, international law firm.

In 2000, he graduated with honours from the Kharkiv National University of Internal Affairs majoring in Law. In 2001, he received a Master's degree in Law Enforcement with honours from the same university. In 2002, he obtained Master's Degree in International and Comparative Law from the Chicago-Kent College of Law. During his employment with DTEK, Mr. Sakharuk successfully completed the Energy of Leader programme, a joint programme of the London Business School and DTEK Academy.



Igor Shchurov

CEO of DTEK Oil&Gas

Mr. Shchurov has been working for the company since September 2011.

From April 2013 to September 2016, he was in charge of Naftogazvydobuvannya PJSC, a key production asset of DTEK Oil&Gas. He joined DTEK Group from Novatek, Russia's largest independent gas producer, where he was the head of its subsidiary Novatek-Tarkosaleftegaz. From 1998 to 2007, he worked at Samaraneftgaz (Yukos Oil Company, Russian Federation), where he rose from oil and gas production operator to deputy general director.

In 2002, he received a Ph.D. in Technical Sciences at the Ufa State Petroleum Technological University. In 2000, he received a second university degree in Finance and Credit at the Samara State University of Economics. In 1998, he graduated from the Samara State Technical University, where he received a degree in Oil and Gas Field Development.



Philipp Leckebusch

CEO of DTEK Renewables

Mr. Leckebusch has been heading the company since April 2018.

He has extensive experience working in senior management positions in the electric power, utilities and renewable energy sectors.

He started his career in 1989 in the aerospace industry with MBB Deutsche Aerospace (Germany) and Mitsubishi Heavy Industries (Japan). During his time with ABB, ALSTOM Power and Ferrostaal, his responsibilities included supervising project development and engineering of multiple-fossil-fuel and biomass power plants in all major regions of the world.

Even as he acquired his extensive conventional power plant know-how, he spent more than 10 years overseeing the development and operation of numerous geothermal, wind, solar and biogas projects, which qualified him for his most recent position as head of the MVV Energie Group's generation division. In that post, he successfully managed the transformation of the company's conventional power plant portfolio into a continuously growing renewable energy asset base.

Mr. Leckebusch holds a degree in aeronautical engineering from the Munich University of Applied Sciences.



Ivan Gelyukh

CEO of DTEK Grids

Mr. Gelyukh has been heading the company since February 2018.

Joined the DTEK team in 2005, working as head of the investment department from 2005 to 2008. He then moved to the Kyivenergo JSEC as head of the investment department, in 2011 he headed the Regulatory Policy and Investments Directorate, and the Strategy Directorate of Kyivenergo in 2012. He has held the post of Deputy Commercial Director of DTEK Energy since September 2013 and exercised the functions of Electricity Distribution and Sales Director of DTEK Energy since March 2017.

He began his career in 2001 as an economist at Intron.

Educated at the Donetsk National University, he graduated with a master's degree in Finance in 2003.

Review of macroeconomic indicators and industries

01

Ukraine's macroeconomic
indicators in 2017

02

Coal
Market

03

Electricity
Market

04

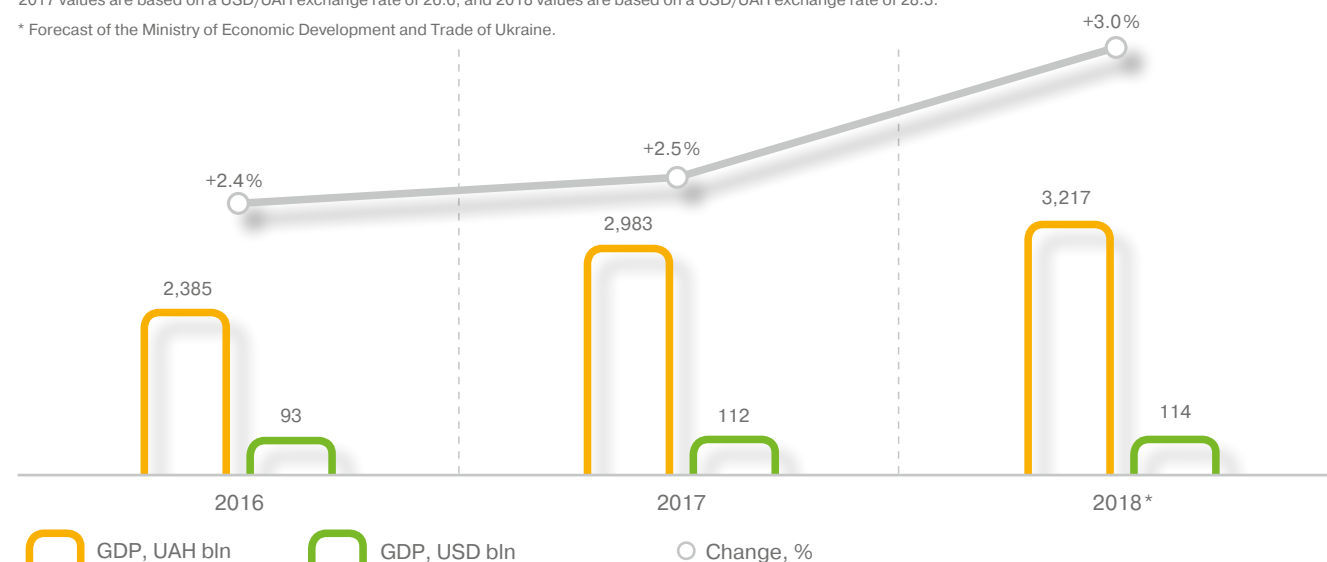
Natural Gas
Market

01 Ukraine's macroeconomic indicators in 2017

GDP trends

2017 values are based on a USD/UAH exchange rate of 26.6, and 2018 values are based on a USD/UAH exchange rate of 28.3.

* Forecast of the Ministry of Economic Development and Trade of Ukraine.



According to the Ministry of Economic Development and Trade of Ukraine, high consumption, the EU market representation of Ukraine and active construction work are the key factors of GDP growth.

NBU forecasts economic growth by 3.4% in 2018. The key factors will be private consumption through the preservation of positive rates of change in real wages, the continuation of the policy of fiscal easing, and tightening of monetary policy to bring the consumer inflation to the target level.

The companies and organizations allocated UAH 412.8 billion for capital investments in 2017, which is 22.1% more than in 2016. In the structure of capital investments, the equity of companies and organizations accounted for 69.9%, budgets of all levels accounted for 12.7%, private investments in housing construction for 7.8%, bank loans for 5.3% and foreign investments for 1.4%. Thus, in 2017 the share of budgets of all levels increased by

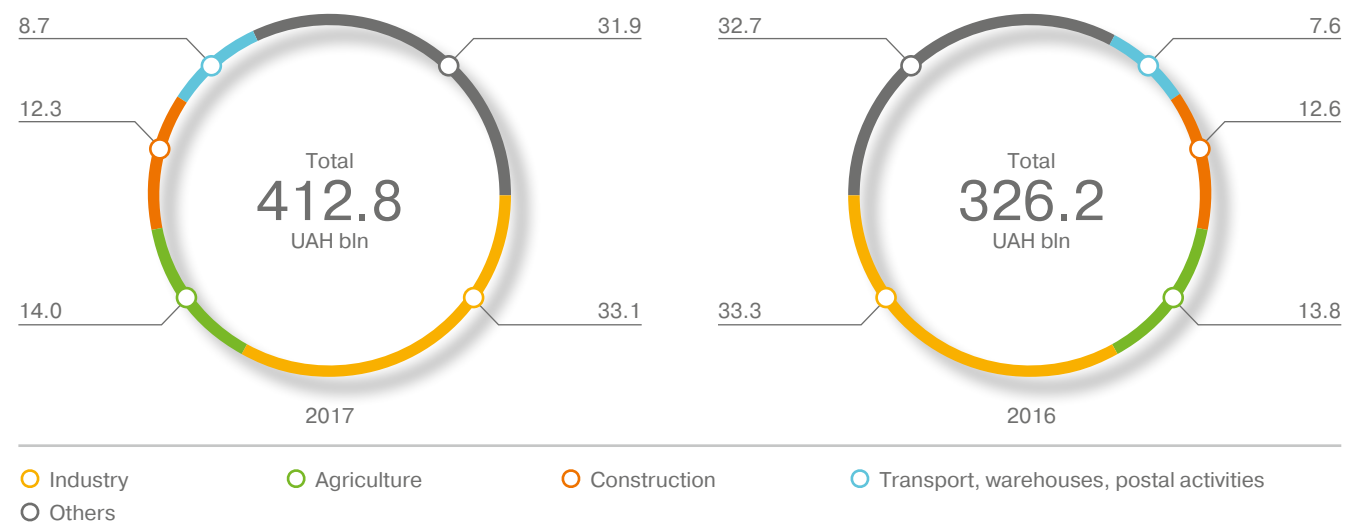
3.3 percentage points due to a decrease in the share of bank loans and foreign investments.

In the industrial sector, capital investments were allocated as follows: processing industries accounted for 51.6%, mining sector including excavation for 25.2% and energy sectors for 21.2%. Investments were allocated to acquire tangible assets, mainly for the procurement of equipment.

The net inflow of foreign direct investments was USD 2.2 billion, while the year-on-year net inflow was USD 3.3 billion. At the same time, the net inflow to the real sector is USD 1.6 billion.

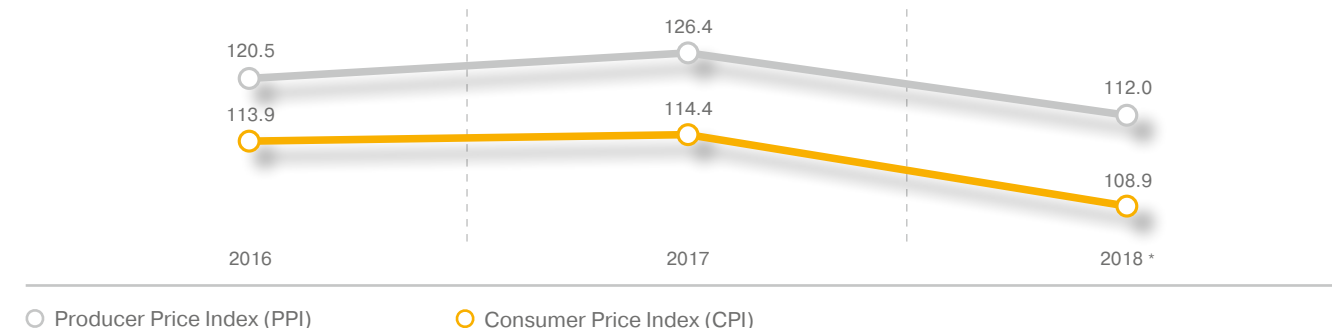
Structure of capital investments, %

Data: The State Statistics Service of Ukraine.



Producer price index and consumer price index, %

Data: The State Statistics Service of Ukraine.



* Forecast of the Ministry of Economic Development and Trade of Ukraine.

The consumer inflation rate was significantly affected by the reduction of certain types of commodities due to unfavourable weather conditions in the beginning of the year, the unstable situation with livestock and the improving domestic demand for domestic food. At the same time, growth rates for prices on non-food products, which are mainly imported, were lower than in the previous year.

Core inflation according to the results of 2017 accounted to 9.5% (5.8% in 2016). The growth acceleration of the cost of services included in the core inflation made an impact due to an increase in production costs and the rapid recovery of consumer demand, including an increase in the level of minimum wages and pensions. The largest contribution to the level of core inflation was made by the services of fast food, higher education and the maintenance of adjacent territories.

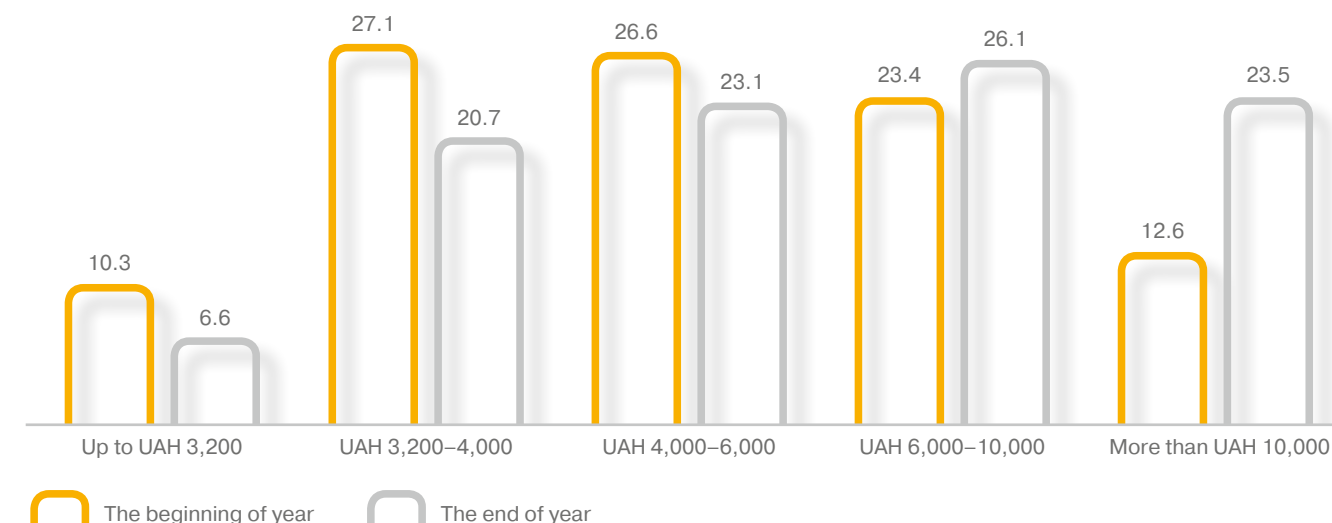
The average nominal wage of full-time employees in December was UAH 8,777, which is 35.5% higher compared to the same period in 2016. According to the State Statistics Service of Ukraine,

the income of the population in 2017 was UAH 2,475.8 billion and expenditures UAH 2,544.8 billion. At the same time, the growth of income due to wages increased by 31.1% compared to 2016.

As of December 2017, 46.2% of households received subsidies. As noted by the NBU, in December there was a decrease in the number of households that applied for subsidies, and the average amount per household was UAH 732.4. This is due to the increase in household income due to the revision of wages against a background of moderate changes in tariffs for housing and utilities management.

Distribution of full-time employees by wage level in 2017, %

Data: The State Statistics Service of Ukraine.



Industrial production index, %

Data: The State Statistics Service of Ukraine.



* Forecast of the Ministry of Economic Development and Trade of Ukraine.

In 2017, industrial output practically remained at the level of last year, despite the termination of trade connections with the temporarily occupied territories. As noted in the report of the NBU, iron and steel production decreased by 3.6%; the reduction in the production of steel, pig iron and ferro-alloys was offset by the increased production of pipes.

In addition, the higher indicators of iron and steel industry in comparison with the forecast are due to the rapid reorientation of enterprises to new sources of raw materials supply, as well as favourable foreign economic conditions.

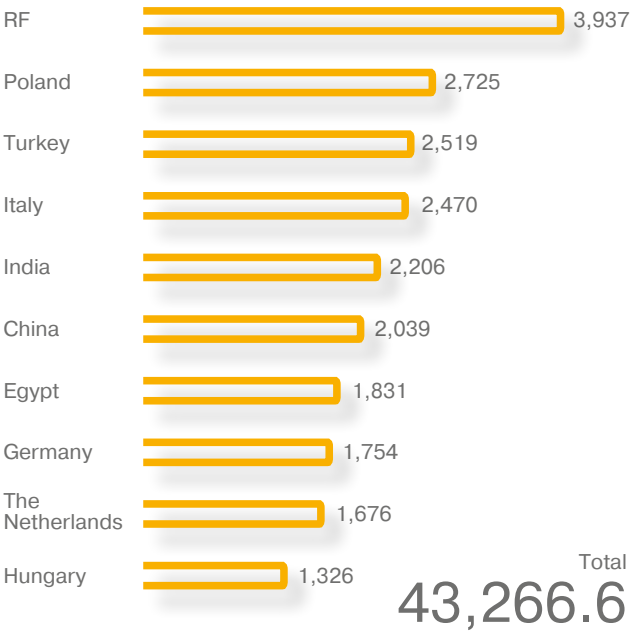
In the sales of industrial products, the share of long-term goods increased by 12.8%, investment goods by 9.3%, and short-term goods by 3.6%.

Industry, construction, retail trade and agriculture are core sectors on which the national GDP primarily depends. According to the results of 2017, the scope of completed construction work grew by 20.9% and retail sales increased by 8.8%, but agriculture product index decreased by 2.7%.

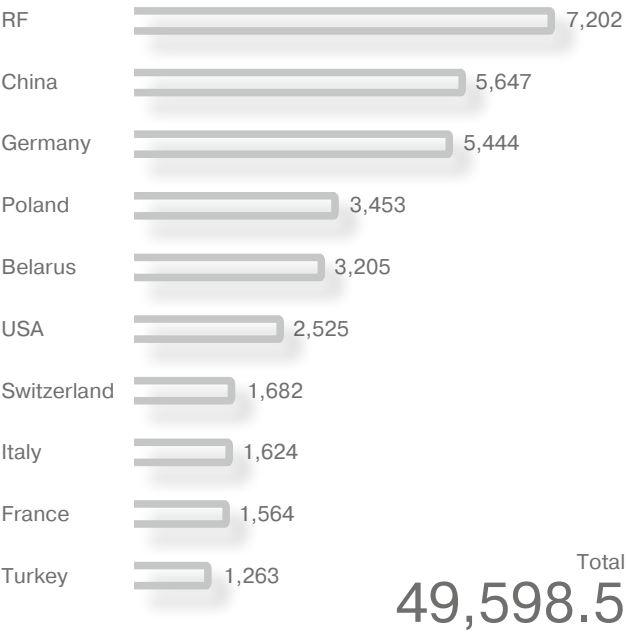
Cross-border trade in commodities in 2017, USD mln

Data: The State Statistics Service of Ukraine.

Export



Import



Exports of goods and services in 2017 amounted to USD 52,329.6 million, and imports to USD 54,955.0 million. Exports increased by 16% year-on-year, while imports increased by 23.3%. The negative balance of foreign trade amounted to USD 2,625.4 million.

Geographically, exports of goods to the EU and Asia increased by 30% and 9.6%, respectively. At the same time, the EU countries account for 40.5% of Ukraine's foreign trade, and Asia for 32.4%. Despite the fact that the export of goods to the Russian Federation changed by 9.6% (USD 345 million), the ratio was 9.1% compared to 9.9% in 2016.

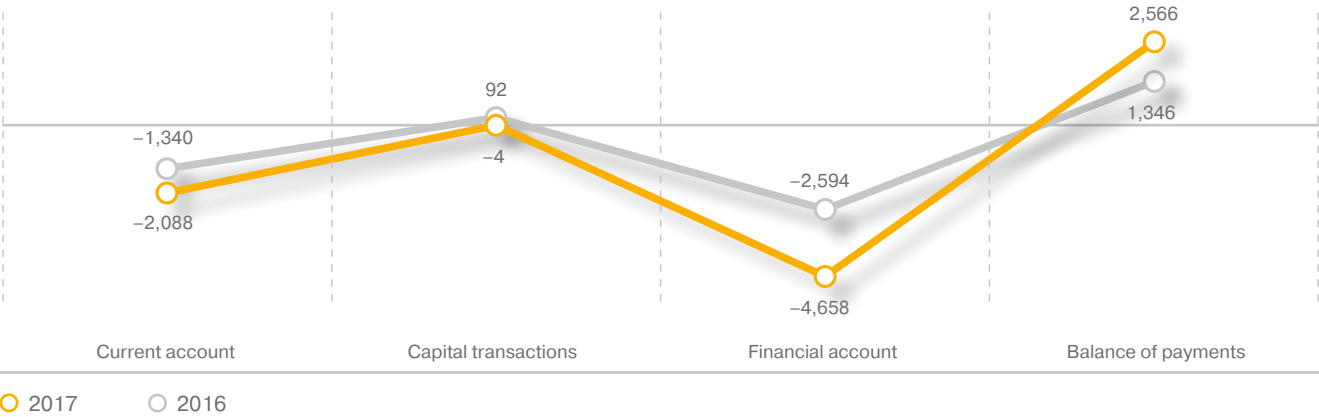
The share of EU countries in the import of goods increased to 41.9%, and the ratio of the Russian Federation increased to 14.5%. Although the volume of imports from Asia increased by 19.5%, the region's ratio in the total import decreased to 20.1% against 20.3% in 2016.

In 2017, the main Ukrainian exporting segments were food products (including grain) with 41.0%, the iron and steel industry with 23.4%, engineering with 9.9% and mineral goods with 9.1%. In imports, oil products prevail with 23.6%, engineering goods with 20% and the goods of the chemical and associated industries with 13.2%.

According to the forecast of the NBU, the role of exports in economic growth will increase due to favourable terms of trade and better access to foreign markets. At the same time, an increase in domestic consumer and investment demand will further lead to an increase in imports.

Balance of payments, USD mln

Data: The National Bank of Ukraine.



In 2017, the current account deficit in the balance of payments increased to USD 2.1 billion (USD 1.3 billion in 2016). The growth of imports of goods and services prevailed over exports by 2%.

According to the forecast of the National Bank of Ukraine, in 2018 the current account deficit will remain at 3.5% of GDP, whereas the balance of the net liquidity balance is expected to be positive, with 1.8% of GDP.

The financial account capital inflow in 2017 was observed both in the public sector and in the private sector. At the same time, the public sector attracted USD 2.1 billion against a capital outflow of 0.8 billion in 2016, and the private sector attracted USD 2.5 billion compared to 3.4 billion in 2016. The sources of revenue in the public sector: USD 1.3 billion from the bond issuance of the external public loan and EUR 580 million from the European Commission.

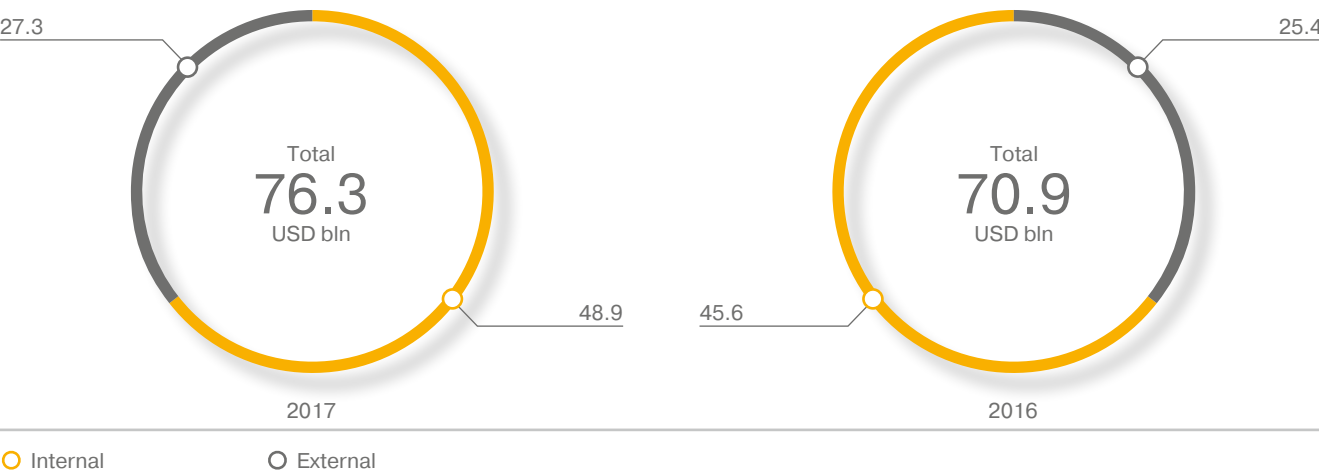
In 2017, the international reserves of the National Bank of Ukraine increased by 21%, mainly due to the IMF loan, and it amounted to USD 18.8 billion as of January 1, 2018. This volume covers 3.6 months of future imports and allows Ukraine to meet its obligations and current operations. The NBU forecasts a decline in gold and foreign exchange reserves to USD 17.8 billion by

the end of 2019 instead of the previously expected 21.1 billion. The reasons for the decline are peak payments on external public debt and the formation of the deficit of the net liquidity balance at the level of 1.1% of GDP. According to the National Bank, a new programme of cooperation with the IMF will be needed to restore reserves, which should commence in 2020.

Since January 2018, the NBU discount rate has been revised to 16.0% per annum. A more hardline monetary policy is aimed at preventing further deterioration of household and business inflation expectations. In addition, this is a response to the increased risks of changing the cooperation renewal terms with the IMF, growth acceleration of consumer demand in connection with the raising of social standards and the implementation of the reduced fiscal policy by the government.

The government and government-guaranteed debt, USD bln

Data: The Ministry of Finance of Ukraine.



Ukraine's government and government-guaranteed debt in 2017 increased by 7.5% in USD equivalent, or UAH 5.3 billion; the growth is 11%, or 211.9 billion.

The ratio of total debt to GDP in 2017 decreased to 71.8%, this was achieved for the first time since 2011. According to the Ministry of Finance, this ratio is gradually approaching the optimal value of 60%.

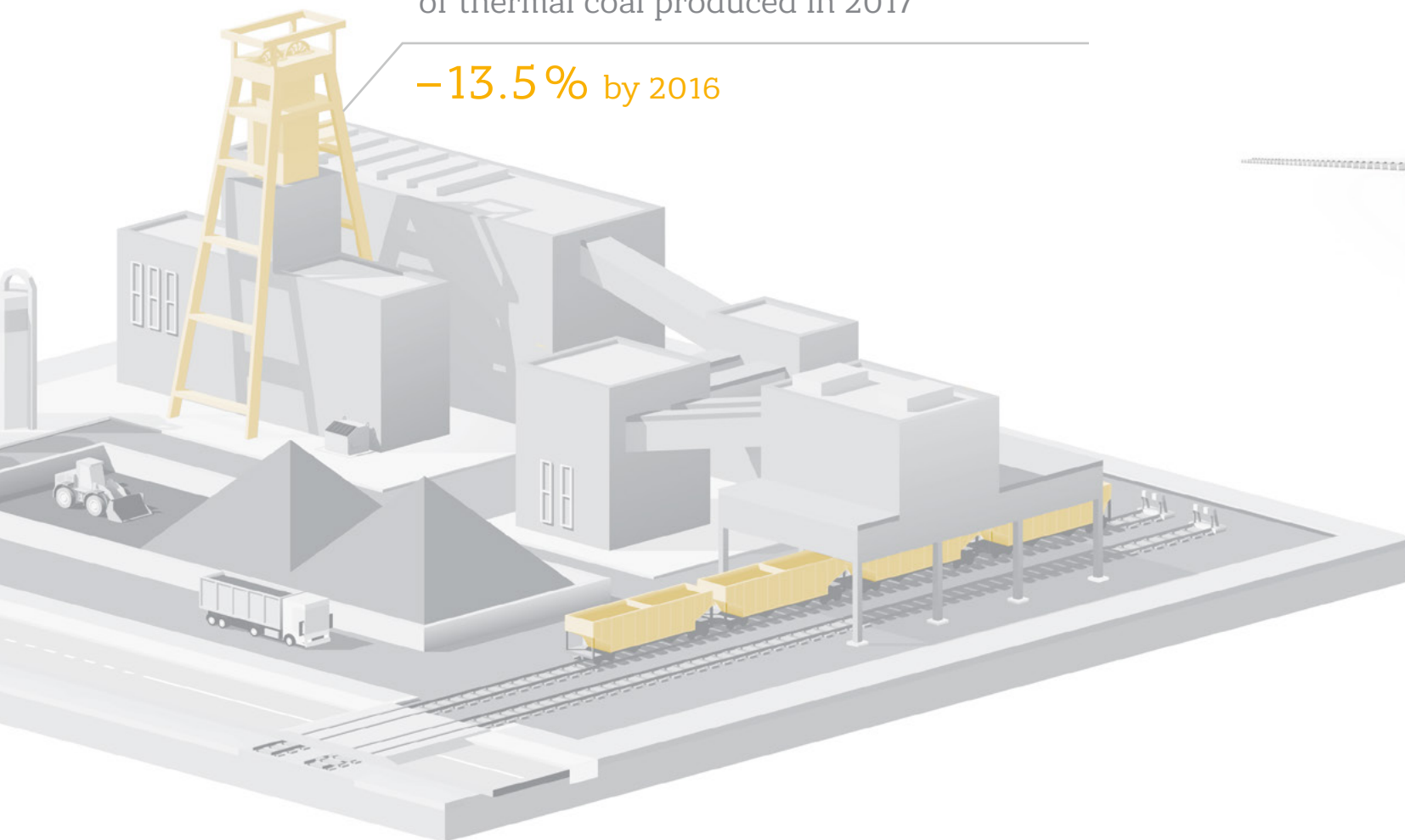
Coal Market

Ukraine terminated the production of anthracite

28.1
mln tonnes

of thermal coal produced in 2017

–13.5 % by 2016



21%

Ukraine imports of coal for energy sector

5.1
mln tonnes

imported of coal in 2017

It's the top line since 2014



Ukraine increases investments in the production of high-volatile steam coal grades to replace the anthracite in the energy sector

6 068.6
UAH mln

+21.9 % by 2016



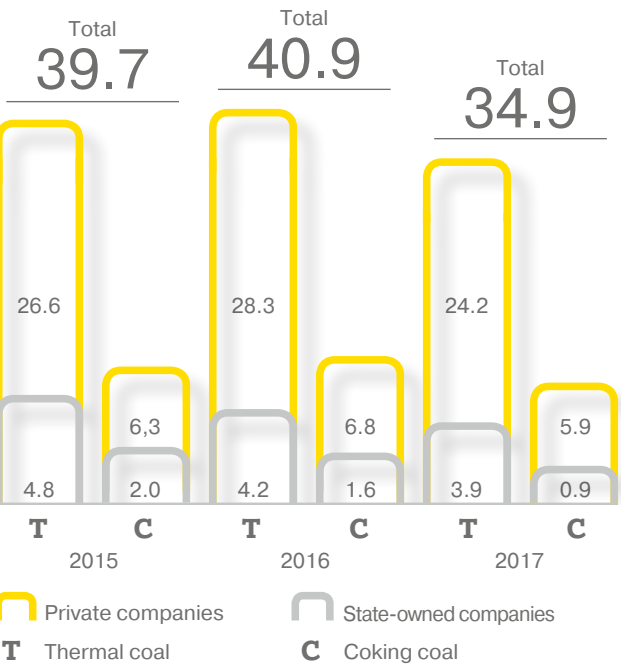
02 Coal Market

Thermal coal balance

Coal reserves in Ukraine are estimated at 34.4 billion tonnes, which is 3% of the world's total reserves. Most of the reserves consist of thermal coal, coking coals account for about 30%. The main reserves are found in the Donetsk, Dnipropetrovsk and Lviv-Volyn coal basins, as well as in the Dniro-Donetsk and Zakarpattia coal depression. The deposits are characterised by deep occurrence and thin seams (0.8–1.0 m). Work is carried out at depths of 500 to 1,000 meters.

There were 150 coal mines in operation at the beginning of 2014.

Coal production in Ukraine, mln tonnes



Ukraine has been importing coal for electricity production since the beginning of the military conflict. In March, Ukraine terminated the anthracite production which led to an increase in imports. In 2017, the volume of imports exceeded 5 million tonnes, which was the highest since 2014. For the first time, coal supplies from the United States began.

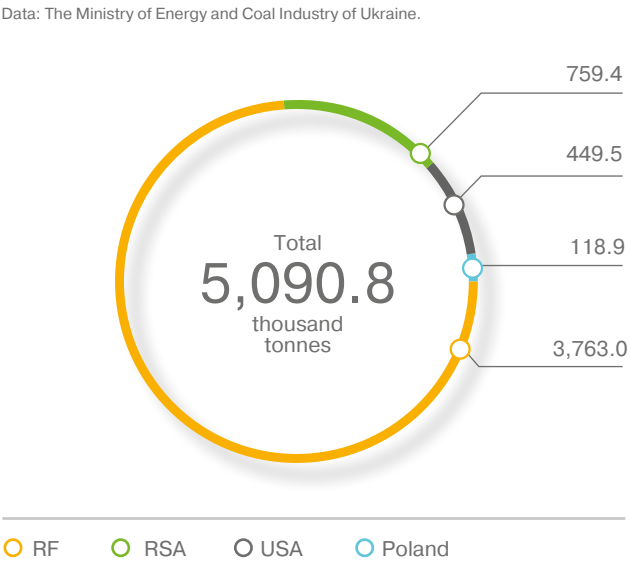
Coal fuels one-third of Ukraine's electricity demand. According to the forecast fuel structure for 2017, it was expected that thermal generation uses 26.3 million tonnes of coal, of which 7 million tonnes are anthracites. In fact, the thermal power plants and heating plants consumed 24.8 million tonnes, which, according to the Ministry of Energy and Coal Industry of Ukraine, is 20.8% lower than in 2016.

Such a significant reduction in coal consumption in 2017 is due to the cessation of supplies from Ukrainian companies in the territory temporarily not controlled by the Ukrainian authorities. Considering that anthracite is used for a significant part of the generation, fuel will be imported to ensure the production of electricity. Later Ukraine plans to completely replace the anthracite with high-volatile steam coal grades, the production of which is not at risk of termination due to military hostilities.

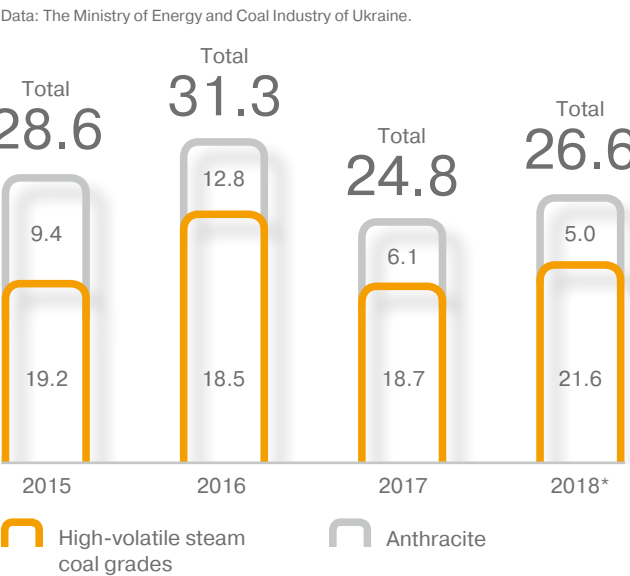
According to the government, in 2017 Ukraine has already saved 4.1 million tonnes of anthracites due to the conversion of a number of power units to the combustion of G-grade coals, as well as the increase in electricity production by other types of generation.

There are 85 mines in the territory temporarily not controlled by the Ukrainian authorities, and 60 of them produce thermal coal. Since March 2017, Ukraine has completely terminated the production of coal in the occupied territory, where all the anthracite mines are located. According to the Ministry of Ecology and Natural Resources, 36 mines are already completely flooded and cannot be restored. According to the agency, Ukraine will need international support in the conservation of dozens of mines after the restoration of control over the occupied areas of Donbass.

Countries supplying thermal coal to Ukraine in 2017, thousand tonnes



Coal consumption at TPPs and CHPPs, mln tonnes



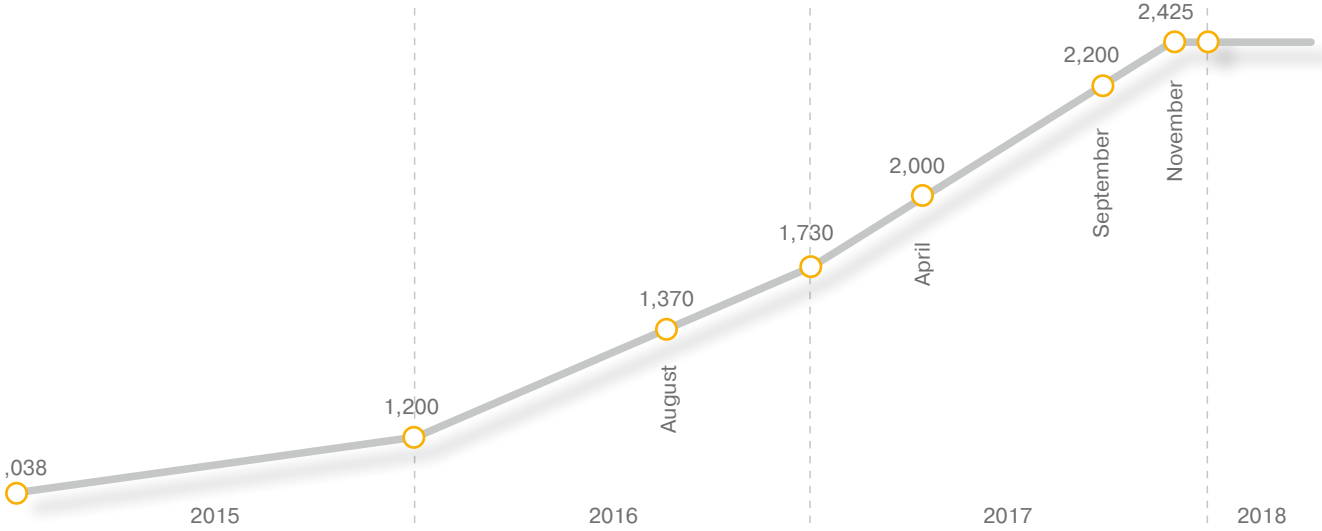
Sector regulation and pricing

The Ministry of Energy and Coal Industry of Ukraine is the main governmental body determining policies in the coal mining sector. Coal in Ukraine is sold under direct contracts between mining companies and consumers or via State Enterprise Derzhvuhlepostach, which acts as the wholesale coal market operator for some state-owned mines. Derzhvuhlepostach is established by the order of the Ministry of Energy and Coal Industry of Ukraine.

The operator distributes coal products at fixed calculated prices. This results in cross-subsidisation of loss-making state-owned mines at the expense of profitable ones. The cross-subsidisation does not fully cover the financial demands as a few mines operate at a breakeven level. Furthermore, the state allocates funds to support state-owned mines by partially covering some expenses in the production cost of coal.

Average coal selling price of state-owned mines, UAH/tonne

Data: The Antimonopoly Committee of Ukraine, the Ministry of Energy and Coal Industry of Ukraine.
The prices exclude VAT and transportation costs.



In 2017, the ministry advised on the revision of the indicative price for coal produced by the state-owned mines and sold to thermal generators three times. This was reasoned by the necessity to ensure the stable operation of the country's power system.

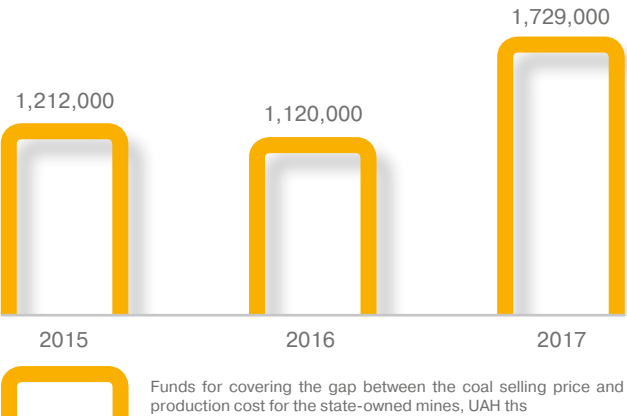
The government continues supporting the state-owned mines by providing subsidies which are, first of all, transferred to cover the gap between the coal selling price and the production cost, as well as to reform the industry. In particular, national budget for 2018 provides

for UAH 1.3 billion for measures to ensure domestic production of coal and further reform of the public sector, UAH 753 million for loss-making mine liquidation and UAH 10 million for supporting the construction of Novovolynska Mine No. 10.

State support of state-owned mines

Indicators	2015	2016	2017
The production cost of marketable coal products, UAH	2,067.8	2,160.0	2,726.9
The price per tonne of marketable coal products, UAH	1,001.1	1,156.0	1,658.4

Data: Laws of Ukraine on the State Budget, the Ministry of Energy and Coal Industry of Ukraine, Energobusiness magazine.

