



ISO 14064: 2018 CARBON FOOTPRINT PUBLIC DISCLOSURE REPORT

ABDULLAH GÜL UNIVERSITY

Contents

1.	Organization Information	5
2.	Definitions and Acronyms.....	6
3.	Inventory Boundary.....	8
	3.1. Institution Boundary	8
	3.2. Report Boundary	9
4.	Emissions Summary	9
	4.1. Significant Changes in Emissions	11
5.	Emissions Reduction.....	11
6.	AGU's Future Goal.....	13
7.	Conclusion.....	14

Table

Table 1.	AGU's Total Carbon Emission	9
Table 2.	AGU's Carbon Emission Sub-Categories.....	10
Table 3.	AGU's Future Goal	13

Figure

Figure 1.	AGU Institution Boundaries.....	8
-----------	---------------------------------	---

ISO 14064: 2018 Carbon Footprint

Public Disclosure Report

Prepared by

Dr. Fatma Şener Fidan

Approved by

Prof. Dr. Erk Hacıhasanoğlu



1.

Organization Information

Abdullah Gül University (AGU,) the first Turkish Public University supported by a philanthropic foundation (AGUV), was established on 21 July 2010 and enrolled its first students in the 2013- 2014 academic year. AGU was established in the city of Kayseri, a Historical, Industrial and Touristic Hub of Turkey counting 1,5 Mio inhabitants.

AGU was designed as a Socio-Technical University Model for Higher Education, an on-going initiative supported by the Turkish Ministry of Development. The project was defined with the help of over 20 Search Conferences and 40 Workshops, and has aimed at pioneering the New Generation University model in Turkey, with unique and innovative curricula and educational processes, with the objective of disseminating the project's findings across all higher education institutions in the country and beyond.

This pilot project, started in 2010 by the Turkish State to reform the Higher Education, was shaped by +700 contributors from universities, corporations, NGOs, and other organizations. It is the first cross-sectorial initiative for a hybrid university model.

AGU, as a research university seeking solutions to global challenges through partnerships and learner-centered approaches, aims to raise citizens who can contribute to their communities and shape the future by converting knowledge into personal and social values.

With its mission focusing on societal impact, AGU targets global challenges, which will also stimulate students' professional careers and ambitions. AGU aspires to the ways of engagement with UN Sustainable Development Goals (SDGs) through the provision of qualified human resources, development of technology, production of patents, founding new start-up companies, running industrial projects, development of economic and social policies, contribution to the culture, and the dissemination of knowledge to the society.

AGU's primary objective is to pioneer "New Generation Universities" by blending the three university missions (1st Education, 2nd Research and 3rd Societal Impact) via innovative approaches, focusing particularly on the 3rd mission.

Within the framework of AGU's vision, AGU sees its contribution to the world and the environment as a responsibility. All stakeholders, governments, institutions, and individuals are responsible for doing their part to bring climate change under control. AGU has prepared the Carbon Footprint Report to become a sustainable campus and analyze its environmental impacts by moving forward within the framework of its commitment to become carbon neutral by 2029.

AGU, while operating as an internationally-oriented university, strives to play a part in the global initiative by engaging in efforts that minimize its ecological footprint and work towards achieving sustainability objectives. It carries out its activities in line with the United Nations Sustainable Development Goals (UN SDGs). This carbon report contributes to SDG 7 (Affordable and Clean Energy), SDG 13 (Climate Action) and SDG 17 (Partnerships for the Goals).



2.

Definitions and Acronyms

Base Year: A past period determined for comparison of greenhouse gas emissions, removals, or other greenhouse gas-related information in the future. Note – Base-year emissions or removals can be calculated based on a specific time period (one year) or the average of several time intervals.

Biomass: Organic matter of biological origin, excluding matter within geological formations and fossilized matter. Note 1: Biomass includes organic materials (both living and dead), such as trees, grains, grasses, woody debris, algae, animals, manure, and biologically derived wastes.

Carbon Dioxide Equivalent (CO₂e): A unit used in comparing the radiative forcing of a greenhouse gas to that of carbon dioxide. Note – The carbon dioxide equivalent is obtained by multiplying the mass of a given greenhouse gas by its global warming potential.

Carbon Footprint: A term used to describe the amount of carbon released into the atmosphere as a result of production, transportation, heating, energy consumption, or the purchase of raw materials.

Confidence Level: The degree of confidence requested by the target user in validation or verification. Note 1 – The confidence level is used to determine the details of the validation or verification plan designed by the approving or verifying party to determine whether there are material errors, omissions, or misunderstandings. Note 2 – Two confidence levels (reasonable or limited) result in different validation or verification statements.

Facility: A single facility, group of facilities, or production processes that can be defined within a single geographical boundary, organizational unit, or production process (fixed or mobile).

Greenhouse Gas: A component of Earth's atmosphere and clouds that absorbs and emits certain wavelengths of infrared radiation in the spectrum, both naturally and anthropogenically.

Greenhouse Gas Activity Data: A quantitative measure of an activity resulting in greenhouse gas emissions or removals. Note – Examples of greenhouse gas emission activity data include the amount of energy consumed, fuel or electricity used, materials produced, services provided, or affected land area.

