

The background of the entire page is a photograph of a solar farm. In the foreground, several rows of blue solar panels are visible, angled towards the sun. The panels are set against a backdrop of a rugged, rocky desert landscape with a prominent cliff face under a clear blue sky.

Renewable Energy of Ukraine: Monthly Monitoring

October 6, 2021

Content

Summary	2
Electricity from RES generation statistics	3
Review of the share of RES in the power system for September 2021	6
Information on the generation curtailments of NPC “Ukrenergo” for September, 2021	7
Monitoring of the Memorandum Implementation and Law of Ukraine No. 810-IX	7
Information on payments for electricity at the "green" tariff as of October 1, 2021	11
The Constitutional Court of Ukraine (CCU) and the Antimonopoly Committee of Ukraine (AMCU) on RES	11
Weighted average prices of DAM (Day-Ahead Market) for IPS (Integrated Power System) of Ukraine for September 2021	13
Legislative initiatives for September 2021, affecting the activities of RES producers	14

Authors: Anastasia Ivanko, Iryna Pashchuk

Data compliance control: Oleksandra Gumeniuk

*Established in 2009, **European-Ukrainian Energy Agency (EUEA)** as a non-governmental, non-profit organization, business association has grown into an effective advocate for the realization of Ukraine’s massive renewable energy and energy efficiency potential, by working within Ukraine’s business community, government structures, and with other key energy market stakeholders.*

Members of EUEA: Acciona, Arzinger, Beycelik-Elawan Renewable Energy LLC, CCT Energy, CES, DTEK, EMSOLT, Electrum, Elementum Energy, Eurocape, GOLAW, Guris, Green Genius, GrECo Ukraine, GSE&C, Huawei, iC consulenten, IMEPOWER, Indian Solar, IRUN Engineering, Irshanska SPP, Khmelnytsky Bio Power Plant, NBT AS, Met Energy, Scatec, Schneider Electric Ukraine, Sfera, Sungrow, West Solar, Terra Solar, Thermosystems, TIU Canada, Total Eren, Ukraine Power Resources, Ukrwindinvestments, Voltage Group.

Summary

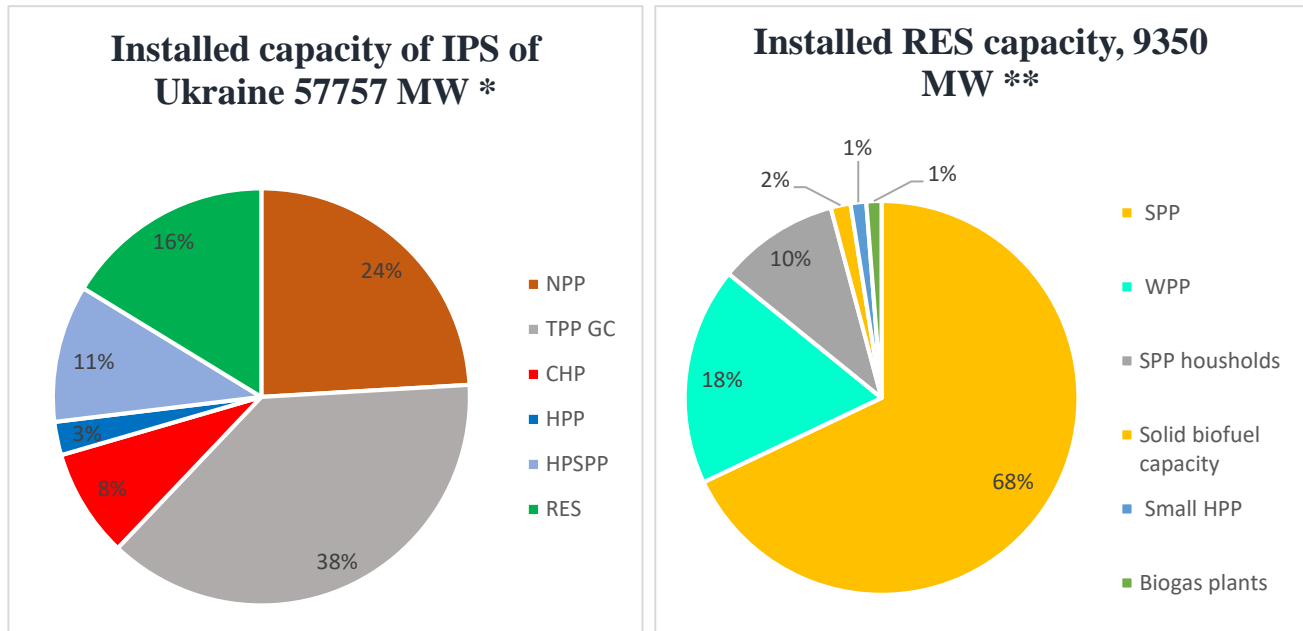
- The installed capacity of renewable energy sources (RES) in Ukraine according to the State Agency for Energy Efficiency and Energy Saving of Ukraine (SAEE) and the NEURC - **9350 MW** as of October 1, 2021. In total, the new added RES capacity in September was **37 MW**.
- Dnipropetrovsk region is the constant leader in terms of installed solar capacity, which is **1139 MW**, Zaporizhia region is leader of installed wind capacity - **595.8 MW**, Vinnytsia region is leader of small hydropower plants - **24.6 MW**, and Khmelnytsky is of the biomass and biogas **34.6 MW**.
- **8.5%** - the share of RES generation in the total energy produced by the Integrated Power System (IPS) of Ukraine in September 2021.
- In **10** of the 30 days of September, generation restrictions were limited to a total of **9568 MW**, with an average daily figure of **957 MW**. In total, since the beginning of the year, the restrictions have been **65 days** for a total capacity of **69958 MW**.
- As of the end of September, the level of payment at the "green" tariff is: **for January - April - 93%, May - 73%, for June - 70%, July - 67%, August - 56%, September (20 days) - 57%**. The average level of payment from the beginning of 2021 is **77%**.
- The weighted average price of electricity for September DAM on the IPS of Ukraine was **UAH/MWh 2229, 29 (excluding VAT) or EUR/MWh 71,79 (excluding VAT)**.

