



Statement

on the verification of the adequacy of carbon emission reduction calculations and data reporting for the regular generation of carbon credits

Background

Green Cross Hungary (short name: GCH, full name: Green Cross Hungary, headquarters: H-1023 Budapest, Frankel Leo str 42-22., registration number: 01-02-0006012), tax number: 18062465-1-41, website: <https://www.magyarzoldkereszt.hu>) was founded in 1994 as an affiliate of Green Cross International (short name: GCI, website: www.gcint.org). GCI was founded by Mikhail Gorbachev in 1992.

The mission of Green Cross is to promote the prevention of conflicts arising from environmental degradation and the increasing demand for increasingly scarce natural resources, and to address global water, energy and environmental sustainability challenges.

Their innovative programme proposals, mainly to mitigate the climate crisis, would be difficult to classify in only one category. Green Cross aims to fully implement ecological sustainability and circular economy models and technologies. Green Cross organisations work on a self-fund basis, with a focus on overall societal benefit.

international Carbon Cycle (iCC)- Green Cross' carbon mitigation brand

The international Carbon Cycle (short name: iCC, website: <https://www.youandicc.com>) is a carbon market think-tank established by GCH experts, which has developed and is continuously improving the internationally operating, voluntary carbon market-compatible, quality carbon credit generation "QxyS" family of standards. The generated, "issued" carbon credits (VCUs) are registered in any international carbon credit registry, typically OurOffset Nonprofit Ltd (website: <https://ouroffset.com>), an internationally recognised Hungarian-based carbon market registry.



The aggregator is MITIGIA CARBON Zrt.

The carbon credit generation process, the carbon calculations and the necessary documentation requirements are based on the methodology of MITIGIA CARBON Szolgáltató Zártkörűen Működő Részvénytársaság (abbreviated as MITIGIA CARBON Zrt., formerly EMPROVIA Zrt., registered office: 2800 Tatabánya, Szent Borbála tér 6/C., tax no.: 27964671-2-11, company registration no.: 11-10-001772, website: <https://www.mitigia.com>), which have been registered as intellectual property at the National Intellectual Property Office in the Voluntary Register of Intellectual Property and which MITIGIA CARBON Zrt. is exclusively entitled to use without any restrictions in time, space and manner of use. This entitles MITIGIA CARBON Zrt. to generate regular carbon credits. Details of the relevant documentation relating to this certification can be found in the following table:

Name of carbon market process	Date of voluntary registration	Reg. No. of voluntary registration	Reg. No. of carbon market verification
Post-financing of investments in green energy investments by issuing carbon credits	2024.07.09	012417	GCH-EMP-80712

Mitigia: MITIGIA CARBON Zrt.'s carbon credit issuance programme

The carbon credits generated by the carbon market processes owned by MITIGIA CARBON Zrt. and used as proprietary knowledge are registered in a specialised emission pooling scheme, based on the legal concept of the service commission, within the framework of the carbon credit issuance service launched by MITIGIA CARBON Zrt. under the mitigia brand. Based on the fact of the service commission, MITIGIA CARBON Zrt. acts in its own behalf in the carbon market, i.e. it issues and sells carbon credits as an aggregator. However, it does so for the benefit of its clients (green investors), under the mitigia brand.

The carbon credits generated under each carbon market procedure are completely homogeneous, based on the same methodology, calculation methodology, legal framework and validation. The mitigia carbon crediting scheme thus provides significant efficiency gains for all stakeholders compared to separate project-by-project issuances. It provides a significant reduction of registration and transaction costs associated with issuances for its clients, while at the same time providing a simplified, one-certificate offsetting transaction for carbon credit purchasers.



Carbon calculations and data verification of ID Energy Group

ID Energy Group, as the Issuer's 4 companies, presented in detail:

