

**ДЕРЖАВНЕ АГЕНТСТВО
З ЕНЕРГОЕФЕКТИВНОСТІ ТА
ЕНЕРГОЗБЕРЕЖЕННЯ УКРАЇНИ
(Держенергоефективності)**



**STATE AGENCY ON
ENERGY EFFICIENCY AND
ENERGY SAVING OF UKRAINE
(SAEE)**

пров. Музейний, 12, м. Київ, 01001,
тел. (044) 590-59-60, факс (044) 590-59-61
E-mail: saee@saee.gov.ua,
сайт: www.saee.gov.ua,
код згідно з ЄДРПОУ 37536010

Muzeinyi lane, 12, Kyiv, 01001,
phone (044) 590-59-60,
fax (044) 590-59-61
E-mail: saee@saee.gov.ua,
WEB: www.saee.gov.ua

№ _____ від _____ 20__ р.

**Energy Community Secretariat
Director
Mr. Janez Kopač**

Dear Mr. Kopač!

On behalf of the State Agency on Energy Efficiency and Energy Saving of Ukraine (SAEE) I would like to express compliments to the Energy Community Secretariat and you personally and transmit herewith the **Fifth Annual Report** on the progress of Ukraine under Directive 2012/27/EU on energy efficiency (EED) requirements. By submitting this report, Ukraine is fulfilling its reporting obligations under Article 24(1) of EED, which requires Contracting Parties to report on the progress achieved towards national energy efficiency targets.

The State Agency on Energy Efficiency and Energy Saving of Ukraine avails itself of this opportunity to renew to the Energy Community Secretariat the assurances of its highest consideration.

Annex: 5th Annual Report of Ukraine on 14 pages in 1 copy.

Sincerely,

Acting Head

Kostiantyn GURA

Horovykh Ihor

**Fifth Annual Report
under the Energy Efficiency Directive**

UKRAINE

Prepared by: STATE AGENCY ON ENERGY EFFICIENCY AND
ENERGY SAVING OF UKRAINE

July 2021

This Report was prepared by State Agency on Energy Efficiency and Energy Saving of Ukraine (SAEE). By submitting this Report, Ukraine is supporting the Decision of the Ministerial Council of the Energy Community D/2015/08/MC-EnC and fulfilling its reporting obligation under Article 24(1) of Directive 2012/27/EU, which requires Contracting Parties to report on the progress achieved towards national energy efficiency targets.

This Report provides key statistical indicators as required by Annex XIV Part 1 EED, describes tendencies in energy consumption by sector that occurred in 2019, presents energy efficiency targets which Ukraine has established by 2020, and provides an overview of the main legislative and non-legislative measures. According to the EED Annex XIV the reporting period is the year 2019. Statistic data is provided by the State Statistic Service of Ukraine. Some data presented in the previous annual reports is adjusted in this Report based on the recently updated statistic information.

A. Key statistics and indicators

Table 1: Key energy statistics data

	Estimation of key statistics and indicators	Value			Unit
		2017	2018	2019	
(i)	Primary energy consumption	86 947	90 847*	86 276	ktoe
(ii)	Total final energy consumption	47 396	48 813*	46 563	ktoe
(iii)	Final Energy consumption – Industry	15 098	16 491*	16 126	ktoe
(iii)	Final energy consumption – Transport	9 624	9 488*	10 064	ktoe
	Final energy consumption in pipeline transport	1 643	1 485	1 537	ktoe
(iii)	Final energy consumption – Households	16 487	16 668*	14 004	ktoe
(iii)	Final energy consumption – Services	4 337	4 275*	4 475	ktoe
	Final energy consumption – Agriculture	1 847	1 887*	1 890	ktoe
	Final energy consumption – Other sectors	22 675	22 834*	20 372	ktoe
(iv)	Gross value added by sector – Industry	697 318	830 236	899 354	mIn UAH
(iv)	Gross value added by sector – Services	1 518 294	1 826 781	2 166 681	mIn UAH
(v)	Disposable income for households	2 061 009	2 534 840	2 981 681	mIn UAH
(vi)	Gross domestic product (GDP)	2 983 882	3 560 596	3 978 400	mIn UAH
(vii)	Electricity generation from thermal power plants	143 794	145 550	141 333	mIn kWh
(viii)	Electricity generation from combined heat and power	12 048	15 319	14 447	mIn kWh
(ix)	Heat generation from thermal power generation	96 682*	98 253	91 259	thousand Gcal
(x)	Heat generation from combined heat and power plants, incl. industrial waste heat	38 548	36 138	32 613	thousand Gcal
(xi)	Fuel input for thermal power generation	46 602	47 432	45 304	ktoe
(xii)	Passenger kilometres (pkm)	99 408 649	104 446 000	107 175 000	thousand pkm
(xiii)	Tonne kilometres (tkm)	364 192 164	361 355 000*	355 009 000	thousand tkm
(xv)	Population	42 386,4	42 153,2	41 902,4	thousand