Thank you for reading our report!

Send your feedback, comments and suggestions by mail office@euea-energyagency.org

Electricity from RES generation statistics

Installed capacity of the power system of Ukraine as of October 1, 2021:



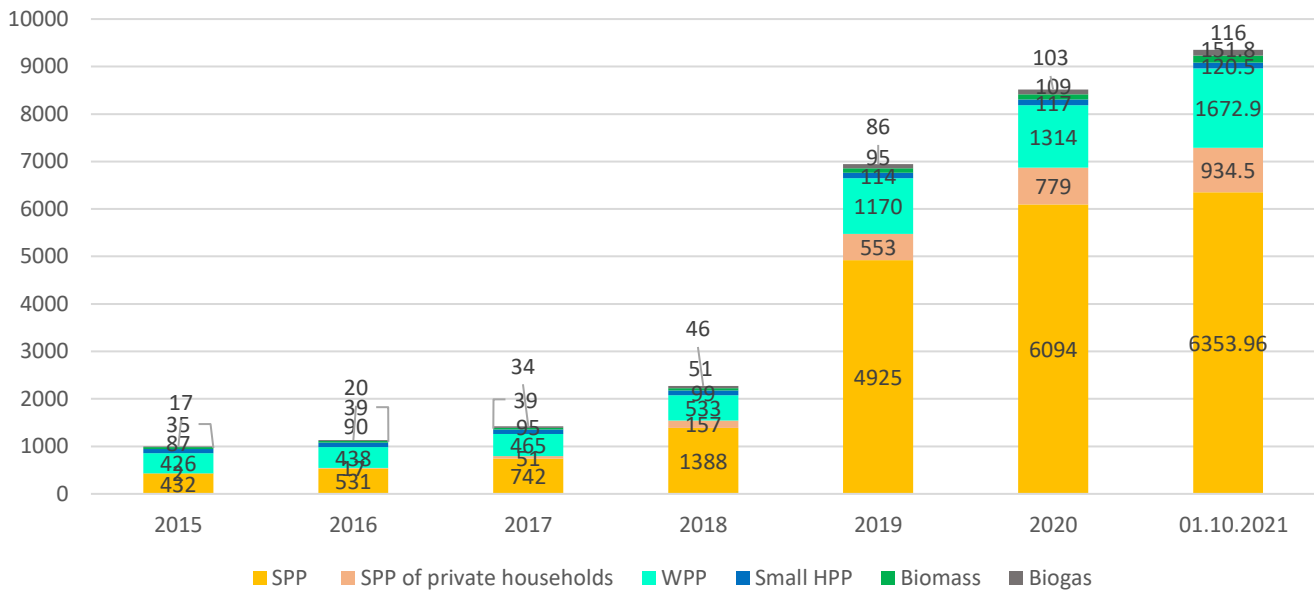
* Resource (Ukrenergo): <https://ua.energy/vstanovlena-potuzhnist-energositymy-ukrayiny/>

** Resources: SAEЕ as of the end of the first half of 2021, NEURC as of 01.08.2021:

<https://www.facebook.com/saeEU/posts/6303411463004170>, <https://www.nerc.gov.ua/?id=60637>

According to the Transmission System Operator of PJSC “NPC “Ukrenergo”, the installed capacity of the power system of Ukraine as of the end of September 2021 is **57757 MW**, and separately for RES according to SAEЕ and NEURC - **9350 MW**. Thus, compared to last month, RES increased by **37 MW**.

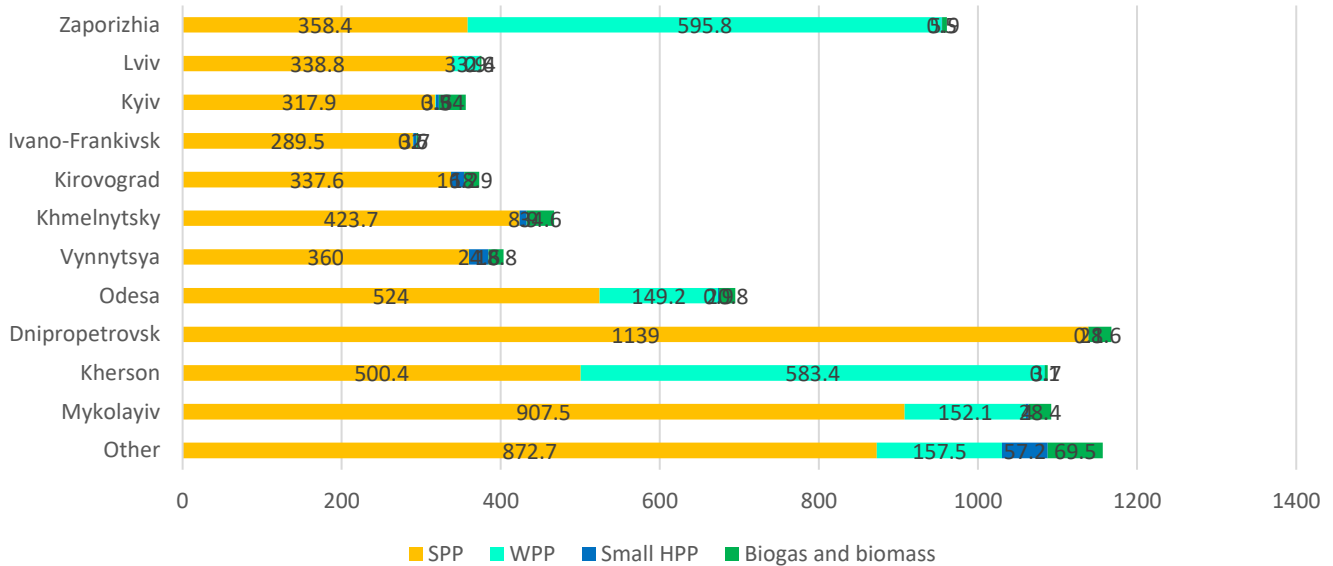
Installed capacity of RES in the period of 2015-2021, MW