Greenhouse Gas Emission: The total mass of one of the greenhouse gases released into the atmosphere over a specific period.

Greenhouse Gas Emission or Removal Factor: Factor related to activity data for greenhouse gas emissions or removals. Note – An oxidation parameter may also be included in the emission or removal factor of a greenhouse gas.

Greenhouse Gas Inventory: Information related to greenhouse gas sources, sinks, emissions, and removals for an organization.

Greenhouse Gas Program: A voluntary or mandatory international, national, or regional system or plan outside an organization or greenhouse gas project that records, processes, or manages records of greenhouse gas emissions, removals, emission reductions, or removal improvements.

Greenhouse Gas Removal: The total mass of one of the greenhouse gases removed from the atmosphere over a specific period.

Greenhouse Gas Sink: A physical unit or process that removes any one of the greenhouse gases from the atmosphere.

Greenhouse Gas Source: A physical unit or process that releases greenhouse gases into the atmosphere.

Materiality: A concept that can affect greenhouse gas declarations and decisions of target users due to errors, omissions, and misunderstandings, either in whole or in part.

Monitoring: The continuous or periodic assessment of greenhouse gas emissions, removals, or other greenhouse gas data.

Non-Anthropogenic Biological Origin GHG Emission: Greenhouse gas emissions resulting from natural disasters (e.g., forest fires or insect infestations) or natural evolution (e.g., growth, decomposition) of biological materials.

Organization: An entity with its own operation and management, whether public or private, joint or non-joint, a company, firm, entrepreneur, institution, or establishment, or any combination thereof or part thereof.

Responsible Party: The individual or individuals responsible for providing greenhouse gas declarations and information. Note – The responsible party can be individuals or a representative of an organization or project, and may collaborate with an approving or verifying party, such as a verifying customer or greenhouse gas program manager.

Target User: The person or organization identified by greenhouse gas reporters who rely on this information in decision-making. Note – Target users can be customers, responsible parties, greenhouse gas program managers, legislators, the financial community, or other stakeholders (local governments, government agencies, or non-governmental organizations).

CH₄ Methane
CO₂ Carbon Dioxide
N₂O Nitrous Oxide
HFC Hydrofluorocarbons
PFC Perfluorocarbons
SF₆ Sulfur Hexafluoride
NF₃ Nitrogen Trifluoride
CO₂e Carbon Dioxide Equivalent
EF Emission Factor
NKD Net Calorific Value
FV Activity Data
GHG Greenhouse Gas
GWP Global Warming Potential
IPCC Intergovernmental Panel on Climate Change
DEFRA Department for Environment, Food & Rural Affairs
EPA USA Environmental Protection Agency

3.

Inventory Boundary

3.1. Institution Boundary

The boundaries for the calculation of AGU's greenhouse gases were identified by taking into account its active offices. While determining the institutional boundaries, the "control approach" was adopted. Thus, only administratively or financially controlled boundaries were taken into account. In this context, greenhouse gas emissions due to the activities carried out or managed at the buildings and facilities located at AGU Sümer Campus, 38080 Kayseri, Türkiye were calculated.

All areas used for education including faculty, graduate schools, and administrative office buildings, sports centers, laboratory buildings, and residence halls and dormitories on the AGU Sümer Campus were counted in the institutional boundaries. Private establishments on the Sümer Campus were excluded from the calculations. The areas counted within the institutional boundaries are shown on Figure 1.