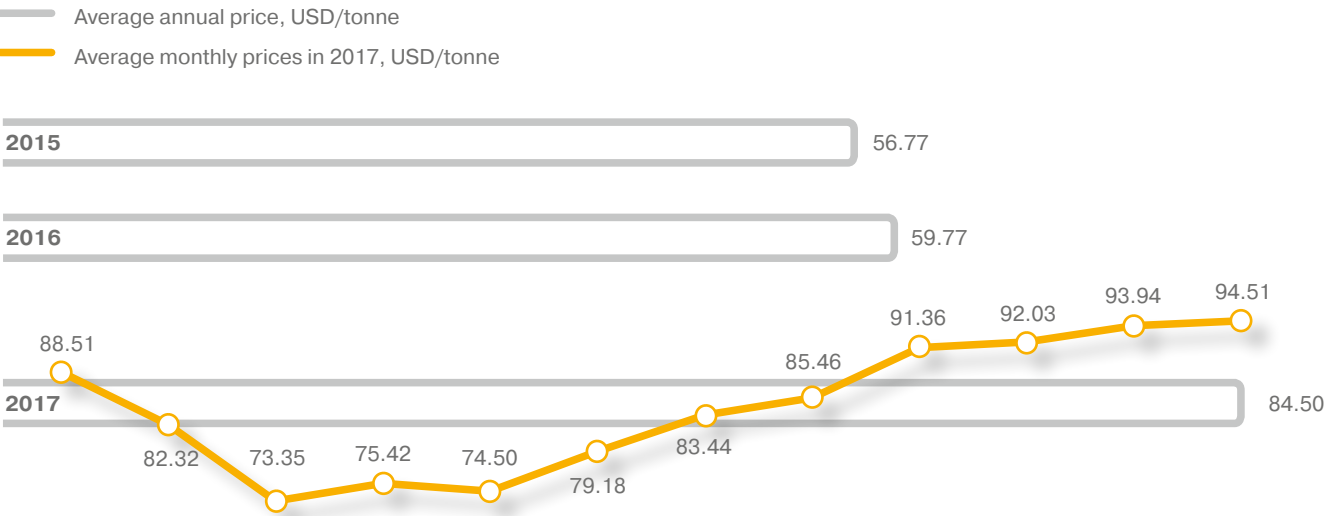


Initially, the national budget for 2017 included UAH 870 million to cover the gap between the coal selling price and the production cost, and UAH 847.1 million were included for the programme of the restructuring of the coal and peat industries. However, in fact, UAH 1.7 billion were assigned in 2017 to the state-owned mines to cover coal production costs, and UAH 0.6 billion were assigned to restructuring.

Resolution No. 289 on approving the procedure for formation of forecast market-based wholesale price of electricity of the National Energy and Utilities Regulatory Commission dated 03.03.2016 also includes the calculation methodology for the indicative price of coal. The indicative price is taken into account for setting the thermal generation tariff. At the same time, the market-based wholesale price is approved for a year with breakdown for each quarter and it may be revised during the year. For the year of 2017, the price was set twice: in December 2016 and March 2017.

API2 index reflects the price for thermal coal with a calorific value of 6,000 kcal/kg delivered CIF the ports of Amsterdam, Rotterdam and Antwerp

Data: IHS Markit (McCloskey).



Private companies set prices for coal products that are not used in thermal generation for electricity production based on supply and demand, taking into account the general trends on international and domestic markets.

The exchange trading indicated the market-based price in 2017. The Antimonopoly Committee of Ukraine recommended purchasing thermal coal for electricity generation on the basis of competitive bidding from May to December. The volume of electricity was meant to be at least 10% of DTEK Energy TPP's consumption in the same period in 2016. The Ukrainian Energy Exchange commodity exchange conducted such tenders in July. DTEK Trading and State Enterprise Derzhvuhlepostach participated in them. As a result, the whole tendered volume was sold: 1.5 million tonnes, and the weighted average price was 2,050.98 UAH / tonne (excluding VAT).

In 2017, the prices on global coal market increased significantly. One of the key reasons for market changes is supply disruptions from key exporting countries — Australia and South Africa. This was due to the deterioration in climatic conditions and strikes in mining and logistic companies, as well as increased demand at the consuming end.

Key legislative events of 2017

The government decree No. 733-p dated 24.05.2017 on the Concept of the 2020 Governmental Target Economic Programme for Coal Industry Reform became the main event for the coal industry.

As indicated in the document, 96% of the state-owned mines have been operating without reconstruction for more than 20 years. The depreciation of the active part of industrial production assets has reached a much larger scale: out of 17,000 basic plant equipment units, two-thirds have completely worked out their statutory service life and need urgent replacement. A significant number of loss-making unprofitable mines continue their operation due to the slow restructuring of the industry. Given the difficult economic conditions, there is no scope for the government to support such mines.

The Concept is addressed to overcome the crisis in the coal industry by comprehensive solution to problematic issues. The document identifies the following areas:

- optimisation of non-core assets of coal-mining companies;
- making coal-mining companies more attractive for investors;
- development of a social protection mechanism for employees who were made redundant and tackling environmental problems;
- quicker preparation of mines for privatisation;
- determining specific measures to reduce the production cost of marketable coal products;
- making the prices for marketable products economically sound.

When reforming the state-owned mines, it is proposed to divide them into prospective mines and mines lacking in prospects. The first include those that have a significant amount of industrial coal reserves and can reach a break-even level of operation within a short period. The second include the mines that are subject to liquidation (those mining the remaining volume of industrial reserves or that cannot break-even) and mothballing (those having low technical and economic indicators, high depreciation of the mine equipment, require a significant amount of capital investment to break even and large industrial coal reserves).

As part of the implementation of this concept, the Cabinet of Ministers of Ukraine adopted an order No.1019-r dated 06.12.2017 on the establishment of the state enterprise National Coal Company. The document provides for the reorganization of the state enterprises by joining the established company, which is intended to optimize the structure and concentrate the resources.

The new company includes 19 enterprises: Yuzhnodonbasskoye No. 1 Mine Group, N. S. Surgay Mine, Selidovugol, Toretskugol, Mirnogradudol, Pervomaiskugol, Volynugol, Lvovugol, Pre-start Directorate of Mine No. 10 Novovolynskaya, Integrated Company Ukruglerestrukturizatsiya, Novovolynsky Repair and Mechanical Plant, Dongiprouglemash, Yuzhghiproshakht, Dneprogiproshakht, the State Research, Engineering and Design Institute of the Coal Industry UkrNIIproekt, the State Scientific Research Institute of Organization and Mechanization of Mine Construction, Scientific and Technical Centre Ugleinnovatsiya, Directorate on Facility Construction Ukrshakhtgidrozashchita.

UAH 1.5 billion is the expected annual savings resulted from the establishment of the National Coal Company.

The State Programme for Restructuring the Coal Industry

Prospective mines.
Quick privatization.
7 mines

Potentially prospective.
State support required.
First-priority privatization.
15 mines

Liquidation.
11 mines



Data: Annual report of the Minister of energy and coal industry of Ukraine for 2017.

Electricity Market

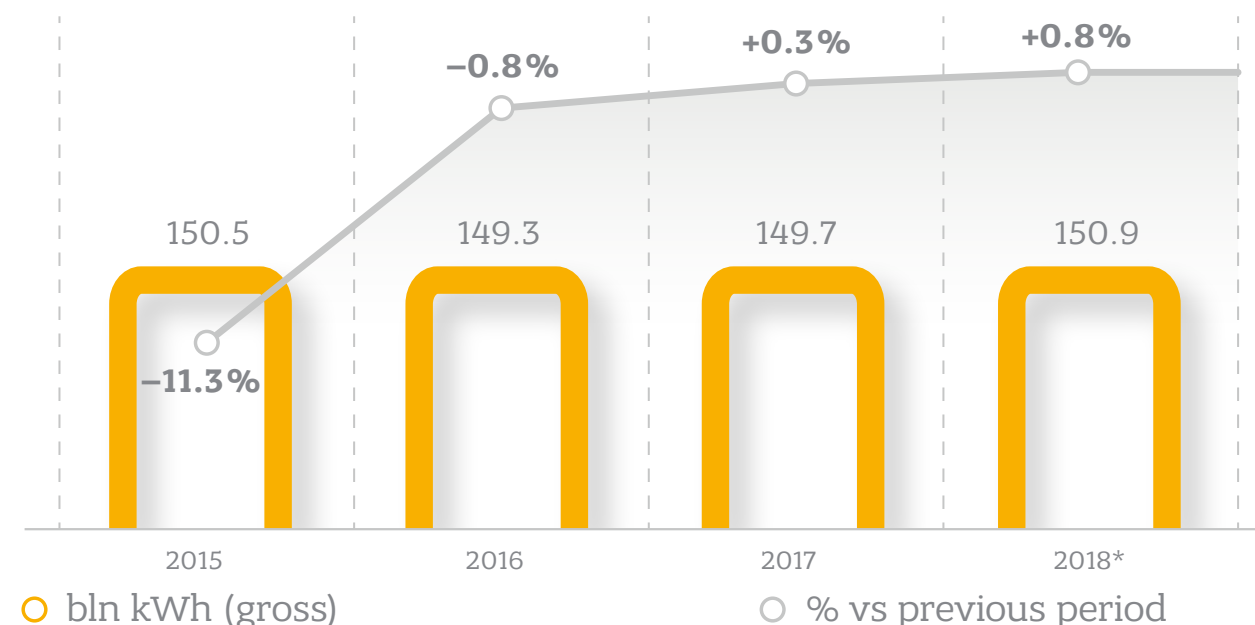
Ukraine increased the growth of renewable energy development

847 MW

is the installed capacity according to the forecast

+181.4% by 2017

Electricity consumption is under recovery



* According to the forecast electricity balance of the United Energy System of Ukraine (UES).

Electricity generation in Ukraine in 2017

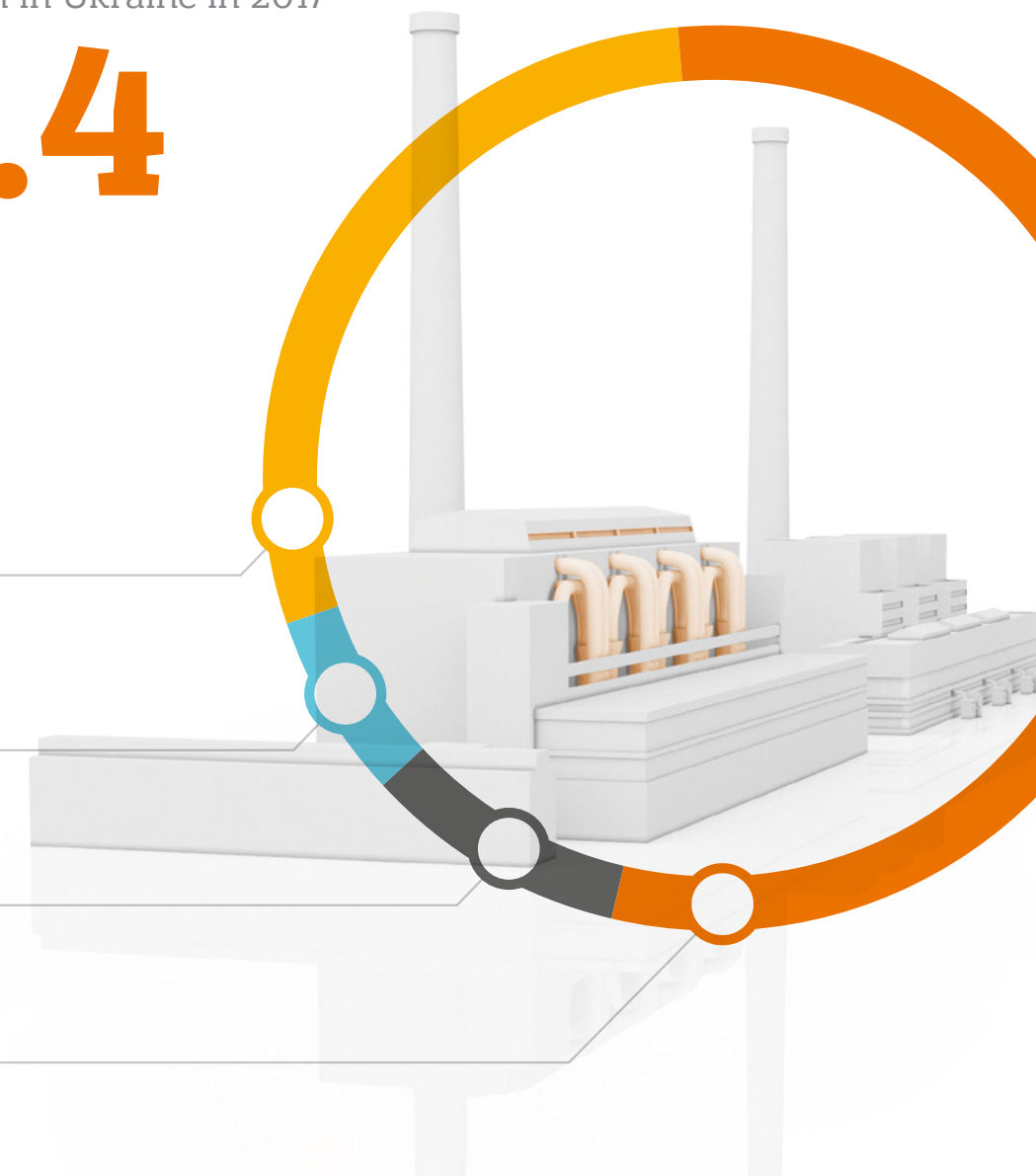
155.4
bln kWh
+0,4 % by 2016

GenCos TPPs
28.9%

HPPs and PSPPs
6.8%

Others
9.2%

NPPs
55.1%



03 Electricity Market

Electricity balance

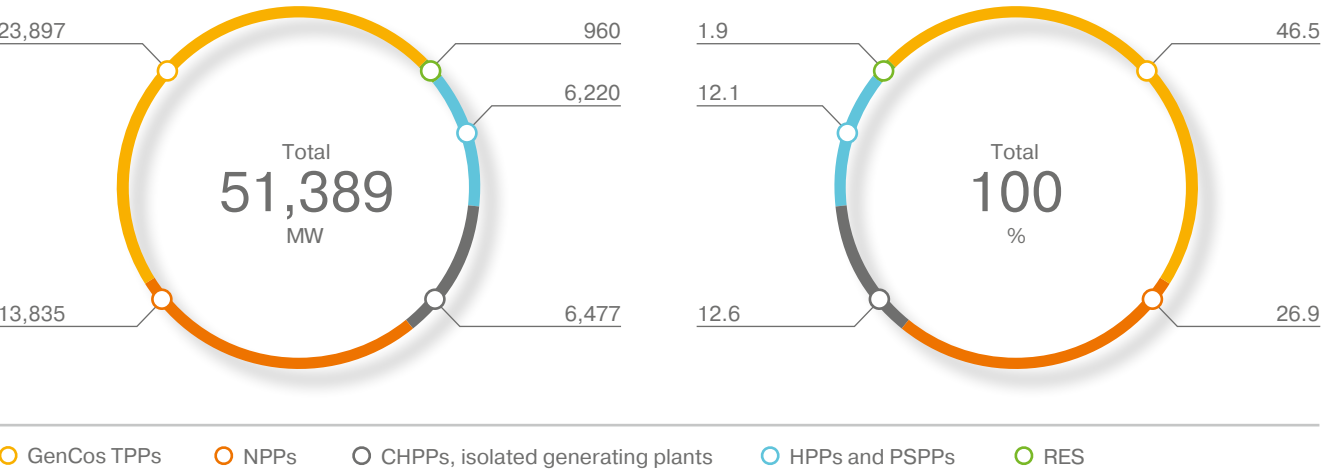
The Ukrainian energy system is united. Centralized operational and process control of the United Energy System of Ukraine (UES) is carried out by National Power Company "Ukrenergo". The main task of the national company is to balance the production and consumption of electricity in the country and prevent violations of operational regimes and system-wide failures, thus ensuring uninterrupted operation of the UES of Ukraine. All operational commands and instructions of the dispatcher are subject to unconditional fulfilment by all business entities whose facilities are connected to the UES of Ukraine. Thus, electricity producers cannot change the load of the generating equipment at their own discretion and deviate from the approved schedules.

All generated electricity is sold to the State Enterprise "Energo-rynok", which is the Wholesale Electricity Market operator. Distribution companies buy electricity on the Wholesale Market to supply it to end customers.

Ukraine is switching from the existing "single buyer" model to a liberalized market by adopting the Law "On the Electricity Market" No. 2019-VIII dated 13.04.2017. This Law implements the requirements of the EU Third Energy Package and determines the terms of switching to the new market model up to July 1, 2019. These changes enable direct relations between power producers and consumers.

The installed capacity of the UES of Ukraine as of December 31, 2016

Data: NPC "Ukrenergo", excluding the capacities in the temporarily occupied territories.



The generating mix to meet peak loads differs significantly from the mix of installed capacities. Coal-fired 100/200/300 MW units of TPPs are the main capacities used to level out the load profile in the UES of Ukraine.

In 2017, cessation of Ukrainian anthracite supplies significantly affected the energy sector. At the end of January, the railway communication with enterprises located beyond the line of demarcation in Donetsk and Luhansk regions was blocked. Since anthracite in Ukraine is extracted only in this region, this led to a cessation of shipments of such coal for heat generation. (In 2016, the electricity generation by Ukrainian GenCos TPPs burning anthracite was about 20 billion kWh, or 13% of the total volume.) For this reason the Cabinet of Ministers of Ukraine introduced an order "On the Adoption of Temporary Extraordinary Measures on the Electricity Market" No. 103-p dated 15.02.2017.

The further escalation of the conflict was followed by the implementation of the decision of the National Security and Defence Council from 16 March "On Urgent Additional Measures to Counter Hybrid Threats to Ukraine's National Security". The document was adopted as a result of the significant

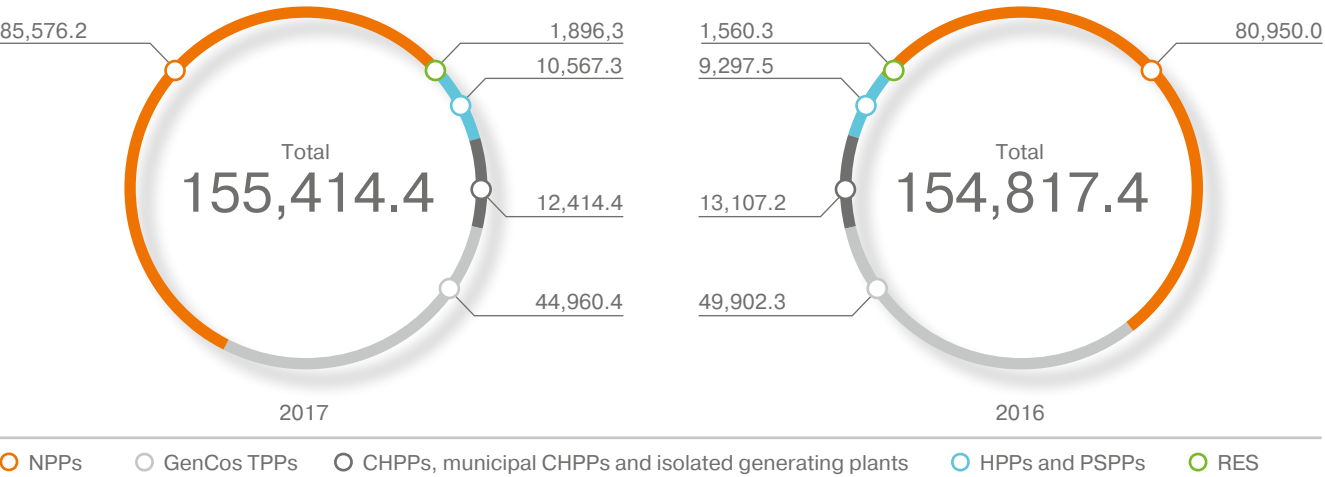
escalation of the situation in the ATO area, the forcible seizure of Ukrainian enterprises located in the territory of certain areas of Donetsk and Luhansk regions, and it imposed a ban on cargo transportation through the line of conflict. Consequently, Ukraine completely stopped coal production and electricity generation on the occupied territories.

Temporary emergency measures on the electricity market were in effect until mid-July inclusive. During this period, power plants using A-grade coals for electricity generation stopped to store fuel.

In the accounting period, there were 342 emergency repairs at TPP units operating under price-based bids. This is 176 fewer repairs compared to 2016. The average duration of emergency repairs decreased by 11 hours. NPPs had 19 emergency repairs of power units which equals the figures of 2016.

Electricity generation, mln kWh

Data: The Ministry of Energy and Coal Industry of Ukraine.



On August 4, the maximum consumption of electricity was fixed at 18,760 MW. On this day, unit No. 4 of the Zaporizka NPP was unloaded to be put into the planned repairs. The maximum energy consumption was covered by all efficient generating equipment, and additional GenCos TPPs burning anthracite were added: 5 power units of DTEK Kryvorizka TPP, 2 power units of DTEK Prydniprovsk TPP and 1 power unit of Zmiivska TPP (Centrenergo).

Generation, ICUR* and specific fuel consumption of the thermal generation companies

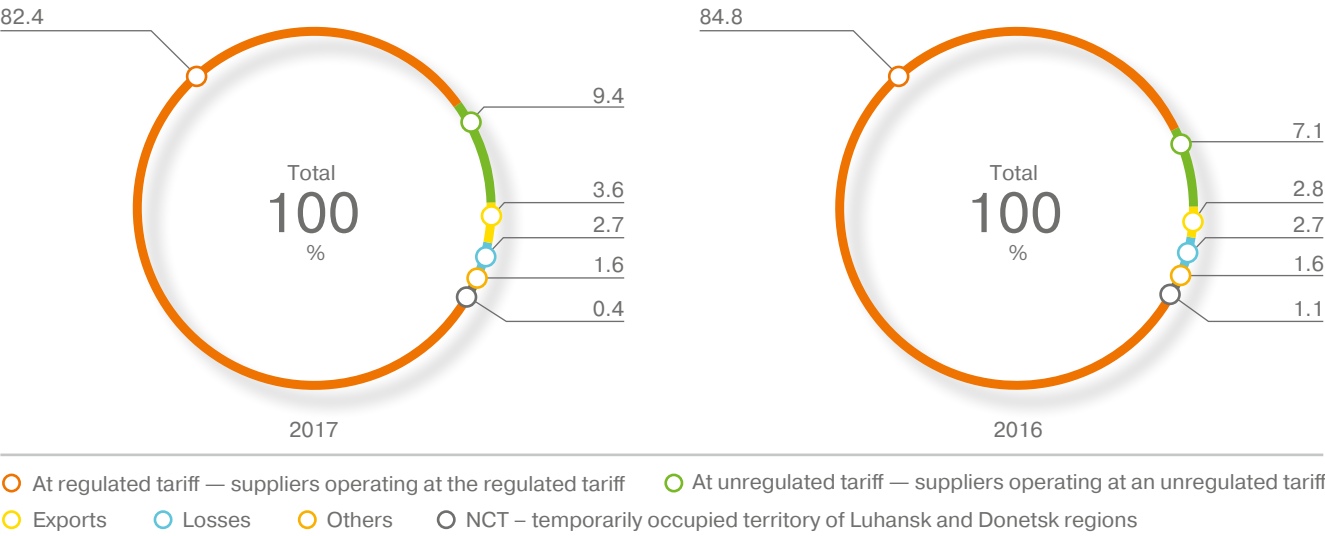
Companies	Electricity generation, mln kWh		ICUR, %		Specific fuel consumption, g/kWh	
	2017	2016	2017	2016	2017	2016
GenCos TPPs DTEK Energy	37.1	40.6	35.7	36.4	400.0	400.8
Centrenergo	6.3	9.9	9.3	14.6	404.7	412.4
Donbasenergo	2.3	8.1	50.6	31.7	402.8	396.8

* Installed capacity utilization rate (ICUR).
ICUR for GenCos TPPs DTEK Energy is indicated excluding power units under mothballing and oil/gas units.

Thermal generation companies are switching power units from anthracite coal to gas to minimize the risks of shutdown due to fuel shortages. In 2017, there were switched two power units of DTEK Prydniprovsk TPP and one unit of Zmiivska TPP (Centrenergo). In 2018, it is planned to continue these operations: the completion of work on the switching of one power unit of Trypilsk TPP and Zmiivska TPP (Centrenergo) is expected, as well as the commencement of work on two power units of DTEK Prydniprovsk TPP.

Electricity purchase on the Wholesale Electricity Market, %

Data: SE "Energoynok".



94 suppliers operated at an unregulated tariff on the Wholesale Electricity Market in 2017, and in 2016 – 89 suppliers. The largest number of such suppliers operates in Kharkov region.

According to licensing conditions, the suppliers operate at the regulated tariff exclusively on the fixed territory, and such suppliers are Oblenergo. The suppliers operating at the unregulated tariff have the right to carry out economic activities throughout Ukraine.



Electricity consumption in Ukraine

Consumer categories	Consumption, million kWh				Share in total consumption, %	
	2017	2016	Change, +/-	Change, %	2017	2016
Consumption (gross)	149,726.0	149,346.4	379.6	0.3		
Consumption (net)	118,719.5	118,258.0	461.5	0.4	100.0	100.0
Including						
1. Industry	50,897.6	49,995.4	902.2	1.8	42.9	42.3
Iron and steel	28,994.7	28,872.3	122.3	0.4	24.4	24.4
Fuel	3,628.8	3,597.5	31.3	0.9	3.1	3.0
Machine-building	3,962.8	3,706.4	256.5	6.9	3.3	3.1
Chemical and petrochemical	2,889.9	2,968.5	-78.6	-2.6	2.4	2.5
Food and processing	4,430.0	4,214.3	215.7	5.1	3.7	3.6
Construction materials	2,281.7	2,198.8	82.8	3.8	1.9	1.9
Others	4,709.7	4,437.5	272.2	6.1	4.0	3.8
2. Agricultural consumers	3,635.8	3,513.2	122.6	3.5	3.1	3.0
3. Transportation	7,010.5	6,795.5	214.5	3.2	5.9	5.7
4. Construction	878.9	814.1	64.8	8.0	0.7	0.7
5. Utilities	14,940.6	15,190.7	-250.1	-1.6	12.6	12.8
6. Other non-industrial consumers	6,291.8	6,031.9	259.9	4.3	5.3	5.1
7. Households	35,064.3	35,917.3	-852.9	-2.4	29.5	30.4

Data: Interfax-Ukraine based on data from the Ministry of Energy and Coal Industry of Ukraine.

Over the last three years, electricity consumption in Ukraine has remained nearly unchanged. This is due to a decrease in the number of consumers. In 2017, on the temporarily occupied territory of Luhansk and Donetsk regions, the cross-flows of electric energy were cut off in April and July, respectively. Up to this point, the monthly growth in consumption was 1.3–3.9%

Electricity exports, mln kWh

Countries	2017	2016	Change, +/-	Change, %
Hungary	2,851.6	3,055.6	-204.0	-6.7
Moldova	1,133.9	3.7	1,130.2	306.5 times
Poland	894.8	957.4	-62.646	-6.5
Slovakia	162.0	0.1	161.9	1,620 times
Romania	124.1	0.0	124.1	100.0
Total	5,166.3	4,016.9	1,149.4	28.6

Data: Interfax-Ukraine based on data from the Ministry of Energy and Coal Industry of Ukraine.

In 2017, Ukraine increased electricity exports by 28.6% compared to the previous year. According to the data from the State Fiscal Service of Ukraine, in money terms, electricity exports amounted to USD 235.5 million (vs. USD 152.1 million in 2016). In 2017, electricity was not supplied as a part of the provision of emergency mutual assistance.

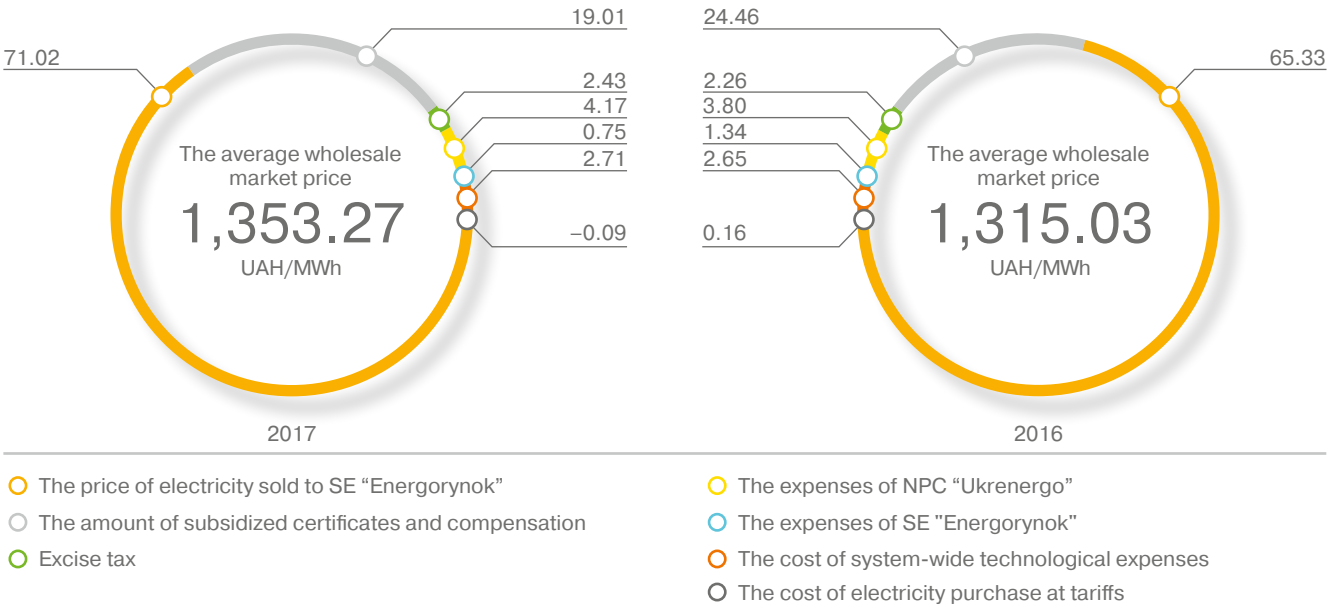
Sector regulation and tariffs

The National Electricity and Utilities Regulatory Commission (NEURC) is a collective body acting independently from any governmental and local government bodies. Its objective is to carry out governmental regulation, monitoring and supervision of business entities in the energy and public utilities sector. Regulation is exercised through the legislative and regulatory framework, licensing operations, and setting price and tariff policies for producers and consumers.

The electricity market in Ukraine is based on the "single buyer" principle, which is SE "Energorynok". At the same time, based on the forecast electricity balance in the UES of Ukraine, which is approved by the Ministry of Energy and Coal Industry, the National Commission approves tariffs for electricity supply for individual producers and the forecast wholesale market price for electricity. Thus, the producers sell all the electricity they generate to SE "Energorynok" at the tariffs set by NEURC.

The wholesale market price, %

Data: SE "Energorynok".



The average wholesale market price increased by 2.9% compared to 2016. This is due to an increase in the average selling price of the producers, payment of NPC "Ukrenergo" in connection with the growth of investment costs for the design and construction of new substations and transmission lines, as well as an increase in excise tax.

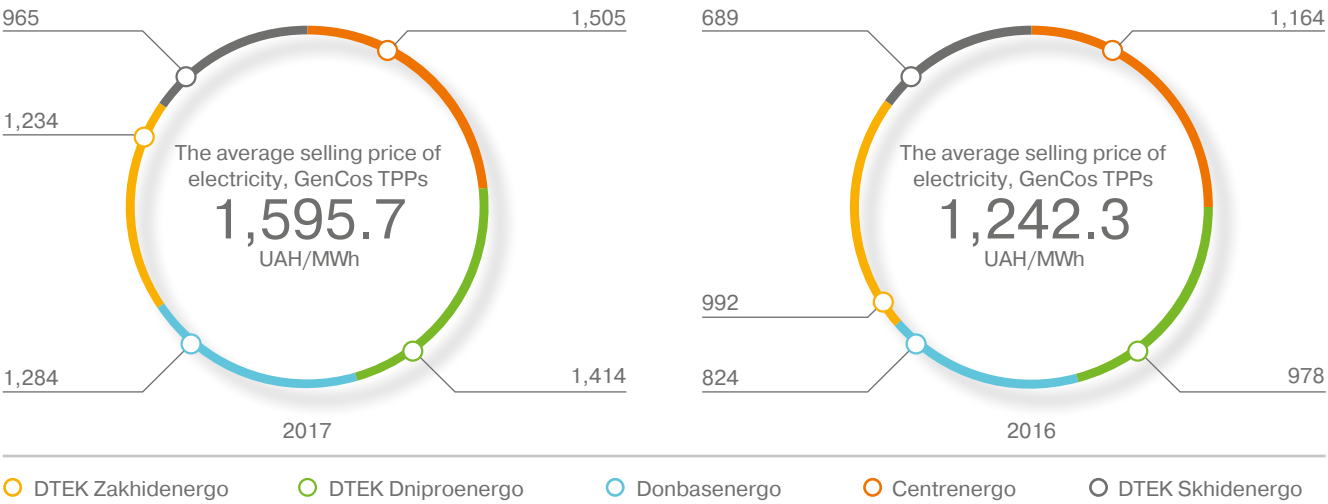
In 2017, the average selling price of electricity for the Wholesale Electricity Market was 96.11 kopecks/kWh vs. 85.92 kopecks/kWh in 2016. The average purchase price, including export deliveries, was 109.01 kopecks/kWh (98.25 kopecks/kWh in 2016).

At present, there is only one competitive segment in the electricity market — thermal generation. Each generating unit of TPP submits a price-based bid for each hour of the next day. At the same time there is a mechanism limiting the system marginal price, differentiating between day hours and night hours. The limit set on the system marginal price is determined by SE "Energorynok". Based on submitted bids and day-ahead fore-

cast electricity demand, SE "Energorynok" prepares a merit order of generating units for each hour on the ascending principle, from the least expensive to the most expensive. Generating units that offered to produce electricity at the lowest price are the first to be included in the merit order. The last accepted bid sets the price for electricity for all TPP units included in the merit order for this hour.

Average producers' price-based bids, UAH/MWh

Data: SE "Energorynok".

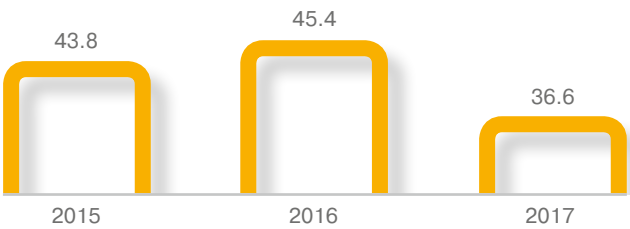


According to the SE "Energorynok", the largest number of flexible power units in 2017 was recorded by DTEK Zakhidenergo.

Regional electricity distribution companies (Oblenergos) transmit electricity to all categories of consumers. There are also independent suppliers in the market that distribute electricity at an unregulated tariff, but do not own networks.

NEURC sets fixed tariffs for end consumers all over Ukraine. Electricity distribution companies supply electricity to their consumers at these tariffs. In 2017, the Commission revised tariffs once for households. The tariffs increased by 3–30% depending on electricity consumption.

Subsidies to subsidized consumers, UAH bln



In 2017, preferential electricity tariffs were in effect for the following consumer categories:

- Households,
- Consumers paying for electricity at time-of-day based tariff rates,
- Moloda Gvardiya children's centre.

Other categories of electricity consumers are divided into two classes. The first class is represented by consumers connected to networks with a voltage of 27.5 kV or more, and the second class is made up of consumers connected to networks below 27.5 kV. Until April 2017, the unified retail tariffs were valid for these consumers all over Ukraine. In May, to eliminate region-based cross subsidies, a transition was made to the market formation of retail tariffs, which are set based on the region and consumption class. The transition to a new tariff-setting model is formalized in NEURC Decree No. 1129 dated 13.06.2016 "On approving the procedure for setting market-based retail tariffs for electricity sold to consumers".

In 2017, the transition of power supply companies to RAB regulation failed in spite of the regulatory document package adopted in 2013.

Under the RAB regulation, NEURC will set tariffs and the threshold value of returns for Oblenergos once for several years ahead.

Once a company starts using RAB regulation, it is obliged to annually invest 50% of its returns on the "old" regulatory asset base in the "new" one. The company can use the remaining part of the profit at its own discretion. Oblenergos must meet strict requirements: 100% settlements with Energorynok, asset valuations and continuous monitoring and compliance with the set service quality requirements. There are advantages of RAB regulation: the tariff is set for 3 to 5 years, allowing companies to forecast their expenses and revenues for several years ahead. This will help systematically reduce the critical depreciation rate of equipment which will improve the quality of electricity supply in Ukraine.

Amendments to the Procedure for setting incentive-based tariffs came into force on 1 April 2016. The amendments make it possible to switch to RAB regulation on the 1st day of any quarter. In 2017, the rate of return on the regulatory asset base was set at 12.5%. It is expected that in 2018 RAB regulation will be introduced for distribution companies.

Key legislative events of 2017

The key event of 2017 was the entry into force of the Law of Ukraine No. 2019-VIII dated 13.04.2017 "On the Electricity Market of Ukraine".

The Law ensures the fulfilment of Ukraine's obligations under the Energy Community Treaty and implementation of some energy documents of the European Union in the energy sphere: Directive 2009/72/EC concerning common rules for the internal market for electricity; Regulation No. 714/2009 on conditions for access to the network for cross-border transmission of electricity; Directive 2005/89/EC concerning measures to safeguard security of electricity supply and infrastructure investment.

According to the document, a new model of the electricity market will become active starting from July 1, 2019.

Under the two-year preparatory period of market reform, legislative and regulatory norms of secondary legislation should be adopted. There should be taken the organizational measures for the creation of infrastructure market entities, purchase and commissioning of software and technical support for the market operator and transmission system operator, separation of Oblenergo and certification of transmission system operator. The measures also should be taken to eliminate cross-subsidization and bring prices for end consumers to an affordable and reasonable level, to provide solutions to the debt repayment problems that arose in the Wholesale Electricity Market.

As of March 2018, within the framework of the implementation of the electricity market reform, the following documents were adopted by NEURC but did not enter into force:

- License conditions for business activities on implementation of the functions of the market operator (NEURC Decree No. 1466 dated 27.12.2017)
- License conditions for business activities on electricity generation (NEURC Decree No. 1467 dated 27.12.2017)

- License conditions for business activities on the resale of electricity (trading activities) — (NEURC Decree No. 1468 dated 27.12.2017)
- License conditions for business activities on electricity supply to a consumer (NEURC Decree No. 1469 dated 27.12.2017)
- License conditions for business activities on electricity distribution (NEURC Decree No. 1470 dated 27.12.2017)
- License conditions for business activities on implementation of the functions of a guaranteed buyer (NEURC Decree No. 1471 dated 27.12.2017)
- Market rules (NEURC Decree No. 307 dated 14.03.2018)
- Market rules of the day-ahead and intra-day market (NEURC Decree No. 308 dated 14.03.2018)
- The Transmission System Code (NEURC Decree No. 309 dated 14.03.2018)
- The Distribution System Code (NEURC Decree No. 310 dated 14.03.2018)
- The commercial electricity metering code (NEURC Decree No. 311 dated 14.03.2018)
- Rules of the retail electricity market (NEURC Decree No. 312 dated 14.03.2018).

Another significant event for the industry was the adoption of the Energy Strategy of Ukraine in a new edition. The Cabinet of Ministers approved the Energy Strategy of Ukraine "Security, Efficiency, Competitiveness" (Order No. 605-p dated 18.08.2017). This is the base document of the state energy policy, which defines the goals of the industry development for the period until 2035. The set goals are expected to be achieved in stages by implementing action plans that will be developed by working groups under the Ministry of Energy and Coal Industry.

Main tasks and challenges in 2018

2018 is the key year for preparation of the electricity market reform for which the following is required:

- Ensuring NEURC capacity: the rotation of the current members of the commission and the appointment of seven new ones
- Implementing measures for the separation of Oblenergo
- Certifying a transmission system operator
- Purchasing and commission the software and technical support of the market operator, transmission system operator and distribution system operators

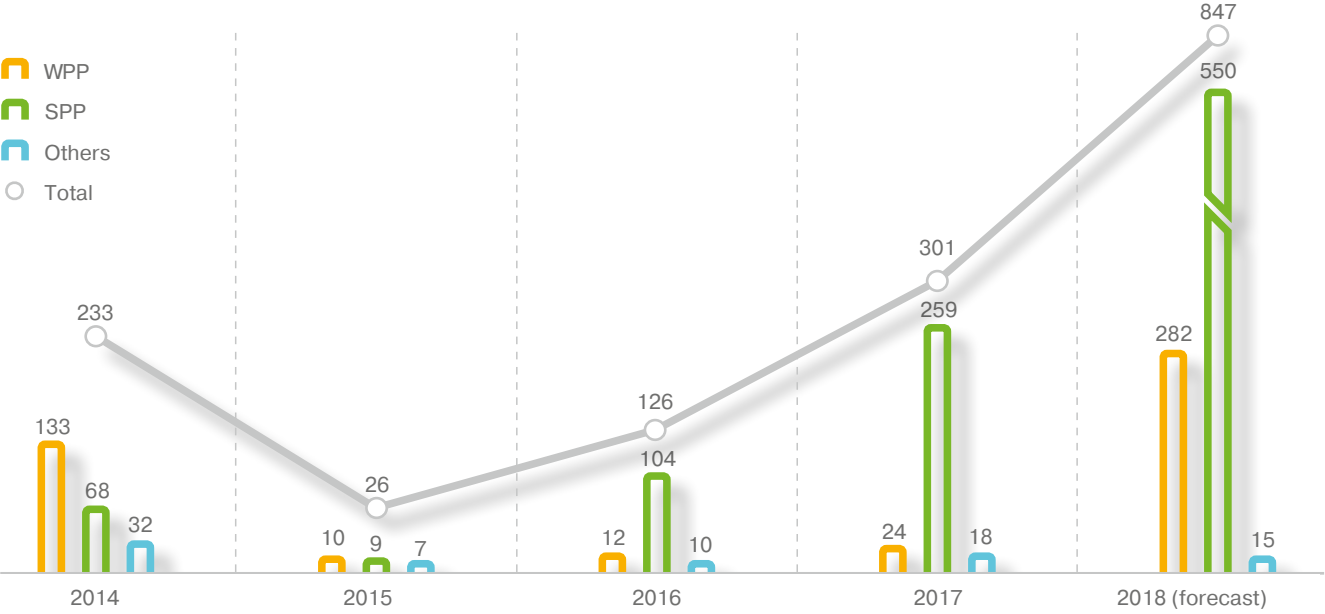
- Implementing measures under the electricity retail market reform
- Preparing consumers and other market participants for work under new conditions
- Eliminating the mechanisms of cross-subsidization and bring prices (tariffs) for end consumers to an economically sound level
- Settling issues of arrears arising in the Wholesale Electricity Market.