Data provided by the State Statistics Service of Ukraine. Data for temporarily occupied territories of the Autonomous Republic of Crimea, the city of Sevastopol, and part of the temporarily occupied territories in the Donetsk and Luhansk oblasts is not available.

(*) Adjusted data

B. Overview of energy consumption trends

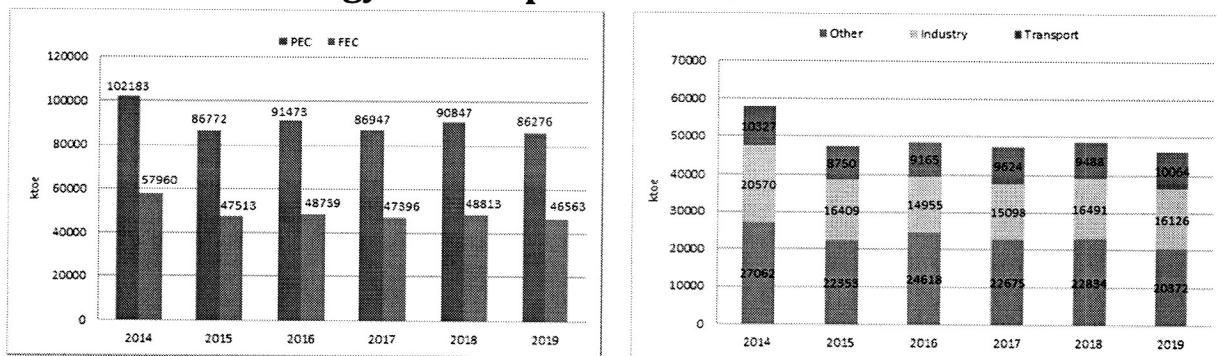


Fig. 1. Final and primary energy consumption (left) and final energy consumption by sectors (right) in 2014 – 2019

According to the State Statistics Service of Ukraine, in 2019 primary energy consumption (PEC) decreased by 5% compared to 2018, caused by a decrease in Final energy consumption (FEC) by 4.6% (Fig. 1).

The most significant decline of the Final energy consumption in 2019 compared to 2018 was observed in Residential sector (decrease by 16%) and also there was a slight decline in Industry (decrease by 2%) while some growth was observed in such sectors as Transport (increase by 6%) (in particular, given that the final energy consumption in pipeline transport increased by 3.5% and by 2 279 mln increased Passenger kilometres indicator) and Commercial and Public Sector (increase by 5%). In the Agriculture sector almost no changes were observed.

Figure 2 describes the trends in final energy consumption since 2014 and shows the change 2019/2018 (%).