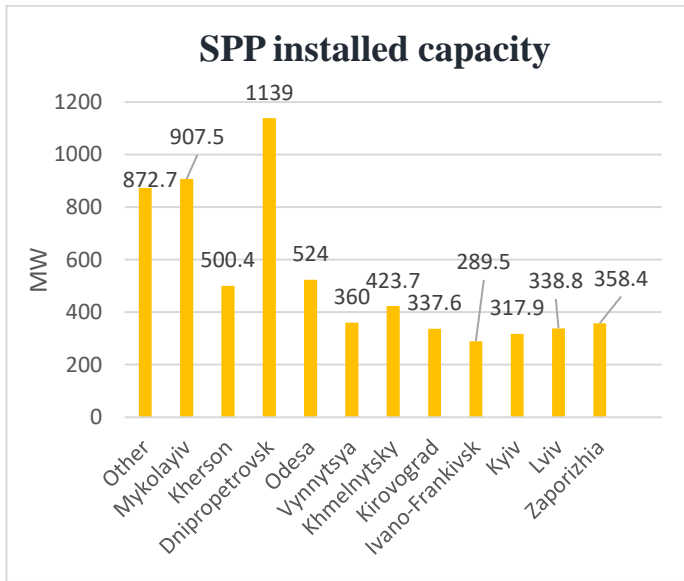
Resources: SAE as of the end of the first half of 2021, NEURC as of 01.08.2021:

<https://www.facebook.com/saeUA/posts/6303411463004170>, <https://www.nerc.gov.ua/?id=60637>

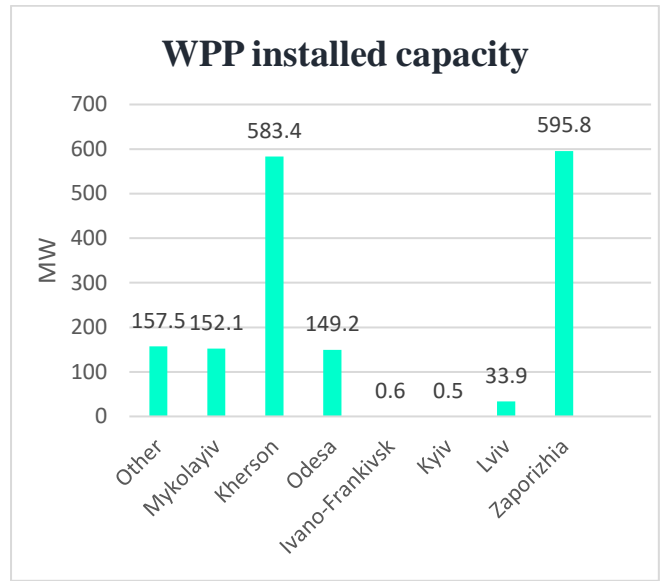
The installed capacity of RES facilities in the regions of Ukraine as of 01.10.2021, MW