Renewable energy sector

In 2017, a record growth in green energy capacity was documented — 301.4 MW (+138.9% by 2016). This indicates the renewed interest of investors in the sector as a result of stabilization of country risk and a favourable regulatory environment, as well as the influence of the global trend — the reduction of the cost of technology.

Despite the active construction of green power plants, their share in the total balance of the United Energy System of Ukraine remains small — less than 2% in electricity generation. The rates of capacity growth make it possible to forecast an increase in the share of green energy in the future.

Commissioning of installed capacities in green energy sector, MW



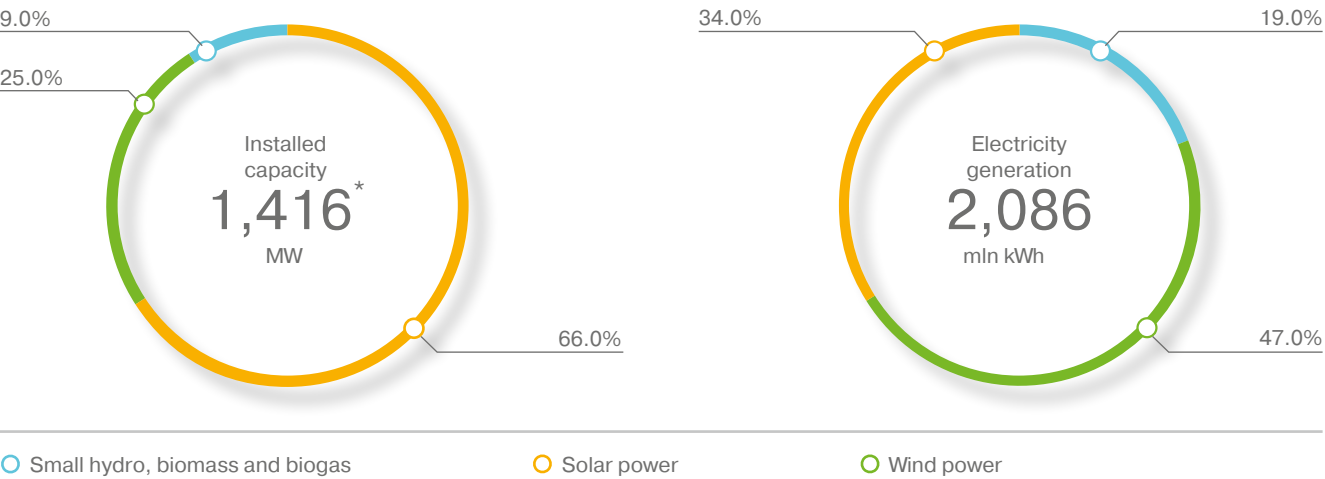
In 3,010 private households SES (+1,901 households by 2016) were installed. Ukrainians began to move more actively to solar electricity, due to the support of local authorities as well. For example, in Lviv region, 10 % of the loan amount for solar panels are returned to households from the regional budget, and in Zhytomyr region this figure is 20 %.

According to the State Agency on Energy Efficiency and Energy Saving of Ukraine, at the end of 2017 the capacity of household SES reached 51 MW (+34.3 MW by 2016).

In 2017, the total installed capacity of generating electricity from renewable sources reached 1,416 MW, and the production volume — 2,086 million kWh.

80.5% of electricity generation was provided by solar and wind power plants.

Share of RES in installed capacity and electricity generation in 2017



* According to the estimates of the Ukrainian Wind Energy Association and the State Agency for Energy Efficiency and Power Saving.

Data are given excluding 494 MW in the AR of Crimea and private households.

The Ukrainian segment of renewable energy sources (RES) comprises 230 companies. Most of them work in segment of solar generation and operate small solar power plants. The exception is CNBM and Active Solar, as well as DTEK RES, which is implementing a project for the construction of a 200 MW Nikopol solar power plant.

The wind power segment is represented by only 13 companies. Such a significant difference between the number of players in the solar and wind power is due to a number of features of the implementation of projects: wind power obtains higher "entry threshold" and longer project implementation than the solar power.

Largest renewable energy players	
Company	Capacity, MW
Current	
CNBM (SPPs)	267
Wind Power (WPPs)	200
Wind Parks of Ukraine (WPPs)	163
Vindkraft (WPPs)	75
Rengy Development (SPPs)	68
Eco Optima (WPPs)	45
Declared perspective projects	
Solar power generation	
DTEK Renewables	200
TIU Canada	80
CMEC	50
Others	220
Total	550
Wind power generation	
DTEK Renewables	200*
Vindkraft	94.6
Guris	32.4
Others	55.0
Total	382

Data: UWEA, Ukrainian Association of Renewable Energy, DTEK RES, open sources.
* 100 MW capacity plants are planned to be built in 2018.

Industry regulation

Key incentives for the development of renewable energy in Ukraine — a green tariff, denominated in euros, a favourable regulatory environment and a reduction in country risk.

In 2017, the Energy Strategy of Ukraine was adopted until 2035, which provides for a gradual increase in the share of renewable energy sources in the final energy consumption. At the first stage, by 2020, green energy should reach 11% of total electricity consumption. To achieve this goal, the total capacity of renewable energy sources should be 5 GW. By 2035, the share of renewable generation in total electricity consumption is expected to reach 25%. At the same time, the planned indicator, by 2035, includes 10%, which is attributable to solar and wind generation. Thus, the new energy strategy confirmed the earlier adopted course for the development of green energy in the country.

In addition, a number of provisions of the Law of Ukraine "On the Electricity Market" No. 2019-VIII dated 13.04.2017 and other legislative acts are aimed at promoting the development of the industry. In particular, the state guarantees the support of the sector until 2030, and companies are given the opportunity to conclude an agreement with a guaranteed buyer for the purchase and sale of electricity before commissioning the facilities in renewable energy. On the other hand, the law introduces responsibility for imbalances for electricity producers from renewable sources. This obligation is to compensate a guarantee buyer with the cost of the unbalance settlement due to the deviation of the actual electricity supply from the previously declared one. For green energy, liability for imbalances is introduced from 2021, which will grow by 10% per year and it should reach 100% by 2030.

The following tasks and challenges exist for the renewable energy sector in 2018:

- To restore trust and interest of foreign investors in the Ukrainian renewable energy sector.
- To increase the new capacities commissioning rate to achieve the targets of the Energy Strategy of Ukraine.



Natural gas market

New historic low
of natural gas consumption

31.9
bln cubic meters

–4% by 2016

Gas produce in Ukraine in 2017

20.5
bln cubic meters

+2.4% by 2016

20%

of natural gas was produced
by private companies

40%

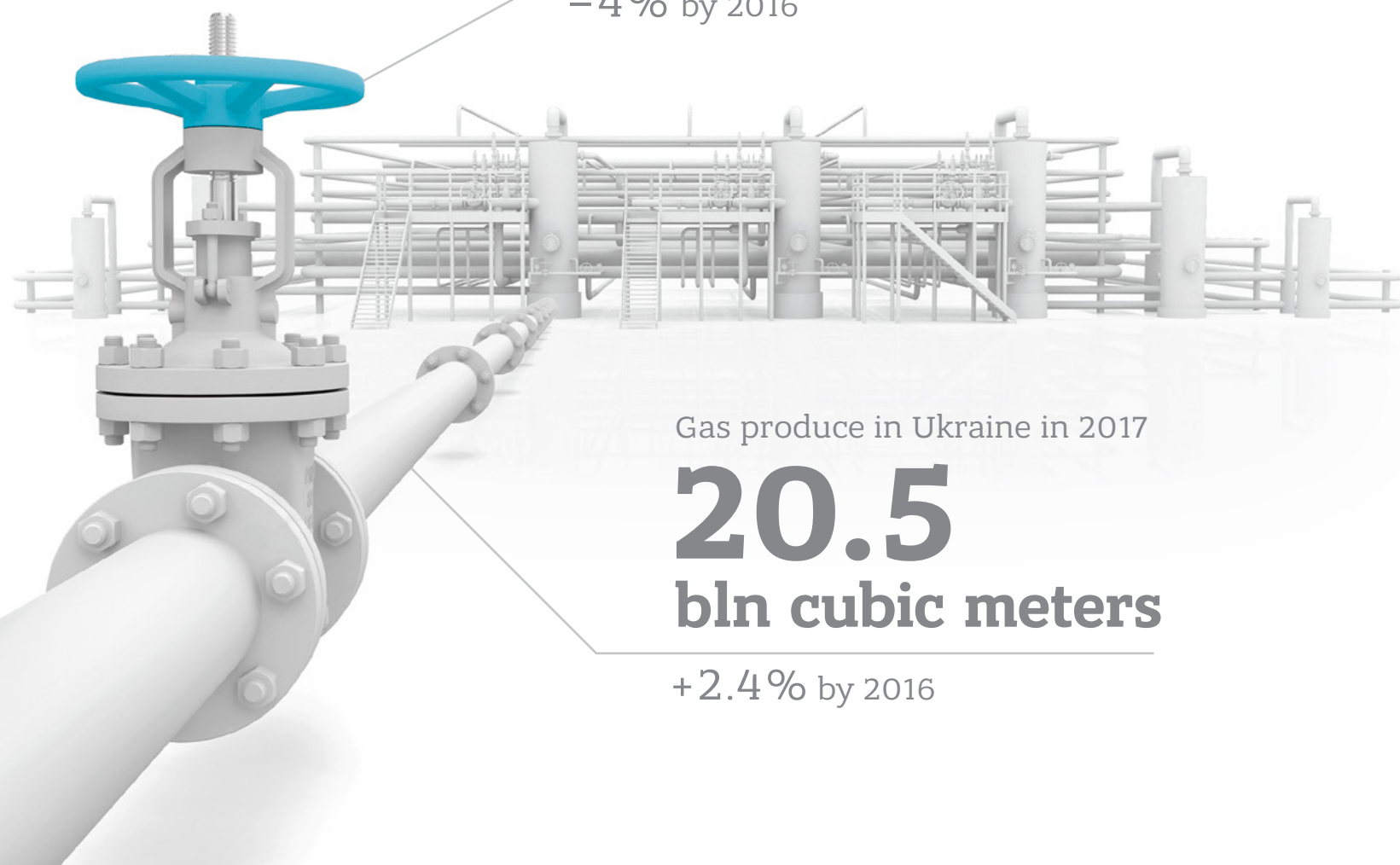
natural gas was produced
by DTEK Naftogaz among
private companies

The target level of
natural gas production
in Ukraine by 2020 is

27
bln cubic meters

This calls for the following:

1. The industry deregulation; adoption of bill No. 396-D
2. Public auctions for the issuance of mining licenses
3. Access to the geological information to attract investors



04 Natural Gas Market

Natural gas consumption

Structure of natural gas consumption in Ukraine, bcm

Data: NAK Naftogaz of Ukraine.



Ukraine's natural gas consumption in 2017 was 31.9 bcm. This is the next all-time low consumption during the whole independence period.

The industrial enterprises are continuing to reduce the natural gas consumption which is contributing to a decrease in the indicators all over Ukraine as a whole.

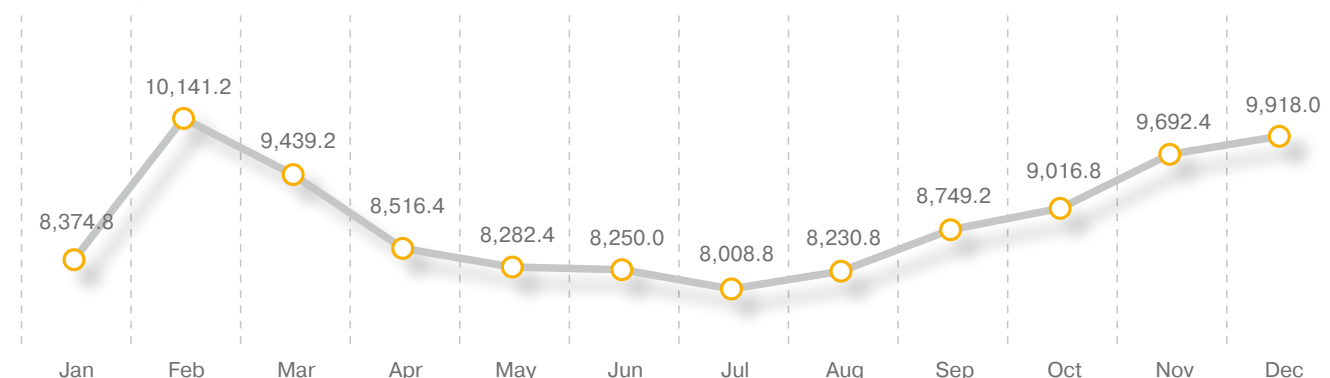
On the other hand, residential users take the first place in terms of consumption. Taking into account that energy-saving technologies are not yet used in the housing and utilities sector, there is considerable potential for reducing the use of gas or for replacing it with other energy carriers. In 2017 the use of natural gas for domestic purposes was 15.8 bcm. At the same time, the residential users directly consumed 11.2 bcm (-5.9% by 2016), and utility companies consumed 4.6 bcm (-19.3%) for heating houses.

The growth of production and process losses is associated with an increase in the volume of transit of the Russian resource to Europe. Transit supplies were 93.5 bcm (+12.1%), which entailed an increase in production and process costs of PJSC Ukrtransgaz to 2.2 bcm (+29%).

Since 2016, the natural gas uniform tariff has been set on all residential consumers and heating companies. During 2017, the tariff was reviewed once for these categories of consumers – starting from April 1, it was set at 6 957.9 UAH/thousand cubic meters (6,879 UAH/thousand cubic meters from May 1, 2016 to March 31, 2017). The price is set for non-domestic consumers. NAK Naftogaz of Ukraine price lists serve as a reference for the market.

Natural gas prices for non-domestic consumers in 2017, UAH/thousand cubic meters

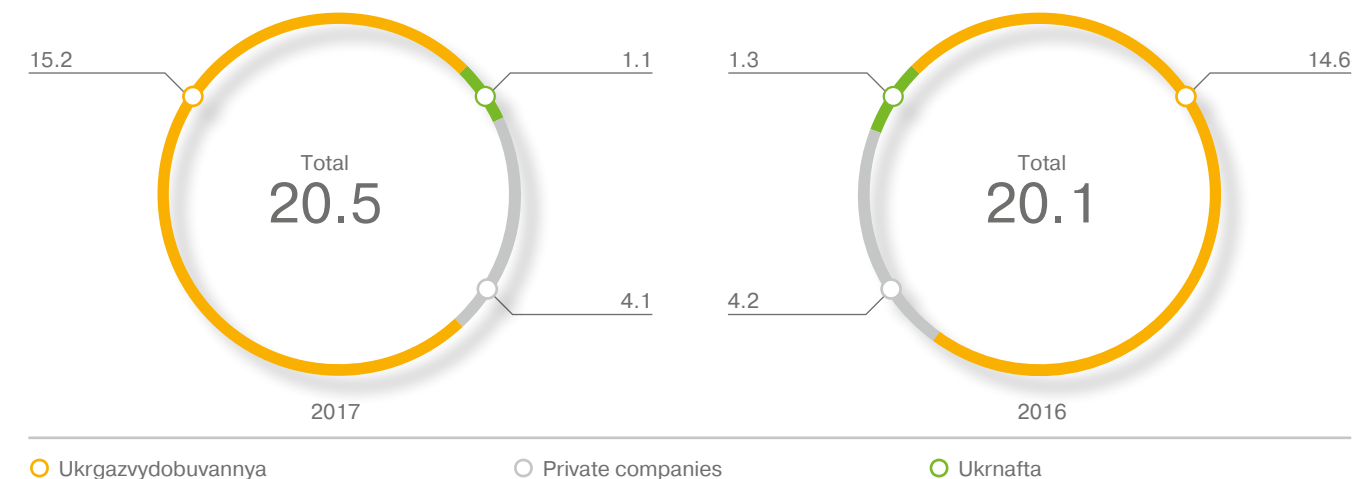
Data: NAK Naftogaz of Ukraine, all prices include VAT.



Natural gas production and import

Natural gas production in Ukraine, bcm

Data: Gas producers association of Ukraine.



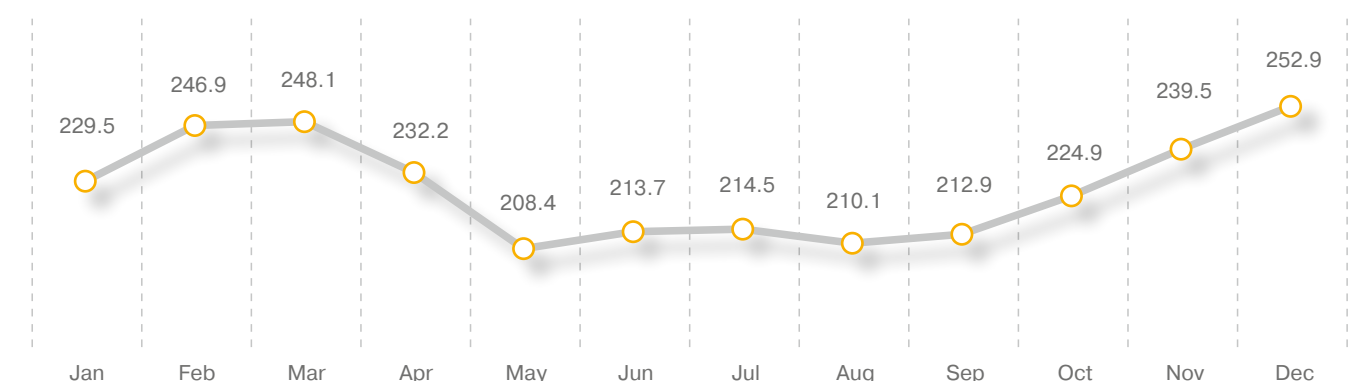
According to operational data, natural gas production in Ukraine increased by 2.4% in 2017. Thus, Ukraine provides its own production for 64.3% of the total natural gas consumption.

The moderate growth in gas production is due to the imperfection of the regulatory and investment environment. Thus, a long process by the State Service of Geology and Mineral Resources of Ukraine to extend the validity of existing licenses for mineral resources use and issue new ones, the regulated order of land allocation for hydrocarbon production and the absence

of auctions for deposits from the unlicensed site list prevented a higher rate of gas production growth in 2017. At the same time, the regulatory environment was also characterized by further positive changes: amendments were made to the Tax Code, which lowered the rent rates for natural gas production from new wells (for more details, see Regulatory Environment).

Average price for imported natural gas in 2017, USD/thousand cubic meters

Data: Ministry of Economic Development and Trade of Ukraine.



In 2017, Ukraine's natural gas imports came exclusively from Europe. Ukraine did not directly import natural gas from the Russian Federation as in 2016.

In 2017, Ukraine imported 14.1 bcm of natural gas (+27.0%), all volumes came from Europe. Out of these volume, 5.4 bcm (+86.2%) of natural gas were imported by private traders and direct consumers, NAK Naftogaz of Ukraine imported 8.7 bcm (+6.1%).

The creation of an open and transparent market, which was facilitated by the adoption of the Law on the Natural Gas Market No. 329-VII of 09.04.2015 and a number of statutory documents, provided for the emergence of competition and stimulated the creation of independent players. So, in 2017, natural gas was imported from 67 companies, whereas a year earlier it was supplied from 34 companies.

Regulatory environment

In 2017, a number of initiatives were approved for the development of domestic gas production, due to which the industry recovery is expected.

Introducing fiscal incentives. Draft Law No. 6776-D dated 14.11.2017 on Amendments to the Tax Code of Ukraine ensuring the balance of budget revenues in 2018 was adopted by the Verkhovna Rada and signed by the President of Ukraine. This document introduces stimulating taxation for gas producers: ad valorem rates for natural gas production from new wells are set at 12% and 6%, depending on the depth of the deposits. In addition, government guarantees have been given to maintain ad valorem rates at this level for five years.

Decentralization of payments. The largest royalties – ad valorem payments – are being previously paid to the state budget in full. Since January 1, 2018, 5% of ad valorem payments will be levied on the development of local communities on the territory of which gas is produced. This initiative should motivate the regions to engage in a constructive dialogue with the gas producers. In addition, in 2017, new rules were adopted for the development of oil and gas deposits, and the requirement for the re-evaluation of reserves every five years was cancelled.

It is expected that 2018 will be decisive and lay the foundation for a new positive trend in gas production. Among the key reforms that the industry needs:

Deregulation of the approval system. Draft Law No. 3096-D dated 25.05.2017 on amendments in regulatory legislation of Ukraine as to the improving of oil and gas industry, has been decided by the Verkhovna Rada in the first reading. This document is to significantly simplify the procedure for commissioning of oil and gas deposits and accelerate the process of land allocation for drilling wells. The Verkhovna Rada voted for this document in the second reading on March 1, 2018.

Transparent and open auctions for new licensed sites. One of the key issues in the oil and gas industry is providing a simple, transparent and competitive system for distribution of special permits for exploration and production of hydrocarbons. However, the legislation for regulating operation in the oil and gas industry has become obsolete. This has led to instances where the conditions for licence distribution are not specific: there is no open auctions, and preferences are used instead. In 2017, the State Service of Geology and Mineral Resources of Ukraine did not conduct any auctions for the issuance of licenses for oil and gas deposits. The formation of the system of subsoil use auctions will help to reform the industry and attract investments.

An additional solution to the issue of conducting auctions is the discovery of geological information. An independent site selection for the development carried out by the investor will be simplified through the liberalization distribution of geological information. Thus, investors will be able to optimize their solutions and independently decide selected sites for auctions. In the world practice, such an approach has long been popular – open data on deposits and licenses, wells and available results on seismic research.

Solving the problem of “sleeping licenses”. In hydrocarbon production, there are many examples when a company that received a special mining permit can simply have this right for 5 to 10 years and not develop the site. According to some estimates, the number of “sleeping licenses” has reached about 30% of all licensed areas in Ukraine. Toughening supervision and recalling “sleeping licenses” from unscrupulous owners with subsequent auctions for such sites will help to attract effective investors.

Modernization of the Natural Resources Code taking into account European standards. The current code was adopted in 1994 and is obsolete as of today.



Operating results

01 Production
operations

02 Investment
projects

03 Financial results
analysis

01 Production operations

In 2017, DTEK Group enterprises produced 27.7 million tonnes of coal, of which gas coal grades accounted for 22.9 million tonnes (+8.2% compared to 2016), and anthracite and lean coal accounted for 4.8 million tonnes (–52.5%). They produced and supplied 37.1 billion kWh of electricity (–7.4%), transmitted 43.2 billion kWh of electricity (–5.8%) over grids and produced 1.655 million cbm of natural gas (+1.5%).

Key Performance Indicators of DTEK Group

Indicators	Units	12 months 2017*	12 months 2016	Change, +/-	Change, %
Coal production	thousand tonnes	27,706.0**	31,250.6	–3,544.6	–11.3
including G, DG grades	thousand tonnes	22,914.8	21,174.3	+1,740.5	+8.2
including A, T grades	thousand tonnes	4,791.2**	10,076.3	–5,285.1	–52.5
Coal concentrate production	thousand tonnes	13,609.3**	16,039.2	–2,429.9	–15.1
including third-party CCMs	thousand tonnes	1,424.9	719.3	+705.6	+98.1
Electricity generation (supply)	million kWh	37,103.7	40,071.0	–2,967.3	–7.4
including DTEK's RES	million kWh	637.8	608.4	+29.4	+4.8
Electricity transmission over grids	million kWh	43,155.1	45,809.2	–2,654.1	–5.8
Electricity export	million kWh	4,999.5	3,983.9	+1,015.6	+25.5
Coal exports***	thousand tonnes	748.2	1,333.1	–584.9	–43.9
Coal imports	thousand tonnes	2,571.7	222.2	+2,349.5	+11.6 t.
Natural gas trading	million cbm	1,952.0	2,460.8	–508.8	–20.7
including gas import	million cbm	19.6	15.4	+4.2	+27.3
Natural gas production	million cbm	1,655.3	1,630.9	+24.4	+1.5
Gas condensate production	thousand tonnes	54.8	56.1	–1.3	–2.3

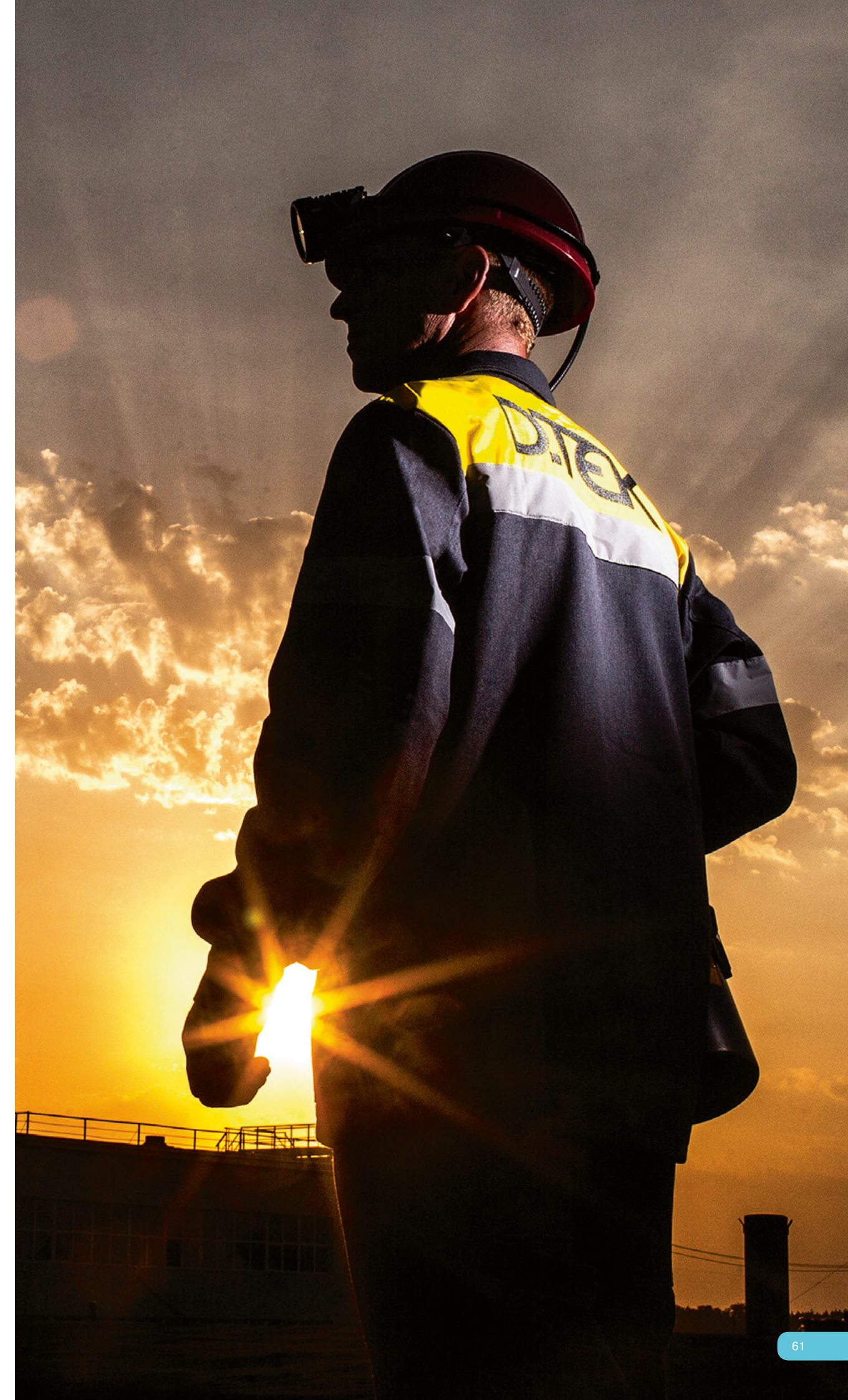
* Indicators of the assets located on the territories of Donetsk and Luhansk regions temporarily uncontrolled by Ukrainian authorities have not been consolidated in the statements since March 2017, for the company has no control over these assets.

*** Including trading operations outside of Ukraine.

** Including Mine Office Obukhovskaya JSC

Indicators	Units	12 months 2017
Coal production	thousand tonnes	2,912.0
Coal concentrate production	thousand tonnes	1,774.9

Since September 1, 2016, DTEK Energy has not been consolidating the indicators of Mine Office Obukhovskaya JSC into its statements since the management of the company has been transferred to DTEK B.V. strategic holding.



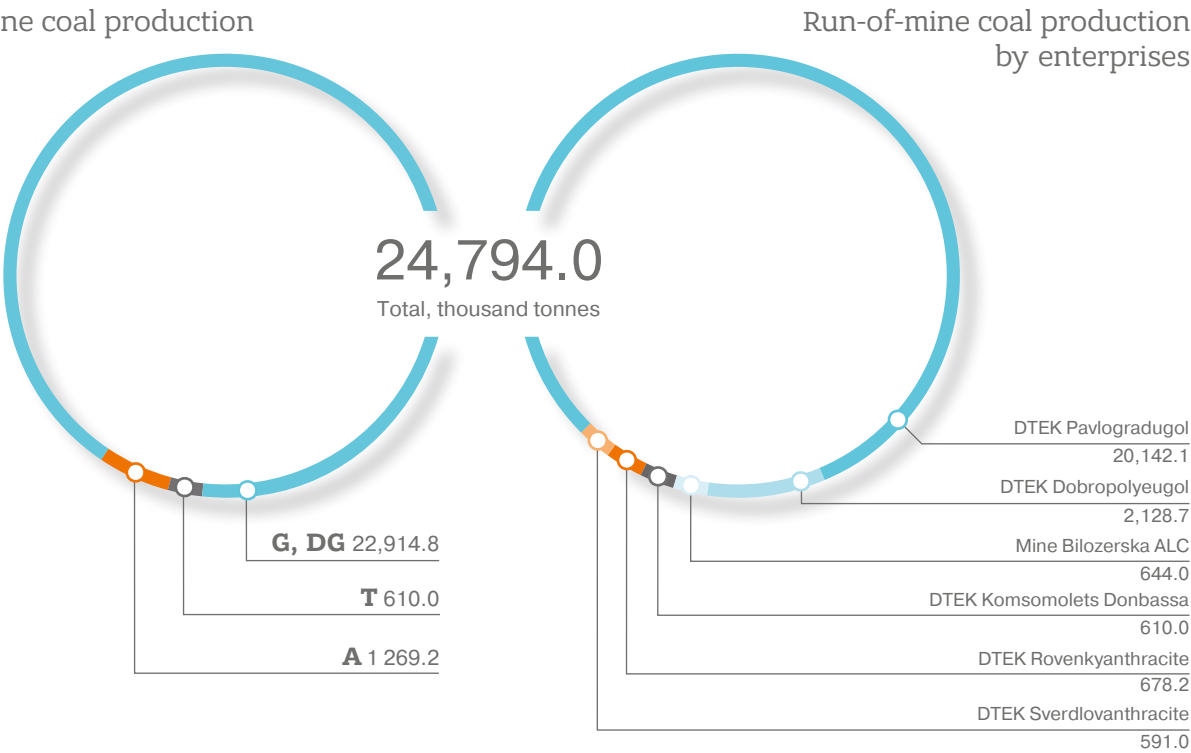
DTEK Energy

Manufacturing statement for 2017

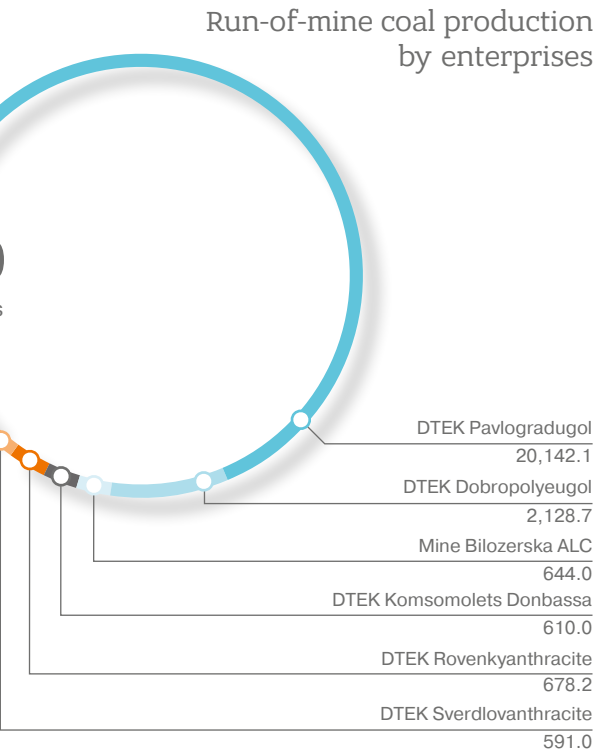
Coal production and processing

The company's priority was to increase the production of gas coal grades. This ensured that stations fired by these coal grades could carry increased loads and intensify electricity generation. In addition, this facilitates implementation of the plan to generate thermal power with maximum replacement of anthracites with gas grades of coal, the extraction of which is not limited by military operations.

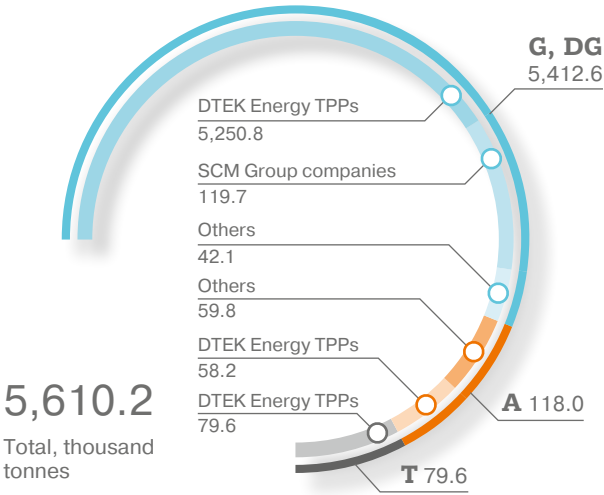
Run-of-mine coal production by grades



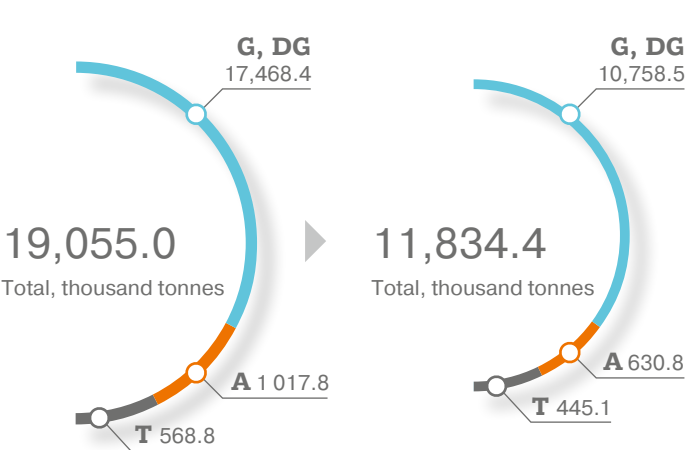
Run-of-mine coal production by enterprises



Run-of-mine coal shipment



Run-of-mine coal processing and coal concentrate production

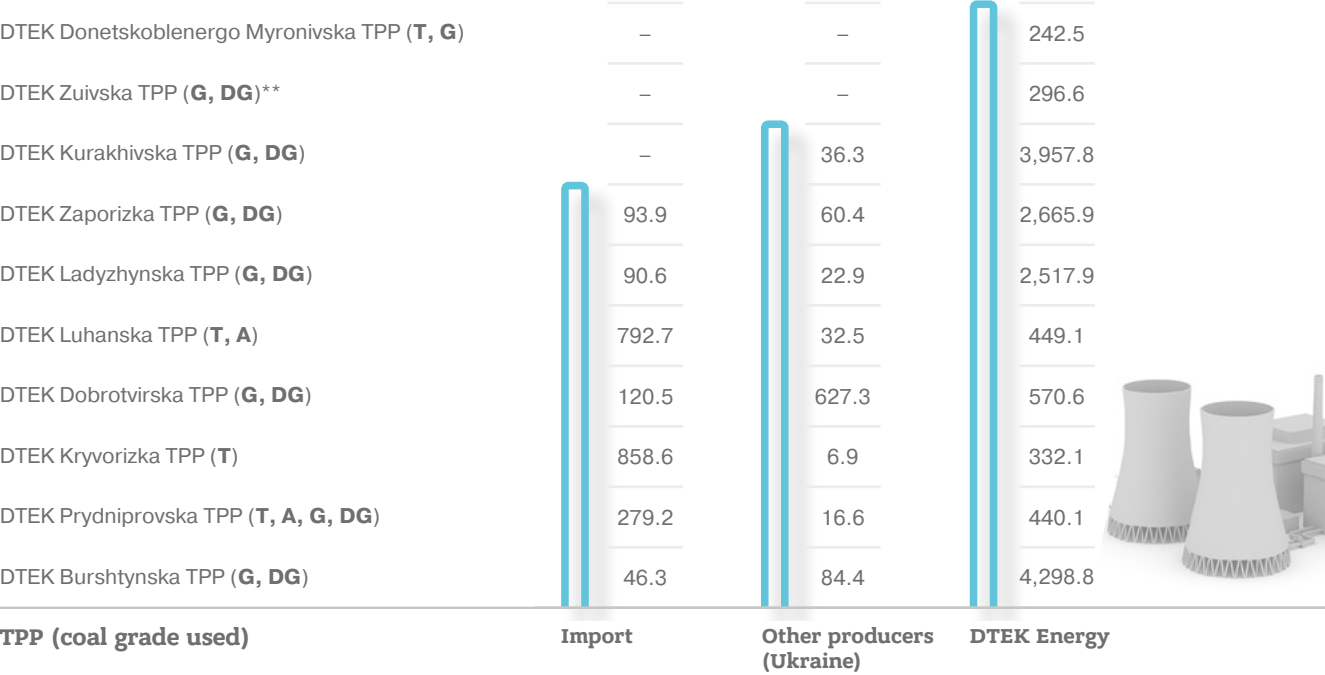


The coal concentrate supply to the company's thermal stations was 10.4 million tonnes; SCM Group enterprises received 0.3 million tonnes, and other domestic consumers received 1.1 million tonnes. Ukrainian coal was not exported.