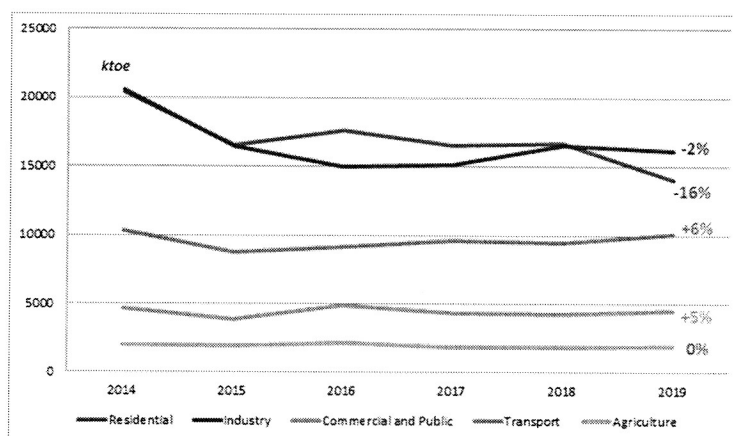


Fig. 2. Final energy consumption in different sectors

The State Statistics Service of Ukraine has revised some indicators of the Energy balance for 2018 and made some adjustments which are reflected in this Report. The changes in the Energy balance for 2018 occurred mainly in the following sectors: Households (increase by 465 ktoe), Transport (decrease by 145 ktoe), Agriculture (decrease by 20 ktoe), Industry (decrease by 10 ktoe) and Services (decrease by 2 ktoe).

C. National energy efficiency targets

Table 2: Division of targets per sectors and per EED articles

TARGETS	2018	2019	2020	2021	2025	2030
EED ARTICLE 3 [ktoe or other unit]						
EED ARTICLE 5 [ktoe or other unit]						
EED ARTICLE 7 [ktoe or other unit]	652 ³	978 ³	1 304 ³			
PEC [ktoe]			101 316 ²	88 983 ⁴	90 820 ⁴	91 468 ⁴
FEC [ktoe]			55 507 ²	49 253 ⁴	50 518 ⁴	50 446 ⁴
FEC - BUILDINGS <i>Residential Sector</i> <i>Commercial and public services</i> [ktoe]			4 267 ¹ 3 226 ¹ 1 041 ¹			
FEC - INDUSTRY [ktoe]			1 610 ¹			
FEC - TRANSPORT [ktoe]			624 ¹			

¹ Cumulative savings for 2016-2020, First National Energy Efficiency Action Plan

² Absolute targets, Resolution of the Cabinet of Ministers of Ukraine on August 14, 2019 No. 607-p

³ Absolute targets, EnC study on EED targets for Ukraine

⁴ Absolute targets, Daft Second National energy efficiency action plan till 2030

D. Update of measures implemented in last year

● Legislative measures

After preparation of the 4rd annual report the following important regulatory documents were adopted.

Regulations directly related to the energy efficiency

- **Resolution “On amendments to the Resolution of the Cabinet of Ministers of Ukraine of March 1, 2010 (No. 243) and of October 17, 2011 (No. 1056)”**, adopted by the Cabinet of Ministers of Ukraine on September 30, 2020 (No. 896), which extended to 2021 the Government’s “Warm Loans” program for individual (one-apartment) houses.

<https://zakon.rada.gov.ua/laws/show/896-2020-%D0%BF/sp:max100#Text>

- **Technical regulation on the energy labelling of space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device**, adopted by the Order of the

Ministry of Energy of Ukraine on October 07, 2020 (No. 646); registered in the Ministry of Justice on October 23, 2020 (No. 1048/35331)