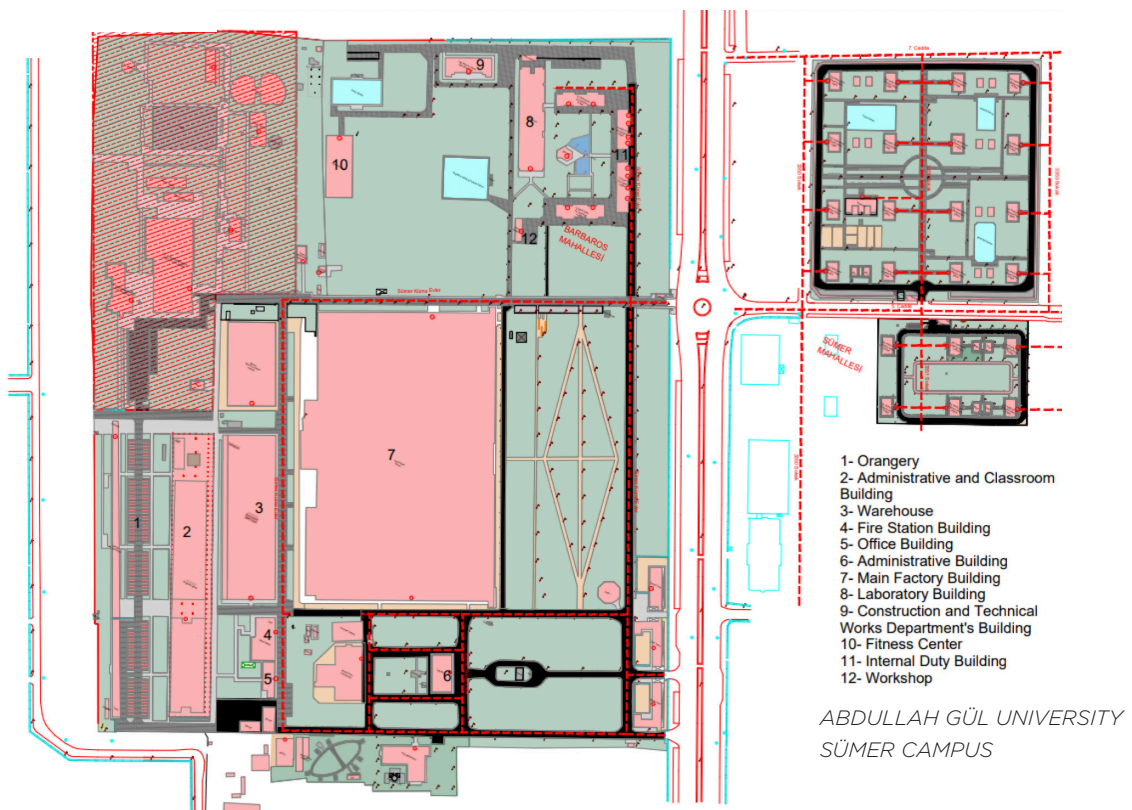


Figure 1. AGU Institution Boundaries

3.2. Report Boundary

The operational boundaries are identified by measuring the greenhouse gas emissions and removals caused by the activities of the organization. All potential emission sources to be counted within the operational boundaries are defined by the Greenhouse Gas Protocol and ISO 14064-1 standard. These can be categorized as

- Direct greenhouse gas emissions,
- Energy indirect greenhouse gas emissions,
- Other indirect greenhouse gas emissions.

4

Emissions Summary

AGU is a young university established in 2010 and the preparation of greenhouse gas emission inventories has continued steadily since this report. Therefore, there is no reference point that can be compared with 2010. In this context, 2021 was taken as the base year for AGU carbon calculations. In 2022, the comparison of the carbon calculation realized by including all data is given in the table below.

Table 1. AGU's Total Carbon Emission

No	Scope	Base Year (2021) t CO ₂ e	Current Year (2023) t CO ₂ e	Base Year (2021) Carbon Intensity	Current Year (2023) Carbon Intensity
1	Scope 1	733,11	1.069,47	0,2115	0,1874
2	Scope 2	1.116,21	1.500,75	0,3220	0,31
3	Scope 3	5.311,37	1.035,23	1,5324	0,2021
Total		7.160,69	3.605,45	2,0659	0,6995

Category based emission values are given in the table below.

Table 2. AGU's Carbon Emission Sub-Categories

No	Sub Categories	t CO ₂	te CH ₄	te N ₂ O	Te CO ₂
1	1.1 Direct emissions from stationary combustion	727,84	1,82	0,37	730,02
2	1.2 Direct emissions from mobile incineration	31,00	0,21	0,41	31,62
3	1.4 Direct fugitive/leakage emission from GHG release in anthropogenic systems	121,36	0	0	121,36
4	2.1 Indirect emissions from imported electricity	1387,16	0	0	1387,16
5	3.1 Indirect emissions from transportation and distribution of input materials	0,18	0	0	0,18
6	3.2 Indirect emissions from transportation and distribution of output materials	0	0	0	0
7	3.3 Indirect emissions from employee commuting	58,08	0	0	58,08
8	3.4 Indirect emissions from transportation of visitors and customers to the facility	123,25	0	0	123,25
9	3.5 Indirect emissions from business travel	26,01	0	0	26,01
10	4.1 Indirect emissions from purchased products	38,74	0	0	38,74
11	4.2 Indirect emissions from capital assets	407,78	0	0	407,78
12	4.3 Indirect emissions from the disposal of solid and liquid waste	5,25	0	0	5,25
13	4.4 Indirect emissions from the use of assets not owned by the entity	26,75	0	0	26,75
14	4.5 Indirect emissions from the use of other services	278,84	0	0	278,84
15	5.1 Indirect emissions from the use phase of the product	0	0	0	0
16	5.2 Indirect emissions from the use of capital assets owned by the facility	0	0	0	0
17	5.3 Indirect emissions from waste management after the product has become waste	0	0	0	0
18	5.4 Indirect emissions from investments	1514,86	0	0	1514,86
19	6 Indirect emissions from other sources	138,72	0	0	138,72
Total		4885,82	2,03	0,77	4888,62

4.1. Significant Changes in Emissions

To begin, with this kind of reporting, AGU seeks to quantify and control its corporate greenhouse gas emissions, formulate and evaluate impactful initiatives as part of its corporate efforts to address climate change and foster awareness regarding corporate emission reduction. Therefore, it is important to improve the scope and data quality of the report. In this regard, during the assessment of AGU's carbon footprint inventory, which saw enhancements in 2023, the coverage of activities within Scope 3 was expanded and their details were further refined, particularly in the year 2023. Consequently, a more extensive carbon footprint inventory was prepared.