Electricity generation

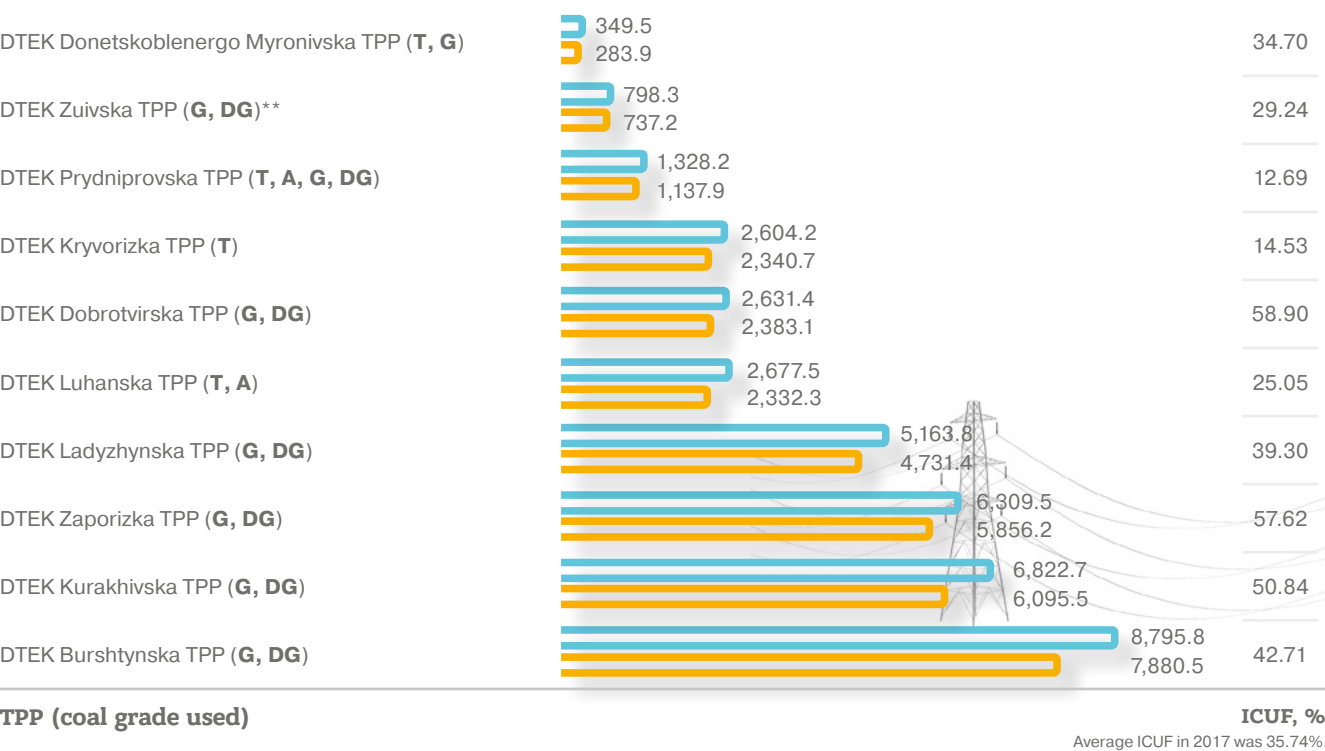
In 2017, DTEK Energy's TPPs received 18.9 million tonnes of coal products, of which 2.3 million tonnes were imported, including 0.9 million tonnes for Mine Office Obukhovskaya.

Volume and sources of coal supply to DTEK Energo's TPPs in 2017, thousand tonnes



G-grade-coal-fired units of DTEK Energy TPPs managed by the company have increased their electricity output to the United Energy System by 15.3%, or 3.6 billion kWh. DTEK's TPPs have supplied a total of 27.1 billion kWh of electricity for the reporting period. These generating units carried an increased load during the year, which, among other things, made it possible to compensate for the drop in electricity production by plants fired by anthracite coal.

Electricity production and supply by DTEK Energo's TPPs in 2017, million kWh



* ICUF is indicated without taking into account gas-and-fuel-oil-generating units and mothballed units.
**The data of DTEK Zuivska TPP are given for the period of operational management.

The data do not include indicators of warehouses.

Coal production and processing

In 2017, miners of DTEK Energo produced 24.8 million tonnes of coal, of which 24.2 million tonnes are energy coal and 0.6 million tonnes are coking coal. (In 2016, coal production was 30.7 million tonnes, of which energy and coking coal accounted for 29.8 and 0.9 million tonnes, respectively.)

Main factors that have affected the performance indicators:

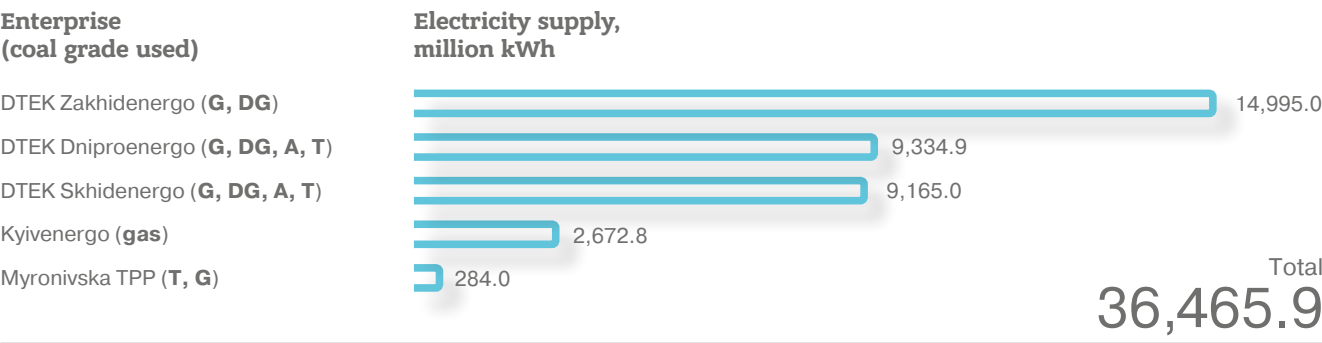
- Since March 2017, DTEK has had no control over DTEK Mine Komsomolets Donbassa PJSC, DTEK Sverdlovanthracite LLC, DTEK Rovenkyanthracite LLC and Mospino Coal Preparing Enterprise LLC because of their capture and the unacceptable demand to re-register those companies on the temporarily uncontrolled territory of Donetsk and Luhansk regions. At the end of 2017, the production of anthracite coal grades at the company's Ukrainian mines decreased by 76.6%, or 6,153.2 thousand tonnes, as compared to the previous year.
 - The extraction of gas coal grades is not limited by military operations. The company's priority was to increase the share of these coal grades in the fuel mix of its thermal power plants. In 2017, the miners produced a total of 22.9 million tonnes of G-grade coal, which is the company's historic year-end record. Compared to 2016, that is 8.2%, or 1,740.5 thousand tonnes of coal more. Such a significant result was achieved despite the fact that the preparation of new coal faces was complicated by deteriorating mining and geological conditions within the development area.
- In 2017, the total processing volume of run-of-mine coal was 19.1 million tonnes (–23.4% compared with 2016), the coal concentrate production volume was 11.8 million tonnes (–24.7%).
- In particular, the company's coal concentrating mills processed 16.5 million tonnes of run-of-mine coal, the coal concentrate production was 10.4 million tonnes. Third-party CCMs processed 2.6 million tonnes of coal, and their coal concentrate production reached 1.4 million tonnes.

Electricity generation

In 2017, DTEK Energo supplied 36.5 billion kWh of electricity to the United Energy System of Ukraine. That is 7.6% or 3.0 billion kWh down year-on-year.

Main factors that have affected the performance indicators:

- An increase in electricity production by nuclear and hydroelectric power stations by 6.5%, or 5.9 billion kWh. The predictive electricity production balance in Ukraine was revised towards increasing the share of these types of electricity generation because of the emergency situation in the energy industry. The imposition of the state of emergency, which lasted until mid-July, was preceded by a railway blockade and seizure of enterprises located in the anti-terrorist operation (ATO) zone. These events were followed by the decision of the National Security and Defense Council of Ukraine "On Urgent Additional Measures to Counter Hybrid Threats to Ukraine's National Security". On March 16, 2017, the Head of State imposed this decision in his Decree No. 62, which terminated cargo movement across the confrontation line. Consequently, Ukraine completely stopped coal and electricity production at the enterprises located in the ATO zone.
- A drop in electricity supply by DTEK Skhidenergo by 20.6%, or 2,376.5 million kWh, due to the loss of control over Zuivska TPP.
- A drop in electricity supply by DTEK Dniproenergo by 20.1%, or 2,342 billion kWh. Since February 11, DTEK Prydniprovsk TPP and DTEK Kryvorizka TPP have not been receiving anthracite from the company's mines located in the ATO zone. After the heating season ended, the plants were stopped in order to accumulate the coal resource for electricity production in the summer period of maximum energy consumption. So the company began to import anthracite and prepared its power plants for bearing the load. Until August, the capacities of power plants were not fully employed due to the lack of demand in the UES of Ukraine.
- An increase of electricity supply by 11%, or 1,752.9 billion kWh, by DTEK Zakhidenergo and Kyivenergo.



G stands for gas coal, DG stands for long flame coal, T stands for lean coal, A stands for anthracite.

Commercial Activity

Coal shipments in the foreign and domestic markets

In 2017, coal products only from Mine Office Obukhovskaya were sold in foreign markets. The company made shipments to consumers in Europe, Canada, India and North Africa. The year-end results showed that the volume of export supplies amounted to 748.2 thousand tonnes, which is 43.9% lower than in the previous year. The decrease is due to the fact that since the second quarter a significant part of the coal resource has been sent to the Ukrainian market to minimize the anthracite deficit that had arisen in connection with the cessation of the production of this coal grade. In particular, 911,000 tonnes were supplied to meet the needs of DTEK Energo's thermal power generation.

In addition, the company began to import coal products from South Africa, Poland and the United States to ensure uninterrupted power supply in Ukraine. On the whole, DTEK Energo imported 2,571.7 thousand tonnes of coal, 88.7% of which were supplied to its own thermal power plants.

In 2017, the supplies of coal to Ukrainian industrial consumers decreased by 27% to 2 million tonnes, which is related to the loss of control over the assets in the ATO zone.

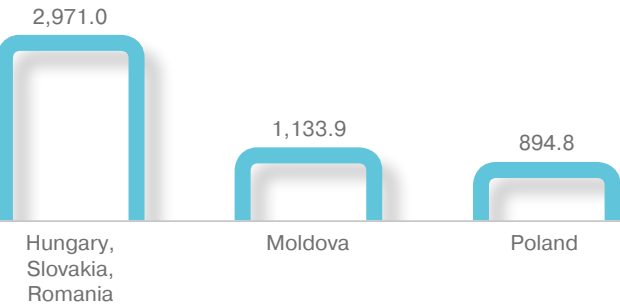
Import and supply of natural gas on the domestic market

In 2017, the total sales volume of natural gas in the Ukrainian domestic market amounted to 1,952 million cubic meters. Both imported and Ukrainian coal was traded. In particular, 19.6 million cubic meters of natural gas were imported from Europe: most of it was supplied by Hungary, the rest came from Slovakia. The increase in the imported volume of natural gas was made possible by Hungary-related cross commodity trading operations.

Electricity supply to foreign markets

In 2017, the company supplied 5 billion kWh under international contracts, which is 25.5% higher than in 2016. Supplies were made to Hungary, Moldova, Poland.

Electricity supply under foreign trade contracts in 2017, million kWh



Production capacities of DTEK Energo TPPs as of January 1, 2018

Power unit number	Total installed capacity, MW	Date of commissioning / last major repair or retrofit	Running time, hours	Major repair / retrofit
DTEK Kurakhivska TPP				
3	200	1972/2007	293,723	retrofitting is planned for 2024–2025; the installed capacity is expected to increase by 25 MW
4	210	1973/2017	267,502	retrofitting is planned for 2022-2023; the installed capacity is expected to increase by 15 MW
5	222	1973/2015	248,012	retrofitting completed in 2009; the installed capacity increased by 12 MW
6	225	1973/2013	247,090	retrofitting completed in 2013; the installed capacity increased by 15 MW
7	225	1974/2016	258,927	retrofitting completed in 2010; the installed capacity increased by 15 MW
8	225	1974/2017	256,287	retrofitting completed in 2012; the installed capacity increased by 15 MW
9	225	1975/2015	252,676	retrofitting completed in 2015; the installed capacity increased by 15 MW
Total	1,532			
DTEK Luhanska TPP				
9	200	1962/2017	331,137	mothballing is considered from 2020
10	210	1962/2012	318,847	retrofitting completed in 2012; the installed capacity increased by 35 MW
11	200	1963/2004	318,252	retrofitting is not planned
12	175	1963/1996	199,661	mothballed
13	210	1967/2014	298,676	retrofitting completed in 2014; the installed capacity increased by 35 MW
14	200	1968/2006	289,491	retrofitting is planned for 2024–2025; the installed capacity is expected to increase by 10 MW
15	200	1969/2005	302,742	retrofitting is planned for 2022-2023; the installed capacity is expected to increase by 10 MW
TPG No. 4	100	1957/-	279,039	mothballed
Total	1,495			
DTEK Zaporizka TPP				
1	325	1972/2012	288,819	retrofitting completed in 2012; the installed capacity increased by 25 MW
2	300	1972/2017	280,970	retrofitting is planned for 2022-2023; the installed capacity is expected to increase by 30 MW
3	325	1972/2014	284,380	retrofitting completed in 2014; the installed capacity increased by 25 MW
4	300	1973/2016	266,412	retrofitting is planned for 2020-2021; the installed capacity is expected to increase by 30 MW
5	800	1975/1995	148,998	unit fired by fuel oil and gas. Reserved
6	800	1976/1993	127,365	unit fired by fuel oil and gas. Mothballed
7	800	1977/1992	133,190	unit fired by fuel oil and gas. Reserved
Total	3,650			

Production capacities of DTEK Energo TPPs as of January 1, 2018

Power unit number	Total installed capacity, MW	Date of commissioning / last major repair or retrofit	Running time, hours	Major repair / retrofit
DTEK Kryvorizka TPP				
1	315	1963/2017	297,622	retrofitting completed in 2017; the installed capacity increased by 33 MW
2	300	1964/1998	312,436	retrofitting is not planned
3	300	1965/2013	272,775	retrofitting completed in 2013; the installed capacity increased by 18 MW
4	300	1966/2005	252,820	plans are in consideration
5	282	1967/1994	301,239	major repair is planned for 2021
6	282	1968/1995	246,410	mothballed
7	282	1970/1991	190,390	mothballed
8	282	1969/1996	263,906	it is being considered to change the design fuel, i.e. to convert to burning the mixture of anthracite and G-grade coal
9	282	1972/1994	178,750	mothballed
10	300	1972/2017	208,118	it is being considered to change the design fuel, i.e. to convert to burning the mixture of anthracite and G-grade coal
Total	2,925			
DTEK Prydniprovskia TPP				
7	150	1958/2013	337,253	in 2017, the design fuel was changed: the plant was converted from burning anthracite to burning G-grade coal
8	150	1958/2014	360,531	in 2017, the design fuel was changed: the plant was converted from burning anthracite to burning G-grade coal
9	150	1959/2012	331,805	retrofitting completed in 2012 without an increase in the installed capacity; it is planned to change the design fuel in 2018: to convert the plant from burning anthracite to burning G-grade coal
10	150	1960/2006	331,246	it is planned to change the design fuel in 2018: to convert the plant from burning anthracite to burning G-grade coal
11	310	1962/2016	266,286	major repair is planned for 2022
12	285	1964/1990	221,579	mothballed
13	285	1964/1997	299,570	mothballed
14	285	1966/1993	246,384	mothballed
Total	1,765			
DTEK Burshtynska TPP				
1	195	1968/2017	300,106	major repair is planned for 2022
2	185	1965/2014	287,499	major repair is planned for 2020
3	185	1966/2013	299,101	major repair is planned for 2019
4	195	1966/2014	321,767	major repair is planned for 2018
5	215	1967/2013	311,970	phase I retrofitting completed in 2013; phase II retrofitting completed in 2016; the installed capacity increased by 20 MW
6	195	1967/2015	315,971	major repair completed in 2015; the installed capacity increased by 10 MW

Production capacities of DTEK Energo TPPs as of January 1, 2018

Power unit number	Total installed capacity, MW	Date of commissioning / last major repair or retrofit	Running time, hours	Major repair / retrofit
DTEK Burshtynska TPP				
7	206	1968/2012	297,283	retrofitting completed in 2012; the installed capacity increased by 21 MW
8	195	1968/2009	311,612	retrofitting is planned for 2021-2022; the installed capacity is expected to increase by 13 MW
9	195	1968/2016	294,110	retrofitting is planned for 2023-2024; the installed capacity is expected to increase by 13 MW
10	195	1969/2004	306,212	retrofitting is planned to be completed in 2018; the installed capacity is expected to increase by 15 MW
11	195	1969/2011	276,357	retrofitting is planned for 2025-2026; the installed capacity is expected to increase by 13 MW
12	195	1969/2012	268,858	retrofitting is planned for 2027–2028; the installed capacity is expected to increase by 13 MW
Total	2,351			
DTEK Dobrotvirska TPP				
5	100	1960/2017	348,539	major repair carried out in 2017–2018
6	100	1961/2015	340,200	mothballing is considered from 2018
7	150	1963/2011	352,122	retrofitting is planned for 2020–2021; the installed capacity is expected to increase by 10 MW
8	160	1964/2014	326,506	retrofitting completed in 2014; the installed capacity increased by 10 MW
Total	510			
DTEK Ladyzhynska TPP				
1	300	1970/2017	254,799	major repair carried out in 2017–2018
2	300	1971/2009	253,253	major repair is planned for 2019
3	300	1971/2011	241,946	major repair is planned for 2020
4	300	1971/2001	242,968	retrofitting is planned for 2020–2021; the installed capacity is expected to increase by 25 MW
5	300	1971/2003	223,741	mothballing is considered from 2018
6	300	1971/2004	230,276	retrofitting started in 2018; the installed capacity is expected to increase by 25 MW
Total	1,800			
DTEK Donetskoblenergo Myronivska TPP				
TPG No. 2	100	1953/2004	285,814	under repair
TPG No. 3	60	1954/1998	335,195	mothballed
TPG No. 5	115	2004/2013	75,444	in 2017, the design fuel of boiler No. 10 was changed – it burns G-grade coal instead of anthracite; in 2018, it is planned to change the design fuel of boiler No. 9 – to switch it from burning anthracite to burning G-grade coal
Total	275			

Kyivenergo

Kyivenergo supplies energy and heat to the capital of Ukraine. The company's total installed capacity for electricity production is 1.2 GW and 8.8 thousand Gcal/h for thermal power. The company fully meets Kyiv's demand for electricity. In the centralized heating and hot water supply sector the company takes up 75% of the capital's market. At the same time, the heating pipelines are mostly owned by municipalities.

The main fuel for Kyivenergo CHPPs is natural gas. 1,675 million cubic meters of gas were used in 2017, of which NAK Naftogaz Ukraine delivered 1,348 million cubic meters, and DTEK Trading delivered 327 million cubic meters. In addition, CHPPs used 186.3 thousand tonnes of fuel oil, and block boiler houses used 772 tonnes of coal for thermal energy production.

Electricity is produced by two combined heat and power plants, CHPP-5 and CHPP-6. In 2017, Kyivenergo increased its electricity production by 4.9%, or 124.9 million kWh, because of adjusting the predictive electricity balance to ensure the reliability of the Kyiv energy hub. The volume of electricity transmission via grids increased by 1.4%, or 126.5 million kWh.

Thermal power is produced by CHPP-5, CHPP-6, four heating plants and 177 boiler houses. In 2017, thermal energy supply dropped by 11.2%, or 0.7 million Gcal, due to more comfortable weather conditions.

Key operational indicators of Kyivenergo CHPPs

Enterprise	Indicators	2017	2016	Change, +/-
CHPP-5	Electricity production, million kWh	1,515.8	1,494.6	+21.2
	Electricity supply, million kWh	1,231.6	1,198.1	+33.5
	Internal electricity consumption (for electricity generation), %	7.9	8.1	–0.2
	Internal electricity consumption (for heat generation), kWh/Gcal	54.9	51.5	+3.4
	ICUF, %	24.7	24.3	+0.4
CHPP-6	Electricity production, million kWh	1,659.5	1,554.3	+105.2
	Electricity supply, million kWh	1,441.2	1,349.9	+91.3
	Internal electricity consumption (for electricity generation), %	5.3	5.4	–0.1
	Internal electricity consumption (for heat generation), kWh/Gcal	54.6	51.0	+3.6
	ICUF, %	37.9	35.4	+2.5
Total	Electricity production, million kWh	3,175.3	3,048.9	+126.4
	Electricity supply, million kWh	2,672.8	2,547.9	+124.9
	Thermal energy generation, thousand Gcal	5,964.0	6,580.5	–616.5
	Thermal energy supply, thousand Gcal	5,542.1	6,238.7	–696.6
	Internal electricity consumption, million kWh	510.6	525.1	–14.5
	ICUF, %	30.2	28.9	+1.3

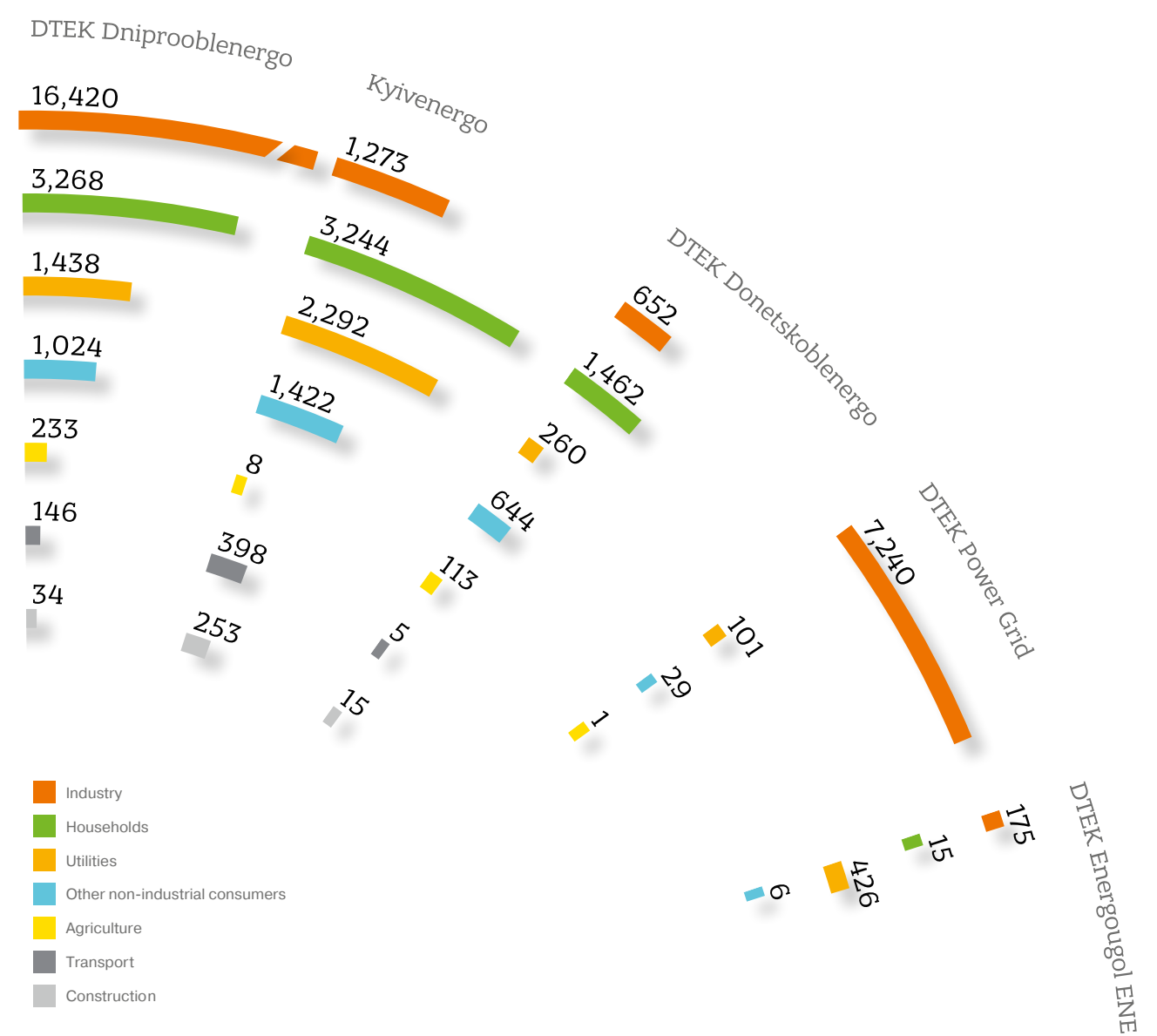
DTEK Grids: electricity transmission over grids

For 2017, DTEK’s distribution companies have transmitted 43.2 billion kWh of electricity to their consumers. This is 5.8% or 2.7 billion kWh down year-on-year.

Main factors that have affected the performance indicators:

- Recovery of demand by the industrial consumers in Ukraine: an increase by 0.9 billion kWh to 50.9 billion kWh against reducing consumption by the public utility consumers and households by 1.1 billion kWh to 50.0 billion kWh due to more comfortable weather conditions in summer and autumn.
 - Kyivenergo has increased electricity transmission by 126.5 million kWh and DTEK Dniiprooblenergo has maintained the scope of electricity transmission at the previous year’s level.
 - DTEK Donetskoblenergo, DTEK Power Grid and DTEK Energougol ENE have reduced electricity transmission by 18.8%, or 2.7 billion kWh. Since March 2017, the company has no longer been in control of the grids of DTEK Energougol ENE PJSC, DTEK Power Grid LLC and DTEK Donetskoblenergo PJSC located in the areas of Donetsk region temporarily not controlled by the Ukrainian government.
- In 2017, the company's enterprises reduced the actual losses in grids to 6.99% (–25.3%). In particular, for DTEK Donetskoblenergo the figure is 24.68% (–20.2% compared with 2016), for DTEK Energougol ENE it is 15.36% (–36.5%), for Kyivenergo it is 7.01 (–6.2%), for DTEK Dniiprooblenergo it is 4.63% (–0.9%), for DTEK Power Grid it is 1.87% (–32.0%).
- The average figure for Ukraine is 11.77% (+0.3%).

Electricity supply to consumers in 2017, million kWh



* Data are given without taking into account the electricity transmission to consumers in the ATO zone who received 0.6 million kWh in 2017.

DTEK RENEWABLES: renewable energy

The company increased its supply of green energy to the United Energy System by 4.8%, to 637.8 million kWh. This is the amount the whole Ukraine consumes over two days.

Main factors that have affected the performance indicators:

- Botievo Wind Farm has supplied 634.1 million kWh of energy, which is 4.2%, or 25.7 million kWh more than in the same period of 2016. The key growth factor is favourable weather conditions and well-coordinated repair campaign. The availability factors of the wind turbines and the plant infrastructure remain sustainably high: 98.33% and 99.23%, respectively.
- Start of operation of Tryfanivka solar power plant with the capacity of 10 MW located in Kherson Region. This is the company’s first project in solar energy, the results of which became the foundation of the development strategy in this segment of renewable energy. Construction of the power plant began in March. Tryfanivka SPP is equipped with 37 thousand solar panels supplied by Chinese company JA Solar and inverters manufactured in Italy by ABB company. Its electricity has been supplied to the United Energy System of Ukraine since 1 August. Over 2017 the plant produced 3.7 million kWh. The availability factor of the equipment was 99.29%.

DTEK OIL & GAS: gas production

In 2017, Naftogazvydobuvannya, the key production asset of DTEK Oil & Gas, increased its production of natural gas by 1.5%, to 1,655.3 million cubic meters. This became a new record in the history of the company and private gas production in Ukraine on the whole. Gas condensate production amounted to 54.8 thousand tonnes.

Main factors that have affected the performance indicators:

- Completion of drilling and commissioning of 5,600 meters deep at well No. 34 at Semyrenkivske Field.
 - Intensification of flowrates and major repairs of active wells.
 - Retrofitting and upgrade of the surface infrastructure to ensure uninterrupted and safe operation of gas processing facilities.
- In 2017, the company continued to invest in drilling deep wells and developing complex mining and geological sites. New technologies and equipment are used for that purpose. For example, at well No. 34 of the Semyrenkivske Field the company used pitless drilling for the first time and quit storing rock in the works execution location to comply with modern international environmental standards.
- After winning an open tender to provide drilling services, a new contractor – the Belarus company Belorusneft – was engaged and began drilling well No. 25 at Semyrenkivske Field. This will be a directional, 5,714-meter-deep well. This project will also include pitless drilling accompanied by sludge dewatering.
- When repairing wells, DTEK Oil & Gas started using the snubbing technology. Snubbing is a high-tech repair method since it makes it possible to carry out works in a short time without stopping production and with minimum negative consequences for natural gas deposits. Although this technology is widely used in gas-producing countries, in Ukraine it is used only sporadically by some companies since it requires modern imported equipment. In 2018, the company plans to use snubbing to carry out repairs at two more wells at Semyrenkivske Field.

02 Investment projects

In 2017, DTEK Group increased its capital investments by 34%, to UAH 10.4 billion. Investments into coal mining and processing, upgrade of thermal power plants and capacity building in the renewable energy sector were significantly increased. Those projects not only ensure the stable operation of Ukraine’s energy system, but also create a long-term prospect to replace electricity-generation capacities.

The Novator continuous improvement programme as well as energy efficiency projects implemented by DTEK ESCO are also aimed at increasing generation efficiency. These projects are based on the internal expertise of employees. They know better how to improve the quality of equipment operation and make their job safer. In its turn, the company helps put their ideas into practice. Such an approach shapes the culture of innovation, while operational improvement becomes part of the production culture.

UAH 2 billion is the economic effect of the Novator programme by the end of 2017. Such a high figure was made possible with

involving employees in the improvement process. For example, 23% of the staff took an active part in the programme and submitted about 44,000 ideas for consideration, 72% of which have already been implemented.

DTEK ESCO scaled energy efficiency projects using the energy service mechanism whose model was developed and put into practice a year earlier. The energy service allows upgrading production and buildings and reduce energy consumption. At the same time, such projects also mean an increased level of production automation for industrial enterprises.

Investments, UAH million (IFRS, excluding VAT)*

Business segment	2017	2016	Change, +/-	Change, %
DTEK Energy	8,416	6,194	2,222	35.9
Coal production and processing	4,552	3,912	640	16.4
Electricity generation	1,526	588	938	159.5
Kyivenergo	1,199	769	430	55.9
Others	147	98	49	50.0
DTEK Grids: electricity transmission over grids	992	827	165	19.9
DTEK RENEWABLES	370	8	362	by 46 times
DTEK Oil & Gas	1,143	932	211	22.6
DTEK Group	10,388	7,781	2,607	33.5

* Excluding the cost of intangible assets.

DTEK Energy

Coal production and processing

In 2017, DTEK Energo focused on increasing its production of gas coal grades to ensure maximum conversion to domestic coal in thermal power generation. To this end, the company devised a new development strategy for DTEK Dobropolyeugol envisaging production of 15 million tonnes of G-grade coal from 2018 to 2020. There are also projects implemented at the mines of DTEK Pavlogradugol and aimed at ensuring stable ventilation of mine openings to increase the coal production rate.

Key projects in 2017

As part of equipment fleet development of DTEK Dobropolyeugol:

- A modern CLS 450 cutter-loader (by Svet Shakhtyora) was delivered to Dobropilsk Mine. The cutter-loader is designed taking into account the specific mining and geological conditions of Dobropillia and can hoist a load of over 2,000 tonnes of coal per day, equaling the performance level of more expensive imported alternatives.
- A modern 260-metre-long SP-251.13 scraper conveyor (by Svet Shakhtyora) was installed at Almazna Mine. The conveyor is equipped with BP250 gearboxes that made it possible to fit it with more powerful two-speed motors. This will increase the speed of coal transportation by 36%, up to 10.8 tonnes per minute.

On ensuring stable ventilation of mine openings at DTEK Pavlogradugol:

- Retrofitting of the ventilation system at Dniprovsk Mine is underway, within the framework of which a project is being implemented to replace the main fans with an increase in power to 3.8 MW. In 2017, main fans No. 1 and No. 2 of Dniprovsk Mine were commissioned and construction of Start-Up Facility 1 was completed.
- The construction of the new ventilation shaft at Yuvileina Mine continues. In fact, this project has developed into the construction of a new mine as it provides access to 19 million tonnes of industrial coal reserves. Underground equipment was commissioned to transport people last year, and in 2017, work was already being done to prepare it for the start of load-hoisting. In particular, a narrow gauge track was laid at ventilation shaft No. 3, and the construction of a disposal point, a charging shed and an emergency equipment storage continued. In addition, electricity is provided at the mine and on the surface. It is planned that the ventilation shaft will start hoisting loads in 2018.

On upgrading processing capacities:

- The construction and installation of the filter-press section at Dobropilsk CCM have been completed. In global coal-processing practice, belt filter-presses are one of the most widely applied solutions, which makes it possible to reduce environmental footprint by switching the plant to a fully-closed water-slurry cycle. The application of filter presses makes it possible to obtain two products: pure water, which returns to the enrichment process, and solid waste. Therefore, there is no need for a sludge tank.
- The construction of rock-disposal dumps at Dobropilsk CCM and Oktyabrskaya CCM is underway using the innovative “green dump” technology, which will also reduce the burden on the environment. The project includes covering each tier of the dump with clay while constructing an internal drainage system to prevent pollution of underground waters, as well as planting vegetation. In 2017, the first stage of the Dobropilsk CCM project and the second stage of the Oktyabrskaya CCM project were completed. The Oktyabrskaya CCM project is planned to be fully implemented in 2018, the same is planned for the Dobropilsk CCM project in 2018–2019.
- In addition, DTEK ESCO specialists upgraded the lighting system in the main building of the Dobropilsk CCM. This made it possible to reduce the cost of lighting by 90.5% of the baseline energy consumption level, while the lighting of workplaces improved three times. The expected result is saving 1.1 million kWh per year. In 2018, it is planned to continue with upgrading the lighting system: works began in the conveyor gallery section.
- DTEK Kurakhivsk CCM installed a frequency converter with a capacity of 160 kW per transport water pump. This measure is expected to save 350 thousand kWh per year. The project was implemented by DTEK ESCO under an energy service contract valid for 4 years.

In 2017, the company extended the validity of special permits for using the resources of Dniprovsk Mine (for 20 years), Pavlogradsk Mine (for 20 years) and Ternivsk Mine (for 15 years).



Electricity generation

In 2017, the company's priority in thermal power generation was to increase the share of Ukrainian coal in the fuel mix of its power plants. In the absence of anthracite coal production such decision strengthens Ukraine's energy security. In 2018, the company will continue to work towards converting TPPs from burning scarce anthracite to G-grade coal.

Key projects in 2017:

- Conversion of generating units No. 7 and No. 8 of DTEK Prydniprovsk TPP from anthracite to gas coal grades. This allows cutting down on anthracite imports and increase the consumption of Ukrainian coal.
- DTEK Kryvorizka TPP completed the second stage of Unit 1 retrofitting. The retrofit will help expand the unit's installed capacity from 282 to 315 MW and increase its flexibility range by 58 MW to 158 MW, while reducing its specific fuel consumption.
- The retrofit of Unit 10 at DTEK Burshtynska TPP is underway. The project is aiming at increasing the unit's installed capacity by 15 MW to 210 MW, expand its flexibility range by 30 MW to 105 MW, raise the boiler efficiency to 90% and enhance the unit's reliability during peak hours. In the beginning of 2018, the generating unit was connected to the grid.
- DTEK Ladyzhynska TPP began construction of a solar power plant with the capacity of 1 MW. The plant will be located on the bank of the Southern Buh, at the TPP dam. The electricity generation is expected to be 0.6 million kWh per year, and the payoff period is 8 years.

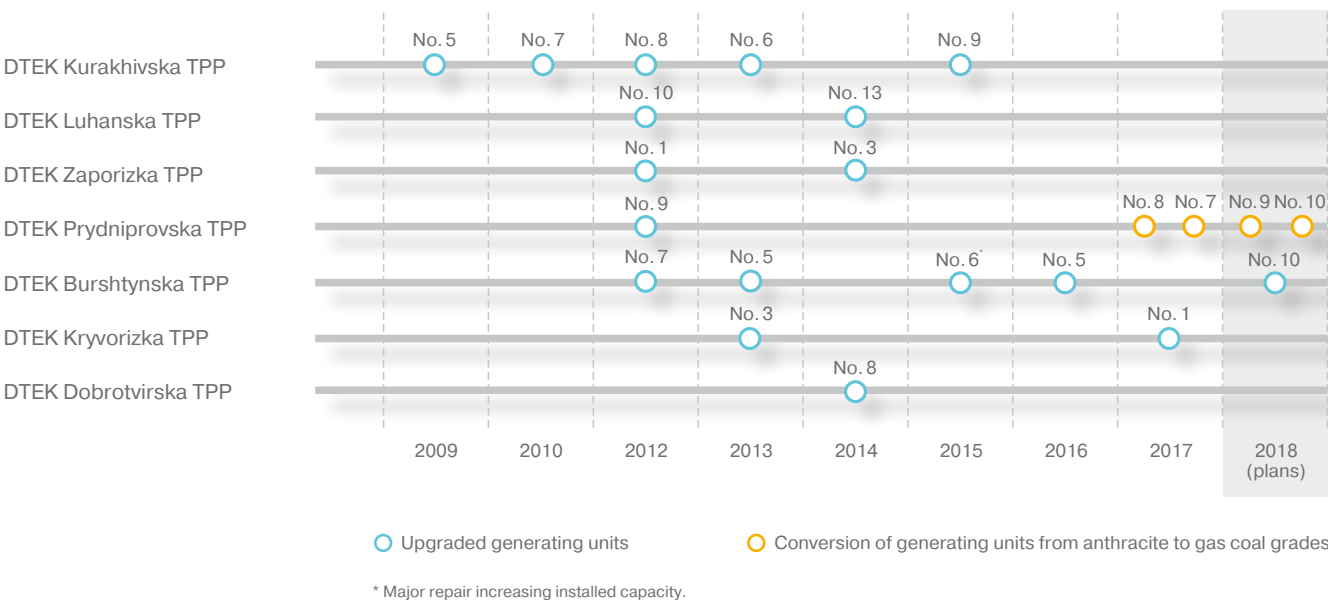
While retrofitting each unit, the electrostatic precipitators are upgraded to achieve the dust emission targets set forth in Directive 2001/80/EC.

In addition, DTEK ESCO implemented a number of projects to reduce energy consumption at its thermal power plants in 2017.

- DTEK Burshtynska TPP performed technical re-equipment of its microclimate control systems in the main control room achieving a 50% reduction of electricity consumption by climate control systems. The project implementation provided the staff with more comfortable working conditions, including reduced noise level. The expected annual savings are 1 million kWh. The project was implemented under an energy service contract valid for 4 years.
- DTEK Ladyzhynska TPP implemented three projects on technical re-equipment of pumps that are expected to save 2 million kWh of energy per year. Frequency converters were installed during the upgrade of the water filtration unit pumps at the TPP, on the replaced network pump and on the pump equipment of the condensate storage tank. These projects improved reliability of the equipment and, consequently, the heat and water supply systems in the town of Ladyzhin.

99 TPPs of DTEK Energo began implementing the energy management system. Consulting services were provided by DTEK ESCO and the international company TÜV SÜD. The project is aimed at reducing internal energy consumption by TPPs. It is expected to save 10% of the baseline energy consumption level. In 2018, it is planned to integrate the energy management system into the business processes of power plants and to certify the system for compliance with the ISO 50001:2011 standard.

Upgraded generating units of DTEK Energy's TPPs and upgrade plans for 2018



Kyivenergo

Ukrainian energy companies are increasingly oriented towards the customer needs and improving quality of their services. Kyivenergo is one of the first to introduce services that simplify communication between the customer and the company and to increase the network automation level to bring Kyiv energy industry closer to implementing the Smart Grid concept.

Kyivenergo customers are using online services more and more actively. If at the beginning of the year only 27% of payments were made via the Internet, and at the end of the year this figure was already 51%. Contributing to this are active development of existing web services and launches of new ones.

Among the new web services that the company launched in 2017 is the Personal Account for Grid Connection, which significantly reduced the time necessary for processing documents and fulfilling customer requests. For example, if developing connection specifications used to take more than a month, now it takes no more than five days. The company's improvements affected Ukraine's position in the World Bank's Doing Business 2018, a ranking that assesses the business climate of countries around the world. One of the components of this ranking is the Getting Electricity topic where Ukraine improved its position going two places up thanks to Kyivenergo's efforts.

A customer only applies for connection on the company's website, and the programme determines the connection type automatically using the cadastral number of the land lot, devises the specifications and the agreement and calculates the distance from the declared facility to the power supply point and the cost of connection. In the future, the same procedure will be used for requests on power increase for already connected facilities.

In general, Kyiv's electricity needs grow by about 4–5% per year. At the same time, more than half of the grids were constructed 30 years ago, so the company is actively upgrading the infrastructure to meet the growing demand. Kyivenergo plans to increase investments in new technologies every year to bring the Ukrainian capital closer to the Smart Grid implementation.

Key power supply projects of 2017:

- Technical re-equipment of the 110/10 kV switchgear at Solomenska substation. Retrofitting will help relieve the grids, significantly increase reliability of power supply and decrease pressure on the energy hub.
- Retrofitting the 110/10 kV Pozniaky substation to increase reliability of power supply to the left bank area of Kyiv and lift restrictions on connection of new customers.
- Retrofitting the 110/10 kV Centre substation. The existing capacity of 80 MVA was not enough to connect new customers, and there were difficulties with reserving capacity. The company replaced the equipment, installed power transformers by Hyundai Heavy Industries and introduced an automated electricity metering system. The project also helped improve monitoring of electricity quality parameters, switch lines in the automatic mode and reduce the response time in case of any deviations.