Resource: <https://www.nerc.gov.ua/?id=60637>

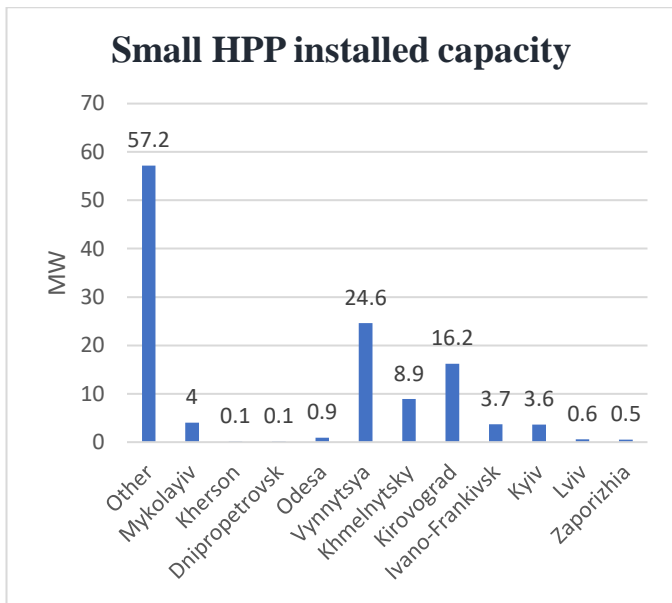


As of 01.10.2021

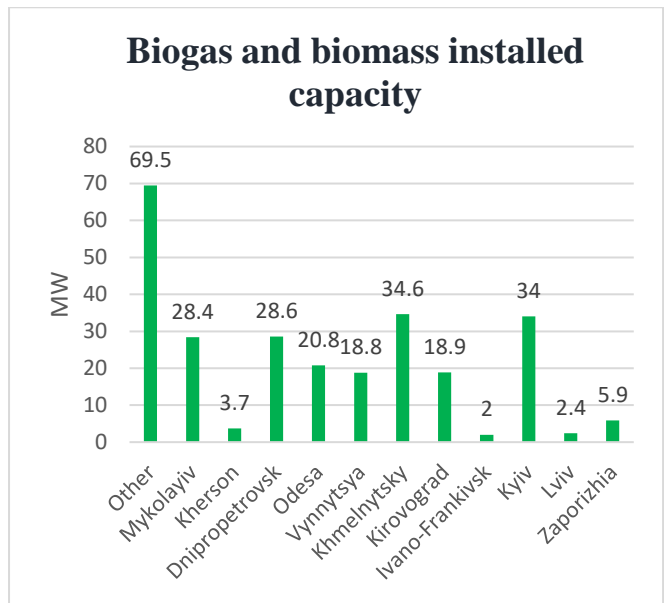


As of 01.10.2021

Most of the solar power is installed in Dnipropetrovsk region – 1139 MW, in Mykolayiv – 907.5 MW and Odessa - 524 MW. Kherson and Zaporizhia regions show the largest amount of installed wind capacity - with 583.4 MW and 595.8 MW, respectively.



As of 01.10.2021

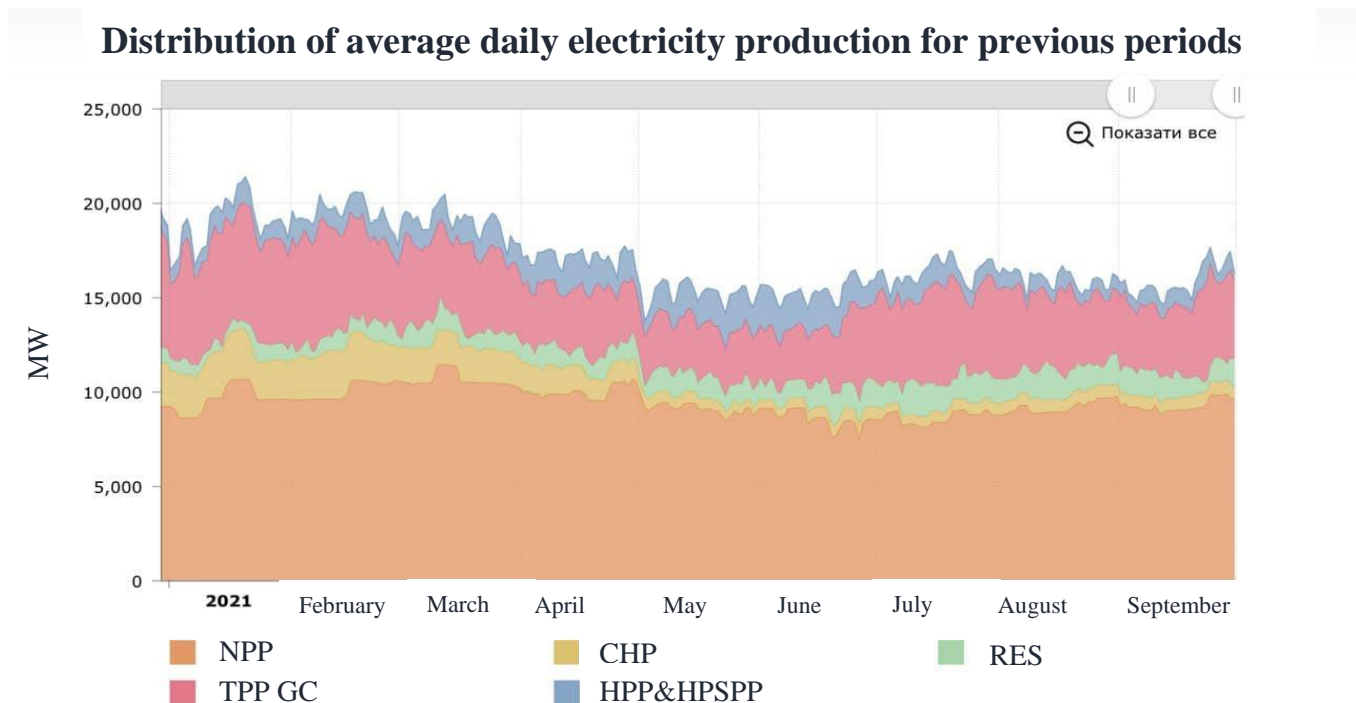
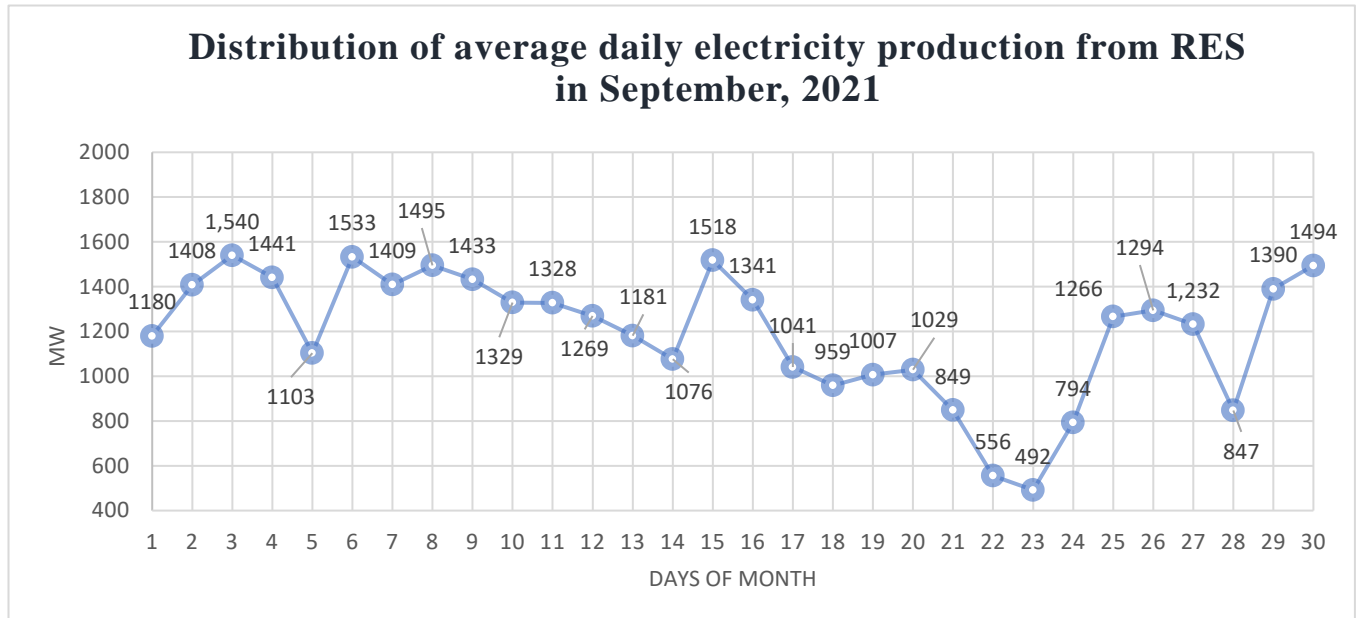