AGU managed to reduce its Category 1 net emissions from 1069.47 to 883, representing a 17% reduction in net emissions in this category compared to last year. A similar improvement was observed in the net emission values of AGU belonging to Category 2. AGU succeeded in decreasing its Category 2 net emissions from 1500,75 to 1387,16, representing a %7.5 reduction in net emissions in this category compared to last year. AGU was also successful in reducing its net emissions from Category 3 (from 815,48 to 207,51) and Category 6 (from 150,08 to 138,72). It can be said that AGU has been progressing in reducing its net carbon emissions in parallel with the targets specified in the Climate Action Plan. These improvements can be evaluated as important indicators demonstrating AGU's strong commitment to being a carbon-neutral university by 2029. On the other hand, AGU has increased its net carbon emissions from Category 4 (from 69,66 to 757,37) and Category 5 (from N/A to 1514,86) due to its ongoing investments at the Sümer Campus. The decrease in total emissions and carbon intensity indicates AGU's positive efforts in emission reduction strategies and practices.

5.

Emissions Reduction

The Paris Agreement is an international climate change agreement adopted in 2015 under the United Nations Framework Convention on Climate Change (UNFCCC). The main goal of the agreement is to continue efforts to keep global warming below 2°C and, if possible, limit it to 1.5°C. This aims to minimize the impacts of climate change around the world and maintain environmental sustainability. The Paris Agreement also requires countries to commit to reducing their greenhouse gas emissions and establish action plans to achieve these targets.

AGU's approach is also aligned with the 1.5°C Paris Agreement Target, in line with the IPCC roadmap. This target requires a global net reduction of 45% of anthropogenic greenhouse gas emissions by 2030, with the ultimate goal of achieving net zero emissions before 2050. Against this backdrop, the AGU's main objective is to set carbon reduction targets that exceed current global standards and implement a comprehensive plan. Therefore, AGU has made a commitment to achieve net zero carbon emissions by 2029. Continuous efforts are being made across the University campus to achieve this goal.

Since its inception, AGU has shown a strong commitment to various initiatives related to transportation, energy efficiency, and waste management with a focus on reducing carbon emissions. In this context, it has prepared its Strategic Plan for 2023-2027 as a result of being aware of its respon-

sibility to contribute more efficiently. The Strategic Plan includes goals that will contribute to the environment such as reducing carbon footprint and switching to renewable energy sources. In addition, AGU has developed an Energy Efficiency Strategy. With this Strategy, AGU has determined the principles to be considered in energy efficiency, saving in the use of energy resources, and low CO₂ emissions. As an implementation of the Energy Efficiency Strategy, it has also set new targets by monitoring the emission rate by performing carbon calculations since 2021 and created the Abdullah Gül University Climate Action Plan.

AGU acknowledges its global responsibilities, and as a proactive measure, it enforces a range of policies, action plans, guidelines, and regulations in line with these responsibilities. Thus, AGU has established the Plastic Use Reduction and Disposable Products Policy. Accordingly, AGU is committed to reducing the amount of plastic and single-use products on its campus. This policy aims to prevent and mitigate the negative impacts of plastic and single-use products on the environment and human health.

In addition, Abdullah Gül University has an Energy Management Unit and an Energy Management Directive to ensure energy savings and control and reduce energy consumption. This directive aims to regulate energy management practices, use energy effectively and efficiently, prevent energy waste, reduce the burden of energy costs on the institution's budget, and increase energy use efficiency to protect the environment.

As a continuation of these activities, AGU has a Waste Management (Zero Waste) Committee, which has developed a Waste Management Directive. This Directive aims to regulate the principles for the sorting, safe temporary storage, transportation, and final disposal of waste generated from teaching, research and service activities under the responsibility and authority of AGU within the university. An annual Waste Management Report is also published to monitor the implementation of this directive. In recognition of its commitment to environmental sustainability and responsible practices, AGU also holds the AGU Zero Waste Certificate. This certification reflects AGU's commitment to waste management and emphasizes our continued commitment to a greener and sustainable future.

Furthermore, AGU has established the Sustainability Office as a result of the importance it attaches to Sustainable Development Goals. Through this office, AGU carries out sustainability activities more systematically while making a global contribution.

Moreover, AGU Sümer Campus represents an exemplary university location that has been dedicated to environmentally friendly and sustainable practices from its inception. AGU's most-used main building received silver LEED Certification in 2015 for its use of a greywater recycling system. AGU's LEED Certification proves that all AGU facilities are designed and constructed using strategies that aim to improve performance in energy conservation, water efficiency, reduction of CO₂ emissions, improvement of indoor quality, and sensitivity to resource conservation and impacts.

AGU aims to create a pedestrian-friendly campus by continuing its efforts for a sustainable environment. Therefore, AGU has adopted a philosophy that promotes urban environmental awareness through pedestrian traffic, encourages pedestrian living, and supports the use of bicycles within the campus. By supporting pedestrian and bicycle transportation within the campus, it reduces the carbon dioxide emissions generated within the campus and consequently aims to reduce the individual carbon footprint of community members. Also, Campus Traffic Regulation Committee was established in order to regulate the traffic on campus and improve it for pedestrians. In this context,

the license plate identification system has been put into use for vehicles to be taken onto campus.