In 2017, during its upgrade of generating capacities the company completed the first stage of construction of a condensing economizer on the NAS-209 hot water boiler of CHPP-6 in Kyiv. This helped increase thermal generation capacities due to utilizing the heat of flue gases (after-cooling of the combustion products) and therefore reduce the consumption of natural gas by 10%. When the project is completed, it is expected that the savings will exceed 100 million cubic meters of natural gas per year and the company's environmental performance will significantly improve: carbon dioxide emissions will drop by 20,000 tonnes per year, nitrogen oxides emissions will drop by 18.8 tonnes per year and carbon oxides emissions will drop by 10.6 tonnes per year.

The installation of a condensing economizer was a significant project of Kyivenergo in 2017. The company was one of the first in Europe to install such powerful and modern equipment.

In addition, the company continued its work on updating its heating networks. This remains an urgent issue for Kyiv as today the wear rate of heating mains is 67%. As such, non-heating periods are the time for replacing sections of heating pipelines and network repairs. In 2017, the company replaced 15 km of heating mains using its own resources

Kyivenergo is continuing to improve its system of recording and transmitting data on the volume of thermal energy consumption. To make payments convenient and charges transparent the company offered its customers new web services in 2017: Personal Account for Hot Water Supply and Central Heating and, specifically for homeowners' associations of apartment houses and building cooperatives, Personal Account for Asset Holders. This service allows the apartment house manager to enter the heat meter readings from each apartment.

Kyivenergo develops the Smart Metering concept. In multi-storey buildings, heat and electricity meters are installed that are equipped with M2M (Machine-to-Machine) modems. Modems transmit information to a single database over a mobile network. 10,000 meters are already equipped with such modems.

DTEK Grids: electricity transmission over grids

The key objective of the company is to make the transition from the enterprises selling electricity to the customer-oriented business. The company's distribution enterprises have built a customer service network offering a wide range of communication channels. In the future, it is planned to focus on developing web services. An integral part of service quality improvement is investment programmes for development of power grids. Such projects are aimed at improving the reliability and quality of power supply to consumers.

In 2017, the company's distribution enterprises fully built a customer service network that covers all household subscribers. Customers are offered various communication channels to choose the most convenient from them. All electricity supply issues can be communicated to the service centres, contact

centres or through social networks. Creating a high-availability system for its customers is one of the company's strategic goals. At the end of 2017, Customer Satisfaction Index (CSI) DTEK Dniprooblenergo was 83%, for DTEK Donetskoblenergo it was 80%, for Kyivenergo it was 66%.

Household customer service network as of 2017



Contact centres

- 24/7 support
- Free call
- Basic electricity supply issues (meter reading submission, consultations on the customer's account and current tariffs)
- Consultations on individual issues
- Accident handling request
- Plan of scheduled maintenance operations



Customer Service Centres (CSC)

- One-window approach
- All electricity supply services, including grid connection
- Energy-efficient Smart WATT kits



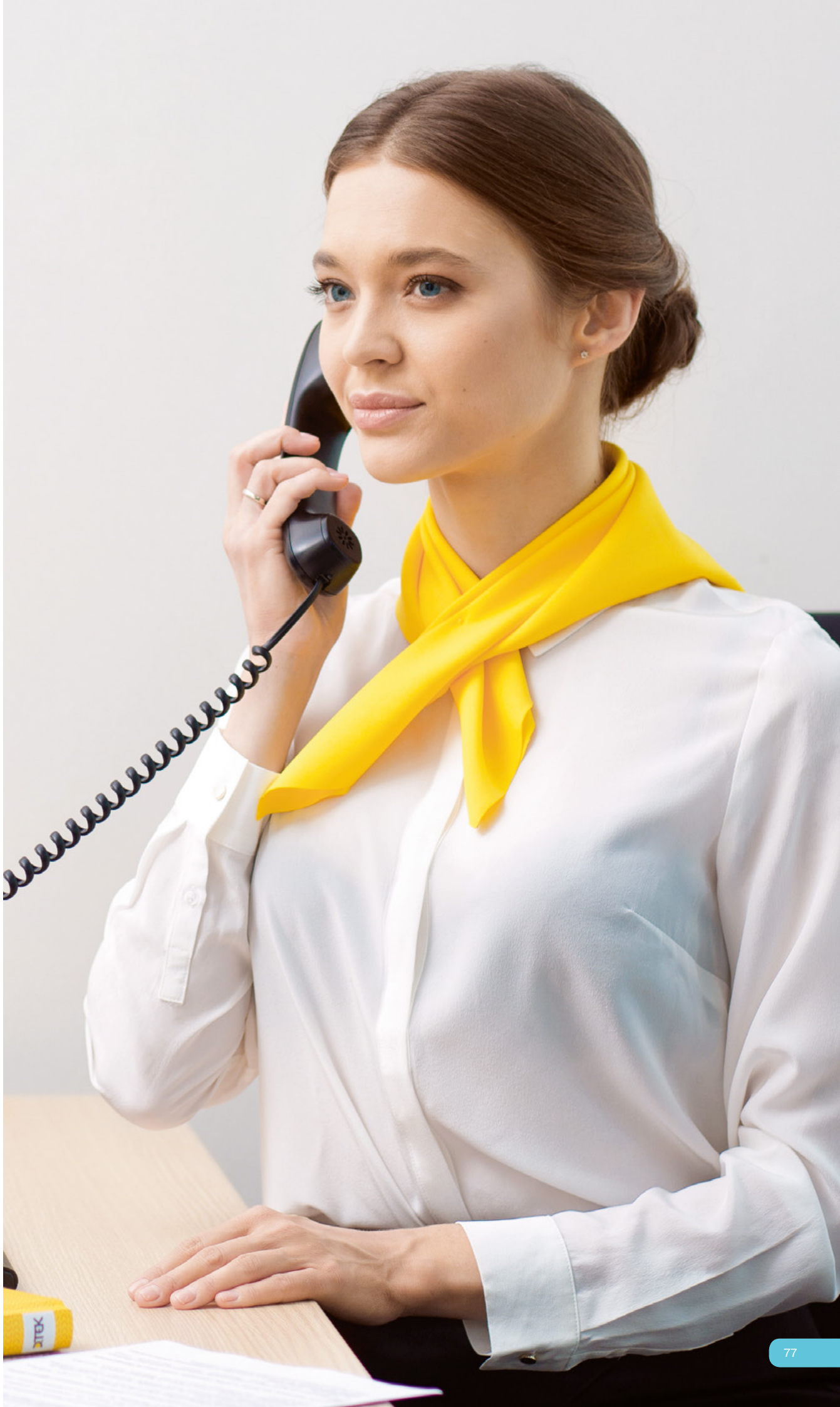
Personal account and PayHub

- Online services for personal and Android or iOS mobile devices
- All personal account information and transactions (meter reading submission, calculation of the cost of consumed electricity, payment, receipt by e-mail)
- International standards of payment system security
- No fee



Websites for customers

- Information about the company's work
- Online services for signing agreements with the company and for connecting to power grids
- Detailed information on current tariffs for households and legal entities
- Notifications on scheduled maintenance



Distribution enterprises' data as of January 1, 2018

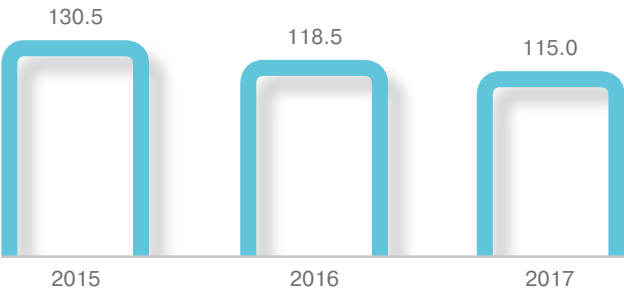
Enterprise	Total length of power transmission lines, km	Total number of SSS	Total capacity of SSS, MVA	Number of customers
DTEK Dniprooblenergo	50,135	12,629	11,401	1,509,677
DTEK Donetskoblenergo	33,872	7,095	5,265	886,790
Kyivenergo	13,510	4,101	7,998	1,160,149
DTEK Power Grid	1,888	39	888	509
DTEK Energougol ENE	95	28	47	7,045
Total	99,500	23,892	25,599	3,564,170

As part of power grid development, 22.8 km high-voltage and cable transmission lines were built, and 97.3 km of them were retrofitted; 2,895.1 km of high-voltage transmission lines were repaired, of which 711.2 km were rewired. Moreover, 22 substations and distribution points were upgraded and 2,395 facilities were repaired. All these projects are aimed at providing reliable and uninterrupted power supply to consumers and contribute to improving the quality of life in communities.

The most part of Ukraine's power grids was built in 1960–1970 and they were designed according to regulations of the 50's. For this reason, the key problem of the industry is a high wear rate and non-compliance with modern technical requirements, which is an obstacle for ensuring high-quality electricity supply to consumers and development of urban infrastructure.

The company's investment projects contribute to solving these problems as they provide high-quality power supply to consumers, eliminate the capacity deficit that arose in the process of urban development and reduce losses in electricity transmission.

Customer Average Interruption Duration Index (CAIDI), min



CAIDI is the ratio of the sum of all customer interruption durations to the total number of customer interruptions. The index is measured in minutes.

The index does not include force majeure situations and de-energizing according to emergency shutdown schedules. Data are given for all distribution enterprises of the company, including Kyivenergo.

Key projects in 2017:

- DTEK Donetskoblenergo:** the company has completed the technical re-equipment of Gorod-5 substation in Mariupol. During the upgrade, the equipment of the 35 kV switchgear was replaced, and a modern 6 kV electrical module with vacuum circuit breakers was mounted. This has helped to enhance the reliability of power supply to consumers, reduce transmission losses and improve work conditions.
- A new transmission line was built and 14 transformer substations were restored, providing power supply to the villages of Bakhmut district, the residents of which lived without electricity for more than a year because of military operations.
- DTEK Power Grid:** the company completed an upgrade of two substations in Kramatorsk to improve the reliability of electricity supply to consumers and create additional opportunities for connecting new subscribers. It has installed an automated substation control system integrated into the common information system of the high-voltage electric network dispatch centre. It will allow for the remote equipment control and fault identification.
- The company completed construction of the double-circuit high-voltage 110 kV Ocheretyne–Avdiivka Coke Plant Branch Line. The new lines provide reliable power supply to Avdiivka and the plant thanks to the power supply from the government-controlled territory.

- DTEK Dniprooblenergo:** the first stage of construction of 150/10/6 kV Naddnyprianska substation in Dnipro has been completed. The substation will provide an additional capacity for connecting new consumers and improve reliability of power supply to the existing and planned substations powering the city's underground, and will allow to dismantle the obsolete system of overhead power lines.

A topical issue for electricity consumers was connection of their facilities to power grids. Availability of energy infrastructure is an important component in assessing the investment attractiveness of regions and it affects economic development. Despite the stable demand for connection, it is difficult to define the increase in the volume of electricity net supply. According to the company's estimates, such projects account for an average growth in consumption of less than 2% per year.

The company's distribution enterprises are making purposeful efforts aimed at increasing availability of their power grids, specifically through revision and simplification of connection procedures and introduction of specialised communication channels. For example, Kyivenergo launched a new web service for all its customers called Personal Account for Grid Connection (see the Kyivenergo section).

Number of connections made in 2017

Enterprise	Standard connection						Non-standard connection
	First degree (up to 16 kW inclusive)		Second degree (from 16 kW to 50 kW inclusive)		Third degree (from 50 kW to 160 kW inclusive)		
	city/town	village	city/town	village	city/town	village	
DTEK Donetskoblenergo	346	300	66	6	6	2	28
Kyivenergo	526	–	292	–	2	–	293
DTEK Dniprooblenergo	2,176	1,280	891	334	11	5	194
DTEK Power Grid	0	0	0	0	0	0	4
Total	3,048	1,580	1,249	340	19	7	519

DTEK RENEWABLES: renewable energy

Development of various types of power generation can create a platform for the stable performance of the Ukrainian energy sector in the future, given the need to replace capacities. DTEK is open to innovation and new lines of business. The total portfolio of projects that DTEK Renewables plans to implement by 2020 is 1 GW.

Key projects in 2017:

- DTEK Renewables has started construction of the first stage of Prymorska wind farm in Zaporizhia Region.

The total capacity of the wind farm will be 200 MW; the investment volume will be EUR 300 million. Every year Prymorska wind farm will generate 650–700 million kWh of green energy contributing to reducing CO₂ emissions by 700–750* thousand tonnes per year.

In 2017, the project implementation was agreed at public hearings of the local community in Primorsk, Borysivka village and Botievo joint local community. After that the company began constructing the administration complex and the central distribution point where the main control and automation equipment of the wind farm will be located, as well as high-voltage equipment that provides supply of electricity to the grids.

During 2018 GE (General Electric) will supply and install 26 wind turbines with the capacity of 3.8 MW each. The ordered wind turbines are GE's most advanced products that adapt to the direction and force of the wind. Installation and further maintenance of the wind power equipment will be carried out by the GE office in Ukraine.

- Tryfanivka solar power plant with the capacity of 10 MW started generating power. It was built and put into operation in August 2017. EUR 8.1 million, including borrowings, were invested in the project. By implementing it DTEK Renewables started building its target portfolio of solar power generation projects.

In December 2017, the company agreed with the communities of Nikopol District of Dnipropetrovsk Region to construct the solar power plant with the capacity of 200 MW. The company is preparing the necessary permission and project documentation for the project implementation. The power plant is planned to be built in 2018.

* Electricity generation from fossil fuels is accompanied by emission of greenhouse gases. To estimate these emissions, a CO₂ equivalent is used as a standardised reference for all emissions of greenhouse gases. To calculate the contribution of renewable energy sources to emission reductions the conversion factors for CO₂ intensity per 1 kWh are used, calculated from averaged figures of thermal power plants. In 2010, the National Environmental Investment Agency of Ukraine established the standard of 1.063 kg of CO₂ per 1 kWh.

DTEK RENEWABLES

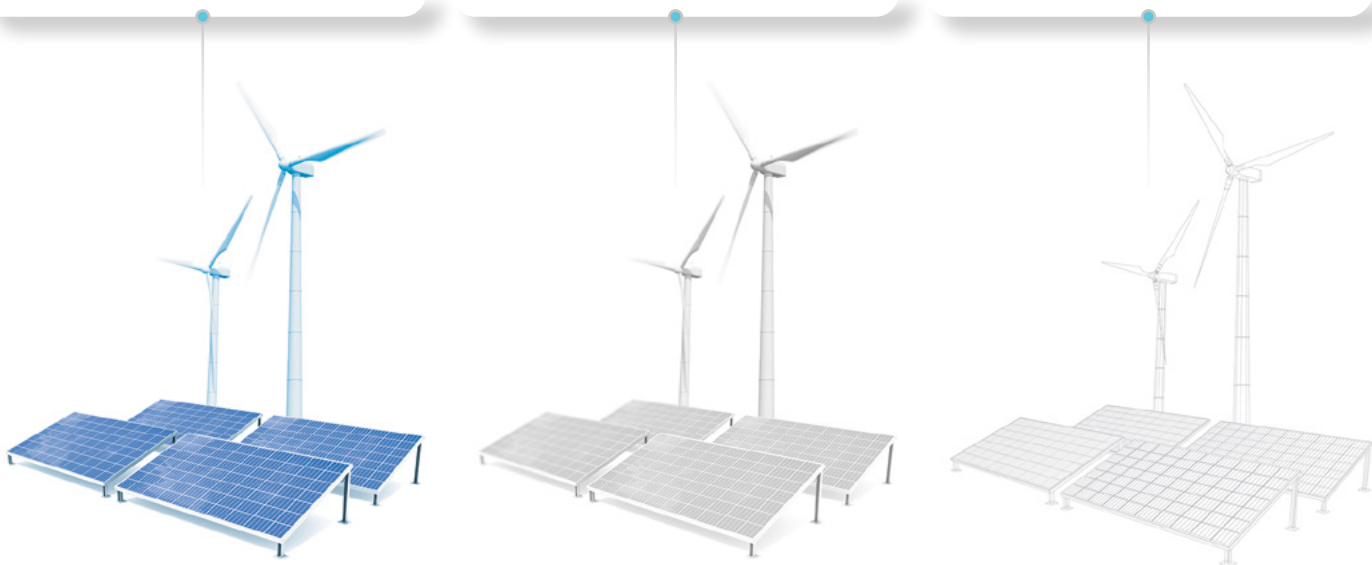
Botievo WPP
200 MW

Prymorsk WEP
200 MW

Orlivka WPP
100 MW

Tryfanivka SPP
10 MW

Nikopol SPP
200 MW



DTEK OIL & GAS: gas production

Ukraine set the goal to increase production of natural gas to fully cover its needs with its own gas resources by 2020. Modern technologies and equipment play a big role in the efficiency of field development and therefore for production growth. In terms of the technology level and equipment used assets of DTEK Oil & Gas have become the industry benchmark. Its experience is important for the progress of gas production in Ukraine, so the company constantly conducts specialised conferences and trainings open to all experts.

Key projects in 2017:

- Completion of drilling and commissioning of 5,600 meters deep well No. 34 at Semyrenkivske Field. The well achieved a high daily flowrate of 400,000 cubic meters of gas. The company used the method of pitless drilling for the first time to comply with the strictest international environmental standards.
- Flowrate intensification of well No. 51 at Machukhske Field. The well was treated with acid, which more than doubled gas production up to 150,000 cubic meters per day.
- Start of drilling of 5,714-meter-deep well No. 25 at Semyrenkivske Field.
- Retrofitting and upgrade of the surface infrastructure to ensure uninterrupted and safe operation of gas processing facilities.

In 2017, the company's large-scale infrastructure project was the completion of retrofitting of the gas processing facility at Machukhske Field. This project enabled the plant to double its capacity – up to 2 million cubic meters of gas per day.

A new gas processing line was constructed and equipped with efficient separation and heat exchange equipment. In addition, an automated process control system was installed based on a new generation of Siemens equipment (Germany). As part of this project, DTEK Oil & Gas was the first among Ukrainian gas producers to equip its gas metering station with an automatic

stream chromatograph and humidity meter. This allows real-time determination of the content and physical and chemical properties of the gas, as well as monitoring the dew point temperature (one of the key indicators of the quality of gas supplied to the main gas pipeline).

Moreover, the company retrofitted commercial metering units at Semyrenkivska complex gas treatment plant and Olefirivska preliminary gas treatment plant. The metering stations were also equipped with automatic flow chromatographs, humidity meters and redundant metering systems. Representatives of Ukrtransgaz PJSC and Ukrmetrteststandard SE noted the high project implementation level. Taking into account the fact that other Ukrainian gas producing companies did not achieve such a convergence between the main and redundant systems, the representatives called the project the industry benchmark.

DTEK Oil & Gas became Ukraine's first company to get all its facilities ready to sell natural gas in energy units. This is an important condition of the Gas Transportation System Code of Ukraine. Transition to energy units will contribute to sustainable market development in accordance with the requirements of the EU directives and regulations.

03 Financial results analysis

For 2017, the consolidated revenue of DTEK Group was UAH 145,070 mln. The product distribution costs increased to UAH 111,891 mln. As of the end of 2017, the net profit amounted to UAH 4,628 mln.

The net operating cash flow for 2017 was UAH 23,754 mln (in 2016, it was UAH 26,314 mln). The capital expenditures increased by 33.5% and amounted to UAH 10,388 mln.

Dynamics of the consolidated financial performance of DTEK Group, UAH mln*

Indicators	2017	2016	Change, +/-	Change, %
Revenue	145,070	131,815	+13,255	+10.1
Cost of goods sold	(111,891)	(105,824)	+(6,067)	+(5.7)
Operating income	1,260	714	+546	+76.5
Operating expenses	(3,742)	(5,752)	−(2,010)	−(34.9)
EBITDA	37,195	30,621	+6,574	+21.5
EBITDA margin	26%	23%	+3 pp	+10.3
EBIT	26,484	18,923	+7,561	+40.0
EBIT margin	18%	14%	+4 pp	+27.1
Net profit (loss)	4,628	(1,215)	+5,843	+480.9
Assets	152,492	140,597	+11,895	+8.5
Capital investments	10,388	7,781	+2,607	+33.5

* All data in the Financial Results Analysis section are sourced from the audited consolidated statements of DTEK B.V.

Income

The income of DTEK Group is derived from electricity wholesale to SE Energorynok, the sale of coal, gas and gas condensate, as well as the distribution of electric and thermal power to end consumers.

In 2017, income from the sale of electricity to end consumers in Ukraine and exports accounted for 42% of the consolidated revenue; the income from electricity wholesale to SE Energorynok – 39%; gas and gas condensate sale – 7.2%; sale of thermal energy to end consumers – 6.6%; sale of coal – 4.6%.

The major part of the income – 94% of the consolidated revenue (including the compensation for the difference in heat tariffs) – was generated by the company in the Ukrainian domestic market. The share of export income in the consolidated revenue was 6%: as of the end of 2017, the income from export sales increased by UAH 1,679 mln year-over-year up to UAH 8,435 mln.

The following income changes took place in the key business segments:

- income from coal sales increased by 14.8%, to UAH 6,704 mln, compared to UAH 5,838 mln a year earlier. Income from coal export amounted to UAH 1,832 mln compared to UAH 2,397 mln in 2016;
- income from electricity generation increased by 18.6% and amounted to UAH 56,248 mln compared to UAH 47,413 mln in 2016;
- income from electricity transmission and supply in the domestic market increased by 1.4% and amounted to UAH 54,303 mln compared to UAH 53,548 mln in 2016;
- income from thermal energy production, including the compensation for the difference in tariffs, increased by 14.9% and amounted to UAH 10,296 mln;
- income from gas and gas condensate sale dropped by UAH 1,023 mln and amounted to UAH 10,395 mln compared to UAH 11,418 mln in 2016.

Cost of goods sold

In 2017, the cost of goods sold increased by UAH 6,067 mln and amounted to UAH 111,891 mln. The increase in the cost of goods sold is linked to a rise in the expenses on process fuel, equipment, and consumables.

As of 2017, the gross profit was UAH 33,179 mln, which exceeds the respective 2016 indicator by UAH 7,188 mln. The gross margin increased from 19.7% in 2016 to 22.9% in 2017.

Operating expenses and income

As of 2017, the general and administrative costs grew by 12.1% and amounted to UAH 3,040 mln. The main general and administrative expense item is staff costs, including payroll taxes, which accounted for 65.7% of all general and administrative costs in 2017.

Selling expenses increased by 9.5% and amounted to UAH 1,575 mln, which was caused by an increase in transportation costs.

Other operating expenses dropped by 34.9% and amounted to UAH 3,742 mln. The decrease in other operating expenses is mainly due to the restoration of reserves for accounts receivable as well as the reduction in charitable donations and sponsorship expenses in 2017.

Other operating incomes dropped by 76.5% and amounted to UAH 1,260 mln.

Liabilities and equity

Since the end of 2016, the volume of credits and loans had grown from UAH 73,177 mln to UAH 81,213 mln by the end of 2017. In 2017, DTEK Group restructured a significant portion of its bank borrowings amounting to UAH 14,035 mln by signing supplementary contracts to reschedule the principal debt repayment. In addition, during the restructuring, financial liabilities amounting to UAH 6,437 mln were converted into borrowings. In 2017, the company also obtained a loan from Ukrgasbank in the amount of UAH 215 mln.

Long-term and short-term financial liabilities in 2017 decreased by 61.8%, or by UAH 11,895 mln, and amounted to UAH 7,340 mln.

As of the end of 2017, DTEK Group’s accounts payable dropped by 9%, from UAH 18,695 mln to UAH 17,015 mln. Advances received as of 31 December 2017 decreased by 3.2% and amounted to UAH 8,327 mln.

Assets

In 2017, the assets of DTEK Group increased by 8.5% compared to 2016 and amounted to UAH 152,492 mln.

The book value of non-current assets increased by 16%, to UAH 108,877 mln. Current assets decreased by UAH 3,094 mln, from UAH 46,709 mln in 2016 to UAH 43,615 mln in 2017. This change is mainly caused by an 18.9% drop in current financial investments in 2017 compared to 2016.

Cash flow

In 2017, the net cash flow from operating activities dropped by UAH 2,560 mln and amounted to UAH 23,754 mln. At the same time, the investment activity payments in 2017 decreased by UAH 684 mln compared to 2016 and amounted to UAH 15,892 mln.

Expenditures on financial activities in 2017 amounted to UAH 8,500 mln.

Corporate governance

01 Corporate governance
structure

02 Supervisory boards of
operating holding companies

03 Compliance and
corporate ethics

04 Dividend
policy

01 Corporate governance structure

The corporate governance system of DTEK Group is established in accordance with the best global standards of public international corporations, which contributes to implementing the company's strategic development priorities. This ensures not only the independence of each line of business, but also the transparency and effectiveness of decisions taken at all governance levels.



Strategic Holding DTEK B.V. exercises general management of operating holdings. At the same time, the supervisory board provides strategic management of the corresponding line of business and monitors managerial actions. Since 2008, DTEK has been putting independent directors on the supervisory boards: there are currently three of them on the operating holdings' supervisory boards. Managers regularly present reports on the execution of previously adopted decisions on in-person meetings of the board.

Management boards are the executive bodies of the companies responsible for managing day-to-day activities and implementing the strategy approved by the supervisory boards.

The quality of the corporate governance contributes to the successful development and improvement of the company's investment attractiveness. It also gives additional assurances to shareholders, partners, customers and contributes to the strengthening of the internal control system.

02 Supervisory boards of operating holding companies

Structure of the supervisory boards

DTEK ENERGY B.V.	DTEK RENEWABLES B.V.	DTEK OIL & GAS B.V.
Oleg Popov	Oleg Popov	Oleg Popov
Damir Akhmetov	Damir Akhmetov	Damir Akhmetov
Iryna Mykh	Iryna Mykh	Iryna Mykh
Sergey Korovin	Sergey Korovin	Sergey Korovin
Johan Bastin	Johan Bastin	Robert Sheppard
Catherine Stalker		
Robert Sheppard		

Corporate Secretary of the Supervisory Boards of DTEK ENERGY B.V., DTEK OIL&GAS B.V. and DTEK RENEWABLES B.V. (without voting rights) is Oleksiy Povolotskyi.



Oleg Popov
Chairman of the Supervisory Boards of DTEK ENERGY B.V., DTEK OIL&GAS B.V. and DTEK RENEWABLES B.V., CEO of SCM JSC

Graduated from the Donetsk Polytechnic Institute in 1991 and from the Donetsk State University in 1996.

From 1991 to 2000, he worked in various state institutions.

He was invited to join SCM as deputy general director in 2000. He held the office of executive director from 2001 to 2006. Oleg Popov has been CEO of SMC since January 2006. He is also the chairman of the supervisory boards of FC Shakhtar and FUJB PJSC, and is on the supervisory board of Metinvest B.V.

He approves key financial, investment and personnel decisions related to both the management company and SCM Group's assets and assesses the performance of their directors.

Damir Akhmetov
Member of the Supervisory Boards of DTEK ENERGY B.V., DTEK OIL&GAS B.V. and DTEK RENEWABLES B.V.; Chairman of SCM Advisors (UK) Limited

In 2010, he graduated from Sir John Cass Business School (City, University of London) with a MSc in Finance.

Since February 1, 2013, he has worked at SCM Advisors (UK) Limited, where he currently holds the office of Chairman.

Damir Akhmetov is also a member of the Supervisory Board of Metinvest B.V.



Sergey Korovin

Member of the Supervisory Boards of DTEK ENERGY B.V., DTEK OIL&GAS B.V. and DTEK RENEWABLES B.V.

In 1993, Sergey Korovin graduated with honours from the Faculty of Applied Mathematics and Cybernetics of the Lomonosov Moscow State University.

In 2002–2008, he worked at the Danish and Russian offices of the international consultancy McKinsey & Company. Starting in 2008, Sergey Korovin was responsible for working with telecommunications companies and served as a member of the Board of Microsoft's Russian office.

In 2010–2017, he was Director of Energy Business Development at SCM JSC.



Iryna Mykh

Member of the Supervisory Boards of DTEK ENERGY B.V., DTEK OIL&GAS B.V. and DTEK RENEWABLES B.V., Senior lawyer of SCM JSC

Iryna Mykh graduated from the law school of the Ivan Franko State University in Lviv in 1994. She later studied at the Osgoode Hall Law School, York University, Toronto, Canada.

From 1996 to 2006, she was a senior lawyer at Siletskyi and Partners, an affiliate of Squire, Sanders & Dempsey LLP, where she became a partner in 2006. From June to October 2008, she was a legal adviser to Ukrainian Agrarian Investments Group owned by Renaissance Capital. She then worked as Head of the Legal Department of Klub Syra Ltd. until June 2009. She was a senior lawyer at Voropayev & Partners law firm until 2017.

Iryna Mykh currently holds the office of senior lawyer at SCM JSC.



Robert Sheppard

Member of the Supervisory Boards of DTEK ENERGY B.V., DTEK OIL&GAS B.V., Independent Director, Chairman of IPM Advisors

Robert Sheppard graduated from the University of Wyoming in 1972 and has a Bachelor's degree in Physics and Mathematics. He graduated from the Columbia Business School in 1991 with an Executive MBA degree.

He began his career in the oil industry at Amoco in 1972. In the mid-1980s, he worked at Amoco Exploration as a vice president. He was Executive Director at GUPCO (Gulf of Suez Petroleum Company) from 1992 to 1995. He was President and General Director of Amoco representative offices in Argentina and Egypt from 1995 to 1998. He worked as Chief Operating Officer and then as President of Sidanco from 1998 until it merged with BP. From 2002 to 2004, he was Senior Vice President at BP responsible for overseeing assets in Russia. Later on, he was appointed as General Director of Soma Oil and Gas.

He is currently the chairman of consulting company IPM Advisors and Non-Executive Director of Soma Oil and Gas.



Johan Bastin

Member of the Supervisory Boards of DTEK ENERGY B.V. and DTEK RENEWABLES B.V., Managing Partner of Iveaghhouse Capital Investment Advisors

Dr. Bastin holds a MSc in Urban Planning from the Eindhoven University of Technology in the Netherlands and a Ph.D. in Regional Planning with a specialty in Public Administration and Public Finance from the Université de Montréal in Canada. He also attended the MBA programme at the McGill University in Montreal.

From 1985 to 1992, Mr. Bastin served as Resident Team Director at Harvard University's Institute for International Development (HIID) in Indonesia, providing advice to Indonesia's Minister of Finance on infrastructure investment, fiscal decentralization and privatization of state-owned companies. From 1993 to 2002, he held several senior management positions with the European Bank for Reconstruction and Development in London (UK), lastly as Business Group Director responsible for loans and equity investments in infrastructure, transport and energy utilities, municipal and environmental services and energy efficiency across the entire EBRD's geography. After the EBRD, from 2002 until 2009, Mr. Bastin was Managing Director at Darby Private Equity, a major private equity fund manager and subsidiary of Franklin Templeton Investments, providing mezzanine finance to companies in Central and Southeast Europe.

From 2009 until 2015, Mr. Bastin was CEO of CapAsia, an international fund and asset management company headquartered in Singapore and focusing on private equity investment in the infrastructure and energy sectors in Southeast and Central Asia. Since mid-2015, Dr. Bastin is a managing partner of Iveaghhouse Capital Investment Advisors, a Netherlands-based investment boutique, advising on corporate strategy, investment finance, renewable energy and M&A.



Catherine Stalker

Member of the Supervisory Board of DTEK ENERGY B.V., Independent Director

Catherine Stalker graduated from the Heriot Watt University in Edinburgh (UK) with a Bachelor's degree and obtained her Master's degree from the London School of Economics.

She began her career in 1991 with the Bank of England as a research analyst and banking supervisor. From 1995 to 2007, she worked at PricewaterhouseCoopers in Moscow and Berlin, where she was the Partner in charge of the client practice for HR management in the CEE-CIS region. She led client projects on executive compensation, organizational restructuring and human resource management.

Catherine is now based in the UK where she advises a range of companies on corporate governance, with particular focus on the effectiveness of their boards.



Oleksiy Povolotskyi

Corporate Secretary of the Supervisory Boards of DTEK ENERGY B.V., DTEK OIL & GAS B.V., DTEK RENEWABLES B.V.; Acting Director of corporate governance, risk management and compliance of DTEK LLC; lawyer

Oleksiy Povolotskyi graduated from the law school of the Kharkiv University of Internal Affairs. Later on, he obtained a Master's degree in the Scarman Centre at the University of Leicester (UK).

Before becoming a lawyer at Squire, Sanders & Dempsey LLP, an international law firm, he taught law and held the position of the director of international relations department at the Kharkiv University of Internal Affairs.

He joined DTEK in 2010. He is currently responsible for developing and maintaining a corporate governance system within the entire DTEK Group, building a centralized risk management system as well as implementing compliance functions and anti-corruption policies.

He is a member of the Board of the Professional Association of Corporate Governance and a member of the Ukrainian Bar Association.

Activities of committees under supervisory boards

Committees are consulting and advisory bodies under supervisory boards of operating holding companies that review and prepare recommendations on field-specific matters for subsequent approval by supervisory boards. Meetings of the committees are held on a regular basis.

Audit committees under the Supervisory Boards of DTEK ENERGY B.V., DTEK OIL&GAS B.V. and DTEK RENEWABLES B.V.

Chairman: S. Korovin
Committee member: I. Mykh

Main tasks:

- supervision of the internal control and risk management system, internal and external audit;
- analysis and consideration of validity and reliability of financial and other reports;
- consideration of matters related to risk management systems, internal control and compliance with applicable law;
- preparation of recommendations for the supervisory boards on candidates for auditors approving financial statements;
- evaluation of the scope and quality of audit procedures, as well as the degree of independence and impartiality of the auditor.

Labour Safety and Environmental Protection Committees under the Supervisory Boards of DTEK ENERGY B.V. and DTEK OIL & GAS B.V.

Chairman: R. Sheppard
Committee member: I. Mykh

Main tasks:

- identification of occupational safety and environmental protection risks, development of measures to minimize them;
- development of a motivation system for the staff to observe occupational safety rules;
- carrying out trainings on emergency elimination at the enterprises of DTEK Group.

Committee on appointments, remunerations and corporate governance under the Supervisory Board of DTEK ENERGY B.V.

Chairman: C. Stalker
Committee member: O. Popov

Main tasks:

- assistance to managers in raising the effectiveness of personnel management and corporate governance systems;
- monitoring and preparation of recommendations on the company's non-market strategy (social initiatives and partnerships, reputation management, GR) for managers;
- monitoring and preparation of recommendations on implementing the best global practices in corporate governance for managers, as well as motivation, assessment, remuneration and development of top managers;
- preparation of recommendations on appointing top managers for the supervisory board;
- preparation of recommendations on the structure of the supervisory board and its committees;
- monitoring compliance with the basic principles and legislative requirements of corporate governance in the company's jurisdictions, as well as with corporate governance standards of DTEK Group.

03 Compliance and corporate ethics

DTEK Group conducts its business openly and transparently, in full compliance with the regulatory requirements of the jurisdictions of its enterprises and companies. DTEK's unconditional priority is ethical business conduct with zero tolerance for corruption.

DTEK openly declares its anti-corruption standards and pays special attention to the development of compliance culture. DTEK's anti-corruption programme was highly appreciated in the Transparency in Corporate Reporting study conducted by the experts of Transparency International Ukraine*, an independent international organization.

In 2013, the company enacted the Code of Ethics and Business Conduct which established the principles of relations with authorities and counterparties, as well as those of preventing conflicts of interest among employees. The requirements of the Code and the compliance policy are implemented by the compliance management department. The members of the supervisory boards and the officers of holding companies actively support the department's initiatives, which contribute to strengthening the compliance culture. In particular, in December 2016, the supervisory boards of all operating holding companies approved a compliance function strategy that introduces new approaches in the following areas:

- **Approval of regulatory documents.** Rules and procedures require the compliance management department's participation in the processes of harmonizing the companies' regulatory documents: regulations, policies and procedures.
- **Corporate investigations.** The compliance management department participates in corporate investigations on various report categories (as part of the investigation team or as an expert).
- **Risk assessment of conflicts of interest among employees.** Self-disclosure of potential conflicts of interests among employees was implemented. It is conducted when hiring and promoting an employee to another position or enterprise of the DTEK Group. The company annually runs a conflict of interest disclosure aimed at minimizing the risks of such situations.

- **Training employees in ethical and anti-corruption standards and the basics of sanctions compliance.** Since 2017, these areas have been included in the training programme for all of the company's employees. An e-course has been developed for distance learning. In addition, trainings are conducted monthly for managers and employees exposed to high compliance risk.
- **Check of counterparties, assessment of corruption and sanctions risks.** A new compliance questionnaire has been developed to identify counterparty risks within the framework of KYC (know your client) procedures and continuous monitoring of transactions using a risk-based approach. All contracts with counterparties include an anti-corruption and anti-sanctions clause, which is common practice in international companies but not widely used in domestic business so far. This clause reflects changes in the risk assessment and was developed taking into account the recommendations of the national legislation, international principles and legislation, best foreign practices and the experience of sanction enforcement.
- **Approval of contracts where a counterparty and/or the essence is associated with increased compliance risk.** It is required that donation transactions in the field of sustainability, charity, gifts, mergers and acquisitions be approved by the compliance management department.

The company continues operating an automated system of accounting for and approval of business gifts and business hospitality. The Code of ethics and business conduct, as well as the company's internal rules, set limits to hospitality and giving and accepting business gifts.

* Transparency International Ukraine is a representative office of the international anti-corruption non-governmental organization Transparency International. The study was conducted to assess the implementation of compliance policies in the largest companies of the country and was published in 2017. The study looked at websites and legal documents of 50 private companies and holding companies, as well as 50 state companies. <https://ti-ukraine.org/research/prozorist-korporatynoi-zvitnosti/>

04 Dividend policy

DTEK's dividend policy is based on maintaining the balance between the need to invest in the development of production facilities and the shareholders' right to participate in the distribution of the company's profits. Such approach is the determining factor contributing to the long-term growth of the shareholder value of DTEK.

Sustainability

01 Sustainability

02 Society

03 Employees

04 Occupational health
and industrial safety

05 Environmental
protection

06 Sustainable
power engineering

07 Annexes 1-3

Sustainability



"Energy-Efficient Schools: New Generation" project: energy efficiency training for schoolchildren

The training session was held in

858 schools in 23 regions of Ukraine

in the 2017/2018 academic year

+11 times by 2016

"Your Hometown Begins with You" project: development of social activity and initiative among the residents

16,000 residents

participated directly

+2.2 times by 2016

5 key areas of social partnership programmes

1. Energy efficiency in the utilities sector
2. Health care
3. Development of socially-important infrastructure
4. Increasing local communities' activity
5. Development of business environment



As part of social partnership, DTEK Group supports projects that create more comfortable living conditions in the cities located in the areas of its enterprises

14 utility networks (heat, water and gas pipelines)

41 parks and recreation areas

231 children's playgrounds and sports grounds

5 sports facilities

126 educational institutions

8 medical facilities and rehabilitation centers

were created, repaired, landscaped and equipped in 2017



01 Sustainability

Sustainability Objectives and Management

Sustainability objectives are integrated into the business strategy of the company. DTEK openly informs stakeholders about important issues of its development. As the company's policy pre-scribes, all actions and resolutions match the society interests.

In its policy, the company focuses on the rational use of resources and reduced impact on environment, keeping its personnel health and improving industrial and occupational safety standards, observance of the corporate ethics standards and fulfillment of its obligations to the employees and society. With this purpose, DTEK Group improves its production and management processes, introduces the best standards of industrial and environmental safety, invests in the employees' development and occupational safety, and implements the best international practices for social development of communities.

In its activities, DTEK Group is guided by the Sustainable Development Policy of SCM Group and DTEK's Corporate Social Responsibility Policy.

In 2017, company continued working on the following:

- Creating a system to preserve the health and life of employees and extend their time in employment
- Creating conditions for sustainable development and improving the quality of life of local communities in the regions where the company operates
- Enhancing energy awareness of Ukrainian organizations, companies and citizens
- Securing efficient power generation, transmission and supply
- Compliance with the best practices in the industries regarding efficient use of energy resources
- Compliance with the highest international standards of business ethnics and the best business practices.

DTEK's main principle is to maintain a stable social partnership with the communities and local self-governance bodies of regions operations, to make those towns more comfortable to live in. The Sustainability Committee of DTEK and Regional Policy Directorate of DTEK Energy plan and implement the sustainable development projects.

The Committees' tasks are:

- Identification of challenges and approval of social development strategies for the regions of operations
- Approval of reform plans of social facilities on the balance sheet of DTEK Group
- Development of the occupational medicine system
- Implementation of the environmental protection strategy
- Consideration of non-production issues that can significantly affect fulfillment of the company's business targets.

The Directorate' tasks are:

- Planning, implementation, monitoring and assessment of efficiency of social projects
- Cooperation with stakeholders
- Development of corporate social responsibility in Ukraine
- Participation in Ukrainian and international sustainable development initiatives.

Stakeholders:

- Employees and their families
- Citizens in areas where the company operates
- Non-governmental organizations
- Local authorities
- Experts and analytical centers
- Academic circles and scientific community
- Media
- Population of Ukraine as a whole.