- Megawatt-Bánya Naperőmű Kft (registered office: H-1061 Budapest, Andrásy út 20. 2nd floor. door 4.; company registration number: 01-09-392870; tax number: 26315397-2-42, owner: APATITA SOLAR, SOCIEDAD LIMITADA, registered office: ES-13005 Ciudad Real, C/Marconi 5., represented by Julio Antonio Puebla Espadas, delivery agent: Energy Services Magyarország Kft. H-1061 Budapest, Andrásy Str. 20. 2nd floor door 4.)
- Megawatt-Kastély Naperőmű Kft (registered office: H-1061 Budapest, Andrásy út 20. 2nd floor. door 4.; company registration number: 01-09-380590; tax number: 26315452-2-42, owner: APATITA SOLAR, SOCIEDAD LIMITADA, registered office: ES-13005 Ciudad Real, C/Marconi 5., represented by Julio Antonio Puebla Espadas, delivery agent: Energy Services Magyarország Kft. H-1061 Budapest, Andrásy Str. 20. 2nd floor door 4.)
- Megawatt-Észak Naperőmű Kft (registered office: H-1061 Budapest, Andrásy út 20. 2nd floor. door 4.; company registration number: 01-09-380591; tax number: 26315421-2-42, owner: APATITA SOLAR, SOCIEDAD LIMITADA, registered office: ES-13005 Ciudad Real, C/Marconi 5., represented by Julio Antonio Puebla Espadas, delivery agent: Energy Services Magyarország Kft. H-1061 Budapest, Andrásy Str. 20. 2nd floor door 4.)
- Iliox Solar Kft (registered office: H-1061 Budapest, Andrásy út 20. 2nd floor. door 4.; company registration number: 01-09-357649; tax number: 27930405-2-42, owner: ID ENERGY GROUP SA, registered office: ES-13005 Ciudad Real, C/Marconi 5., represented by Julio Antonio Puebla Espadas, delivery agent: Energy Services Hungary Kft. H-1061 Budapest, Andrásy Str. 20. 2nd floor door 4.)

On the basis of the carbon credit cooperation agreement concluded between MITIGIA CARBON Zrt. and the Hungarian member companies of ID Energy Group, MITIGIA CARBON Zrt. has performed the carbon credit calculations related to the production of the commercial on-grid solar power plants in 2024, owned and operated by the above-mentioned companies of ID Energy Group, and has provided the data and project documentation supporting the calculations.

ID Energy Group is a Spanish-owned international group of companies (<https://idenergy.group/>) that operates 5 small photovoltaic power plants in Hungary. All of these plants were implemented as green investments by Hungarian companies owned by the group between 2019 and 2023. All five plants were operational for the full year of 2024.

MITIGIA CARBON Zrt. has turned to iCC with the request to validate the mathematical calculations of the carbon credit generation based on the **production of green electricity generated by the solar PV projects (photovoltaic solar parks) owned and operated by ID Energy Group companies in the year of 2024, per plant, not directly involved in the sale of green electricity and the issuance of guarantee of origin, as detailed below, and to certify the validity of the provided data and the attached documentation.**

The Verified Carbon Units (VCUs) duly created on the basis of this verification will be registered in the Mitigia Carbon Credit issuance program for green energy producers, launched by MITIGIA CARBON Zrt. on the basis of the company's carbon market procedure "*Post-financing of investments in green energy production by issuing carbon credits*".

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Based on the project, ID Energy Group decided that the carbon units to be issued on the Voluntary Carbon Market should be issued by Iliox Solar Kft., which is the Hungarian commercial entity of ID Energy Group. The credits will be issued under the well-established ID Energy brand name. This decision was made to ensure that the issuance is consolidated under a single certificate, thereby reducing transaction costs and enabling the provision of a larger, unified issuance series to potential credit buyers by leveraging a market-recognized brand. Since this aggregation takes place within the same ownership group, the owners have agreed to this arrangement in the Issuer's Declaration, ensuring compliance with the transparency requirements of the voluntary carbon market.