Some of the other activities AGU has undertaken to reduce emissions are listed below:

- **Waste Reduction and Recycling Programs:** Waste management strategies are updated to contribute to recycling more waste.
- **Education and Awareness Raising:** Students, staff and the community are made aware of environmental sustainability through training programs and awareness campaigns.
- **Sustainable Food and Dining Services:** The environmental impact of catering services is reduced by preferring sustainable agricultural products and local foods in university dining halls.
- **Collaboration and Partnerships:** The number of sustainability projects is increased by collaborating with other international institutions, universities, local institutions, non-governmental organizations, and the private sector.

AGU will continue to contribute to the international community in the future.

6 AGU's Future Goal

As a state university, AGU has set the following goal in line with the climate strategies and targets adopted in our country. AGU has committed to achieving carbon neutrality by 2029. To achieve this goal AGU set following targets and activities:

Table 3. AGU's Future Goal

Goal	Targets	Activities
Achieving Carbon Neutrality by 2029	Reduce net emissions from category 1 to zero by 2027	Calculate and verify category 1 emissions Evaluate carbon pricing mechanisms Prioritizing emission sources according to emission amounts for reduction
	Reduce net emissions from category 2 to zero by 2027	Calculate and verify category 2 emissions Evaluate carbon pricing mechanisms Prioritizing emission sources according to emission amounts for reduction
	Reduce net emissions from categories 3,4,5,6 %40 by 2028	Calculate and verify categories 3,4,5,6 emissions Evaluate carbon pricing mechanisms Prioritizing emission sources according to emission amounts for reduction

A In order to achieve this goal AGU will:

- Raise students with high awareness and consciousness about climate change,
- Raise this awareness in the institutions where AGU graduates work and create a wider impact on reducing greenhouse gas emissions
- Increase renewable energy resources by conducting an energy audit
- Continue practices to get ISO 50001 Energy Management Certificate

To achieve these goals, the aim is to progressively reduce and ultimately eliminate greenhouse gas emissions through guided activities. The AGU Sustainable Development Committee, tasked with achieving these goals, is responsible for planning and executing these initiatives.

7.

Conclusion

AGU has taken intentional actions toward sustainability by aiming for carbon neutrality by 2029. This carbon footprint report demonstrates a dedication to analyzing and reducing our environmental impact. We intend to reach our target through active actions such as the use of renewable energy sources, increased energy efficiency, and the promotion of environmentally responsible practices.



As a result of AGU's efforts, AGU was awarded the first prize in the 'Outstanding Contribution to Environmental Leadership' category at the 2023 Times Higher Education Asia Awards, often referred to as the 'Oscars of Higher Education,' in recognition of its environmental contributions through its activities. AGU has achieved this success with its improvement efforts and projects such as the Strategic Plan, Climate Action Plan (CAP), Zero Waste and Smart Building (LEED) Certification, ISO 14064:2018 Certification. AGU will continue to increase its contributions to the environment.

Our university community's teamwork and dedication have been critical in our journey. We extend our gratitude to everyone participating as we work together to execute and develop these projects. The journey to carbon neutrality is not simply an environmental commitment, but also a community effort toward a more sustainable and resilient future.



Greenhouse Gas Verification Statement

Sera Gazı Doğrulama Beyanı

ABDULLAH GÜL ÜNİVERSİTESİ

Organizational Boundaries / Organizasyonel Sınırlar

Sümer Kampüsü 38080 Kayseri, Türkiye

The Greenhouse Gas emissions inventory has been verified to meet the standard requirements specified below according to ISO 14064-3:2019 / Sera Gazı emisyonları envanterinin, ISO 14064-3:2019'a göre aşağıda belirtilen standart gerekliliklerini karşıladığı doğrulanmıştır.

ISO 14064-1:2018

Category 1- Direct Emissions / Doğrudan emisyonlar	883,00 t CO ₂ eq
Category 2- Emissions from imported energy / İthal edilen enerji kaynaklı emisyonlar	1.387,16 t CO ₂ eq
Category 3- Emissions from transportation / Ulaşım kaynaklı emisyonlar	207,51 t CO ₂ eq
Category 4- Emissions from products, service used / Kullanılan ürün - hizmet kaynaklı	757,37 t CO ₂ eq
Category 5- Emissions from associated with the use of the product / Ürün kullanımı	1.514,86 t CO ₂ eq
Category 6- Other Emissions / Diğer emisyonlar	138,72 t CO ₂ eq
Total Emissions (Location Based) / (Lokasyon Bazlı)	4.888,63 t CO₂ eq
Total Emissions (Market Based) / (Market Bazlı)	4.888,63 t CO₂ eq

Category 2- Emissions (Location Based) / (Lokasyon Bazlı)	1.387,16 t CO ₂ eq
Category 2- Emissions (Market Based) / (Market Bazlı)	1.387,16 t CO ₂ eq

I-REC Reference Number/ I-REC Referans No:

Level of Assurance / Güven Seviyesi	: Reasonable / Makul	Verification Report Date / Doğrulama Rapor Tarihi	: 02.04.2024
Reporting Period / Raporlama Dönemi	: 01.01.2023 - 31.12.2023	Statement No / Beyan No	: SG-GNL-085 / 2023