<https://zakon.rada.gov.ua/laws/show/z1048-20/sp:max100#Text>

- **Technical regulation on the energy labelling of local space heaters**, adopted by the Order of the Ministry of Energy of Ukraine on October 22, 2020 (No. 676); registered in the Ministry of Justice on December 17, 2020 (No. 1256/35539)
<https://zakon.rada.gov.ua/laws/show/z1256-20/sp:max100#Text>
- **Technical regulation on the energy labelling of professional refrigerated storage cabinets**, adopted by the Order of the Ministry of Energy of Ukraine on October 26, 2020 (No. 683); registered in the Ministry of Justice on December 21, 2020 (No. 1267/35550)
<https://zakon.rada.gov.ua/laws/show/z1267-20/sp:max100#Text>
- **Technical regulation on the energy labelling of residential ventilation units**, adopted by the Order of the Ministry of Energy of Ukraine on October 26, 2020 (No. 684); registered in the Ministry of Justice on February 12, 2021 (No. 185/35807)
<https://zakon.rada.gov.ua/laws/show/z0185-21/sp:max100#Text>
- **Technical regulation on the energy labelling of solid fuel boilers and packages of a solid fuel boiler, supplementary heaters, temperature controls and solar devices**, adopted by the Order of the Ministry of Energy of Ukraine on November 2, 2020 (No. 705); registered in the Ministry of Justice on January 5, 2021 (No. 16/35638)
<https://zakon.rada.gov.ua/laws/show/z0016-21/sp:max100#Text>
- **Order “On approval of the Minimum requirements for energy efficiency of buildings”**, adopted by the Ministry for Communities and Territories Development of Ukraine on October 27, 2020 (No. 260); registered in the Ministry of Justice on December 18, 2020 (No. 1257/35540)
<https://zakon.rada.gov.ua/laws/show/z1257-20#Text>
- **Order “On approval of Amendments to the Methodology for calculating the energy efficiency of buildings”**, adopted by the Ministry for Communities and Territories Development of Ukraine on October 27, 2020 (No. 261); registered in the Ministry of Justice on December 17, 2020 (No. 1254/35537)
<https://zakon.rada.gov.ua/laws/show/z1254-20#Text>
- **Resolution “On approval of the Procedure for carrying out professional attestation of persons intending to carry out energy efficiency certification activities and inspection of engineering systems”**, adopted by the Cabinet of Ministers of Ukraine on June 09, 2021 (No. 600)
<https://zakon.rada.gov.ua/laws/show/600-2021-%D0%BF#Text>

- **Law of Ukraine “On ratification of the Financial Agreement (Project ‘Energy Efficiency in Public Buildings in Ukraine’) between Ukraine and the European Investment Bank”,** adopted by the Parliament on July 2021

http://w1.c1.rada.gov.ua/pls/zweb2/webproc4_1?id=&pf3511=71853

Regulations non-directly related to the energy efficiency

- **Law of Ukraine “On Amendments to certain laws of Ukraine concerning the settlement of certain issues in the sphere of provision of housing and utility services”,** adopted by the Parliament on December 03, 2020 (No. 1060-IX)

<https://zakon.rada.gov.ua/laws/show/1060-20/sp:max100#Text>

- **Resolution “On approval of the National Economic Strategy until 2030”,** adopted by the Cabinet of Ministers of Ukraine on March 03, 2021 (No. 179), which identifies 20 areas of key importance for economic growth, both horizontal and sectoral. Strategy aims Ukraine to be climate-neutral by 2060

<https://zakon.rada.gov.ua/laws/show/179-2021-%D0%BF/sp:max100#Text>

- **Order “On approval of the Government's priority Action Plan for 2021”,** adopted by the Cabinet of Ministers of Ukraine on March 24, 2021 (No. 276) which specifies the required steps (including in the field of energy efficiency), certain state bodies responsible for the execution, respective terms and indicators, as well as estimated results

<https://zakon.rada.gov.ua/laws/show/276-2021-%D1%80/sp:max100#Text>

- **Order “On approval of the Action Plan for the implementation of the National Transport Strategy of Ukraine for the period up to 2030”,** adopted by the Cabinet of Ministers of Ukraine on April 07, 2021 (No. 321)

<https://zakon.rada.gov.ua/laws/show/321-2021-%D1%80#Text>

- **Order “On approval of the National Action Plan for Environmental Protection until 2025”,** adopted by the Cabinet of Ministers of Ukraine on April 21, 2021 (No. 443)

<https://zakon.rada.gov.ua/laws/show/443-2021-%D1%80#Text>

- **Law “On amendments to the Customs Code of Ukraine to stimulate the development of the electric transport sector in Ukraine”,** adopted by the Parliament on July 2021

http://w1.c1.rada.gov.ua/pls/zweb2/webproc4_1?pf3511=68838

- **Law “On amendments to the Tax Code of Ukraine and certain legislative acts of Ukraine on stimulating the development of the electric transport sector in Ukraine”,** adopted by the Parliament on July 2021

http://w1.c1.rada.gov.ua/pls/zweb2/webproc4_1?pf3511=68837

In March 2021 the draft Law of Ukraine “On energy efficiency” (No. 4507) was approved by the Verkhovna Rada of Ukraine in the first reading. The draft law is prepared for its second reading.