Configuration of the power plant

Erőmű neve	Szentegát	Szigetvár	Kastélyosdombó	Dunaföldvár A	Dunaföldvár B
Zöld Beruházó	Megawatt-Bánya Naperőmű Kft	Megawatt-Észak Naperőmű Kft.	Megawatt-Kastély Naperőmű Kft.	Megawatt-Bánya Naperőmű Kft	Megawatt-Bánya Naperőmű Kft
Erőmű címe	7915 Szentegát Hrsz: 4/5	7900 Szigetvár Hrsz: 0111/3.	7977 Kastélyosdombó, Hrsz: 0238/7	7020 Dunaföldvár Hrsz: 0541/163	7020 Dunaföldvár Hrsz: 0607/12
Erőmű beépített kapacitása	[0,9936] MW AC / [1.365] MW DC	[0,497] MW AC / [0.702] MW DC	[0,468] MW AC / [0.648, 7] MW DC	[0,9936] MW AC / [1.365] MW DC	[0,9936] MW AC / [1.365] MW DC
Napelem	4000 db Canadian Solar CS6K-300MS	1080 db Trina Solar-Vertex TSM-DEG21C.20 650Wp	998 db Trina Solar-Vertex TSM-DEG21C.20 650Wp	2100 db Trina Solar-Vertex TSM-DEG21C.20	2100 db Trina Solar-Vertex TSM-DEG21C.20 650 Wp
Inverter	25 db Huawei SUN2000 36-KTL	8db Huawei SUN2000-60KTL	1 db Huawei SUN2000-115KTL-M2 3 db Huawei SUN2000-100KTL-M2	4db Huawei SUN2000-215KTL-H3	3 db Huawei SUN2000-215KTL-H0
	3 db Huawei SUN2000 33-KTL	1 db Huawei SUN2000-17KTL	1 db Huawei SUN2000-50KTL-M3	1 db Huawei SUN2000-185KTL-H1	1 db Huawei SUN2000-185KTL-H1, 2 db Huawei SUN2000-105KTL-H1
Transzformátor	SIEMENS 22/0,42 kV, 1,250 MVA	Olajszigetelésű 22kV/0,42 kV 630 kVA	Olajszigetelésű 22kV/0,42 kV 630 kVA	Olajszigetelésű 22kV/0,42 kV 1250 kVA	Olajszigetelésű 22kV/0,42 kV 1250 kVA

The solar power plant strings are connected to the inverters, which are connected to the on-site substations, and to the high-voltage electricity grid via the transformer after the high-voltage ground cables. Most of the electricity generated is fed into the grid and 0.5% is self-consumed.

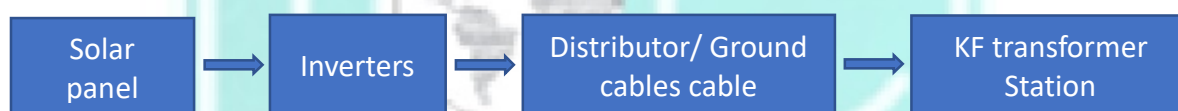


Figure 1: Block diagram of the system

Solar park projects investment data

The locations and key data of the solar park investments made by the ID Energy Group companies presented above are detailed below:

Power plant name	Szentegát	Szigetvár	Kastélyosdombó	Dunaföldvár A	Dunaföldvár B
Green Investor	Megawatt-Bánya Naperőmű Kft	Megawatt-Észak Naperőmű Kft.	Megawatt-Kastély Naperőmű Kft.	Megawatt-Bánya Naperőmű Kft	Megawatt-Bánya Naperőmű Kft
Address	H-7915 Szentegát Hrsz: 4/5	H-7900 Szigetvár Hrsz: 0111/3.	H-7977 Kastélyosdombó, Hrsz: 0238/7	H-7020 Dunaföldvár Hrsz: 0541/163	H-7020 Dunaföldvár Hrsz: 0607/12
Installed capacity	[0,9936] MW AC / [1.365] MW DC	[0,497] MW AC / [0.702] MW DC	[0,468] MW AC / [0.648, 7] MW DC	[0,9936] MW AC / [1.365] MW DC	[0,9936] MW AC / [1.365] MW DC
Power plant type	Solar power plant	Solar power plant	Solar power plant	Solar power plant	Solar power plant
METÁR contract No. (if any)	H 844/2020	H 838/2020	H 839/2020	H 842/2020	H 843/2020
Release licence No.	ÉPHE-220/2020	ÉPHE-628/2018	ÉPHE-560/2018	ÉPHE-250/2020	ÉPHE-48/2021
Issuer of release licence	Baranya Vármegyei Hivatal	Baranya Vármegyei Hivatal	Baranya Vármegyei Hivatal	Baranya Vármegyei Hivatal	Baranya Vármegyei Hivatal
Date of release licence	2024.03.05	2024.10.17	2024.03.14	2023.08.02	2024.03.04
Network connection contract No.	HC_132/2019	HC_146/2019	HC_147/2019	HC_131M/2019	HC_008/2020
DSO name	E.ON Dél-Dunántúli Áramhálózati Zrt.	E.ON Dél-Dunántúli Áramhálózati Zrt.	E.ON Dél-Dunántúli Áramhálózati Zrt.	E.ON Dél-Dunántúli Áramhálózati Zrt.	E.ON Dél-Dunántúli Áramhálózati Zrt.
Date of Network connection contract	2019.06.18	2023.10.24	2023.10.24	2023.04.04	2023.10.24
Solar panel	4000 pcs Canadian Solar CS6K-300MS	1080 pcs Trina Solar-Vertex TSM-DEG21C.20 650Wp	998 pcs Trina Solar-Vertex TSM-DEG21C.20 650Wp	2100 pcs Trina Solar-Vertex TSM-DEG21C.20	2100 pcs Trina Solar-Vertex TSM-DEG21C.20 650 Wp
Inverter	25 pcs Huawei SUN2000 36-KTL	8pcs Huawei SUN2000-60KTL	1 pcs Huawei SUN2000-115KTL-M2 3 pcs Huawei SUN2000-100KTL-M2	4pcs Huawei SUN2000-215KTL-H3	3 pcs Huawei SUN2000-215KTL-H0
	3 pcs Huawei SUN2000 33-KTL	1 pcs Huawei SUN2000-17KTL	1 pcs Huawei SUN2000-50KTL-M3	1 pcs Huawei SUN2000-185KTL-H1	1 pcs Huawei SUN2000-185KTL-H1, 2 pcs Huawei SUN2000-105KTL-H1
Transformer	SIEMENS 22/0,42 kV, 1,250 MVA	Oil insulated 22kV/0,42 kV 630 kVA	Oil insulated 22kV/0,42 kV 630 kVA	Oil insulated 22kV/0,42 kV 1250 kVA	Oil insulated 22kV/0,42 kV 1250 kVA
Building permit No.	ÉP-220/2020/H	ÉP-628/2018/H2	ÉPHE-560/2018	ÉP-250/2020	ÉP-48/2021
Issuer of Building permit	Baranya Vármegyei Hivatal	Baranya Vármegyei Kormányhivatal	Baranya Megyei Kormányhivatal	Baranya Megyei Kormányhivatal	Baranya Megyei Kormányhivatal
Date of Building permit	2022.11.10	2023.04.17	2018.12.03	2021.01.13	2021.05.25

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Technology description

The solar power plants defined above use solar panels to produce green electricity. The solar parks consist of solar panels that convert sunlight directly into electricity through photovoltaic effect. The direct current (DC) electricity produced by the solar panels is converted into alternating current (AC) electricity using inverters, which is connected to the national grid via a transformer station. The energy produced by the plant is generated continuously during the sunny season and as planned and scheduled.

The above 5 solar power plants do not include generating units that directly use electricity locally, only the self-consumption of the power plants occurs, which reduces the amount of commercial feed-in. The additional green electricity generation fed into the grid partially replaces and substitutes the national fossil generation, to which the MITIGIA CARBON Zrt. methodology assigns a specific correlation value for the carbon credit generation period to determine the strength of the "substitution effect" link.

In the current arrangement, the solar power plants produce more energy than the current self-consumption (0.5%) during peak sunshine hours. ID Energy Group's solar power plants feed back the measured portion of their own generation into the national grid during peak hours. In this arrangement, the green electricity that is fed back to the electricity grid, and not covered by a direct green power sales contract or issuance of a guarantee of origin, is the basis of generation of VCU units in 2024 (6,613,255 kWh).

Project boundary condition data, findings

- The project period covered by this issuance is: from **01.01.2024 to 31.12.2024**, with periods precisely defined for each solar power plant;
- To generate the carbon credit, MITIGIA CARBON Zrt. used its proprietary knowledge, the carbon market procedure "**Post-financing of investments in green energy production by issuing carbon credits**";
- The iCC/GCH followed the principles of the **Quality Technology Change Standard® (QTCS) v3** during the validation/verification;
- According to the authentic legal documentation provided, **ID Energy Group has the right to benefit from carbon dioxide emissions savings for all 5 solar power plants**;
- Based on the provided technology documentation, the **green investment was completed, put into production** and clearly achieved CO2 avoidance/removals during the issuance period;
- The volume of carbon savings can be unequivocally quantified by calculations, thus the **quantity of VCUs (Voluntary Carbon Units)** enabled to be issued on the Voluntary Carbon Market, based on these carbon savings, **can be determined too**.