Onaylayan
Okay Kayhanlı – Genel Müdür



QSI Belgelendirme, Muayene ve Test Hizmetleri Ltd. Şti.
Beytepe Mah. 5397 Sokak, Mira Ofis B1 Blok D:2, Çankaya – Ankara
Tel : +90 312 472 60 67 Faks : +90 312 472 60 68
E-mail: info@qsi.com.tr Web: www.qsi.com.tr



ISO 14064-1:2018 Verification Report / Doğrulama Raporu

VERIFICATION BODY
Doğrulama Kuruluşu

**QSI Belgelendirme Muayene ve
Test Hizm. Ltd. Şti.**

Revision

00

QSI Belgelendirme Muayene ve Test Hizm. Ltd. Şti.

Mira Ofis, Beytepe Mah. 5397 Sokak, B1 Blok D:2 Çankaya – Ankara – Türkiye
+90 312 472 60 67 | +90 312 472 60 67
info@qsi.com.tr | www.qsi.com.tr





ISO 14064-1:2018

Verification Report / Doğrulama Raporu

Institute / Kuruluş	ABDULLAH GÜL ÜNİVERSİTESİ		
Adress	Sümer Kampüsü 38080 Kayseri, Türkiye		
Phone / Telefon	3522248800	Fax	3523388828
Web	http://www.agu.edu.tr/	E-Mail	fatma.senerfidan@agu.edu.tr
Third party Verification Body / 3. Taraf Doğrulayıcı Kuruluş	QSI Belgelendirme, Muayene ve Test Hizmetleri Ltd. Şti		
Adress	Mira Ofis, Beytepe Mah. 5397 Sokak, B1 Blok D:2, Çankaya, Ankara		
Phone	+90 312 4726067	Fax	+90 312 4726068
Web	www.qsi.com.tr	E-Mail	info@qsi.com.tr
Lead Verifier / Baş Doğrulayıcı	Aysel ÇEKEN		
Verifier/s / Doğrulayıcılar			
Indipendent Reviewer / Bağımsız Gözden Geçirici	Bengi ÇİFTÇİ		
Statement Decision Maker / Beyan Kararını Veren	Okay KAYHANLI		

Statement No / Beyan No	SG-GNL-085/2023
Statement Date / Beyan Tarihi	02.04.2024
Organisational Boundaries / Organizasyonle Sınırlar	Sümer Kampüsü 38080 Kayseri, Türkiye
Verification Period / Doğrulama Periyodu	01.01.2023 – 31.12.2023
Verification Criteria / Doğrulama Kriterleri	ISO 14064-1:2018, ISO 14064-3:2019
The Aim & Scope of the Verification / Doğrulama Amaç ve Kapsamı	<p>Independently and objectively monitoring the compliance of the emissions, directly and indirectly controlled by the establishment, with the requirements of the greenhouse gas reporting standard EN ISO 14064-1:2018</p> <p><i>Kuruluşun doğrudan ve dolaylı olarak kontrol ettiği emisyonları, seragazi raporunun EN ISO 14064-1:2018 şartlarına uygunluğunun bağımsız ve objektif şekilde gözden geçirilmesi.</i></p>
Method Used / Kullanılan Metod	<p>Based on Calculation</p> <p><i>Hesaplama Temelli</i></p>
Emission Factors / Emisyon Faktörleri	<p>Emission factors are compiled from IPCC and DEFRA 2023. The electricity emission factor was compiled from national inventory. Emission factors for indirect emissions, and intensity and sub-thermal values are compiled from internationally recognized sources.</p> <p><i>Emisyon faktörleri IPCC ve DEFRA 2023'den derlenmiştir. Elektrik emisyon faktörü Ulusal Envanter'den alınmıştır. Yoğunluk ve alt ısı değerler ve dolaylı emisyonların hesaplamasında kullanılan emisyon faktörleri uluslararası kabul görmüş kaynaklardan derlenmiştir.</i></p>
Consolidate Method / Konsolidasyon Metodu	<p><input checked="" type="checkbox"/> Operational Control / <i>Operasyonel Kontrol</i></p> <p><input type="checkbox"/> Financial Control / <i>Finansal Kontrol</i></p> <p><input type="checkbox"/> Equity Share / <i>Eşit Paylaşım</i></p>

Level of Assurance & Materiality / <i>Güven Seviyesi ve Önemlilik</i>	<input checked="" type="checkbox"/> Verified at Reasonable Assurance Level (5%) <input checked="" type="checkbox"/> <i>Makul Güven (%5) seviyesinde doğrulandı</i> <input type="checkbox"/> Verified at Limited Assurance Level <input type="checkbox"/> <i>Sınırlı Güven seviyesinde doğrulandı</i>
Evaluation by Verification Criteria / <i>Doğrulama Kriterlerine Göre Değerlendirme</i>	The evaluation made by the verification team suggests that the greenhouse gas report meets the verification criteria. <i>Doğrulama ekibi tarafından yapılan değerlendirme, sera gazı raporunun doğrulama kriterlerine uygun bir şekilde hazırlandığı yönündedir.</i>
Verification Result / <i>Doğrulama Sonucu</i>	QSI confirms that the greenhouse gas statement report of the organization is prepared in accordance with the requirements of EN ISO 14064-1:2018 for the above-mentioned verification period according to EN ISO 14064-3 standard & ISO 17029:2019 and ISO 14065:2020 principles. <i>QSI yukarıda belirtilen doğrulama dönemi için kuruluşa ait sera gazı beyanı raporunun EN ISO 14064-1:2018 şartlarına uygun olarak hazırlandığını EN ISO 14064-3:2019 standardına ve ISO 17029:2019 ve ISO 14065:2020 prensiplerine göre doğrulamıştır.</i>