Also the draft NEEAP-2030 developed with assistance of EU4Energy Governance project has already been finalized and is pending adoption by the Government. The document also includes the 2030 energy efficiency targets mentioned in section C of this Report.

- **Non-legislative measures**

- **Certification of buildings, energy audit, energy management and training.**

According to the obligations under EPBD, mandatory energy certification of buildings has been introduced in Ukraine. The database has already included 8434 energy efficiency certificates for buildings.

All energy certificates that have been submitted to the Certificate Database were distributed according to the functional purpose of the building, in particular:

- 4353 residential buildings;
- 1208 public buildings;
- 1199 educational institutions;
- 771 hospitals;
- 463 kindergartens;
- 396 trade enterprises;
- 44 hotels.

As of June 30, 2021, according to the Independent Monitoring (Verification), which was carried out on the 199 energy certificates:

- 141 energy certificates – do not meet the requirements of the legislation.
- 58 energy certificates – successfully passed verification

Also, State Agency on Energy Efficiency and Energy Saving of Ukraine (SAEE) takes measures to train relevant professional staff to introduce the market in the field of energy efficiency and to increase the capacity of market participants to apply energy efficiency measures.

For 2021, there are 41 qualification commissions in higher education institutions and self-regulatory organizations that carry out professional attestation in the field of energy certification of buildings. Also special training programs in the areas of "Certification of energy efficiency of buildings" and "Inspection of engineering systems of buildings" have been approved in 30 institutions of higher education. As of 2021, 1542 specialists in energy efficiency audit of buildings and specialists in the inspection of engineering systems were certified.

In the residential sector, the "Warm Loans" program continues to be implemented. Since the beginning of the Program, namely from October 2014 to mid-2021, 864 thousand households have become its participants, which have attracted more than UAH 8.9 bln for energy efficiency measures, of which about UAH 3.4 bln has been reimbursed by the Government. The annual energy

savings of the program participants in natural gas equivalent are estimated at 488.5 million cubic meters.

The budget for 2021 provides UAH 150 mln for the Program. The distribution of funds is planned in the following areas:

- UAH 141,43 million for energy efficiency measures at the individual (one-apartment) houses;
- UAH 8,57 million for installation of “non-gas” and “non-electric” boilers at the individual (one-apartment) houses.

At the same time, over the 6 months of 2021 banks landed more than UAH 417.3 mln of "warm loans", in particular: UAH 389.2 million for energy efficiency measures at the individual (one-apartment) houses; about UAH 28.2 mln were granted for installation of “non-gas” and “non-electric” boilers.

Since 2016, SAEE has been conducting an annual evaluation of the effectiveness and efficiency of the "Warm Loans" program. The assessment is based on a specially developed scientifically based methodology. This unique methodology makes it possible to study the impact of energy efficiency measures on energy consumption in subsequent heating periods, taking into account various factors, namely - temperature regimes of heating seasons, household income and more.

Thus, the assessments show that the "Warm Loans" program allows to save on the average annually 20,8% of heat energy in condominiums and 29,5% of natural gas in households.

The latest estimate shows that 98.5% of condominium (Home Owners Associations (HOA)) borrowers were satisfied with it, 36,3% of borrowers living in individual (one-apartment) houses and 52,9% of condominium (HOA) borrowers said they have used it more than twice, and 85,5% of borrowers living in individual (one-apartment) houses and 100% condominium (HOA) borrowers plan to use the program again. Evaluation link: https://saee.gov.ua/sites/default/files/blocks/Otsinka_TK_14.06.2021.pdf

This indicates both the public's trust in the program and its effectiveness. The "Warm Loans" program allows both to save energy consumption, and to promote increase of comfort in houses.