As of 01.10.2021

Vynnytsya region has the largest capacity of small hydropower power plants - 24.6 MW, the second place relates to Kirovograd region - 16.2 MW, the third one Khmelnytsky - 8.9 MW. Khmelnytsky also has the largest capacity of biomass and biogas - 34.6 MW and Dnipropetrovsk region takes the second place - 28.6 MW.

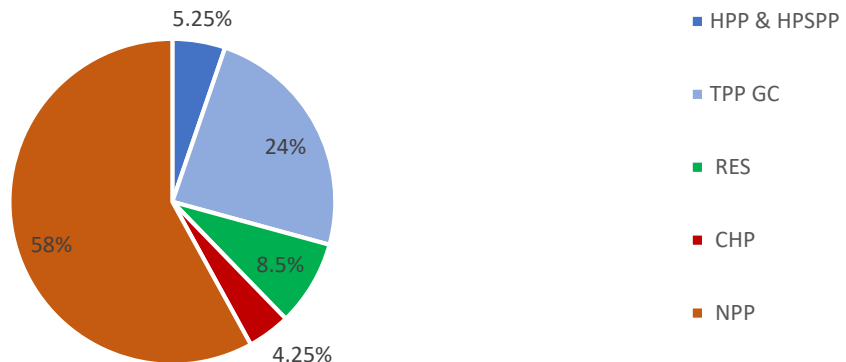
Review of the share of RES in the power system for September 2021

8,5% - the share of RES generation in the total energy produced by the Integrated Power System (IPS) of Ukraine in September 2021.



Resource: <https://ua.energy/peredacha-i-dyspetcheryzatsiya/dyspetcherska-informatsiya/roboata-oes-ukrayiny-za-tyzhden/>

Structure of IPS generation in September, 2021



Resource: <https://ua.energy/peredacha-i-dyspetcheryzatsiya/dyspetcherska-informatsiya/robota-oes-ukrayiny-za-tyzhden/>

Information on the generation curtailments of NPC “Ukrenergo” for September, 2021

In **10** of 30 days of September generation production were limited to a total of **9568 MW**, with an average daily figure of **957 MW**.

It will be recalled that in the previous period (from June to August 2021) the curtailments of RES generation occurred in **19 days** for a total of **16,874 MW** with an average of **888 MW** per day.

In total, since the beginning of the year, the restrictions have been **65 days** for a total capacity of **69958 MW**.¹

Monitoring of the Memorandum Implementation and Law of Ukraine No. 810-IX

On June 10, 2020, a Memorandum was signed between the Government of Ukraine and sectoral associations in the field of RES (European-Ukrainian Energy Agency and Ukrainian Wind Energy Association).

There is a list below of commitments made by the state of Ukraine to stabilize the industry, in addition to reducing the "green" tariff.

¹ <https://ua.energy/novyny/> - from the weekly news about the operation of the energy system for 2021