Cooperation with stakeholders is an important component of sustainable development. The company adheres to the principle of information transparency and provides the stakeholders with information about its activities. Partnership and constructive dialog with stakeholders are conducted on a systematic basis, which allows them to receive timely information about their interests and expectations.

Membership in Associations, International and National Organizations

DTEK is a participant of the United Nations Global Compact network and a member of the Global Compact Alliance in Ukraine.

DTEK is one of the founders of Energy for Society, a global social initiative of energy companies.

DTEK is a member of CSR Centre, an expert organization that promotes corporate social responsibility to achieve comprehensive and profound changes in Ukraine.

DTEK is a member of the European Business Association and the American Chamber of Commerce, the European-Ukrainian Energy Agency, and the U.S. — Ukraine Business Council.

DTEK is a member of professional associations: the European Association for Coal and Lignite (EURACOAL), the Union of the Electricity Industry (EURELECTRIC), European Federation of Energy Traders (EFET).

Key Events and Public Recognition in 2017

February

In Halych central hospital, Ivano-Frankivsk region, with the participation of the President of Ukraine, a new building was opened, for which the company acquired an anesthesia machine as part of the social partnership programme.

April

For the first time in Kurakhove there was a large "Come on, let us play!" football tournament.

In Lviv, with the support of the company, the Forum for Cooperation and Partnership was held — a landmark dialog platform between local government bodies, local executive bodies, public and international organizations, business, international donors.

Dobropillia Educational Complex No. 1 was the first educational institution in Ukraine where Blower-Door Test was conducted, a technology that accurately determines the places of heat loss for the subsequent thermal modernization of a building.

May

The "Energy-Efficient Schools: New Generation" project won the national contest of corporate social responsibility projects and was recognized as the best social project in Ukraine contributing to the achievement of the UN sustainable development goal No. 12 "Ensuring Sustainable Consumption and Production Patterns".

June

42 territories where the company operates were involved in the "Your Hometown Begins with You" project.

September

The "Energy-Efficient Schools: New Generation" project is being implemented at national level. All Ukrainian schools received free access to the online platform energyschool.org.ua where the students can take two courses on energy efficiency and take part in the Smart House game.

November

Zelenodolsk and Dobropillia became the first cities in Ukraine to join the UN Global Compact.

December

The performance of the development programmes and social and economic situation was evaluated using the City Progress Index methodology, which was developed jointly with Deloitte and allows development of a road map for the sustainable development of communities. Researches were carried out on 6 territories where the company operates — Aleksandrovskiy and Dobropilsky districts, Dobropillia, Belitskoe, Belozerskoe, Novodonetskoe (Donetsk region).

DTEK follows the principles of sustainable social development and is a party to the UN Global Compact. Under the social partnership programmes with the territories where the company operates, the projects are implemented ensuring the achievement of the goals of the UN Global Compact.



Ensure healthy lives and promote well-being for all at all ages

In 2017, 14 projects were implemented aimed at promoting a healthy lifestyle. This allowed the opening of 90 sport facilities (see the Society for the details).



Ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all

The "Energy-Efficient Schools: New Generation" project reduced the inequality within city and village schools in access to modern teaching methods due to the creation of an open online platform energy-school.org.ua. In 2015 — 4% of the total quantity of village schools participated in the project and in 2017 — 36%. The transition to online platform ensured the increase in number of the schools participating in the project from 79 in the 2016/2017 academic year to 858 in the 2017/2018 academic year. Employees of the company under the development of professional competencies are provided with the free self-education in the corporate university — DTEK Academy (see the Society, Employees for the details).



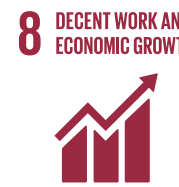
Ensure availability and sustainable management of water and sanitation for all

The general principle of water resources management applied by all companies is economical and rational utilization. Enterprises use both circulating water supply systems and reuse of water (see the Environmental Protection for the details).



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

The company develops the renewable business. The Botievo WPP, with a capacity of 200 MW, generates more than 600 million kWh per year. The Tryfanivka SPP built in 2017 will generate 11–12 million kWh per year. This is enough to provide more than 200,000 households with electricity (see the Production operations, Investment Projects for the details).



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

In order to develop the business environment in communities with a monoconomy, the preferences are given to local contractors. This approach was implemented in 10 areas where the company operates. In addition, with a view to develop entrepreneurship, an infrastructure has been created and maintained to provide consultations and technical assistance in drawing up business plans and fund raising for the regions. In 2017, despite unstable social and economic conditions, the company raised the salaries to the employees, a social package was preserved. The total amount of social benefits for the employees, including pensioners and veterans, was UAH 494 million (see the Society, Employees for the details).



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

In 2017, the projects were implemented to improve the quality of socially important infrastructure: 14 utility networks are modernized, 41 recreation areas are landscaped, 134 medical facilities and educational institutions are repaired, 231 children's playgrounds and sports grounds are open. While implementing the projects, the company uses/provides for use modern and innovative technologies/equipment (see the Society, Sustainable Energy for the details).



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

Programmes of social partnership with the areas where the company operates are aimed at ensuring sustainable development and cover 55 areas. The programmes are implemented in five key areas: energy efficiency in the utilities sector, health care, supporting socially-important infrastructure, developing business environment and increasing local communities' activity. The company annually implements projects in these areas (see the Society for the details).



Ensure sustainable consumption and production patterns

6 to 11 grade schoolchildren are trained on rational consumption of energy resources in everyday life and master the acquired skills through the implementation of projects on energy efficiency under the "Energy Efficient Schools: New Generation" project. Energy-efficient activities, which are implemented by schools under the training programme can reduce electricity consumption to 20.5%. DTEK ESCO carried out 14 energy-efficient projects for the enterprises of steel, energy and coal industries employing the energy service mechanism. As a result of completed projects, energy consumption was reduced by 35–90%. At DTEK Energy TPP, the energy management system is being implemented under the international standard ISO 50001:2011. This will unify approaches to power saving and bring them in line with international practice, increase the efficiency of energy resources, and improve the culture of energy saving. Retail customers were offered a comprehensive solution for rational energy consumption — a set of energy-efficient products and services Smart WATT (see the Society, Sustainable Energy, and Investment Projects for the details).



Take urgent action to combat climate change and its impacts

In 2017, the company became a member of the working groups on the implementation of Directive 2003/87/EC requirements to the establishing of a scheme for trade in greenhouse gas emissions. The participation in the system of monitoring, reporting and verifying greenhouse gas emissions has been initiated. The pilot project is being implemented at DTEK Zaporizka TPP (see the Environmental Protection for the details). Reducing greenhouse gas emissions is facilitated by the implementation of renewable energy projects. Thanks to the operation of Botievo WPP (200 MW capacity) and Tryfanivka SPP (10 MW capacity), CO₂ emissions were reduced by 680,000 tonnes in 2017. Further reduction of emissions is facilitated by the projects for construction of Prymorsk WPP (200 MW) and Nikopol SPP (200 MW).



Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Since 2013, the distribution enterprises of the company continued implementing programmes for ornithological safety of electric networks. Coal mining enterprises of the company perform compensatory forest planting to restore plantations disturbed during mining operations. Also biological re-cultivation of lands is carried out. In 2017, 13 hectares of forest were planted and 23.86 hectares of land were reclaimed.



Strengthen the means of implementation and revitalize the global partnership for sustainable development

The company develops partnership relations with international donor organizations, state funds for implementation of joint projects in the field of sustainable development in the areas where the company operates. In 2017, 66 partnership projects were supported (see the Society for the details).

The UN Global Compact includes 17 goals



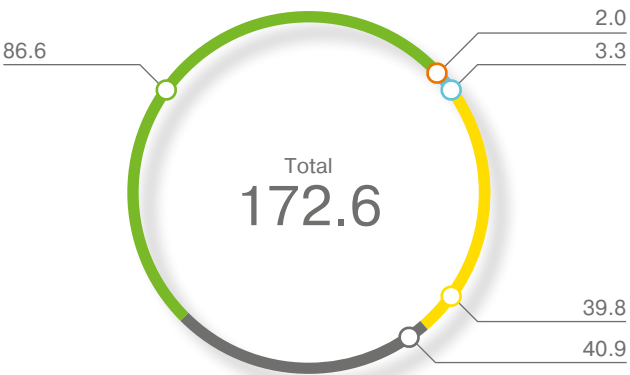
02 Society

Social Partnership Programmes

Since building trust with the society is a prerequisite for the company's business, it pays great attention to social partnership with communities. The main goal of the social partnership programmes is to ensure sustainable social, economic and cultural development of communities by improving the quality of life of people in the areas where DTEK Group operates.

Instruments of sustainable development of the communities are the strategies for the territories' social and economic development, which are developed on the basis of the "road map" principle. This allows to offer comprehensive solutions for the most acute problems. This approach allows the community to raise funds for the implementation of social projects – both from business and government funds, and from international donor organizations.

Investments in the directions of social partnership programmes in 2017, UAH mln

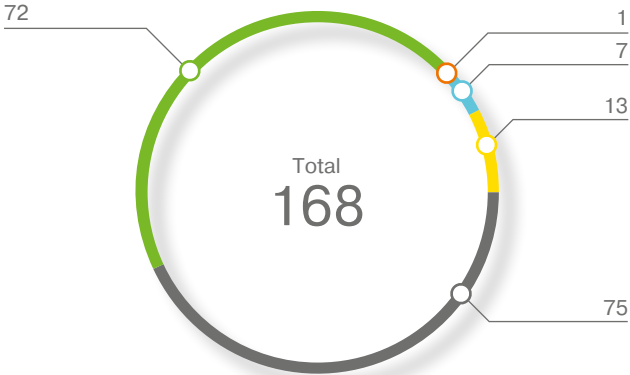


- Energy efficiency in the utilities sector
- Development of socially-important infrastructure
- Increasing local communities' activity
- Health care
- Development of business environment

Social partnership programmes consist of interregional projects and local projects, which are designed taking into account the specifics of each community.

Strategies are developed jointly by business, local authorities, experts, and the public, whose representatives form committees for managing and implementing strategies. Then the strategies are approved by local authorities, and the committees monitor their implementation. This allows involvement and uniting of the population in solving acute and urgent issues of sustainability.

Number of projects implemented under the social partnership programmes in 2017, units



- Energy efficiency in the utilities sector
- Development of socially-important infrastructure
- Increasing local communities' activity
- Health care
- Development of business environment

From 2007 to 2017, within the framework of social partnership programmes, about 2,000 projects were implemented, in which DTEK Group invested more than UAH 1,039 million.

"Your Hometown Begins with You" Interregional Project

The main goal of the project is the development of public activity and initiative among the residents, involving them in solving the problems of the areas. The company has been implementing the project for six years. Under the project, every resident has the opportunity to contribute to improving the quality of life of his district, city, village. Supporting the initiatives of the residents, the company helps everyone to realize their importance in the sustainable development of the community.

The "Your Hometown Begins with You" project consists of a competition for mini-grants, for which residents can submit their project for the improvement of local facilities. The selection of the best projects involves local communities through the website of the social partnership programme <http://spp-dtek.com.ua/>, where an online voting is conducted for each project. In 2017, 64,200 residents took part in the voting.

In addition, the evaluation of the best projects is carried out by a competitive commission, which included the head of the UN Global Compact in Ukraine, representatives of the company, the media, and athletes. The commission identified five best projects, which received additional grants in the amount of UAH 20 to 100,000.

The winners of the national stage were:

- "HUB TOBIG "Greenhouse of public and business ventures of the city" — creative space for supporting business projects and innovations in the social sphere (Pavlograd, Dnipropetrovsk region)
- "Heat insulation of joints of concrete plates" — four apartment building co-owners associations are united to conduct heat insulation in residential buildings (Belozerskoe, Donetsk region)

- "Youth Center is a place for the implementation of challenging ideas!" — the center's activities are aimed at realizing the potential of the new generation, the development of creativity and social activity (Bilytske, Donetsk region)
- "A guest at a fairy tale" — cultural and entertaining tourist space for guests and residents of the district (Halych district, Ivano-Frankivsk region)
- "Village stadium" — landscaping the stadium and popularizing a healthy lifestyle (Zaozernoe, Vinnytsia region).

In 2017, the project was expanded by a contest of ideas for a large grant — this allowed residents to submit projects to improve the city space. 154 ideas were submitted by the communities in 15 pilot territories. The contest commission selected the best ideas of each of the territories, and then the working group developed and implemented the project. In cooperation with the local communities, the central town square was opened in Ternovka, sports ground in the skate-land-park in Pavlograd, winter sports ground in Pershotravensk, a football field in Schas-tiye; the central street in Dobrotvir is landscaped, the children's playground in the city park of Dobropillia is comprehensively landscaped; a space for recreational facilities for the residents of Novodonetskoe is arranged; the hall of the Community Center in Belozerskoe was renovated.

Development of the "Your Hometown Begins with You" project, mini-grants

Indicators	2013	2014	2015	2016	2017
Number of settlements that took part in the project	18	19	15	38	42
Number of applications submitted for the consideration by the commissions	262	401	396	500	539
Number of winning projects	105	167	140	210	268
Number of residents who took part in the project	5,600	6,535	5,918	7,222	16,000
The maximum size of the mini-grant from the company, UAH	20,000	20,000	30,000	30,000	50,000
Fund raising by the communities, UAH mln	1.4	1.2	2.0	2.3	6.0

"Energy-Efficient Schools: New Generation" Interregional Project

Energy-efficient schools: new generation, energyschool.org.ua is an online educational programme on energy efficiency for schoolchildren of 6–11 grades aimed at fostering environmental values, responsible attitude to energy consumption and formation of skills in rational energy use. Two training courses developed by the company under the project – Fundamentals of Energy Saving and Energy Consumption, and The ABC of Housing and Utilities Management – were ratified by the Ministry of Education and Science of Ukraine. In addition, they participated in the Smart House online game as well as in social and creative contests with the participation of the parents.

In 2017, 79 schools from 32 settlements of Vinnytsia, Donetsk, Dnepropetrovsk, Ivano-Frankivsk, Zaporozhye, Lugansk regions and Kiev took part in the project. This allowed the project to cover 41,300 people — students, parents, and teachers.

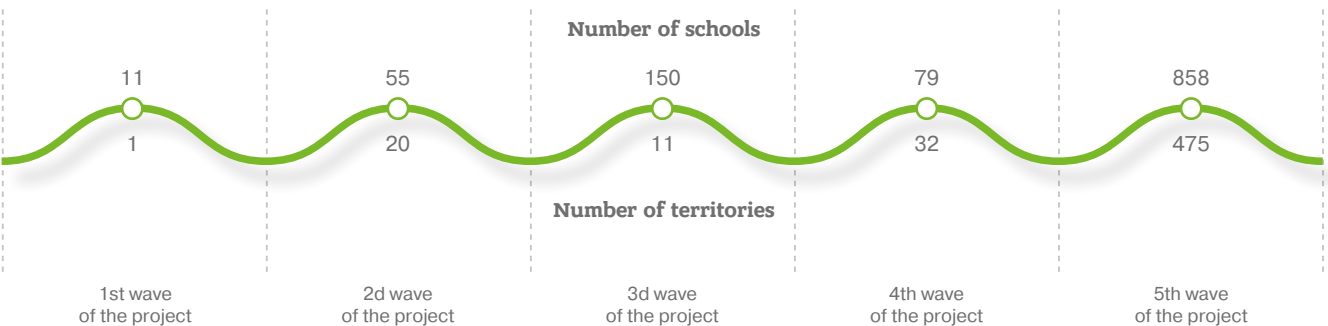
For the acquired skills consolidation, an interregional contest is held, in which students develop energy-efficient measures for their school aimed at saving and rational use of heat and electricity. The best projects of schoolchildren receive mini-grants in the amount of up to UAH 50,000. In 2017, the company allocated grants to 43 schools for the implementation of projects. The introduction of energy-efficient measures allowed schools to reduce electricity consumption by 170,000 kWh. In general, electricity consumption in schools involved in the project is reduced by 20.5 %.

It should be noted that for the first time under the "Energy-Efficient Schools: New Generation" project, the investments were

attracted from other donors. The Heat Keepers company allocated UAH 2.3 million for the insulation of the roof of the school No.1 in Dobropillia. First, the school conducted special studies using Blower-Door Test — a technology that accurately determines the level of heat in the building and the place of air losses. After this, a set of measures for the insulation of the loft with Icynene eco foam. According to the experts' calculations, in the next heating season, the heat savings will be about 30 %, which will significantly reduce the load on the school boiler room and, as a result, will reduce the CO₂ emissions.

Another innovation of the project in the 2017/2018 academic year was the creation of virtual interregional classes to study the ABC of housing and utilities management and participation in the Smart House game. High school students from Burshtyn and Zelenodolsk are united in three interregional classes.

Development of the "Energy-Efficient Schools: New Generation Interregional" project



In 2017, an open access to energyschool.org.ua was provided for all schools. This brought the project to the national level: 858 schools are registered for training courses in energy efficiency courses in 2017/2018, 2018/2019 academic years. Thus, the geography of the project has expanded significantly and covers 475 settlements in 23 regions of Ukraine, including regional centers.

The educational online platform energyschool.org.ua allows to reduce the inequality in access to modern methods of teaching between city and village schools. In 2015, 4 % of the total quantity of village schools participated in the project and it is increased up to 36 % in 2017.

The project's methodological and organizational support is provided by the Municipal Development Institute All-Ukrainian Charitable Organization. According to the Institute's calculations,

every 1,000 schools participating in the project can save up to 5,200 MWh annually, which is equivalent to a 4,742 tonne reduction in CO₂ emissions.

5 Key Areas of Social Partnership Programmes

DTEK Group implements social partnership programmes in 55 areas where the company operates. The social investments are allocated in five key directions: energy efficiency in the utilities sector, health care, supporting socially-important infrastructure, developing business environment and increasing local communities' activity.

1. Energy efficiency in the utilities sector

Energy efficiency is the driver of sustainable economic development in Ukraine. DTEK Group invests in projects that increase utility-sector energy efficiency and social infrastructure, and upgrade of street lighting in cities and settlements.

Important condition for improving the quality of the communities' life is upgrade of heat supply systems and the implementation of energy-efficient measures of socially important facilities — kindergartens, schools, hospitals, public places.

In 2017, the efforts in the field of heat supply were directed to purchase equipment and materials for repair work. So, in **Pershotravensk** a boiler was purchased for the "Pivdenna" boiler house which heats 70 % of the residential properties and social facilities. In **Zelenodolsk**, heat meters have been installed for 7,000 residents and consultations have been held on the rational use of energy resources. In the cities of **Greater Dobropillia**, the company, in partnership with the United States Agency for International Development (USAID), supported the opening of the "Resource Center of apartment building co-owners association on lean energy issues" under the "Municipal Energy Reform in Ukraine" project. For **Botievo united territorial community**, a gas fiscal metering instrument was installed, which allowed to connect the settlement to the gas distribution system "Zaporozhgas". The project made the residents feel comfortable during the autumn-winter heating season. In addition, the company installed a solid fuel boiler and reconstructed the heat supply system in the general education school in Botievo.

Energy-efficient measures (replacement of windows, door blocks, in some cases — replacement of radiators, installation of new pipelines) were carried out in community halls of **Mikhailovka** in Vinnytsia region, **Silets** and **Polonichnaya** in Lviv region, in schools No. 1 and No. 2, kindergartens "Ivushka", "Rosinka" in **Schastiye**, Lugansk region, in schools No.1 and No.2, kindergarten "Beryozka" in **Petropavlovka** of Lugansk region, **Stepanovsk** school of Donetsk region.

Street lighting remains an acute problem for many territories: it is either absent or requires significant modernization. An unsatisfactory state of lighting negatively affects the level of personal safety, and due to the poor condition of roads, it increases the risk of injury, especially during the winter. To partially solve this problem, there were financed the projects on street lighting modernization in 14 areas where the company operates. Main streets and places in the villages of **Aleksandrovsy, Dobropillia, Halych** and **Kamenka-Bugsky districts** (Donetsk, Ivano-Frankivsk and Lviv regions) were lighted. In **Burshtyn** (Ivano-Frankivsk region), lighting was installed in the central city square and in the street, in **Kurakhovo and adjacent settlements** (Donetsk region) for the first time in many years street lighting appeared, in **Pershotravensk** and **Ladyzhin** (Dnipropetrovsk and Vinnytsia regions) main streets were lightened.

2. Health care

DTEK Group pays great attention to the issue of health care so that the employees of its enterprises and local residents receive quality medical care in time.

The greatest projects of 2017:

- **Nimshin (Ivano-Frankivsk region):** major repairs of the premises of the field-midwife station, serving 500 residents. Now the station is provided with cold and hot water supply, essentials are purchased, the roof has been repaired, and a ramp has been installed.
- **Halych (Ivano-Frankivsk region):** for the surgical department of the regional hospital, an anesthetic and respiratory apparatus was purchased and installed.
- **Kamenka-Bugskaya (Lviv region):** 35 new windows were installed in the central district hospital.
- **Roya, Kurakhovo (Donetsk region):** a field-midwife station, which serves about 2,500 residents, is equipped with furniture and facilities.
- **Myronivsky village (Donetsk region):** an outpatient clinic which serves about 8,000 residents, received medical facilities, an ECG recorder Heaco 1201.
- **Schastiye (Lugansk region):** a device for radio wave therapy "Surgitron EMC" with dermatological electrodes was purchased for a city hospital that serves 30,000 people.
- **Shishatsky district (Poltava region):** modernization of the Shishatskaya district hospital is continued. In 2017, the roof of the children's department was overhauled and modern medical equipment was purchased, which greatly facilitates the examination and treatment of patients. In particular, a telecard, a contactless indicator of intraocular pressure, ECG recorder, a coagulator, concentrators for oxygen saturation during resuscitation, a compressor inhaler and other modern devices have been purchased.
- **Vinnitsa:** a colonoscope and a bronchoscope were purchased at the Regional Children's Clinical Hospital. A mobile ultrasound system was purchased for the regional clinical oncology dispensary.

3. Development of socially-important infrastructure

The company supports the projects aimed at improving the quality and accessibility of social services, addressing major problems of vital infrastructure elements, improving affordability of education and leisure.

The greatest projects of 2017:

- Documentation has been prepared that allows the use of bottom ash materials in road construction. The Shulgin State Road Scientific and Research Institute (with the participation of DTEK and PPV Knowledge Networks) developed "Methodological recommendations for the use of bottom ash materials of DTEK Dobrotvirsk TPP in road construction". The National Aviation University conducted research and developed the "Expert opinion on the use of bottom ash of DTEK Dobrotvirsk TPP while repairing and constructing roads and airfields", which are coordinated with the Shulgin State Road Scientific and Research Institute. The design and estimate documentation for the implementation of the pilot project on the road section of Perekalki — Rogaly — Dobrotvir railway station — Matyashi has been developed".
- **Dobropillia** (Donetsk region): works on covering the football field have been completed.
- **Schastiye** (Lugansk region): the main auditorium of the Community Cultural Center for 500 people has been renovated and equipped. All ceremonial events of the city are held in the Community Cultural Center.
- **Silets** (Ivano-Frankivsk region): the public space for leisure of 120 square meters area was created and landscaped.
- **Zaozerno** (Vinnytsia region): the park-exhibition is landscaped.
- **Burshtyn** (Ivano-Frankivsk region): for Doverie Center — communities of people with disabilities — comfortable conditions have been created due to major repairs.
- **Iverskoe** (Donetsk region): reconstruction of water supply wells and cleaning of sewage system were carried out.
- **Novoukrainka** (Donetsk region): a pumping station was purchased and installed for pumping water into the village.
- **Trifonovka** (Kherson region): major overhaul of artesian well and water intake for uninterrupted water supply of 700 villagers was carried out.
- **Annovka** (Donetsk region): a pavement with a length of 1 km was laid.
- Repairs are carried out, a material and technical base is improved for children's and school educational institutions, cultural centers in the villages of **Dobropilsky, Aleksandrovsky, Kamenka-Bugsky districts, Vinnytsia region, Dobrotvir, Myronivsky, Kurakhovo.**

4. Increasing local communities' activity

Promoting development of public, cultural and sport initiatives is important for the company, for changes in the quality of life depend on activity and initiatives of each particular resident.

The greatest projects of 2017:

- The first Greencity Sport Fest sports festival was held in **Zelenodolsk**, where a rock concert and the battle of DJs, a graffiti championship, streetball, beach volleyball and football competitions, extreme sports were organized. The festival was attended by 1,600 people.
- In **Dobrotvir** there was held the sports and athletic meeting for children and young people called "United Country. East and West Together". Football Spartakiads took place among the cities where power plants operate, which were attended by six teams, and the winners received valuable prizes. In total, the tournament attracted 1,500 people.
- Support was provided to **FC "Burshtyn", Ladyzhin** school of boat racing, creative teams of the Belozerskoe Community Cultural Center.

In 2017, the company allocated UAH 4.1 million for the development of the cultural sphere, supporting the local events and the development of cultural traditions of the communities.

5. Development of business environment

The company's enterprises primarily work in single-industry towns. For the development of economically self-sufficient communities, the company supports small and medium businesses to stimulate the creation of new jobs and attract investors to the regions. This contributes to the growth of tax revenues to local budgets.

In order to economically develop the territories where DTEK Group enterprises operate, in 2017 a list of preferences for local contractors was approved for the purchase of products and services. This approach is aimed at creating competitive opportunities for small and medium businesses, as the company purchases centrally and through tender procedures, in which large companies from all over the country participate. In 2017, the preferences were introduced in 10 pilot areas of Donetsk, Ivano-Frankivsk and Lviv regions.

In particular, when evaluating suppliers' proposals, local contractors can count on 5 additional points out of 100. Also, they are given the opportunity to review prices after bidding (individual re-bidding), to sign a three-year contract with the possibility of reviewing the price, to pay an advance payment for the procurement of materials required for the execution of the order. The preferences are granted if the local contractor provides jobs to local residents and it is a payer of taxes to the local budget.

Business Development and Support Projects:

- 9 local economic development agencies continued working with the representatives of small and medium businesses, organizing information meetings with donor organizations, advising in the preparation of business plans and providing technical support to business start-ups for the first-time entrepreneurs. In 2017, 203 jobs were created in **Dobropillia, Dobrotvir, Ladyzhin and Zelenodolsk.**
- In the cities of **Greater Dobropillia** there are four modern commercial pavilions equipped to support local producers.
- **Kamenka-Bugsky Industrial Park** with an area of 24.5 hectares is included in the register of industrial parks of Ukraine.
- In **Kyiv**, the company supported the iHUB-reopening project. iHUB is a network of innovation and entrepreneurship centers (Ukraine, Georgia, Moldova) that provide access to training, the community, investors and the workplace for start-ups. iHUB is the official UNESCO-UNEVOC center in Ukraine, which conducts more than 250 events per year.

Corporate Culture and Volunteering

The main goals of DTEK Group's corporate volunteering are creating conditions for employees' self-fulfillment, promoting corporate culture and making a practical contribution to the development of local communities. This implies voluntary participation of its employees in socially-important projects with support of the company.



DTEK is guided by five values: professionalism, responsibility, pursuit of excellence, unity and openness. At the heart of values is the philosophy of the company: "Be the best in everything that we do". The most important task of the company's corporate culture is to strengthen the value kernel, which is common for all enterprises.

The company cares about improving the social climate of the teams and it is working on building a system for continuous diagnosis of employees' moods. A research of social climate is carried out annually and 68,000 employees took part in it in 2017. Quantitative results are supplemented by in-depth interviews and focus group studies. The obtained data form the basis for planning activities in the field of personnel management, building internal corporate communications and are an argument for making managerial decisions.

In 2017, the company continued to implement initiatives aimed at supporting internally displaced persons from the war territories.

The company annually develops healthy lifestyle and environmental protection initiatives. Such initiatives have already become a tradition. For example, about 3,800 volunteers took part in the annual Clean City event in 27 areas where the company operates. It was collected 1,060 cubic meters of garbage and planted 1,457 plants, which were purchased with funds saved due to efficient use of electricity and water. The volunteers also repaired attractions and benches, planted flowers.

03 Employees

DTEK Group's HR management system corresponds to the Ukrainian legislation, industry regulations and internal regulatory documents. The HR management system regulates employees' recruitment, remuneration, career advancement, training and development.

DTEK respects their right to set up trade unions and other communities that represent their interests. The company cooperates with these authorities and holds an open dialog with them. It ensures that potential problems are identified and solved in a timely manner.

Collective agreements are another guarantee of employees' protection. The company pays special attention to compliance with industry and collective agreements. The agreements provide for conditions of labor remuneration, social benefits, payments to retirees, and the company's occupational safety and personnel training liabilities. The company executives yearly report on fulfillment of agreement conditions.

The company is in a constant dialog with its employees. For that, enterprises use several mechanisms to make the employees' voices heard at the top:

- Trade unions' cooperation and regular meetings with trade union leaders
- Communication meetings between the staff and heads of enterprises and relevant directorates
- Communication meetings between enterprise heads and opinion leaders
- Personal reception of employees by the director of the company (the so-called "director's hour") and HR manager
- Regular HR-days, when HR managers meet with employees directly at workplaces and answer questions, inform about the projects, initiatives, HR-activities, and provide feedback on the status of resolving the issues raised at previous meetings

- Social surveys of employees
- Collecting employees' requests and suggestions.

The main aims of the company's HR policy are as follows:

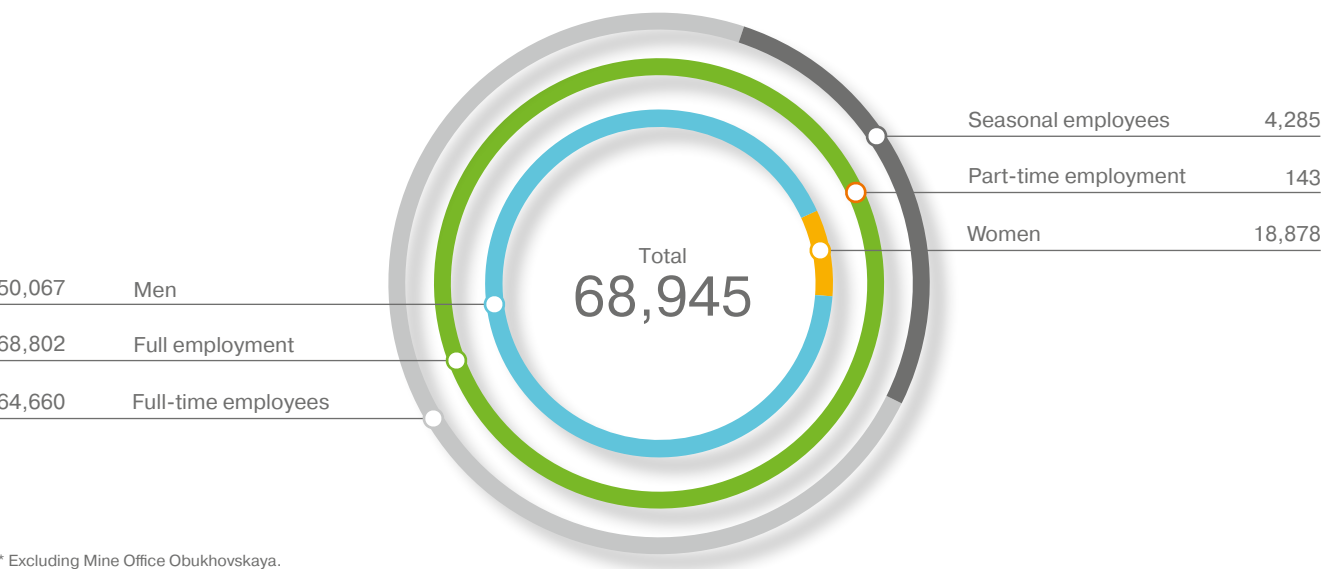
- Attracting the most talented employees in the labor market
- Providing competitive remuneration and incentives to employees
- Developing employees' potential
- Establishing a single corporate culture.

Such a system is an effective tool that leaves open opportunities for the employees' initiatives.

Priority tasks in HR:

- Coverage by SAP HCM of all the company's enterprises for the implementation of the "Creation of Unified HR Settlement Center" project
- Implementation of the "Generation" project aimed at providing enterprises with personnel; staff retention, development and motivation. The project envisages the creation of tools for forecasting the needs and sufficiency of labor resources, taking into account the quality and time factors
- Implementation of measures on improving the social climate to increase the level of loyalty and involvement of employees.

Total number of personnel of DTEK Group in 2017, people*



* Excluding Mine Office Obukhovskaya.

Employee Engagement

Planning of the need for the employees, recruitment of personnel, as well as HR management is carried out in accordance with the legislation of Ukraine, collective agreement, recruitment provisions, internal labor regulations, instruction "On the Procedure for Execution of Work Incapacity Certificates" and "On procedure for scheduling of vacation leaves and granting leave to the employees."

Internal selection of candidates is primarily used when recruiting personnel for vacant positions: vacancy announcement for the employees of the company's enterprises, obtaining CVs from the applicants, interviews for compliance with qualification criteria and needed personal qualities. External candidates are

selected through employment centers, Internet recruiting on job search websites, etc.

When recruiting, the company takes into account the applicants' appropriate education level, and whether they have the necessary knowledge, skills, experience and competence level.

Number of newly recruited employees by DTEK Group in 2017, people

Gender breakdown		Age breakdown		
Men	Women	Up to 30 years	Aged from 30 to 50	Aged over 50
5,997	1,682	2,838	3,943	901

DTEK Group enterprises have a significant impact on employment in the regions of their activities. The enterprises provide stable wages, social package, adherence to the internal working schedule, etc.

Payment, Remuneration and Incentives

Personnel performance is annually evaluated in the first quarter of the year; this evaluation determines the amount of remuneration, objectives for the next year, training and development programmes, and career advancement.

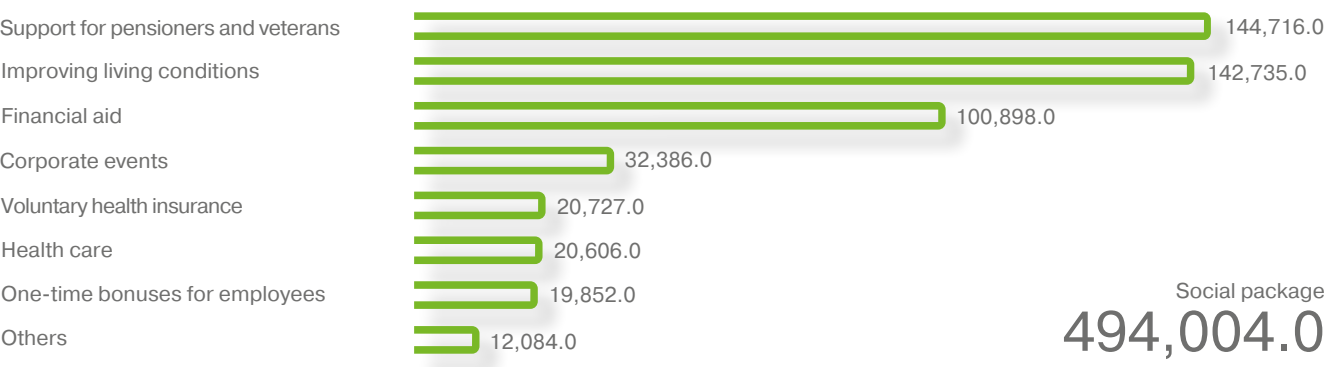
In 2017, the approach was changed and the coverage of personnel performance annual evaluation was expanded among the operating personnel. For a more objective evaluation, the coefficient of labor input (CLI) was applied. The CLI is the personal contribution of each worker to the overall result of the division based on which the individual score is assigned. The criteria for calculating the CLI include: performance of work duties, compliance with labor protection, safety and competence requirements.

In DTEK Energy, the Regulation on Employee Remuneration Management was created, in which basic payments and a social package for employees of all enterprises were unified.

In 2017, the company raised its salaries to employees and retained the full social package.

At enterprises that are on the line of demarcation, in 2017, there was an outflow of highly skilled personnel due to a change in the place of residence, with a shortage of highly qualified specialists in the labor market. Due to the closure of DTEK Kryvorizka TPP and DTEK Prydniprovskaya TPP (see Production operations), part of the plant personnel was in the forced outage, and certain categories were transferred to a four-day working week. Once the plants are operating at full load volumes, the operation mode of the employees was restored.

Social benefits and incentives granted to the employees of DTEK Group in 2017, UAH thousand*



* Excluding funds transferred to trade union organizations for the improvement of employees' health and cultural work.

Approach to Responsible Restructuring and Retirement of Employees

There were no dismissals of personnel at DTEK Group's enterprises due to changes in the industrial and labor management in 2017.

When restructuring the enterprises, it is possible to use the following mechanisms:

- Outsourcing non-core functions
- Transfer of social facilities to the communal property
- Natural staff reduction (retirement, voluntary redundancy, etc.)
- Dismissal of employees by agreement of the parties.

Collective agreements of enterprises stipulates the minimum period during which employees should be notified of the forthcoming changes. The legislation specifies the period of two months, and in respect of coal enterprises – three months.

Forecast of employees' retirement, %

Percentage of employees who will retire after 5 years		Percentage of employees who will retire after 10 years	
Men	Women	Men	Women
7.5	6.1	12.8	11.1

Wellness Programmes, and Promoting a Healthy Lifestyle

The company's enterprises annually allocate funds for organization of leisure and health promotion of employees and their families in various health resorts. This is organized together with trade union committees.

The employees of enterprises and their families visited the following health resorts:

"Mirgorod", "Berezoviy Gai" (Mirgorod); "Carpathians", "Spring", "Dnipro-Beskid", "Crystal" (Truskavets); "Roscha" (Kharkov); Berdyansk (Berdyansk); tourist and hotel complex "Sea Republic" (Berdyansk); recreation camps "Skazka", "Selena", "Avtomobilist" (Kirillovka); health complex "Odessa-

kabel", "Belaya Akatsia" (Odessa); Children's summer camp "Dzhura" (Kremennaya); "Zhemchuzhina", etc.

Moreover, the employees can use prophylactic sanatoriums of DTEK Service that provide medical treatment focusing on prevention of diseases and overall strengthening of the body.

Personnel Training and Development

DTEK provides its employees with an opportunity to develop their potential at DTEK Academy, the corporate university.

Within the framework of training and development the company conducts:

- Compulsory professional training of employees, including training on specific specialties, the development of professional corporate standards for key occupations of manufacturing enterprises
- Promotion of a culture of professional competence with the professional skills competitions held among employees
- An annual assessment of activities at all of the company's enterprises
- The Employee pool programme, which allows to plan and develop career maps.

According to the results of 2017, 69 employees were recommended to the Employee pool of production facilities.

Priority tasks of the company in the field of personnel training and development:

- Creation of a Center for assessment and confirmation of workers' proficiency testing on the basis of three branches of DTEK Academy
- Establishment of an Independent certification center for workers
- Introduction of integrated occupations "universal miner", "electrician" and "welder in power sector" to the State Classifier of Professional Work Names (DK 003: 2010) and approval of the standards of these professions.

Professional standards. In 2017, professional corporate standards served as their basis for the professions: in the coal industry – "conveyor operator", "shaft (underground)", "electric locomotive driver (underground)"; in the energy sector – "fuel-engine operator", "electrician for the repair of electrical machines," "chemical water purifier", "repairman for the maintenance of heat points"; in the field of electric transmission – "electrician for the distribution substation equipment repair", "energy auditor", "operator of elevated work platform and auto hydraulic hoist". E-courses and test tasks are developed in accordance with corporate professional standards.

In 2017, work was initiated to create a new profession of "universal miner" and to introduce this profession into the State Classifier of Professional Work Names (DK 003: 2010). The introduction of a new profession will facilitate the operational HR management due to the performance of interchangeable functions, and will also shorten the time for employee training. The creation of integrated professions, as well as the introduction of partial qualifications into the training system at the production facilities, corresponds to the implementation of the decisions of the state Plan for the National Qualifications Framework implementation.

In 2017, professional standards and the state standards of vocational education developed on their basis received a positive expert assessment of the European Education Fund.

In 2017 the following company's corporate professional standards served as their basis for the state standards of vocational education: underground electrical fitter, electric locomotive operator, roadway repair miner, coal processing operator, steam and gas turbine equipment repairmen, a power unit operator, a chemical water treatment technician, a maintenance locksmith, the electrician for repair and installation of cable lines, field service team electrician, the electrician for the maintenance of power plant equipment.

Profession-oriented schools. DTEK Energy has developed the training course. The training is carried out by the internal trainers in the school of chief engineers (for electricity generation companies, 12 employees were trained in 2017), foreman schools (for electricity transmission companies, for coal mining – 60 employees), schools for masters (for electricity generation companies, for coal production – 31 employees), coal processing schools (at coal processing plants, 18 senior managers at five plants), HR school (for all divisions in the direction of "HR management" – 40 employees), finance schools for non-financial personnel (for all divisions – 27 employees), institute of project managers (for electricity transmission companies – 54 employees).