1- Reporting Boundaries / Raporlama Sınırları

The organization has developed a risk-based method to determine indirect greenhouse gas emissions by importance criteria. For indirect emissions in the less important category, they are included in the calculation if sufficient data is available. Following the materiality analysis made by the organization, the following emissions have been taken into account.

Kuruluş dolaylı sera gazı emisyonlarını önem kriterlerine göre belirlemek için risk temelli metod geliştirmiştir. Daha az önemli kategorideki dolaylı emisyonlar, yeterli veri mevcut olması durumunda, hesaplamaya dahil edilmiştir. Kuruluş tarafından yapılan önemlilik analiz sonrasında aşağıda yer alan emisyonlar dikkate alınmıştır.

Category 1 – Direct GHG emissions and removals / Doğrudan Sera Gazı Emisyon ve Uzaklaştırmaları

- Stationary combustion / Sabit Yanma
- Mobile combustion / Mobil Yanma
- Leakage (Refrigerants, Fire Extinguishers inventory) / Kaçak - Sızıntı (Soğutucular, Yangın Söndürücüler envanteri)

Category 2 – Indirect GHG emissions from imported energy / Enerji Dolaylı

- Electricity Consumption / Elektrik Tüketimi

Category 3 – Indirect GHG emissions from transportation / Ulaşım Kaynaklı

- Upstream Transport and Distribution / Girdi Malzemesi Taşıma - Dağıtım
- Employee Commuting / Çalışan İşe Geliş Gidiş
- Client or Visitor Transport / Ziyaretçi / Müşteri Tesise Ulaşım
- Business Travel / İş Seyahatleri

Category 4 – Indirect GHG emissions from products used by the organization / Kullanılan Girdi

- Purchased Goods / Satın Alınan Girdi
- Capital Goods / Sermaye Varlıkları
- Waste Disposal / Atıklar
- Purchased Services / Satın Alınan Hizmetler
- WTT / Yakıtların Çıkartılması

Category 5 – Indirect GHG emissions associated with the use of products from the organization / Ürün – Hizmet kaynaklı

- *Investments / Yatırımlar*

Category 6 – Greenhouse gas emissions from other sources / *Diğer*

- Electricity T & D / *Elektrik İletim Dağıtım Kaybı*

2- Exclusions from Reporting Boundary / *Hariç Tutmalar*

As a result of the significant evaluation made by the organization, it has been determined that no emission source that has been evaluated as important has been excluded from publication.

Kuruluş tarafından yapılan önemlilik değerlendirmesi sonucunda önemli olarak değerlendirilmiş olan hiçbir emisyon kaynağının raporlama dışı bırakılmadığı tespit edilmiştir.

3- NCN's / *Uygunsuzluklar*

There are no non-compliances that remain open from the audits and need to be reviewed.

Tetkiklerden açık kalan ve gözden geçirilmesi gereken herhangi bir uygunsuzluk bulunmamaktadır.

4- Verification Explanation / Doğrulama Açıklaması

The purpose of the verification is to establish a reasonable trust level opinion on the above-mentioned greenhouse gas statements, including:

- a) Compliance with the requirements of EN ISO 14064-1:2018 standard,
- b) The acceptability of the calculated emissions.

The verification activities carried out are based on the ISO 14064-3:2019 standard and ISO 14065:2020 principles. In this context, the following verification activities were carried out;

- Reviewing of documentation, controls and methods, including other verification reports,
- Preparation of the risk assessment and verification plan,
- Evaluation of greenhouse gas information management, documentation, records, controls and methods of the organization,
- Documentation of verification findings and observations in the verification report,
- Assessment and documentation of non-conformities and reconciliations of observations in the verification report,
- Preparing the verification statement and completing the verification.