<p>Granting the right to SE "Guaranteed Buyer" to sell electricity produced from RES at auctions under bilateral agreements.</p>	<p>According to current data as of September 24, 2021, SE "Guaranteed Buyer" sold 589 thousand MWh of e/e from RES as a result of trading on the stock exchange, which is 14% of total electricity sales in August 2021.² At the same time, we will remind that for the II quarter of 2021 sold on results of the auctions of "green" the electric power under bilateral agreements of 1227 thousand MWh for more than 40%.³</p>
<p>Improving the procedure for organizing and conducting auctions for the distribution of support quotas.</p>	<p>There is no news compared to last month, as well as the draft resolution of the Ministry of Energy to improve the procedure for conducting auctions is approved by the CEB.⁴</p>
<p>Stabilization clause, which provides for the invariability of the legislation in force at the time of entry into force of the Law of Ukraine №810-IX of August 1, 2020.</p>	<p>In June-September, an initiative was registered in the Verkhovna Rada in the Draft Law №5600 on the introduction of an excise tax of 3.2% on the sale of electricity produced from renewable energy sources (RES). Following the joint efforts of EUEA, member companies and other industry associations to advocate for the exclusion of this amendment from the Draft Law, on 17 September 2021, the Committee on Finance, Tax and Customs Policy excluded the amendment.</p>
<p>100% payment to RES producers, which were to occur from August 1, 2020.</p>	<p>Current payments: for January-April - 93%, May - 73%, June - 70%, July - 67%, August - 56%, September (20 days) - 57%.⁵</p>
<p>Repayment of the existing debt of UAH 22.4 billion that has accumulated for the period up to August 1, 2020 to producers of electricity from RES.</p> <p>The repayment schedule is provided in the Memorandum of Understanding: 40% in the 4th quarter of 2020; 15% quarterly during 2021.</p>	<p>There are no changes and news in relation to the previous periods, as well as the debt remains around UAH 16 billion, with the total level of repayment of the principal amount of debt at 28% instead of the promised 85%. As previously reported, "NPC "Ukrenergo" is preparing to issue bonds worth 500 million euros in autumn this year in order to attract additional financial resources to repay the debt to the producers of "green" electricity in 2020.⁶</p>
<p>Development and implementation of a mechanism of compensation to producers for electricity not produced and not released</p>	<p>As of today, there are many comments from electricity producers of RES on the system, to the compensation mechanism for restrictions, balancing, the formula for</p>

²<https://www.gpee.com.ua/main/news?id=749>

³<https://www.gpee.com.ua/main/news?id=719>

⁴http://mpe.kmu.gov.ua/minugol/control/uk/publish/article?art_id=245534726&cat_id=167475

⁵<https://www.gpee.com.ua/main/news?id=342>

⁶<https://kosatka.media/uk/category/elektroenergiya/news/v-ukrenergo-rasskazali-o-planah-po-vypusku-zelenyh-obligacij>

<p>by RES producers as a result of execution of commands of the electricity transmission system operator.</p>	<p>calculating liability for imbalances, the situation remains unchanged compared to the previous month.</p>
<p>Increasing the tariff for the services of electricity transmission of PJSC “NPC “Ukrenergo” to a sufficient level to cover the FIT.</p>	<p>The current tariff is UAH 293.93 / MWh without VAT. This tariff set from December 2020 is insufficient to cover payments under the "green" tariff, which on average during 2021 is kept at 77%, which led to the accumulation of new debt this year in the amount of about UAH 10 billion. On September 28, 2021, Ukrenergo conducted a public discussion of the new higher tariff, which should fully cover “green” tariff payments and loan servicing. However, on September 29, 2021, the State Regulator approved the Draft Resolution on leaving the TSO tariff unchanged at UAH 293.93/MWh. A hearing on the tariff revision in the NEURC is to be held in October in the near future.⁷</p>
<p>Compensation of 20% of the "feed-in" tariff from the State Budget.</p>	<p>There is no corresponding expenditure norm in the State Budget 2021, as well as in the Draft Law "On the State Budget of Ukraine for 2022" this norm is suspended for 2022. Uncertainty of the written norm in the Law allows the NEURC to keep the transmission tariff at a low level, each time excluding from its value 20%, which can be compensated from the State budget. Unfortunately, 2021 showed the ineffectiveness of this norm.</p>
<p>The right of RES producers to leave the balancing group of the Guaranteed Buyer.</p>	<p>On August 26, 2021, the Ministry of Energy promulgated a Draft Law providing for the right of producers of electricity from alternative energy sources to leave the balancing group of a guaranteed buyer and freely sell electricity on the market with the possibility of receiving a margin between the established "green" tariff or auction and market price, improvement of the auction model of support in accordance with the best world practices.⁸ EUEA on behalf of the member companies sent comments emphasizing the importance of supporting this approach of voluntary transition of producers from RES to the new support system Feed-in Premium; we propose the need to determine a specific price indicator (indicative) for the estimated market price of electricity as a basic element in the calculation of compensation; create</p>

⁷ https://www.nerc.gov.ua/data/filearch/Materialy_zasidan/2021/Veresen/29.09.2021/p19_29-09-21.pdf

⁸ http://mpe.kmu.gov.ua/minugol/control/uk/publish/article?art_id=245570020&cat_id=167475