Given the positive results of the implementation of the Program, the Government approved a decision to continue it in 2021 for residents of individual (one-apartment) houses (Resolution of the Cabinet of Ministers of Ukraine of September 30, 2020 No. 896). In addition to the traditional set of energy efficiency equipment and materials and replacement of gas boilers with solid fuel, individuals (residents of individual (one-apartment) houses) have the right to loan funds for the purchase of energy storage systems, equipment for charging electric cars and smart electricity meters.

Considering the need to adopt a new state target energy efficiency program for the next five-year period, namely by 2026, a Concept of the new 5-year energy efficiency Program is drafted

and prepared for submission to the Government. The estimated amount of funding for the Program for the entire period of its validity (5 years) is more than UAH 10 billion.

Energy efficiency awareness campaigns. SAEE is constantly carrying out information work to promote the economic, environmental and social benefits of energy efficiency measures.

In November 2020 at the initiative of the SAEE under the auspices of the Ministry of Energy of Ukraine there was organized and held all-Ukrainian online forum "Energy-independent regions of Ukraine: how to replace gas, find investment and stimulate business", in which took part more than 900 registered participants.

Also during the reporting period SAEE together with the Heinrich Böll Stiftung in Ukraine have started a constant dialogue and cooperation with key stakeholders on the "green" transition of Ukraine – "Green Deal Network". The first discussion on a key topic – "Green Transition. Realities of Ukraine" took place at the end of 2020, followed by the discussion "Ways of decarbonization and modernization of Ukrainian industry in the context of the Green Course" in February 2021. And a third discussion "Legislative decisions needed to accelerate the "green" course" took place in June 2021.

In addition, in order to raise awareness of local governments about the importance of implementing energy efficiency measures and "green" energy projects, SAEE and its partners on June 2, 2021 organized and held a webinar "Quality project financing is the key to a wealthy community."

Moreover, SAEE together with the Friedrich Ebert Foundation in Ukraine launched an informational and explanatory campaign in the regions on the implementation of local programs for co-financing of energy efficiency measures, energy management, energy monitoring, and energy service. A number of seminars took place in different Ukrainian regions.

It is also worth noting that since 2017 SAEE together with the "All-Ukrainian Sustainable Development and Investments Agency", "Ukraine-Denmark Energy Center", GIZ Project "Establishment of Energy Agencies" continues to improve and update the Interactive Investment Map on Energy Efficiency and Renewable Energy, which reflects all existing and planned projects on energy efficiency and renewable energy in Ukraine. The map aims to provide communication between the initiators of such projects and investors, in order to facilitate the attraction of investment in these areas.

To strengthen the cooperation between industrial enterprises, in collaboration with the Ministry of Economy, Learning Energy Efficiency Network – LEEN was introduced in Ukraine. In such a network, companies work together on a partnership basis to learn from each other and achieve agreed energy saving goals. In addition, they agree on common energy efficiency goals. Two networks have already signed their commitments: by the end of 2021, the 23 companies involved want to save 21,000 MWh of energy and reduce CO₂ emissions by 7200 tons.

Metering. As of June 1, 2021 in Ukraine buildings are equipped with:

- heat meters – 82.6% of residential and 82.4% of non-residential buildings;
- cold water meters – more than 77.5% of residential and 95.8% of non-residential buildings;
- hot water meters –18.2% of residential and 51.9% of non-residential buildings.

According to the Law of Ukraine "On commercial metering of heat and water supply", the operator of external engineering networks is obliged to equip buildings with commercial metering units by August 1, 2022. This applies only to buildings that, on the date of entry into force of the Law, were connected to external engineering networks and were not equipped with such metering units, or if such metering units failed on the date of entry into force of the Law.