Considerations for the generation of carbon credits based on green electricity production

1. The solar power plants listed above, implemented by ID Energy Group, are so-called "**on-grid commercial power plants**" that feed green electricity into the national energy grid. The project is considered to be a fully green investment, the green investor being **ID Energy Group, which**



is entitled to purchase the VCU units as a pass-through owner and operator for the above 5 solar plants.

2. ID Energy Group has a strong **strategy and roadmap** to further develop and expand its green investment activities. The **green investment** involved in the generation of carbon credits is **considered to be additional** because:
 - a. ID Energy Group, as a green investor, has included the renewable origin of the energy sold (in the form of guarantees of origin or carbon credits) as a significant contribution to its business plan, on the basis of which it makes its business decisions,
 - b. the ID Energy Group will use the proceeds from the carbon credit issuance for further green investments.
3. Furthermore, ID Energy Group has also confirmed by declaration, and this is also evident from the production data included in the project documentation, that it only generates carbon credits for production not directly involved in the sale of green electricity and the issuance of guarantees of origin, thus **logically excluding double generation**.

The result of the carbon calculation

Based on the supporting documents provided and the hourly energy production data, it can be concluded that **the total amount of green energy production** under the project was **6,646,487 kWh in the period under review from 1st January 2024 to 31st December 2024, of which only 6,614,255 kWh was accounted for in the generation of the carbon credit, after deduction of self-consumption**. From the hourly elementary data during this period, the average cumulative carbon intensity in the Hungarian electricity grid was 220.8 gCO_{2e}/kWh, while the correlation coefficient describing the substitution effect of the in-use coal energy input on the fossil generation over the period was -0.8046 (absolute value: 0.8046). For the fossil energy source replaced, MITIGIA CARBON Zrt. has conservatively calculated the carbon intensity of the lowest carbon-intensity fossil energy mix component, natural gas (562 gCO_{2e}/kWh). Residential carbon consumption over the period considered was considered with a life-cycle carbon intensity of 31 gCO_{2e}/kWh, which is typical for solar power plants on average.

Based on the documents provided by ID Energy Group, the project has resulted in the avoided carbon emissions for the relevant periods per solar power plant between 1st January 2024 and 31st December 2024, as summarised in the table below:

Address	Installed capacity	Project started	End date	VERs (gCO _{2e})	VERs (tCO _{2e})
7020 Dunaföldvár HRSZ: 0541/163	[0,9936] MW AC / [1,365] MW DC	2024-01-01	2024-12-31	809 212 142	809,2121
7020 Dunaföldvár HRSZ 0607/12	[0,9936] MW AC / [1,365] MW DC	2024-01-01	2024-01-16	787 344 206	787,3442
7977 Kastélyosdombó HRSZ: 0238/7	[0,468] MW AC / [0,648,7] MW DC	2024-01-01	2024-12-31	378 255 057	378,2551
7915 Szentegát HRSZ 4/4	[0,9936] MW AC / [1,365] MW DC	2024-01-01	2024-12-31	818 248 325	818,2483
7900 Szigetvár	[0,497] MW AC / [0,702] MW DC	2024-07-01	2024-07-08	186 419 183	186,4192
				2 979 478 912	2 979,4789
				Originated VCUs (pcs)	2 979
				Residual VER (tCO _{2e})	0,4789

Table summarising the emission avoidance of the portion of total period production (feed-in) not involved in direct green electricity sales and/or guarantees of origin issuance



Carbon emission reduction certification

Using the above carbon calculation data, **the total carbon dioxide emission reduction certified by iCC/GCH for the project under assessment for the relevant period is: 2979,479 tonnes CO₂e.**

Therefore, based on this, the iCC/GCH **considers a total of 2,979 (two thousand nine hundred and seventy-nine) carbon credits (VCUs) to be issued and registered in the carbon market.** With this certificate, MITIGIA CARBON Zrt. as the issuer (or its authorised agent) may contact any carbon credit registry (VCM registry) recognised in the Voluntary Carbon Market and, on the basis of this certificate, **initiate the use of its CO₂ emission savings in the form of carbon credit registrations.**

Comment

The iCC/GCI will not store the provided input documentation, but will store the corner numbers supporting this opinion for 10 (ten) years from the date of registration of the carbon credits and will forward them to the competent authority upon official request. At the same time, the Client is requested to keep the complete documentation and data field containing the input data of ID Energy Group's solar power plants for the period under review, also for at least 10 (ten) years.

Budapest, 2025.06.09.

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