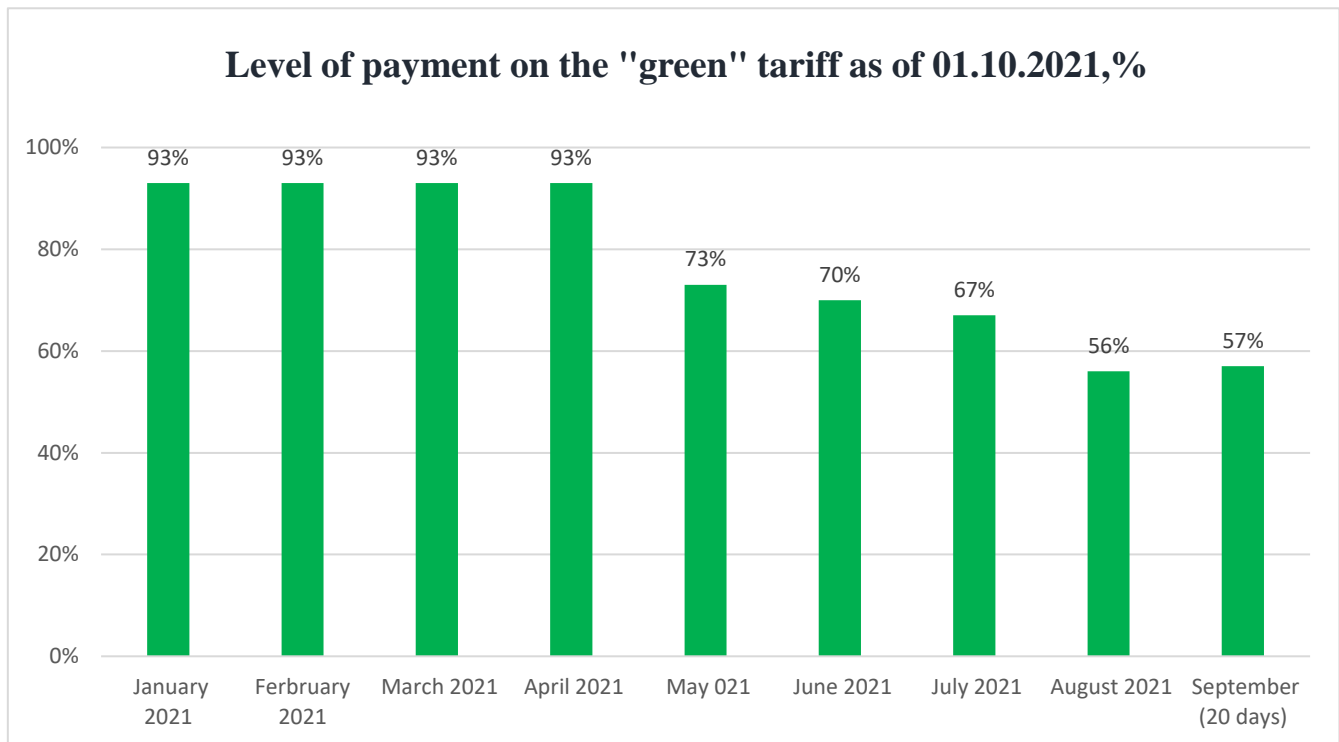
	<p>equal conditions with a clear definition of the terms of full payment; market rules should include the specifics of pricing for the services of RES producers in the balancing market, as well as the issue of determining the cost of settling imbalances. EUEA addressed the Ministry of Energy with a proposal to organize a round table to discuss the details of the Draft Law and the Feed-in Premium mechanism in general.</p>
<p>Stimulation of balancing and energy storage systems.</p>	<p>There is a list below of legislative initiatives in the field of energy storage and their main initiators:</p> <ul style="list-style-type: none"> • Yuriy Kamelchuk, People's Deputy of Ukraine (draft law №2582, №5436-1); • Oleksiy Kucherenko, People's Deputy of Ukraine (draft law №5436); • Andriy Gerus, People's Deputy of Ukraine (draft law №5436-2, №5518). <p>Currently, the Ministry of Energy has published a new Draft Law of Ukraine "On Amendments to Certain Laws of Ukraine on the Development of Energy Storage Systems (ESS)".⁹ EUEA sent its comments on this Draft Law, stating the following: to replace the obligation with the right of ESS operators to participate in the balancing market and the market of ancillary services; to keep guarantees for RES producers who install ESSs to pay for the implementation of TSO commands to reduce the load and to improve the calculation mechanism for such payment; change the proposed amount of payment for transmission services, distribution of electricity for ESS.</p>
<p>Conducting auctions for the distribution of RES support quotas until the end of 2020.¹⁰</p>	<p>We will remind that the previous acting Minister of Energy of Ukraine, Olga Buslavets presented on December 3, 2020 (not yet approved by the Cabinet of Ministers of Ukraine) annual support quotas and the schedule of auctions. See here on the page 9.</p> <p>Most likely, the auctions should be held within the Feed-in-Premium model, which can be adopted in 2022.</p>

⁹ http://mpe.kmu.gov.ua/minugol/control/publish/article?art_id=245573969

¹⁰ http://mpe.kmu.gov.ua/minugol/control/uk/publish/article?art_id=245573969&cat_id=167475&fbclid=IwAR1WR8eIi4AZY9BTX31iLLi_euqQop7EDNask02NGZvNZamCsxbdq_5IDbI

Information on payments for electricity at the "green" tariff as of October 1, 2021

The level of payment at the "green" tariff: for January - April - 93%, May - 73%, for June - 70%, July - 67%, August 56%, September (20 days) - 57%. The average level of payment from the beginning of 2021 is 77%.



Resource: <https://www.gpee.com.ua/main/news?id=342>

The Constitutional Court of Ukraine (CCU) and the Antimonopoly Committee of Ukraine (AMCU) on RES

AMCU

On October 1, 2021, by the invitation of the Ministry of Energy, with the participation of the Antimonopoly Committee of Ukraine, NEURC, EUEA and other industry associations joined a round table on the need to establish a working group and cooperation of key stakeholders to develop common approaches to reforming Ukraine's energy support system, taking into account the legislation of Ukraine and the secondary legislation of the EU in the

field of state aid to business entities. As a result of the discussion, the AMCU asked to provide a justification as soon as possible for our position that the current support mechanism is not state aid.¹¹

It will be recalled, that in the winter of 2021, the Antimonopoly Committee of Ukraine received a statement from the NGO "Antitrust League" with a request to open proceedings to recognize the "green" tariff - illegal state aid, which must be stopped due to its inadmissibility. The Antimonopoly Committee has not yet opened proceedings in this regard. EUEA, together with leading associations, argued to the Antimonopoly Committee that there were no signs of state aid in the state mechanism for supporting renewable energy, and gave examples of European practices.