Energy service market and Energy Performance Contracts. Due to a large-scale information campaign by the authorities and the creation of the necessary tools for implementation, the energy service market continues to grow. According to SAEE as of July 2021, the ESCO budget mechanism is being implemented in 22 regions and 552 EPC contracts have been concluded for a total amount of contracts exceeding UAH 1.25 bln.

On average EPCs concluded for 7.75 years with average energy savings at the level of 25%.

However, from April 2020 there is a pause in the possibility of concluding EPCs, which is caused by legal inconsistency due to the entry into force of the amendments to the Law of Ukraine "On Public Procurement". To overcome this technical barrier, the Government submitted to the Verkhovna Rada of Ukraine the draft Law amending ESCO law (registration number 4274, dated 26.10.2020) but it has not been adopted yet.

In addition, SAEE with the Ministry of Energy prepared further legislative changes for EPC development. These amendments include extension of ESCO-model for energy efficiency measures in district heating, water supply and other sectors and subsectors consuming energy and providing additional changes to overcome existing legal and economic barriers in ESCO market development. The draft Laws including these amendments were also registered in the Verkhovna Rada of Ukraine.

Eco-design and energy labeling.

In 2020, in the framework of the implementation of Directive 2010/30/EC, technical regulations were adopted concerning the labeling of the following energy products:

- space heaters, combination heaters, packages of space heater, temperature control and solar device and packages of combination heater, temperature control and solar device;
- professional refrigerated storage cabinets;
- solid fuel boilers and packages of a solid fuel boiler, supplementary heaters, temperature controls and solar devices;
- residential ventilation units;
- local space heaters.

In addition, a framework draft technical regulation on energy labeling was developed in accordance with the Regulation of the European Parliament and of the Council of 4 July 2017 (EU) (No. 2017/1369) setting a framework for energy labeling and repealing Directive 2010/30/EU.

Also, in accordance with Directive 2009/125/EC, 6 draft technical regulations have been developed and are being approved by the relevant executive bodies, setting out eco-design requirements for:

- air heating products, cooling products, high temperature process chillers and fan coil units;
- solid fuel boilers;
- local space heaters;
- solid fuel local space heaters;
- professional refrigerated storage cabinets, blast cabinets, condensing units and process chillers;
- ventilation units.

In general, within the framework of Ukraine's international obligations, SAEE has developed 38 technical regulations that have been approved by the Government, of which 23 are technical regulations on eco-design and 15 on energy labeling.

Energy efficiency in industry. The Ministry of Energy of Ukraine together with the State Agency on Energy Efficiency and Energy Saving, the Ukrainian-Danish Energy Center and other partners have developed a draft Law of Ukraine, which provides for amendments to the Budget Code of Ukraine to ensure a guaranteed source of funding for energy modernization of Ukrainian enterprises. Draft Law provides for the introduction of a mechanism for the use of CO₂ tax funds as a source of co-financing of energy efficiency measures at enterprises. To implement this initiative, it is proposed to create within a state budget the State Decarbonization Fund which can:

- accumulate revenues from the CO₂ tax, which are about UAH 900 mln annually and currently are not target used and transferred to the general fund of the state budget;
- use the above mentioned revenues to provide enterprises with reimbursement for part of loans for the purchase of energy efficient equipment.

Programs of central authorities in the field of energy efficiency measures. In order to ensure the implementation of Directive 2012/27/EU on energy efficiency in the framework of the Energy Community Treaty ratified by the Law of Ukraine of December 15, 2010, N 2787-VI "On Ratification of the Protocol of Accession of Ukraine to the Energy Community Treaty" and in cooperation with the Eastern Partnership Assistance Division of the Energy Community Secretariat, a working group was formed and work began on a new National Energy Efficiency Action Plan for the period up to 2030. At the time of writing of the 5th Annual Report there was no officially approved National Energy Efficiency Action Plan until 2030, but a draft version has been developed and is pending approval by the Government.