In addition, the programme "Working mentoring in production" is implemented on a permanent basis at coal production and electricity generation enterprises. In 2017, the programme was adapted and the procedure for working mentoring in DTEK Dniiproblenergo and Kyivenergo was approved.

980 mentors were trained at coal production enterprises; mentors were assigned to 2,325 employee-students.

At the electricity generation enterprises, 225 mentors were trained, mentors were assigned to 511 employee-students.

At the electricity transmission enterprises 61 mentors were trained, 52 employee-students were assigned to the mentors.

Professional contests and competitions are aimed at promoting the high standards of DTEK Energy employees' skills. In 2017, in honor of the Miner's Day, contests were held "Best in the occupation" and competitions, where all miner's occupations were presented. Electricity generation enterprises hold the contests for the professional skills of welders, inspectors, power unit operators, as well as the "Best in the occupation" competition among the staff of duty staff in the electrical workshop. Electric power transmission enterprises hold competitions in the professional skills of teams.

Work with universities. In 2017, the company continued cooperation with higher educational institutions, which is aimed at providing production enterprises with young specialists, including those for occupations in short supply.

Training and development of staff –
in figures of 2017

22,4 man hours –
the average number of hours of
training per employee per year

5 contests of professional
skills among the company's
employees are held

8 specialized schools
operate in the company

9 leading technical
universities of Ukraine –
partners of DTEK

**World skills
Ukraine –**

competition of working qualifications for promo-
ting the working occupations among people under
23 years with the support of the company

38,853
instances of training
the company's employees

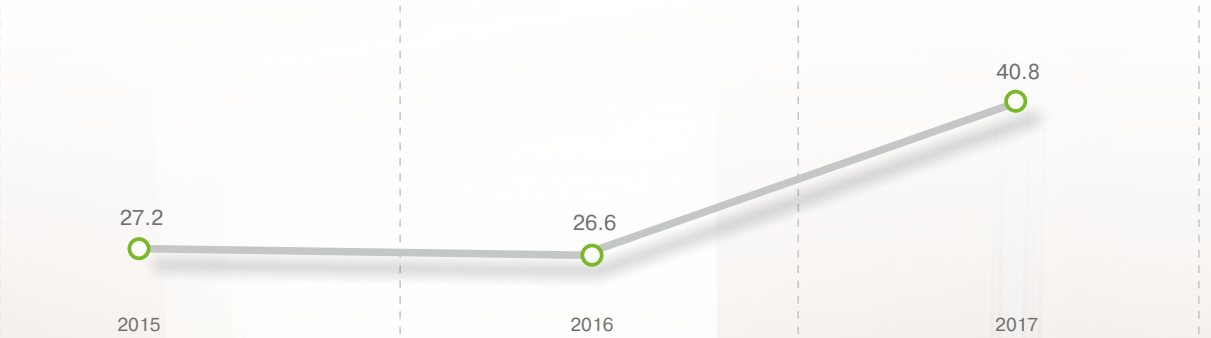
17,708
instances of technical and
engineering employees
training by the company

1,869
instances of training emplo-
yees by external trainers

4,772
instances of technical
and engineering
employees training
by external trainers

63,202
training instances

DTEK Group investments in training and development of the employees, UAH mln



04 Occupational Health and Industrial Safety

DTEK Group's main principles of occupational health and safety are preserving life, health and working capacity of employees in the course of their entire employment. Among the main tasks of the company is the cultivation of a culture of conscious and attentive attitude of the employees to both their personal safety and safety of others. This process requires a correction of the thinking of employees, the consistent introduction of knowledge and principles that underlie any production action.



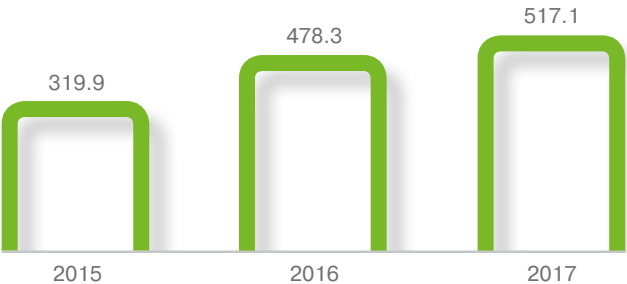
The Occupational Health and Safety Management System is aimed at improving the safety of employees of enterprises and contractors, reducing occupational injuries, providing employees with effective means of personal protection.

Investment priorities related to occupational and health safety are focused on:

- Purchase of overalls, special footwear, means of personal and collective protection, fire protection means
- Implementation of comprehensive measures to improve working conditions
- Compliance with the regulatory requirements for sanitary and living conditions at enterprises
- Regular conduct of certification audits for compliance with the Occupational Health and Safety Management System of the national regulatory requirements and the international standard OHSAS 18001:2007
- Equipment and provision of cabinets for labor protection

- Conducting primary, periodic and extraordinary medical examinations of personnel
- Carrying out measures to prevent injuries among the population.

DTEK Group investments in Occupational Health and Safety, UAH mln



Approaches, management standards and training in Occupational Health and Safety

All of the company's enterprises consider their activities in the field of occupational health and safety as an integral part of successful production and the necessary condition for achieving strategic goals.

The section "Occupational health and safety" (OHS) is a mandatory clause of collective agreements at all the company's enterprises. This clause includes the obligations of the administration and trade union organizations to fully implement the legislation in this area. To improve the state of the OHS management system, internal regulatory documents of DTEK Group enterprises have been submitted and are to be agreed with trade union organizations.

In accordance with the collective agreement, the enterprises of DTEK Group undertake:

- To conduct certification of workplaces
- To provide workers with the necessary tools, overalls, special footwear, means of personal and collective protection, detergents
- To ensure the stable operation of surface and underground health centers with an uninterrupted purchase of medicines and equipment
- To organize and conduct vocational training and training in occupational safety
- To conduct periodic medical examinations
- To inform the employees about occupational health risks and take measures to minimize and eliminate such risks.

The occupational safety departments also initiated the introduction of such clauses in the collective agreement as the provision of emergency medical care, in-depth clinical and surgical examination of the employees with suspected occupational diseases and others.

At all enterprises of DTEK Group there is a provision "On the security of contractor services", which unifies the requirements to occupational safety, industrial, fire and general safety. The provision stipulates for a scheme of actions and the allocation of responsibility for ensuring the safety of work carried out by the contractor organization, the contractor's assessment of compliance with the safety requirements, the list of documentation and requirements for actions to ensure the safety of the contractor's work.

In 2017 for the development of the internal OHS management system, the enterprises continued the introduction of the Occupational Safety Culture programme and Occupational Safety Initiatives programme aimed at increasing the production culture and conscious attitude towards ensuring safe working conditions.

In 2017, Naftogazvydobuvannya and Kyivenergo passed a surveillance audit successfully confirming its certificates of OHS management system to the international standard OHSAS 18001:2007.

100% of the employees are covered by the certification scope. At other enterprises of the company, surveillance/re-certification audits were conducted in 2016.

DTEK Group enterprises conduct mandatory training and occupational safety knowledge tests of employees in accordance with the requirements of the legislation of Ukraine. The procedures are valid for conducting briefings, training and testing of knowledge, which determine the types, frequency and procedure for organizing and conducting these activities. The training is conducted both in the workplaces and in training centers.

Basic approaches to training on OHS issues:

- Involvement of all members of personnel into a training process
- A multi-level knowledge testing system
- Differentiation of employees by qualification level and specialization
- Usage of visualization tools.

In 2017, UAH 2.6 million were allocated for training the employees in corporate standards of OHS. 37,500 employees completed the training.

Occupational Injuries

Indicators	2015	2016	2017
Suffered non-lethal injuries	322	399	285
Lost Time Accident Frequency Rate (LTAFR)	0.500	0.530	0.570
Suffered lethal injuries, number of people	9	9	5
Fatal Accident Frequency Rate (FAFR)	0.014	0.010	0.010

For each case of injury to the employee in the workplace, in addition to the state inspection, an internal investigation is being conducted. Correction measures for avoidance of such injuries in the future are being developed based on these investigations.

The map of main activities at the Occupational Health and Safety Department

Coal production and processing	<ul style="list-style-type: none">• Control of the psycho-physiological state of personnel• Video instructions before the work shift• Training and knowledge tests based on the PROTEK programme• Stimulation for performance of OHS indicators: financial and non-financial reward• Registration and monitoring of critical risks• "Line of trust" on OHS issues, an algorithm for responding to calls is implemented• A project for the management of hazardous activities with the use of The Novator: a System of Continuous Improvement
Electricity generation	<ul style="list-style-type: none">• Emergency and fire training• Stimulation for performance of OHS indicators: financial and non-financial reward• 200 and 300 MW power unit simulator training area for training the personnel• A specialized training area for certified electric welders. It was certified by the E.O. Paton Institute for Electric Welding
Electricity distribution	<ul style="list-style-type: none">• Provision of video cameras and voice recorders to brigades for recording the work process in order to monitor the quality of conducting targeted briefings• Remote access to control room video cameras• Stimulation for performance of OHS indicators: financial and non-financial reward• Safety Walk programme for accounting workplace audits• A system for recording dangerous activities and situations, information that each employee can input and, together with the company, eliminate• Hotline for OHS issues, an algorithm for responding to calls is implemented• Fire and Object Training
Natural gas production	<ul style="list-style-type: none">• 24-hour monitoring of compliance with safety requirements• Control of the culture of production, technological discipline• Automated systems for emergency and fire safety• Emergency and fire safety training• First medical aid training sessions• Annual Conference on Occupational Health and Safety and Environmental Protection• Contests "Best voluntary fire brigade", "Best in the occupation"

In order to protect against natural disasters, DTEK Group enterprises carry out technical, organizational and training activities: flood protection, lightning protection status control and automatic firefighting equipment, ensure the readiness of means of personal protection and protective structures, preparing a fund for quickly adapting premises to shelter personnel during combat operations.

Health Care of Employees, and Occupational Medicine

Control of the dynamics of two medical and social indicators (infection rate and health index) makes it possible to better influence reduction of the company's financial losses and increase labor productivity.



In 2017, DTEK Group production facilities continued to implement a project that establishes the guaranteed control over the quality and reliability of periodic medical examinations and medical examinations when becoming an employee. It was decided to use psycho-physiological expertise as an additional tool to ensure the authenticity of medical examinations of employees engaged in hazardous operations. Doctors of DTEK Service are necessarily on the commissions for medical examinations.

The results of the medical examinations of 33,908 employees were subjected to additional control in 2017. In 2017, DTEK Pavlogradugol saw a 1.8-fold increase in the identification of workers who, for health reasons, require a transfer to another job not related to harmful/hazardous factors in the work environment and the work process.

Also at the enterprises of the company the implementation of Medical and psychological rehabilitation project continued.

The purpose of the project is to support the employees of enterprises demobilized from the ATO area. A staff of 10 psychologists carries out the consultation, psycho-correction, psycho-education of the employees, and also conducts group-training sessions and lectures for those in need of psychological support.

In June, the "Correction of the social and psychological climate in the teams of production enterprises" programme was launched. A healthy social and psychological climate increases the efficiency of work, contributes to reducing accidents and injuries in the workplace, and also ensures high satisfaction, involvement and loyalty of employees. The list of psychological services provided within the framework of the programme (training sessions, testing, information meetings, and psychological consulting) has been made and is being improved.

Health Care of Employees, and Occupational Medicine

1,500

employees were provided with emergency medical aid

457

medical workers, among which there are 26 doctors

32

health posts providing medical care around the clock, out of which 17 are underground

ZVUT –

a unified database for monitoring health index of employees and activities of medical facilities of enterprises

10.93 –

incident-per-employee rate with temporary disability in 2017 (11.17 – per employee in production facilities in 2016)

56

– health index in 2017 (in 2016 the health index (percentage of employees who was not ill during the year) was 52.5)

8,139

people received medical treatment at healthcare facilities

172,000

employees were accepted

32,500

employees employed in jobs of increased danger, underwent psycho-physiological examination under the medical examination

more than 1.7 million inspections of the employees before the shift

Centralized executive office

Uniform standards of medical care

05 Environmental Protection

DTEK Group's strategic tasks include introduction of modern technologies and the best practices to minimize the impact of production on the environment and optimize use of hazardous substances and materials.

The company's environmental activities are guided by the Environmental Policy of DTEK. The policy declares a mission, goals and principles. The document defines the following long-term objectives of the company in the field of ecology:

- Environmental protection including pollution prevention, resource management, mitigation of impacts on climate change, protection of biological diversity and ecosystems
- Development of renewable energy and upgrade of DTEK Energy TPP
- Ensuring compliance with mandatory legislation and other requirements

- Ensuring the environmental safety of enterprises
- Continuous improvement of the environmental management system to reach better indicators of environmental performance.

The company also supports initiatives in the field of environmental education and upbringing. For example, in order to promote green energy, the Industrial Tourism programme has been launched. Weekly in spring-summer season there are free excursions for tourists to Botievo wind farm. In addition, wind power engineers monthly conduct information and educational tours for schoolchildren and students. In 2017, a thousand tourists visited the station.

Environmental costs of DTEK Group in 2017, UAH thousand

Business segment	Capital investments	Operating expenses	Additional expenses	Total business segment
DTEK Energy	319,148.3	738,203.3	59,106.6	1,116,458.2
Coal production and processing	26,349.8	97,064.7	34,398.2	157,812.7
Electricity generation	292,749.4	633,817.6	10,376.5	936,943.5
Kyivenergo	–	6,868.9	13,570.0	20,438.9
DTEK Grids: electricity transmission via grids	49.1	452.1	761.9	1,263.1
DTEK RENEWABLES	–	152.6	–	152.6
DTEK Oil&Gas	29,323.6	811.5	469.0	30,604.1

Implementation of standards on Environmental Protection

All DTEK's enterprises continue their activities on implementing and improving environmental management systems in 2017. For compliance with the requirements of the international standard ISO 14001:2004, surveillance audits of the environmental management systems of DTEK Skhidenergo, DTEK Dniπροenergo, DTEK Dniπροoblenergo, DTEK Donetskoblenergo, Kyivenergo, Naftogazvydobuvannya, and DTEK Renewables were successfully passed. In addition, recertification audits of DTEK Zakhidenergo, DTEK Power Grid, and DTEK Energougol ENE were passed, as well as internal regulatory documents for the implementation of the standard requirements at other companies were carried out to meet the requirements of the updated ISO 14001:2015 standard. The auditing companies confirmed the compliance of the enterprises' environmental management systems with international requirements.

Environmental protection legislation

Under the Contract of Association between Ukraine and the EU, statutory acts of the European Union were implemented, which caused the following legislative changes:

- The Cabinet of Ministers of Ukraine by Order No. 605-p dated 18.08.2017 approved the Energy Strategy of Ukraine for the period until 2035. The state and energy companies require a high level of environmental responsibility, compliance with high environmental standards of production, transportation, transformation and consumption of energy.
- The Cabinet of Ministers of Ukraine by Order No. 796-p dated 08.11.2017 approved the National Plan for Reducing Emissions from Large Combustion Plants. The document provides that by 2028 emissions of dust and sulfur oxides to the atmosphere should be reduced by 40 and 20 times, respectively, and until 2033, nitrogen oxide emissions will drop four times in accordance with the requirements of Directive 2010/75/EC.
- The Cabinet of Ministers of Ukraine by Order No. 820-p dated 08.11.2017 approved the National Waste Management Strategy in Ukraine until 2030, which was developed in compliance with the requirements of Directive 2008/98/EC "On Waste". As a part of the strategy objectives implementation, national and regional waste management plans will be developed.
- The Law of Ukraine "On Amendments to the Tax Code of Ukraine and Certain Legislative Acts of Ukraine Concerning Ensuring the Balance of Budgetary Incomes in 2017" No. 1791-VIII dated 20.12.2016 indexed the environmental tax rates that operated in 2016, by 12%.
- The Law of Ukraine "On Environmental Impact Assessment" No. 2059-VIII dated 23.05.2017 implements the requirements of Directives 2003/4/EC and 2011/92/EC and establishes a new mechanism for assessing the impact of planned activities, which presents an increased environmental hazard. The law provides for the failure to comply with the provisions with the possibility of suspending the activities of the enterprise in the event of a negative conclusion of the authorized body.
- Order No. 548 of the Ministry of Ecology and Natural Resources of Ukraine as of 28.12.2016 (effective from 21.02.2017) amends the methodology for calculating the amount of damages for excess emissions of pollutants into the atmosphere. According to the methodology, the fines can be accrued on the basis of a documentary check; the accrual of penalties occurs from the moment of committing the violation; the fact of elimination of violations can be confirmed only in the presence of the state environmental inspector.

Approach to Environmental Impact

Prevention and minimization of the negative impact on the environment is one of the main priorities in the organization of the environmental activities of DTEK Group enterprises. The structure of responsibility is defined in all processes of the environmental management system, the main elements of which are:

- Implementation, operation and improvement of the environmental management system in accordance with ISO 14001.
- Carrying out audits of the environmental management system.
- Identification and assessment of environmental risks and opportunities, development of measures for their management.
- Development and implementation of environmental programmes (annual, prospective) in the field of air protection, rational use of water resources, regulation of waste water and groundwater quality in the area of production facilities, waste management and land reclamation.
- Holding annual environmental training sessions for the enterprises' employees.
- Work with contractors and suppliers. According to the Technical Policy of Electricity Generation Companies, the contractors – suppliers of equipment must meet the requirements of ISO 14001, and the technical specifications for the purchase of materials are drawn up taking into account the requirements to environmental protection.

DTEK Group enterprises monitor environmental impact in accordance with current environmental legislation. In particular, enterprises control emissions and discharges in laboratories, control of the waste accumulation impact on soil and air, control of groundwater quality, atmospheric air at the border of the sanitary protection zone of enterprises, the technical condition of environmental facilities and purification equipment. Environmental monitoring data make it possible to determine the degree of production impact on the environment and timely respond to possible adverse changes.

The Automated System of Environmental Performance project has been implemented at the thermal power plants of DTEK Energy since 2015. The project includes four functional units aimed for process automation: calculation of the environmental tax, monitoring of condition of ash and slag pipelines and ash dumps, condition of the monitoring systems for exhaust gases, and information on environmental emergencies. In 2017, the project was expanded by automating the process of inspection management of compliance with the environmental legislation.

Preservation and Restoration of Biological Diversity

Since 2013, the distribution enterprises of the company continued implementing programmes for ornithological safety of electric networks. An integrated approach to this issue not only allows protection of birds, but also improves the reliability of electric power supply to the consumers. In general, the provision of ornithological safety of electrical equipment remains a new issue for the Ukrainian energy sector. Previously, power engineers only dealt with the protection of electricity transmission lines from damage and emergency situations, and at present the cooperation with ecologists and ornithologists is also being given attention.

DTEK Dniprooblenergo monitors the impact of power lines on ornithofauna in the Dnipropetrovsk region in cooperation with the Dnyprovsko-Orylsky Nature Reserve since 2015. Monitoring allows allocation of areas for installation of bird protection devices. 121.8 km of electricity transmission lines have already been surveyed. This project is aimed at protecting white storks and other species of birds. For example, in the north of the region on the electricity transmission line supports, a stock dove nesting is found (*Columbaoenas*) – a species listed in the Red Book of Ukraine and a long-eared owl (*Asio otus*) – a species that needs protection according to the Bern Convention on Conservation of Wild Fauna and Flora.

Since 2015, the company annually holds the regional "Leleka" competition, which aims to attract children and young people to protect white storks. In 2017, 14 children – the winners of the contest – were awarded valuable gifts.

In 2017, 20 nests of white storks, which were on the transmission lines of DTEK Dniprooblenergo and DTEK Donetskoblenergo, were moved to special artificial platforms. In just four years, 95 nests were transferred.

The implementation of measures continues to motivate employees to environmental activities. Its main goals are to increase commitment to environmental issues and popularize the nature reserve fund objects. For example, the employees of DTEK Donetskoblenergo and DTEK Dniprooblenergo planted 939 trees and 18 bushes, including on the territory of the reserve "Picturesque canyon on the river Kamenka in the Tokov granites."

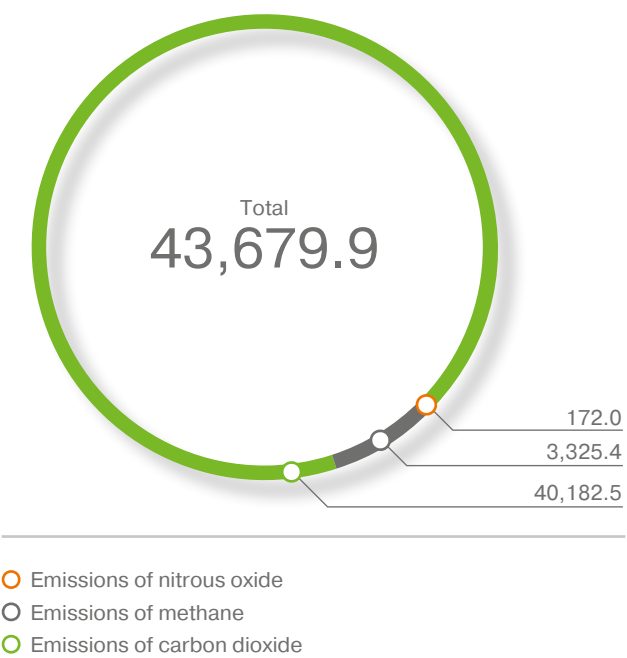
Air emissions, climate change and greenhouse gases

Pursuant to the requirements of Directive 2003/87/EC on establishing a scheme for trading greenhouse gas emission quotas, cooperation with the World Bank has been initiated, which is carried out under the "Partnership for Market Readiness" project. The goal of the project is to prepare the participation of DTEK Energy TPP in the national greenhouse gas emissions trading system. DTEK starts preparing for the participation in the system for monitoring, reporting and verification of greenhouse gas emissions with the technical support provided by the World Bank. DTEK Zaporizka TPP was selected as a pilot project.

In 2017, the company continued work at the power unit No. 1 of DTEK Krivorizka TPP for the construction of new electrostatic precipitators, at the power unit No. 10 of DTEK Burshtynska TPP – for the reconstruction and technical reequipment of electrostatic precipitators, for the power unit No. 1 of DTEK Ladyzhynska TPP the project documentation was developed and the first phase of the "Technical reequipment of GCP of the power unit No. 1 with reaching a residual dust content of not more than 50 mg/Nm₃" project commenced. After the upgrading, all generating units will provide a residual dust content in the flue gas not greater than 50 mg/Nm₃ and will be equipped with continuous flue gas monitoring systems.

Video surveillance systems for flue gases are installed at TPPs of DTEK Energy, which allows boiler unit operators to obtain additional current information on combustion modes in the boilers.

Emissions of greenhouse gases in the equivalent of CO₂, thousand tonnes



Gross air emissions of pollutants, thousand tonnes

Nitrogen oxide (NO _x)	Sulfur oxide (SO _x)	Carbon oxide (CO)	Solid substances	Total
85.2	489.3	6.5	118.3	863.8

Water Resources

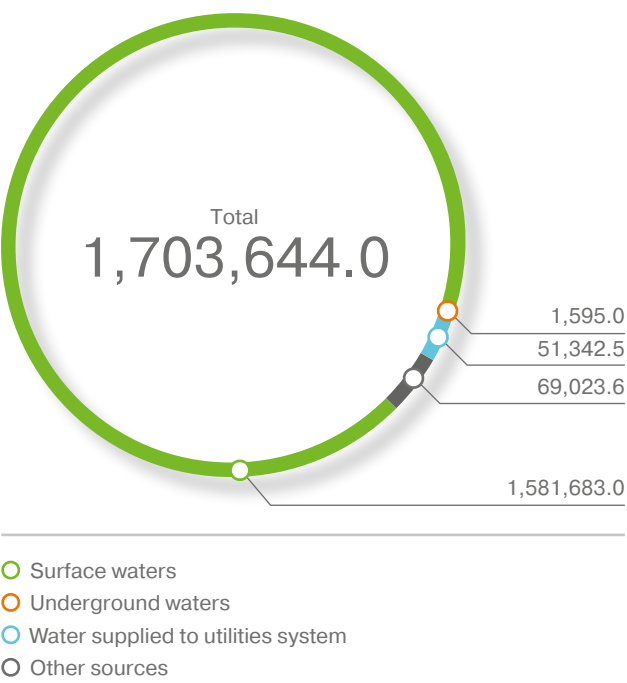
The general principle of water resource management at the company's production facilities is economical and efficient use. Production facilities use both circulating water supply systems and water reuse. This ensures optimal water consumption.

Electricity generation companies use circulating cooling of main and auxiliary equipment, water reuse systems, circulating hydraulic ash removal systems. Efficient water consumption at coal-extraction and preparation enterprises is ensured by the reuse of mine water for production needs and by recycling water supply at coal-preparation plants. Distribution companies use mainly utility and drinking water, the intake of which is carried out mainly from utility water pipelines.

TPP DTEK Energy made an expert analysis of the condition of water-cooling reservoirs, an assessment of the biomelioration work and the possibility of fish farming. Pilot projects on biomelioration and fish farming at DTEK are under implementation at Ladyzhynska TPP and Kryvorizka TPP.

Under the development of renewable energy, a project has been commenced for building a mini-hydroelectric power plant at the Dobrotvirk Reservoir.

Water intake by DTEK Energy enterprises in 2017, thousand cubic meters



Sources water intake for industrial, utility and drinking water supply

Name of the enterprise	Sources water intake for industrial, utility and drinking water supply
TPP	
DTEK Kurakhivska TPP	Siverskyi Donets-Donbas Channel and Kurakhove Reservoir (Vovcha River)
DTEK Luganska TPP	Siverskyi Donets River
DTEK Prydniprovska TPP	Dnipro River
DTEK Kryvorizka TPP	Dnipro-Kryvyi Rih Channel and the water-cooling reservoir
DTEK Zaporizka TPP	Kurakhove Reservoir (Dnipro River)
DTEK Burshtynska TPP	The water-cooling reservoir at Hnyla Lypa River
DTEK Dobrotvirska TPP	The water-cooling reservoir at Western Bug
DTEK Ladyzhynska TPP	The water-cooling reservoir at Southern Bug
DTEK Myronivska TPP	The water-cooling reservoir at Luhan
Mines and CCM	
Production including dust suppression, utility and drinking needs:	
DTEK Pavlogradugol	Underground waters of Pavlograd Regional Office for Water Supply and Sewage Treatment, Dnipro – Western Donbass State Enterprise of Water and Waste Water Services
DTEK Dobropolyeugol	Underground and mine waters, surface waters of the production department of water supply and sewerage of Dobropillia, Water of Donbass Public Utility Company, Vodyana River, pond of Hnylusha River, artesian wells Pioneer
DTEK Dobropiiska CCM	Surface waters of the production department of water supply and sewerage of Dobropillia
Kurakhivska CCM	Surface waters of the production department of water supply and sewerage of Selydove
Pavlogradska CCM	Surface waters of the production department of water supply and sewerage of Pavlograd
Use in recycling water supply	
Pavlogradska CCM	Mine waters
DTEK Dobropiiska CCM	Mine waters
DTEK Oktyabrskaya CCM	Mine waters
Kurakhivska CCM	Surface waters of the production department of water supply and sewerage of Selydove

Wastewater discharge

DTEK Energy companies continuously monitor the quality of discharged waste water, implement projects to upgrade treatment facilities, reuse waste water in technological cycles.

In order to reduce the negative impact of waste water on the surface and underground waters of DTEK Energy TPP, the quality of discharged waste water and condition of underground water is monitored. Also all plants monitor the quality of waste and underground water in the area of ash dumps in accordance with the approved schedules and clean water-cooling reservoirs from bottom sediments.

The main measures on prevention and minimization of wastewater discharges taken by DTEK Energy TPP in 2017 are as follows:

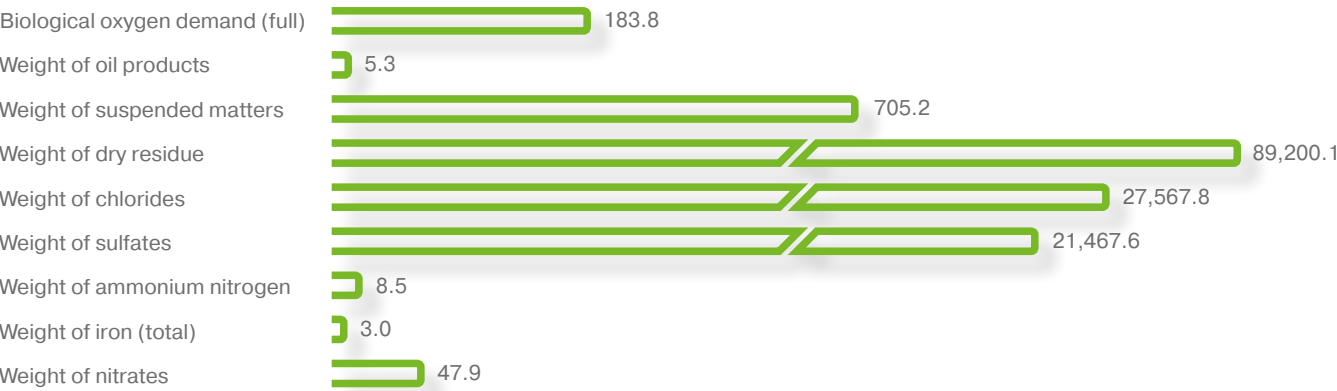
- Development of the project "Technical re-equipment by installing an automated system for monitoring and accounting of water consumption at the discharge channels No. 1 and No. 2 of DTEK Prydniprovska TPP"

- Stormwater sewer system reconstruction of DTEK Prydniprovska TPP
- Stormwater sewer and treatment facilities (treatment of the first portions of stormwater fluids) of DTEK Ladyzhynska TPP
- Repair of pumping equipment of the hydraulic ash-removal system of DTEK Luganska TPP
- Correction of design and project estimate documentation "Reconstruction of waste water disposal and treatment of the motor-road transport department" DTEK Dobrotvirska TPP.

Most of the waste water volume of the distribution companies belongs to the utilities and is directed to the central sewer system. Utility fluids in the areas without the central sewer system are directed to waste pits and cleaned by a biological method.

In 2017, the total volume of waste water was 1,131,542,800 cubic meters.

Containment of pollutants in waste water, tonnes



Industrial waste water discharge facilities of DTEK Energy TPP

Name of the enterprise	Industrial waste water discharge facilities
DTEK Kurakhivska TPP	The water-cooling reservoir at (Vovcha River)
DTEK Luganska TPP	Siverskyi Donets River
DTEK Prydniprovska TPP	Dnipro River
DTEK Kryvorizka TPP	Inhulets River
DTEK Zaporizka TPP	Kakhovka Reservoir (Dnipro River)
DTEK Burshtynska TPP	The water-cooling reservoir (Hnyla Lypa River)
DTEK Dobrotvirska TPP	The water-cooling reservoir (Western Bug River)
DTEK Ladyzhynska TPP	The water-cooling reservoir (Southern Bug River)
DTEK Myronivska TPP	The water-cooling reservoir (Luhan River)
DTEK Pavlogradugol	Samara River
DTEK Dobropolyeugol	Byk River, Hnylusha River, Vodyana River

Waste Management and Reclamation of Lands

99.9% of the wastes generated at the production facilities of DTEK Energy enterprises are non-hazardous, but require the availability of free land for placement. In this regard, the primary goal of the company's environmental policy is increasing the use of bottom ash materials that are formed as a result of coal combustion for the electricity production.

Bottom ash material can be used in the construction industry for the production of cement and concrete, which will help reduce the use of natural raw materials and reduce greenhouse gas emissions. At present, the construction organizations receive bottom ash material on a limited scale on the average of 5–10 % in Ukraine, whereas in the European countries this figure is 95 %.

In 2017, DTEK Ladyzhynska TPP and DTEK Kryvorizka TPP implemented the projects for the selection and preparation of fuel slag for recycling. This allowed export of 30,900 tonnes of high-quality slag from Sibelco (the global leader in production of abrasives).

One of the most promising areas of the use of ash and slag is road construction. Expert opinions on the use of ash and slag were developed to be sent to DTEK Ladyzhynska TPP, DTEK Burshtynska TPP, DTEK Dobrotvirska TPP, DTEK Kurakhivska TPP, DTEK Kryvorizka TPP and DTEK Prydniprovsk TPP. They were approved by the M. P. Shulgin State Road Scientific Research Institute in 2017. This will make it possible to add the use of ash and slag materials to the design and project estimate documentation for construction, reconstruction and capital repair of principal and regional roads.

In order to promote this material in 2017, DTEK Energy held a round table "The use of ash and slag materials of coal plants in road construction". The event was aimed at the exchange of knowledge and experience, as well as the formation and implementation of joint initiatives in this area.

One of such projects is "Major repairs of the road section "Perekalky – Rogaly – Railway station Dolyna roads (Lviv region) using the ash and slag from Dobrotvirska TPP"; It is implemented under the social partnership programmes with the communities. In 2017, the design and project estimate documentation was developed and preliminary agreements were reached with local authorities on the financing of the project in 2018.

Programmes aimed at increasing the use of flue ash, slag and ash are developed and implemented at DTEK Energy TPP for the use of ash and slag volumes increase. In particular, the design and project estimate documentation was developed and the project "Technical re-equipment of the GCP of power generation unit No. 1 of DTEK Ladyzhynska TPP" has been launched, aimed at increasing the selection of dry ash up to 50,000 tonnes per year. In addition, pre-design technical and economic calculations were carried out for two power plants of DTEK Zaporizka TPP, the options for dry ash dumps were considered and the type of installation was considered. Development of the design and project estimate documentation is planned in 2018.

In 2017, the amount of utilization of ash-slag was 819,000 tonnes. Overall DTEK Energy TPP used 319,000 tonnes of ash and slag for their own needs (construction of ash dumps, etc.) and 500,000 tonnes were sold to external customers. This constitutes 17.6% of the total ash and slag content.

In order to exclude the occurrence of ash and slag wastes emission to the environment, replacement of the ash and slag pipelines at the company's plants is carried out, and 5,383 were replaced in 2017.

For the preservation, maintenance and restoration of forest plantations, disturbed as a result of mining operations, in 2017 coal mining and processing companies conducted compensatory planting of 13 hectares of forest instead of the worked up forest plantations. The enterprise carried out biological reclamation of land on reclamation sites on an area of 23.86 hectares.

One of the key initiatives at DTEK Energy's enterprises is to optimize the use of hazardous substances and materials. In 2017, the work to reduce the use of asbestos-containing materials was continued. Thus, at the electricity generating enterprises partially replaced asbestos-containing materials with alternative substances and materials during repairs, brickwork and thermal insulation of equipment. DTEK Donetskoblenergo and DTEK Dniprooblenergo covered 3,677 square meters of roofs with materials that do not contain asbestos.

Also the companies replace mercury-containing energy-saving lamps with LEDs, which are as economical as possible and do not harm the environment. Moreover, oil-filled equipment is replaced with vacuum gas-insulated equipment with a dry dielectric, as well as with oil-sealed transformers. It enables improving environmental safety by ruling out possible oil spills.

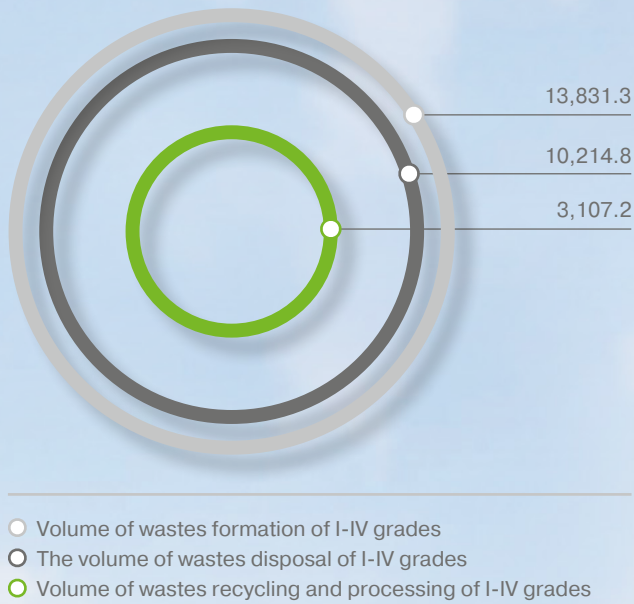
2,094 tonnes of hazardous wastes that DTEK Energy companies formed as a result of their economic activity in 2017 were transferred to specialized enterprises licensed by the Ministry of Ecology and Natural Resources of Ukraine for the handling of hazardous wastes. DTEK Energy does not import, export (including international transportation) or process hazardous wastes.

In 2017, DTEK Dniprooblenergo became a partner of the project "Environmentally sound treatment and final disposal of polychlorinated biphenyls", which is being conducted at the initiative of the United Nations Industrial Development Organization (UNIDO) with the support of the Global Environment Facility and the participation of the Dnipropetrovsk RSA. The purpose of the project is to fulfill the obligations undertaken by Ukraine after the ratification of the Stockholm Convention on Persistent Organic Pollutants.

DTEK Oil&Gas in 2017 introduced higher ecological standards and switched to a non-immersed method of drilling wells, which eliminates the impact on the environment.

In the construction of gas wells, drilling cuttings – a mixture of rocks, materials and drilling fluids – are formed, which legally allow to be placed near wells. The non-immersed method of drilling allows cleaning of cuttings using special equipment. DTEK Oil&Gas cleans the entire amount of cuttings: solids are taken to specially equipped polygons, and the released fluid is reused in drilling. After the completion of the well construction, there are no wastes on the working site. Then the land plot is recultivated and reduced to the initial state.

Wastes formation and management in 2017, thousand tonnes



06 Sustainable Energy

Power Saving and Energy Efficiency

DTEK, the first energy company in Ukraine, provided consumers with the comprehensive energy efficiency and power saving services. This business line is being developed by DTEK ESCO. The company implements projects at industrial, residential, administrative, and social facilities. The services are rendered on the basis of energy service contracts and performance contracts. In the retail business, the company offered a set of energy-efficient products and services under the Smart WATT brand.

For industrial enterprises, DTEK ESCO experts performed 14 energy-efficient projects, of which eight projects have already been completed. It is expected that these projects will save up to 10 million kWh per year, which will result in a reduction of carbon dioxide emissions by 9,000 tonnes. In addition, the completed projects allowed to make the reliability of equipment operation stronger and to increase the level of industrial safety, as well as to improve the working conditions of employees and to improve the quality of heat and water supply of cities. For example, the installation of 12 frequency converters at the Central CCM has ensured the reliability of the pump equipment operation of the plant. Modernization of the network pump at DTEK Ladyzhynska TPP has improved the heat supply of the Ladyzhyn city, and the installation of the frequency converter on the water filter unit has increased the quality of supplying the city with drinking water. Modernization of the lighting system of DTEK Dobropilska CCM has increased the level of illumination of workshops and workplaces by three times, which reduces injuries. A more comfortable environment for workers was also provided by the project for modernization of the climate support system at DTEK Burshtynska TPP.

In the budget sphere, pilot projects were implemented on the terms of the energy service contract, which is valid for seven years. In the two nursery schools of Kiev the modernization of heating systems was performed, with automation of heat points and the installation of thermostats on radiators and temperature sensors in the premises. Thanks to the measures, the average monthly heat energy saving was 28 % and 39.5 %. In 2018, DTEK ESCO plans to take an active part in the implementation of energy service projects in the public sector all over Ukraine.

In 2017, the company **launched a set of energy-efficient products at the retails market under the Smart WATT** brand, which is designed for domestic consumers. This project expands the list of services of distribution companies and promotes energy saving tools among the residents. At the heart of

the Smart WATT sets are two-way power meters, as well as individual heat meters for houses with a horizontal heating system. Also LED lamps, sockets with timers, an instruction with tips for saving electricity and heat are included in the sets. The sets can be purchased on the DTEK ESCO website or in the customer service centers of Kyivenergo, DTEK Dniiprooblenergo, and DTEK Donetskoblenergo. In 2017, the customers purchased 2,379 Smart WATT sets.

The company's experts, together with the DTEK Academy, conduct **customer training on the basis of energy audit and energy management**. In 2017, about 150 people were trained, including employees of DTEK Energy, Corum Group, representatives of apartment building co-owners association and the media. The participants of the training independently conduct and defend express energy audits of their facilities – offices or retail premises, residential houses or enterprises. As a result of the express energy audits, more than 30 projects were identified and selected for implementation using the energy service mechanism.

In addition, to **promote energy services,** DTEK ESCO experts participated in a series of seminars organized by the Friedrich Ebert State Agency for Energy Efficiency and Power Saving of Ukraine and the Fund. Training seminars were held in 23 regional centers as part of the road show for energy services for the budget sphere. The purpose of the event is to familiarize the municipalities with the opportunities provided by the energy service mechanism for modernization of the settlements infrastructure, as well as to form a dialog between cities and investors, energy service companies. Within the framework of the seminars, the peculiarities of purchasing energy services through the ProZorro system were discussed in detail. According to the results of the educational campaign, six cities addressed to DTEK ESCO to conduct 40 comprehensive energy audits of budget buildings and to plan energy-efficient activities.