CCU

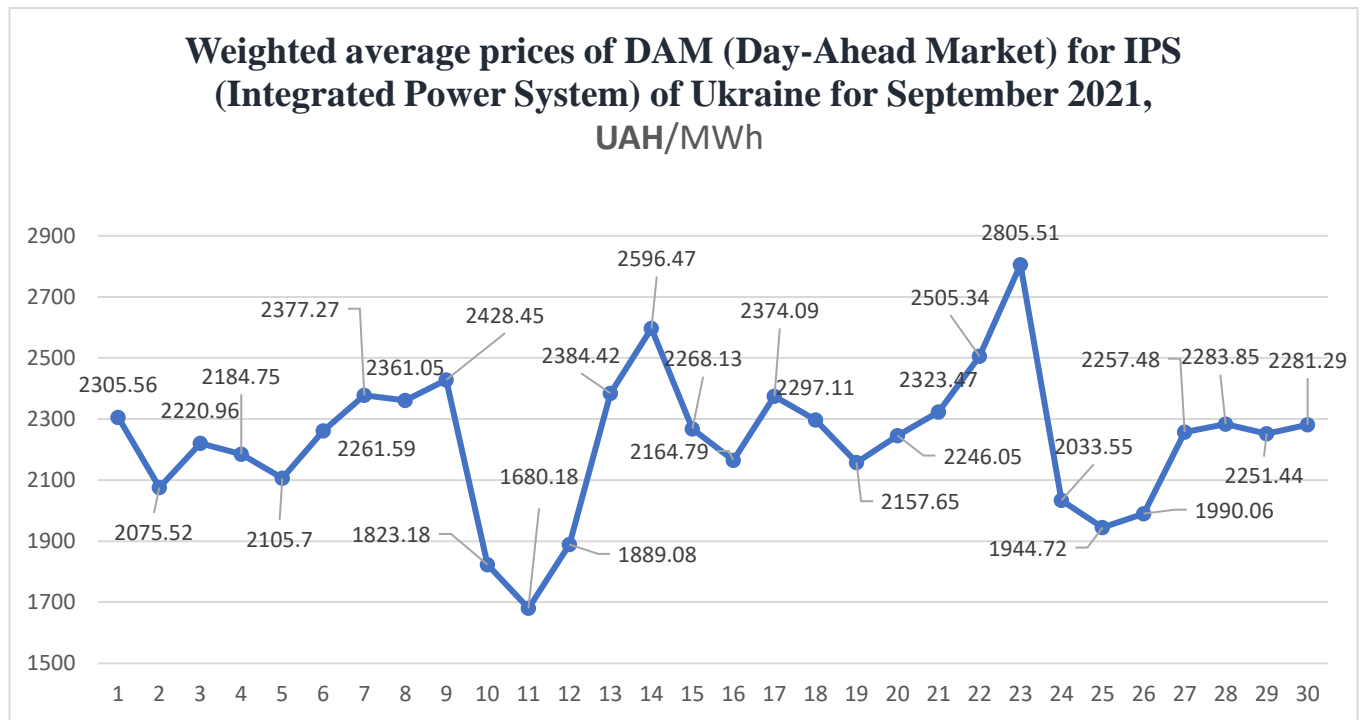
There is no news lately. It will be recalled, that last year (July 2020) a group of people's deputies filed an application with the Constitutional Court regarding the unconstitutional "green" tariff, the application was accepted for consideration and proceedings were opened, the case still remains open, there is no decision. EUEA and the leading RES associations sent their conclusions and arguments in support of the constitutionality of the existing mechanism in the RES sector. Also, as we know, the Constitutional Court received a large number of scientific legal opinions in support of the constitutionality of the "green" tariff.

Details of the constitutional proceedings against RES can be found in the previous monitoring at the following link: <https://cutt.ly/0WIJPAV>

¹¹ <https://amcu.gov.ua/news/rozvitok-zelenoyi-energetiki-amku-vzyav-uchast-u-kruglomu-stoli-shchodo-napracyuvannya-pidhodiv-dlya-reformuvannya-sistemi>

Weighted average prices of DAM (Day-Ahead Market) for IPS (Integrated Power System) of Ukraine for September 2021

The weighted average price of e/e for September DAM on IPS of Ukraine was **UAH/MWh 2229.29** or **EUR/MWh 71.79** (according to the official NBU exchange rate as of September 30, 2021).¹²



The average price for e/e in the period from 17.09.2021 to 30.09.2021 in neighboring countries:

- Romania – 141,44 Euro/MWh;
- Hungary – 143,46 Euro/MWh;
- Slovakia – 139,24 Euro/MWh;
- Poland – 103,5 Euro/MWh.¹³

¹² <https://www.oree.com.ua/index.php/indexes>

¹³ <https://www.oree.com.ua/>

Legislative initiatives for September 2021, affecting the activities of RES producers

Reviews of legislative initiatives that affect the activities of RES producers, prepared by the EUEA Energy Adviser – [IMEPOWER](#).

Legislative initiatives for the period 1 - 15 September (UA): <https://cutt.ly/BEfFaXt>

Legislative initiatives for the period 16 - 30 September (UA): <https://cutt.ly/KECoqYh>



European-Ukrainian Energy Agency

Dorogozhytska str. 3, UNIT City, B9, office 5, Kyiv, Ukraine

Mob.: +380 91 331 0010

E-mail: office@euea-energyagency.org

Mailing address: P.O. box №11, LLC "Service Unit City" for the Association

"European-Ukrainian Energy Agency", building B9, office 5, 04112, Kyiv, Ukraine

www.euea-energyagency.org