At the beginning of 2020, the Government approved the Concept for the implementation of state policy in the field of energy efficiency of buildings in terms of increasing the number of buildings with nearly zero energy consumption and the National Plan to increase the number of

such buildings. The plan envisages measures aimed at stimulating developers and building owners to move to the construction of new and reconstruction of existing buildings in compliance with high energy efficiency standards during 2020-2030 - buildings with nearly zero energy consumption (NZEB). The Concept identified the main barriers that prevent the construction of buildings with nearly zero energy consumption and the direction of state policy to eliminate them.

E. Central Government buildings (Article 5)

Specific target(s) with regard to Article 5 EED are not defined. For the last 4 years the number of local authorities where energy management / energy monitoring systems were introduced has increased almost 4 times (from 60 in 2017 to 225 in 2021).

Thus, energy management / energy monitoring systems are currently implemented in 225 local authorities (84 cities, 15 regions (at the level of regional facilities), 69 districts and 57 amalgamated territorial communities) and are being developed in 113 more (7 regions, 26 districts, 67 ATCs and 13 cities).

The SAEE has started work on creating an inventory list of energy and operational characteristics of buildings of central executive bodies. An analysis of the state of energy management implementation in the buildings of central executive bodies has begun. To date, the study covers more than 2000 buildings of central executive bodies and their territorial divisions.

F. Energy efficiency obligations (Article 7)

Ukraine has not introduced an EEO scheme yet. In the meantime the draft Law of Ukraine "On energy efficiency" which was approved by the Verkhovna Rada of Ukraine in the first reading on March 4, 2021 provides for the preference of an alternative approach, but with the possibility to combine it with the "classical" approach (introduction of the EEO scheme) in order to be able to fully deliver the target set in Article 7(9) EED.

As it is provided by the draft Law on Energy Efficiency among the planned alternative measures to be implemented such a measure as the operation of the Energy Efficiency Fund is very important.

In accordance with the Law of Ukraine "On the Energy Efficiency Fund", dated June 8, 2017 (No. 2095-VIII), the State Institution "Energy Efficiency Fund" has developed a Program of partial reimbursement of energy efficiency measures in apartment buildings – "Energodim" (hereinafter - the "Energodim" Program) which determines the conditions and procedure for providing grants to beneficiaries to partially reimburse costs related to the implementation of energy efficiency measures.

On October 5, 2020, the 5th edition of the Program came into force simplifying the conditions for submitting applications to the Fund (project documentation was finally allowed to be submitted in electronic form, the procedure for quality analysis of projects and financial criteria for

applications were further specified and detailed as well as the list of requirements for equipment and materials was optimized).

Later, the 6th edition of the Program came into force on January 1, 2021 and aimed at further simplifying and clarifying procedural requirements, in particular in the light of the coronavirus pandemic. At the moment, the latest edition of the program, which came into force on July 7, 2021 among other improvements will reduce the time of receipt of documents to the Fund, and thus will significantly accelerate the implementation of projects for energy modernization of apartment buildings.

Over almost two years of the “Energodim” Program, starting from September 3, 2019 to July 23, 2021, the Energy Efficiency Fund received 715 applications from all over Ukraine. The estimated cost of these projects exceeded UAH 5.6 billion while the estimated amount of grants received by condominiums will be up to 70% of the cost of projects (more than UAH 3.65 billion) (first 500 participants are receiving increased grants). As of July 23, 2021, 472 projects are in progress (design, implementation or final stages). The total cost of these projects is about UAH 3.8 billion, of which under package A “Light” – UAH 133.4 million, under package B “Complex” – UAH 3.66 billion. 25 HOAs have completed energy efficiency measures. For this moment UAH 85 mln were already reimbursed.

In total, more than 63.7 thousand families are already involved in energy modernization projects. It is assumed that the total (cumulative) value of the energy savings in modernized buildings will be about 3 million kWh/year.

According to Energy Efficiency Fund Strategy it is assumed that by 2025 more than 426 thousand families in 4 903 multi-apartment buildings will save at least 20% in utility costs while the greenhouse gas emissions will be reduced by 537 thousand tons of CO₂ per year.