Energy saved in 2017 due to measures on reduction of energy consumption and increase of energy efficiency

Indicators	Unit of measure	Result
Amount of energy saving	kWh	118,152,790.2
Amount of heat energy saving	Gcal	4,732.6
Amount of heat energy saving	GJ	19,829.6
The amount of fuel saving	TOE	9,647.8
The amount of fuel saving	GJ	282,752.7
Economic impact	UAH	222,739,698.6

Innovation

DTEK Group improves its production processes by introducing modern technologies and equipment, which is aimed at increasing the efficiency of work.

DTEK Energy's enterprises actively continued work on the implementation of the system of continuous improvement the Novator, which is being implemented from 2013. The Novator is aimed at engagement of the personnel of all levels in the process of change and qualitative modifications in order to increase the efficiency of work and reduce costs.

Each employee can suggest ideas and proposals for improving production and management processes. Internal expertise allows to identify resource-intensive processes and bottlenecks, find a solution and rebuild work. Thus, the Novator system of continuous improvement contributes to the increase of the efficiency of equipment operation and reduction of accidents, improvement of production processes and optimization of the time of operations execution, improving the quality of customer service.

The company uses such instruments and lean production methods as continuous improvement teams (Kaizen), just-in-time (JIT), value stream mapping (VSM), organization of an effective workplace (5S), improvement cycle (PDCA), total productive maintenance (TPM), and standard operating procedures (SOP), deployment of KPI strategy and system implementation for senior management positions.

In 2017, the Novator was focused on the search for the potential of the main production indicators and the formation of a programmes for their achievement. The employees attended the following training sessions: "Analysis of the Potential ", "Analysis of the Process Effectiveness", "Data Analysis", and "Problem Solving Instruments". Employees are taught to understand the relationship between their activities and production results, apply data analysis tools to identify root issues, and seek out best practices for improving production processes.

In 2018, it is planned to introduce certification of the employees on the knowledge of the methods of improving business processes. This will be another step in achieving the goal of changing the culture and model of employees' behavior, combining the best traditions of enterprises and innovation.

Operational improvement has become part of the company's production culture. More than 50,000 employees received training in basic instruments since the beginning of implementation of the system of continuous improvement the Novator. The employees submitted 92,000 ideas, and more than 70 % of initiatives were implemented. This provided about UAH 4 billion of economic effect for the years 2013–2017.

DTEK Oil&Gas has successfully implemented innovative approaches and modern research tools since 2014 in gas production. In the field of exploration and development of fields, one of the most ambitious projects was the large-scale 3D seismic exploration at the Semyrenkivske and Machukhske fields. The company regularly conducts high-tech laboratory studies, processing and interpretation of well-geophysical research. The data is processed by Petrel, KAPPA, tNavigator and Echometer, which are the best industry standards in the world. On the basis of the received information, digital 3D models of deposits are created. These models are an important instrument for making managerial decisions, since they allow monitoring and analysis of the hydrocarbon deposits state in real-time and promptly make decisions to improve the efficiency of development.

In the repair of wells, the company began to apply snubbing technology, which relates to a high-tech repair method. In addition, most of the processes in the company are automated. The integrated control system of the technological process, the automated system of operational dispatch control, telemetry of wells, modern points of commercial gas accounting, automatic systems of emergency protection and early detection of emergency situations have been introduced.

In 2017, DTEK Oil&Gas launched a project to create a laboratory of innovations, the "Engineering Center", which will facilitate the search for and implementation of the most up-to-date solutions in all production processes.

Customer focus

In the conditions of the energy market reform and the formation of a competitive retail electricity market, the company pays special attention to providing the customer with timely and quality service.



General principles in respect of quality of goods and services are:

- Timely performance of scheduled maintenance checks in full
- Investing into enhancement of reliability and continuity of power supply and increase of electricity quality
- Taking organizational and technical measures aimed at decreasing emergencies and the time needed to eliminate them
- Increase of customer satisfaction.

In 2017, under the development of customer services and improving the quality of services, there was implemented a system for quality monitoring of services and a pilot project for online monitoring of the knowledge quality of the employees of Customer

Service Center (CSC). Customer feedback has been rebuilt to continuously analyze requests, isolate system issues and formulate measures to minimize and resolve identified issues.

DTEK Dniiprooblenergo and DTEK Donetskoblenergo opened new CSCs, which serve more than 720,000 household and 18,000 legal clients. Customers are offered new services and products: electric heating, energy efficiency, Smart WATT set, home internet, and fixed communications. Kyivenergo has provided its clients with new services in 2017 such as the "Personal account for connections", a preliminary entry to the CSC through the company's website, and a mobile application "Personal Cabinet for Electricity Supply" was launched. In addition, the companies offered new interconnection channels to customers – Viber, Facebook. The contact capacity of the contact center is expanded by 30%.

Annex 1

About the Report and Non-Financial Reporting Process

This report, including a Sustainability Section (hereinafter referred to as the Report), includes material facts on sustainability activities of DTEK Group in the 2017 calendar year (from January 1 to December 31). It also sets out certain facts about 2017 that are directly related to the Company’s activities in 2016 or important in the context of understanding the sustainability objectives.

This document is the Company’s fifth integrated report, and the eighth report disclosing the Company’s activities in the area of

sustainability. The previous report was published in 2017 and contained information on DTEK’s operations in 2016.

The Report has been prepared with the use of:

- GRI Sustainability Reporting Guidelines
- 17 goals of the UN Global Compact.

GRI compatibility level						
	C	C+	B	B+	A	A+
Self-declaration			✓			
Third party check						
GRI check						

Reporting Limits and Scope

The Report covers the range of DTEK's activities, approaches to management and interaction with stakeholders, as well as performance indicators in such areas as the economy, environment, human resources, public relations, and customer focus.

The structure of the Company is set out in About DTEK Group section (page 12). The non-financial reporting includes quantitative and qualitative (descriptive) elements in the areas of DTEK’s business and its subsidiaries having the most significant impact on the economy, environment and social aspects of the Company’s activities in the regions of Ukraine.

Organizational Boundaries of Non-Financial Reporting

1. Electricity generation

DTEK Skhidenergo LLC, including:
DTEK Kurakhivska TPP
DTEK Luhanska TPP

DTEK Dniproenergo PJSC, including:
DTEK Kryvorizka TPP
DTEK Zaporizka TPP
DTEK Prydniprovskaya TPP

DTEK Zakhidenergo PJSC, including:
DTEK Burshtynska TPP
DTEK Dobrotvirskaya TPP
DTEK Ladyzhynska TPP

DTEK Donetskoblenergo PJSC:
DTEK Myronivska TPP

2. Electricity distribution

DTEK Power Grid LLC
DTEK Donetskoblenergo PJSC
DTEK Energougol ENE PJSC
DTEK Dniprooblenergo PJSC
Kyivenergo PJSC

3. Coal Production and Preparation

DTEK Pavlogradugol PJSC, including:
Pershotravneve Mine Office SIU
Pavlogradske Mine Office SIU
Dniprovske Mine Office SIU
Ternivske Mine Office SIU
Geroiv Kosmosu Mine Office SIU

DTEK Dobropolyeugol LLC, including:
Dobropilska Mine Office SIU
Bilozerska Mine Office SIU

DTEK Dobropilska CCM PJSC
Pavlogradska CCM LLC
Kurakhivska CCM LLC
DTEK Oktyabrskaya CCM PJSC

4. Renewable energy

Wind Power LLC
Primorskaya Wind Power Plant LLC
Primorskaya Wind Power Plant 2 LLC
Tryfanovka Energy LLC
Wind Tech LLC
Orlovskaya Wind Farm LLC
Solar Farm 1 LLC

5. Oil and Gas

PJSC Naftogazvydobuvannya

Grounds for exempting organizations from reporting boundaries

Tekhrempostavka LLC, Pershotravensky Repair and Engineering Plant LLC, DTEK Service LLC, DTEK Trading LLC, and Power Trade LLC are beyond the reporting boundaries (the impact of these companies is insignificant or the data is not consolidated pursuant to GRI indicators). Companies operating outside Ukraine were not included within geographical reporting boundaries: DTEK B.V., DTEK Oil&Gas B.V., DTEK Renewables B.V., DTEK Energy B.V., DTEK Finance B.V., NGD B.V., Primorskaya WEP B.V., DTEK Holdings Limited, DTEK Trading Limited, DTEK Trading S.A., DTEK Finance PLC, DTEK Investments Limited, DTEK Hungary Power Trade LLC, Obukhovskaya Mine Office JSC, Donskoy Antratsit JSC, Sulinantratsit LLC.

Material topics

While evaluating the materiality of the topics for the purposes of non-financial reporting, DTEK relies on the principles of viability and relevance in the Ukrainian context. Following an audit of information materials in mass media, research of social climate in DTEK’s companies, analysis of non-financial reports of the

The reporting boundaries do not include DTEK Krymenergo PJSC; DTEK Zuivska TPP, and DTEK Sverdlovanthracite LLC, including: Chervonyi Partyzan Mine Office RC, Sverdlova Mine Office RC, Sverdlova CCM RC; DTEK Rovenkianthracite LLC, including: Rovenkivske Mine Office RC, Yasenivska Mine Office RC, Komendantska CCM RC, DTEK Mine Komsomolets Donbassa PJSC, Mospino Coal-Preparing Enterprise LLC, and also some of the undertakings operated by DTEK Power Grid LLC, DTEK Donetskoblenergo PJSC, and DTEK Energougol ENE PJSC, control over which was lost due to military operations in Donbas region.

leading energy companies, and dialogs with the stakeholders, the following material topics of the Report have been identified (based on expert assessment by the management of the DTEK Group):

Low Materiality	Medium Materiality	High Materiality
Background: International		
Benefits of various tariffs for consumers	New philosophy: socially and client-focused energy sector	Modernization of energy systems and recovery of capital assets (Eastern Europe)
Safety of network infrastructure for population	Promotion of responsible energy consumption	Energy efficiency and reduction of greenhouse gas emissions
Scientific research and development	Combined use of fuel types, development of renewable energy sources	Interaction with clients
Cooperation with contractors	Investments in new technologies	Management of environmental exposures
Background: Ukraine		
Risk of monopolization of the Ukrainian market	Improvement of environmental monitoring system	DTEK’s strategy and investments patterns
Preservation of biodiversity	Need for national strategy for sustainable development	Enhancement of living standards of population in cities with the company’s presence
	Partnership with NCO	Occupational Safety
	Management of wastes until their full utilization	Salaries and wages standards
	Development of social entrepreneurship	Quality of education and health care services
		Reform of the coal industry and the power sector in general.

Calculation of Indicators

The data is sourced from the official reporting forms submitted annually to the state statistics authorities. Some indicators are gathered and calculated in accordance with the internal reporting forms verified by the responsible representatives of the companies as part of the internal audit procedures.

Greenhouse gas emission data includes only direct emission data. SCM Group currently does not calculate the volume of

indirect greenhouse gas emission as it is very low compared to the direct emission.

The average recorded quantity of regular employees is used for the calculation of a turnover rate.

The calculation methodology was described in detail in the Report on DTEK Group’s Sustainability Activities, 2008-2009.

Annex 2

DTEK Group's Quantity Performance Indicators

Economic Indicators

DTEK Group’s economic performance indicators are set out in the Review of macroeconomic indicators and industry survey and Performance Results sections hereof.

Environmental Indicators

Specific emission of pollutants into atmosphere, tonnes per 1 unit of manufactured products									
Business segment	Specific emission into atmosphere, tonnes per 1 tonne of extracted coal			Specific emission into atmosphere, tonnes per 1 MW of supplied electricity			Specific emission into atmosphere, tonnes per 1 thousand Gcal of supplied thermal power		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
Electricity generation (per 1MW of electricity generated)	—	—	—	0.01969442	0.02236863	0.020358780	0.42583624	0.72604298	1.089757455
Coal mining and processing (per 1 tonne of coal extracted)	0.00637079	0.00649675	0.00531092	—	—	—	—	—	—

Gross emission of greenhouse gas, thousand tonnes					
Year	Methane	Carbon dioxide (CO ₂)	Nitrous oxide (N ₂ O)	Total	In equivalent CO ₂ , tonnes
2015	215.6	42,824.3	0.728	43,040.7	47,606,643.9
2016	234.5	45,108.6	0.632	45,343.8	50,265,704.9
2017	158.3	40,080.9	0.553	40,239.8	43,598,174.9

Specific emission of pollutants into atmosphere, tonnes per 1 unit of manufactured products									
Business segment	Methane			Carbon dioxide (CO ₂)			Nitrous oxide (N ₂ O)		
	2015	2016	2017	2015	2016	2017	2015	2016	2017
Generation (per 1MW of electricity generated)	0.0004	0.0004	0.0004	1.1038	1.0869	1.0891	0.0047	0.0050	0.0051
Coal mining and processing (per 1 tonne of coal extracted)	0.1218	0.1247	0.1049	0.0098	0.0092	0.0068	0.0012	0.0001	0.00002

Emissions of ozone-depleting substances (ODS) N ₂ O, hexafluoride, tonnes					
Year	Hydrochloro-fluorocarbons (HCFC)	Chlorofluoro-carbons (CFC)	Trichloroethane (C ₂ Cl ₃ H ₃)	Galons	Carbon tetrachloride (tetrachloromethane)
2017	10.5	0.0	0.0	0.0	0.02

Content of pollutants in waste water, tonnes

Year	BOD*	Petroleum products	Suspended substances	Dry residues	Chlorides	Sulphates	Ammonia nitrogen	Total iron	Nitrates
2015	544.3	14.7	2,579.9	237,370.4	55,285.5	62,082.1	30.0	17.3	323.3
2016	389.3	10.1	2,352.4	183,803.7	35,169.3	52,673.5	27.7	15.7	282.3
2017	183.8	5.3	705.2	89,200.1	27,567.8	21,467.6	8.5	3.0	47.9

* Biochemical oxygen demand.

Total volume of reused and recycled water, tcm	
Year	Indicator
2015	4,883,221.2
2016	6,495,344.4
2017	6,050,243.6

Total volume of water use for own needs by source, tcm					
Year	Total	Surface waters	Underground waters	Water supplied by municipal and other entities	Other sources*
2015	1,700,101.5	1,620,121.9	1,718.2	67,043.0	11,218.4
2016	1,816,517.6	1,743,516.6	1,597.7	58,265.7	13,137.5
2017	1,635,908.7	1,578,146.5	951.2	50,117.8	13,386.2

Wastes treatment, tonnes			
Indicator	2015	2016	2017
Volume of disposal	12,552,654.6	13,238,278.7	13,831,285.3
Transferred to third party organizations	2,225,661.2	853,070.6	709,980.7
Volume of disposed, recycled wastes	1,656,912.1	3,906,109.0	3,107,214.1
Total	16,435,228.0	17,997,458.4	17,648,480.2

Total volume of industrial wastes, tonnes								
Year	Volume of wastes at the beginning of the year, tonnes				Volume of wastes at the end of the year, tonnes			
	barren rock	sludge	tailing	other wastes	barren rock	sludge	tailing	other wastes
2015	422,775,499.5	42,160,986.6	0	5,980,280.4	430,207,946.6	42,703,457.5	0	6,241,993.0
2016	430,207,946.6	42,703,457.4	0	6,241,993.0	437,566,472.2	43,287,511.7	0	6,700,441.8
2017	265,090,464.0	34,989,241.0	0	6,621,078.0	244,697,528.0	39,673,587.0	0	1,859 284.0

Remediation of lands, ha			
Year	Area of lands subject to remediation at the beginning of the year	Area of lands subject to remediation at the end of the year	Area of lands remediated in the reporting year
2015	453.3	423.7	26.6
2016	389.3	496.9	30.1
2017	295.2	198.7	39.3

Occupational health

Accident indicators			
Indicator	2015	2016	2017
Lost Time Accident Frequency Rate (LTAFR)	0.500	0.530	0.570
Fatal Accident Frequency Rate (FAFR)	0.014	0.011	0.010

Occupational illness			
Indicator	2015	2016	2017
Occupational illness rate	0.69	0.68	1.17
Lost day rate	19.84	29.76	36.64

Personnel

Personnel turnover rate		
2015	2016	2017
6.53	7.48	6.92

Indicator is set out in reporting limits. Personnel turnover rate is calculated in accordance with the internal management reporting as it allows including reasons for workers quitting their jobs in more details and receive more adequate turnover data (e.g. include transfer of personnel within the DTEK Group).

Number of outsourced employees, persons		
2015	2016	2017
429	836	70

Recorded personnel size as of 31 December 2017, persons							
Average recorded personnel size (excluding workers on maternity leave and mobilized personnel) in 2017	Recorded personnel size as of 31.12.2017 (including workers on maternity leave and mobilized personnel)						
	total	permanent	temporary	women	men	full employment	part-time employment
67,146	68,945	64,660	4,285	18,878	50,067	68,802	143

Average employment term at electric power plants of personnel who left the organization within the year, persons									
Year	Total number of employees who left the company	Gender		Age			Years with company		
		women	men	less than 30 years	from 30 to 50 years	over 50 years	less than 1 year	from 1 to 5 years	over 5 years
2017	4,227	1,316	2,911	625	2,095	1,507	905	829	2,792

Data is given for electricity generation and distribution undertaking within the reporting limits.

Personnel structure by categories, persons							
Year	Personnel categories		Age			Gender	
	MSE	workers	less than 30 years	from 30 to 50 years	over 50 years	male	female
2015	28,805	80,897	22,866	64,281	22,050	29,694	79,503
2016	26,841	77,550	21,508	60,517	22,321	27,735	76,611
2017	16,918	46,273	11,599	37,510	14,082	15,862	47,329

Source: data from the management report.

Governing bodies structure* by age and gender, persons						
Year	Number of governing bodies personnel	Age, years			Gender	
		less than 30 years	from 30 to 50 years	over 50 years	male	female
2015	133	0	82	51	111	22
2016	162	6	108	58	109	19
2017	1,258	128	753	377	1,057	201

* Governing bodies include general directors, directors, members of the board (including committees).

Total number of new employees by age and gender, persons					
Year	Gender		Age		
	male	female	less than 30 years	from 30 to 50 years	over 50 years
2017	5,997	1,682	2,838	3,943	901

Number of education and professional development instances					
Year	Total instances of education	Including			
		internal		external	
		MPSE (engineers and technicians)	workers	MPSE (engineers and technicians)	workers
2015	51,639	16,267	29,223	4,667	1,482
2016	67,494	17,795	40,389	6,770	2,540
2017	63,202	17,708	38,853	4,772	1,869

Energy sector

Direct use of energy with indication of primary sources								
Year	Natural gas, GJ	Fuel oil, GJ	Coal, GJ	Coke, GJ	Petrol, GJ	Oil fuel, GJ	Total	
							GJ	tonne of coal equivalent
2017	62,537,001	9,440,564	388,836,185	506	185,633	578,291	461,578,183	15,749,436

Annex 3

Table of Standard Reporting Elements and Indicators of the Global Reporting Initiative Guidelines and UN Global Compact

GRI, UN GA reporting element		Description	Page/references to additional sources of information/direct answer
GRI 102-1		Name of the organization	10
GRI 102-2		Activities, brands, products, and services	10, 14–15
GRI 102-3		Location of headquarters	16
GRI 102-4		Number of countries where the organization operates, and the names of countries where it has significant operations and/or that are relevant to the topics covered in the report	16
GRI 102-5		Nature of ownership and legal form	12
GRI 102-6		Markets served (including a breakdown by geographic locations where products and services are offered; sectors served; and types of customers and beneficiaries)	14–15, 16–17
GRI 102-7		The scale of the organization, including: total number of employees; total number of operations;	10–11, 82–83
		net sales (for private sector organizations) or net earnings (for public sector organizations);	
		total capital broken down in terms of debt and equity (for private sector organizations); quantity of products or services provided	
GRI 102-8		Information on employees and other workers:	106, 108, Annex 2
		a) total number of employees by employment contract (permanent and temporary), by gender;	
		b) total number of employees by employment contract (permanent and temporary), by region;	
		c) total number of employees by employment type (full-time and part-time), by gender;	
		d) whether a significant portion of the organization’s activities are performed by workers who have legal status of self-employed persons or private entrepreneurs, or persons who are not members of the company’s permanent or temporary personnel, including permanent and temporary personnel of the company’s subcontractors;	
		e) explain any significant variations in the numbers of personnel reported (such as seasonal variations in the tourism or agricultural industries); f) explain how the data have been compiled	
GRI 102-9		A description of the organization’s supply chain, including its main elements as they relate to the organization’s activities, primary brands, products, and services	14–15
GRI 102-10		Significant changes to the organization’s size, structure, ownership, or supply chain during the reporting period, including changes in the location of, or changes in, operations, including facility openings, closings, and expansions;	14–15, 18, 60, 64, 70–71, 80, Annex 1
		changes in the share capital structure and other capital formation, maintenance, and alteration operations (for private sector organizations); changes in the location of suppliers, the structure of the supply chain, or relationships with suppliers, including selection and termination	
GRI 102-11		Whether and how the organization applies the Precautionary Principle or approach (an organization’s approach to risk management in operational planning, or when developing and introducing new products)	12, 43, 90–91, 103, 113, 119

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GRI, UN GA reporting element	Description	Page/references to additional sources of information/direct answer
GRI 102-12	Externally-developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes, or which it endorses	18–19, 97, 109, 124
GRI 102-13	Memberships maintained by the organization in industry or other associations, and/or national or international advocacy organizations	97
GRI 102-14	A statement from the CEO about the relevance of sustainability to the organization and its strategy for addressing sustainability	5–7
GRI 102-15	A description of key impacts, risks, and opportunities	22–24
GRI 102-16	A description of the organization’s values, principles, standards, and norms of behavior, such as codes of conduct and codes of ethics	20, 91
GRI 102-17	Mechanisms for advice and concerns about ethics: a) internal and external mechanisms for seeking advice about ethical and lawful behavior, and organizational integrity; b) the internal and external mechanisms for reporting concerns about unethical or unlawful behavior, and organizational integrity	91
GRI 102-18	Corporate governance structure	86
GRI 102-19	The process for delegating authority for economic, environmental and social topics from the highest governance body to senior executives and other employees	86–90
GRI 102-20	Executive-level responsibility for economic, environmental, and social topics	26–27, 87–90
GRI 102-21	Processes for consultation between stakeholders and the highest governance body on economic, environmental, and social topics	96
GRI 102-22	The composition of the highest governance body and its committees by: executive or non-executive; independence; tenure on the governance body; number of each individual’s other significant positions and commitments, and the nature of the commitments; gender; membership of under-represented social groups; competencies relating to economic, environmental, and social topics; stakeholder representation	26–27, 86–90
GRI 102-23	Whether the Chair of the highest governance body is also an executive officer in the organization(and, if so, his or her function within the organization’s management and the reasons for this arrangement)	26–27
GRI 102-24		86–90
	Nomination and selection processes for the highest governance body, including whether and how stakeholders are involved; independence is considered; expertise and experience relating to economic, environmental, and social topics are considered	Guidelines for top management recruitment are in place in the DTEK Group (from Human Resources Policy)
GRI 102-25	Conflict of interest: a) processes for the highest governance body to ensure conflicts of interest are avoided and managed; b) whether conflicts of interest are disclosed to stakeholders	91

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GRI, UN GA reporting element	Description	Page/references to additional sources of information/direct answer
		12, 86–90
GRI 102-26	Highest governance body's and senior executives' roles in the development, approval, and updating of the organization's purpose, value or mission statements, strategies, policies, and goals related to economic, environmental, and social topics	The development, approval, and updating of the organization's purpose, value or mission statements of the DTEK Group, strategies, policies, and goals related to economic, environmental and social impacts are made with the involvement of the Supervisory Board
GRI 102-27	Measures taken to develop and enhance the highest governance body's collective knowledge of economic, environmental, and social topics	86, 96, 106
GRI 102-28	Processes for evaluating the highest governance body's performance with respect to governance of economic, environmental, and social topics, including independence of evaluation and its frequency; actions taken in response to evaluation of the highest governance body's performance	KPI of the top management include performance indicators with respect to governance of economic, environmental, and social topics. The performance is controlled by the Supervisory Boards
GRI 102-29	Highest governance body's role in identifying and managing economic, environmental, and social topics and their impacts, risks, and opportunities; the use of stakeholder consultation	96, 100
GRI 102-30	Highest governance body's role in reviewing the effectiveness of the organization's risk management processes for economic, environmental, and social topics	90, 96
GRI 102-31	Frequency of the highest governance body's review of economic, environmental, and social topics and their impacts, risks, and opportunities	Within the scope of activities of committees under supervisory boards
GRI 102-32	The highest committee or position that formally reviews and approves the organization's sustainability report and ensures that all material aspects are covered	CEO
GRI 102-33	Process for communicating critical concerns to the highest governance body	86, 106
GRI 102-34	Nature and total number of critical concerns: a) total number and nature of critical concerns that were communicated to the highest governance body; b) mechanism(s) used to address and resolve critical concerns	48–50, 58, 90, 96, 100, 106
GRI 102-35	Remuneration policies: a) the remuneration policies for the highest governance body and senior executives; b) how performance criteria in the remuneration policies relate to the highest governance body's and senior executives' objectives for economic, environmental, and social topics	Remuneration policies are based on: performance evaluation approved targets, and KPI
GRI 102-36	Process for determining remuneration, and whether remuneration consultants are involved in determining remuneration	Process for determining remuneration is based on the evaluation of the approved strategic objectives and KPI
GRI 102-37	Stakeholders' involvement in remuneration: how stakeholders' views are sought and taken into account regarding remuneration, and, if applicable, the results of votes on remuneration policies and proposals	Process for determining remuneration is based on the evaluation of the approved strategic objectives and KPI

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GRI, UN GA reporting element	Description	Page/references to additional sources of information/direct answer
GRI 102-38	Ratio of the annual total compensation for the organization's highest-paid individual in each country of significant operations to the median annual total compensation for all employees (excluding the highest-paid individual) in the same country	No evaluation was performed during the reporting period
GRI 102-39	Ratio of the percentage increase in annual total compensation for the organization's highest-paid individual in each country of significant operations to the median percentage increase in annual total compensation for all employees (excluding the highest-paid individual) in the same country	No evaluation was performed during the reporting period
GRI 102-40	A list of stakeholder groups engaged by the organization	96
GRI 102-41	The percentage of total employees covered by collective bargaining agreements	99% of employees covered by collective bargaining agreements within the reporting boundaries
GRI 102-42	The basis for identification and selection of stakeholders with whom to engage	96, 100
GRI 102-43	The organization's approach to stakeholder engagement, including frequency of engagement by type and by stakeholder group, and an indication of whether any of the engagement was undertaken specifically as part of the report preparation process	96, 100
GRI 102-44	Key topics and concerns that have been raised through stakeholder engagement and how the organization has responded to those key topics and concerns	103–104
GRI 102-45	All entities included in the organization's consolidated financial statements: a) all entities included in the organization's consolidated financial statements or equivalent documents; b) whether or not any entity included in the organization's consolidated financial statements or equivalent documents is not covered by the report	12–13, 16–17, Annex 1
GRI 102-46	The process for defining the report content and the topic boundaries	Annex 1
GRI 102-47	All material topics	Annex 1
GRI 102-48	The effect of any restatements of information provided in previous reports, and the reasons for such restatements	Standards update to GRI4 version in accordance with https://www.globalreporting.org/standards/
GRI 102-49	Significant changes from previous reporting periods in the list of material topics and topic Boundaries	Annex 1
GRI 102-50	Reporting period	Annex 1
GRI 102-51	The date of the most recent previous report	Annex 1
GRI 102-52	Reporting cycle (such as annual, biennial)	Annex 1
GRI 102-53	The contact point for questions regarding the report or its contents	Victoria Grib, Sustainability Department Director at the Regional Policy Directorate csr@dtek.com
GRI 102-54	Claims of reporting in accordance with the GRI Standards	This integrated Report was prepared in accordance with GRI 4 Sustainability Reporting Guidelines - self-declaration of GRI 4 application

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GRI, UN GA reporting element	Description	Page/references to additional sources of information/direct answer
GRI 102-55	GRI Content Index	Annex 3
GRI 102-56	The organization's policy and current practice with regard to seeking external assurance for the report	This integrated Report was prepared in accordance with GRI 4 Sustainability Reporting Guidelines - self-declaration of GRI 4 Comprehensive application. Non-financial reports of the DTEK Group before 2012 were subject to the independent audit
GRI 103-1	Explanation of the material topic and its boundary (an explanation of why the topic is material, where the impacts occur; the organization's involvement with the impacts), why each topic is material and topic boundary	Annex 1
GRI 103-2	The management approach and its components: an explanation of how the organization manages the topic; a statement of the purpose of the management approach; policies, goals and targets, responsibilities, resources, grievance mechanisms, specific actions and initiatives included in the management approach	Annex 1
GRI 103-3	An explanation of how the organization evaluates the management approach, including the mechanisms for evaluating the effectiveness of the management approach; the results of the evaluation of the management approach; any related adjustments to the management approach	Annex 1
GRI 201-1	Direct economic value generated and distributed	82–83
GRI 201-2	Risks and opportunities posed by climate change that have the potential to generate substantive changes in operations, revenue, or expenditure (including a description of the risk or opportunity and its classification as either physical, regulatory, or other; a description of the impact associated with the risk or opportunity; the financial implications of the risk or opportunity before action is taken; the methods used to manage the risk or opportunity; the costs of actions taken to manage the risk or opportunity)	No data is available
GRI 201-3	Coverage of the organization's defined benefit plan obligations and other retirement obligations	108
GRI 201-4	Financial assistance received from government	The company does not receive any financial assistance from the government
GRI 202-1	Ratios of standard entry level wage by gender compared to local minimum wage	No analysis was made
GRI 202-2	Proportion of senior management hired from the local community at significant locations of operation	The proportion of senior management hired from the local community at significant locations of operation is 95%
GRI 203-1	Extent of development of significant infrastructure investments and services supported, current or expected impacts on communities and local economies, including positive and negative impacts where relevant, and whether these investments and services are commercial, in-kind, or pro bono engagements	72, 100–104
GRI 203-2	Significant identified indirect economic impacts of the organization, including positive and negative impacts and significance of the indirect economic impacts in the context of stakeholder priorities	100–104
GRI 204-1	Proportion of spending on local suppliers at significant locations of operation	104
GRI 205-1	Total number and percentage of operations assessed for risks related to corruption and the significant risks identified	91
GRI 205-2	Communication and training on anti-corruption policies and procedures	91

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GRI, UN GA reporting element	Description	Page/references to additional sources of information/direct answer
GRI 205-3	Confirmed incidents of corruption and actions taken	91
GRI 206-1	Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices and their outcomes	None registered
GRI 301-1	Total weight or volume of materials used by non-renewable materials used and renewable materials	124–125
GRI 301-2	Percentage of recycled or reused input materials	Annex 2
GRI 302-1	Energy consumption within the organization	Annex 2
GRI 302-2	Energy consumption outside the organization	126
GRI 302-3	Energy intensity	No analysis was made
GRI 302-4	Reduction of energy consumption	72–75, 126
GRI 302-5	Reductions in energy requirements of products and services	126
GRI 303-1	Total volume of water withdrawn, with a breakdown by sources	121–122, Annex 2
GRI 303-2	Water sources significantly affected by withdrawal of water by the organization	121–122, Annex 2
GRI 303-3	Percentage and total volume of water recycled and reused	Annex 2
GRI 304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	120
GRI 304-2	Description of significant impacts of activities, products, and services on biodiversity in protected areas and areas of high biodiversity value outside protected areas	120
GRI 304-3	Habitats protected or restored	120
GRI 304-4	Total number of IUCN Red List species and national conservation list species with habitats in areas affected by the operations of the organization, by level of extinction risk	120
GRI 305-1	Direct (Scope 1) GHG emissions	Annex 2
GRI 305-2	Direct (Scope 2) GHG emissions	120, Annex 2
GRI 305-3	Other indirect (Scope 3) GHG emissions	Annex 2
GRI 305-4	GHG emissions intensity	Annex 2
GRI 305-5	Reduction of greenhouse gas (GHG) emissions	Annex 2
GRI 305-6	Emissions of ozone-depleting substances (ODS)	Annex 2
GRI 305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	Annex 2
GRI 306-1	Total volume of planned and unplanned water discharges by destination; quality of the water, including treatment method; whether the water was reused by another organization. Standards, methodologies, and assumptions used	123
GRI 306-2	Total weight of waste, with a breakdown by type and disposal methods, and how the waste disposal method has been determined	Annex 2
GRI 306-3	Total number and volume of significant spills	Irrelevant
GRI 306-4	Weight of transported, imported, exported, or treated waste deemed hazardous under the terms of the Basel Convention, Annex I, II, III, and VIII, and percentage of transported waste shipped internationally	Irrelevant
GRI 306-5	Identity, size, protected status, and biodiversity value of water bodies and related habitats significantly affected by the organization's discharges of water and runoff	123
GRI 308-1	Percentage of new suppliers that were screened using environmental criteria	119

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GRI, UN GA reporting element	Description	Page/references to additional sources of information/direct answer
GRI 308-2	Significant actual and potential negative impacts on the environment in the supply chain and actions taken	No evaluation was done
GRI 401-1	Total number and rate of new employee hires and total number and rate of employee turnover, by age group, gender and region	107, Annex 2
GRI 401-2	Benefits which are standard for full-time employees of the organization but are not provided to temporary or part-time employees, by significant locations of operation	107
GRI 401-3	Percentage of employees that returned to work after parental leave ended, and percentage of employees retained by the organization after parental leave ended, by gender; total number of employees that returned to work after parental leave ended that were still employed 12 months after their return to work, by gender; return to work and retention rates of employees that took parental leave, by gender	Annex 2
GRI 402-1	Minimum notice periods prior to the implementation of significant operational changes and whether the notice period is specified in collective agreements	108
GRI 403-1	Percentage of workers whose work, or workplace, is controlled by the organization, that are represented by formal joint management-worker health and safety committees	112–113
GRI 403-2	Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender	113
GRI 403-3	Workers with high incidence or high risk of diseases related to their occupation	113, 115
GRI 403-4	Health and safety topics covered in formal agreements with trade unions	112–115
GRI 404-1	Average hours of training that the organization's employees have undertaken during the reporting period, by gender and employee category	109–110, Annex 2
GRI 404-2	Transition assistance programmes provided to facilitate continued employability and the management of career endings resulting from retirement or termination of employment	109
GRI 404-3	Percentage of total employees by gender and by employee category who received a regular performance and career development review during the reporting period	107
GRI 405-1	Percentage of individuals within the organization's governance bodies and percentage of employees per employee category by gender, age group, and other indicators of diversity	Annex 2
GRI 405-2	Ratio of the basic salary and remuneration of women to men for each employee category, by significant locations of operation	No analysis was made
GRI 406-1	Non-discrimination	No data on such situations was received
GRI 407-1	Operations and suppliers in which workers' rights to exercise freedom of association or collective bargaining may be violated or at significant risk, and measures taken by the organization intended to support rights to exercise freedom of association and collective bargaining	The right to freedom of associations is set forth in collective bargaining agreements Employees have the right to strike Negotiation is the main dispute resolution method

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GRI, UN GA reporting element	Description	Page/references to additional sources of information/direct answer
GRI 408-1	Operations and suppliers identified as having significant risk for incidents of child labor, and measures taken to contribute to the effective abolition of child labor, including:	Not relevant
	a) operations and suppliers that employ child labor and young workers (under the age of 18 years) exposed to hazardous work	Child and forced labor are prohibited under Ukrainian law
	b) Operations and suppliers that employ child labor by type of operation and supplier, and by countries or geographic areas of operations and suppliers	Company does not operate in the countries exposed to risks of such violations of human rights
GRI 409-1	Operations and suppliers considered to have significant risk for incidents of forced or compulsory labor either in terms of type of operation and supplier; countries or geographic areas with operations and suppliers considered at risk; measures taken by the organization intended to contribute to the elimination of all forms of forced or compulsory labor	Not relevant
		Child and forced labor are prohibited under Ukrainian law Company does not operate in the countries exposed to risks of such violations of human rights
GRI 410-1	Percentage of security personnel trained in the organization's human rights policies or procedures that are relevant to operations	No evaluation was done
GRI 411-1	Total number of identified incidents of violations involving the rights of indigenous peoples and actions taken	Company does not operate within the territories of indigenous peoples
GRI 412-1	Total number and percentage of operations that have been subject to human rights reviews or impact assessments	No evaluation was done
GRI 412-2	Total number of hours devoted to training on human rights policies or procedures concerning aspects of human rights that are relevant to operations	No evaluation was done
GRI 412-3	Total number and percentage of significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	No evaluation was done
GRI 413-1	Percentage of operations with implemented local community engagement, impact assessments, and development programmes	100–105
GRI 413-2	Operations with significant actual and potential negative impacts on local communities	Irrelevant
GRI 414-1	Percentage of new suppliers that were screened using criteria for impacts on society	No evaluation was done
GRI 414-2	Significant actual and potential negative social impacts identified in the supply chain and actions taken	No evaluation was done
GRI 415-1	Total monetary value of financial and in-kind political contributions made directly and indirectly by the organization by country and recipient/beneficiary	Company does not provide aid to political parties
GRI 416-1	Percentage of significant product and service categories for which health and safety impacts are assessed for improvement	126–128
GRI 416-2	Total number of incidents of non-compliance with regulations and voluntary codes concerning health and safety impacts of products and services during their life cycle, by type of outcomes	No incidents have been reported

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GRI, UN GA reporting element	Description	Page/references to additional sources of information/direct answer
GRI 417-1	Types of information required by the organization's procedures for product and service information and labeling, and percentage of significant product or service categories covered by and assessed for compliance with such procedures	Irrelevant
		Notification of customers about risks related to electricity consumption - please see Sustainable Power section
		Pursuant to the sanitary standards, electrical installations under 220 KV do not require actions aimed at protection of consumers health in connection with the impact of electromagnetic fields
GRI 417-2	Total number of incidents of non-compliance with regulations and voluntary codes concerning product and service information and labeling, by type of outcomes	No incidents have been reported
GRI 417-3	Results of surveys measuring customer satisfaction	76, 128
GRI 418-1	Total number of substantiated complaints received concerning breaches of customer privacy and losses of customer data	No incidents have been reported
GRI 419-1	Total monetary value of significant fines for non-compliance with laws and regulations concerning the provision and use of products and services	258 non-monetary sanctions and UAH 64 million of fines in the environmental sphere
MM1	Amount of land disturbed or rehabilitated/recultivated by the company in the reporting period	Annex 2
MM2	Area and percentage of lands where biodiversity reproduction is required, at the end of the year	268.87 ha
MM3	Total amounts of overburden, rock, tailing at the beginning and at the end of the reporting period	Annex 2
MM4	Number of strikes and lock-outs exceeding one week's duration	No incidents have been reported
		The right to freedom of associations is set forth in collective bargaining agreements
		Employees have the right to strike
MM5	Total number of operations taking place in or adjacent to indigenous peoples' territories, and number and percentage of operations or sites where there are formal agreements with indigenous peoples' communities	Negotiation is the main dispute resolution method
		Company does not operate within the territories of indigenous peoples

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GRI, UN GA reporting element	Description	Page/references to additional sources of information/direct answer
MM6	Whether there were disputes or situations where land use issues had to be discussed with the local communities (population, authorities)	The company is engaged in a permanent dialog with population and authorities in the areas where the company operates
		No disputes have been registered
MM7	Which mechanisms relating to investigation of complaints related to land use are used by the company	The company is engaged in a permanent dialog with population and authorities in the areas where the company operates
		No disputes have been registered
MM9	Any resettlements within the reporting period in connection with the mining works	There have been no resettlements
EU10	Planned capacity against projected electricity demand over the long term, broken down by energy source and regulatory regime	60–80
EU11	Average generation efficiency of thermal plants by energy source and by regulatory regime	60–72
EU12	Transmission and distribution losses as a percentage of total energy	60–72
EU13	In which way biodiversity of offset habitats is compared to biodiversity of the affected areas	No evaluation was done
EU15	Percentage of employees eligible to retire in the next 5 to 10 years, broken down by job category and regions	Annex 2
EU17	Days worked by contractor and subcontractor employees involved in construction, operation and maintenance of energy objects	No data is available
EU18	Percentage of contractor and subcontractor workers who took relevant health and safety training courses	No data is available
EU22	Number of people physically or economically displaced and compensation, broken down by type of project	No evaluation was done
EU25	Number of injuries and fatalities, diseases to the public related to damage caused by company assets	113
EU26	Percentage of population unserved in licensed distribution or service areas	No data is available
EU27	Number of residential disconnections for non-payment	No data is available
EU28	Power outage frequency	78
EU29	Average power outage duration	78
EU30	Average plant availability factor by energy source and by regulatory regime	78