Doğrulamanın amacı, yukarıda belirtilen sera gazı beyanları hakkında aşağıda belirtilen hususlara dair Makul güven seviyesinde bir görüş ortaya koymaktır:

- a) *EN ISO 14064-1:2018 standardının şartlarına uygunluk,*
- b) *Hesaplanan emisyonların kabul edilebilirliği.*

Gerçekleştirilen doğrulama faaliyetleri, ISO 14064-3:2019 standardı ve ISO 14065:2020 prensiplerini esas almaktadır. Bu kapsamda aşağıda belirtilen doğrulama faaliyetleri gerçekleştirilmiştir;

- *Diğer doğrulama raporları dahil dokümantasyon, kontroller ve yöntemlerin gözden geçirilmesi,*
- *Risk değerlendirmesi ve doğrulama planının hazırlanması,*
- *Kuruluş sera gazı bilgi yönetimi, dokümantasyon, kayıtlar, kontroller ve yöntemlerin değerlendirilmesi,*
- *Doğrulama raporunda, doğrulama bulgularının ve gözlemlerin dokümante edilmesi,*
- *Doğrulama raporunda uygunsuzluklar ve gözlemlere ilişkin uzlaşmaların değerlendirilmesi ve dokümante edilmesi,*
- *Doğrulama beyanının hazırlanması ve doğrulamanın tamamlanması.*

During the verification process, a risk assessment was made, a sample plan and a verification plan were created, and within the framework of this planning, documents were reviewed and site visits were made for the following purposes;

- Selection and management of greenhouse gas information and data,
- Processes for collecting, processing, combining and reporting greenhouse gas information and data,
- Processes and systems created for the accuracy of greenhouse gas information and data,
- Studies conducted to design and maintain the greenhouse gas information system,
- Systems and processes that ensure the continuity of the greenhouse gas information system,
- Other systems supporting greenhouse gas information system
- Results of previous evaluations, if available and applicable

Findings determined during the document review and site visit were presented to the organization with the Greenhouse Gas Verification Correction Table. The purpose of presenting the verification findings is to agree on the greenhouse gas statement and to identify the issues that need to be clarified.

Correction actions (CA) have been reported and adjusted within the reporting period.

Doğrulama sürecinde risk değerlendirmesi yapılmış, numune planı ve doğrulama planı oluşturulmuş olup bu planlama çerçevesinde aşağıdaki amaçlar için dokümanların gözden geçirilmesi ve saha ziyaretleri gerçekleştirilmiştir;

- *Sera gazı bilgisi ve verisinin seçimi ve yönetimi,*
- *Sera gazı bilgisi ve verisinin toplanması, işlenmesi, birleştirilmesi ve raporlanması için süreçler,*
- *Sera gazı bilgisi ve verilerinin doğruluğu için oluşturulan süreçler ve sistemler,*
- *Sera gazı bilgi sisteminin tasarımı ve sürekliliğinin sağlanması için yapılan çalışmalar,*
- *Sera gazı bilgi sisteminin sürekliliğini sağlayan sistemler ve süreçler,*
- *Sera gazı bilgi sistemini destekleyen diğer sistemler*
- *Mevcut ve uygunsa önceki değerlendirmelerin sonuçları*

Doküman gözden geçirme ve saha ziyareti sırasında tespit edilen bulgular Sera Gazı Doğrulama Düzeltme Açıklama Tablosu ile kuruluşa sunulmuştur. Doğrulama bulgularının sunulmasının amacı, sera gazı beyanında mutabakata varılması ve açığa kavuşturulması gereken hususların belirlenmesidir.

Düzeltme faaliyetleri (DF) bildirilmiş olup raporlama dönemi içinde düzeltilmiştir.

In addition, the verification team requested an explanation from the organization in cases where there was not enough or enough clear information to decide that the report meets the requirements of EN ISO 14064-1:2018.

The responses sent by the organization regarding the explanation and correction activities were evaluated and it was determined that the deficiencies that required explanation and correction were corrected.

The verification activity results and the verification report were subjected to a technical review and approved by the technical reviewer.

Ayrıca doğrulama ekibi, raporun EN ISO 14064-1:2018 şartlarını karşıladığına karar verebilmek için yeterli veya yeterince açık bilgi bulunmadığı durumlarda kuruluştan açıklama istemiştir.

Açıklama ve düzeltme faaliyetlerine yönelik kuruluş tarafından gönderilen yanıtlar değerlendirilerek, açıklama ve düzeltme gerektiren eksikliklerin giderildiği tespit edilmiştir.

Doğrulama faaliyeti sonuçları ve doğrulama raporu teknik inceleme sorumlusu tarafından teknik bir gözden geçirmeye tabi tutulmuş ve onaylanmıştır.

5- Greenhouse Gas Information System and Control / Sera Gazı Bilgi Sistemi ve Kontrolü

In order to carry out the greenhouse gas information system and controls by the organization, a document system that explains how to document and archive including information management system activities consistent with the intended use of the greenhouse gas statement, which ensures the accuracy and completeness of the greenhouse gas statement and complies with the relevant principles of EN ISO 14064-1:2018 has been prepared.

Data collection, processing and reporting processes have been verified by field audits.

6- Methodology / Metodoloji

The calculation methodology is stated as multiplying the activity data by the emission factor. TIER-1 is accepted in the calculation methods.

However, TIER 2 approach is applied in electricity emission calculations.

Greenhouse gases covered include the seven (7) greenhouse gases covered by the Kyoto Protocol, EN ISO 14064-1: 2018, which are; CO₂ carbon dioxide, CH₄ methane, N₂O nitrous oxide, NF₃ nitrogen trifluorid, HFCs hydrofluorocarbons, PFCs perfluorocarbons, SF₆ sulphur hexafluoride.

Kuruluş tarafından sera gazı bilgi sistemi ve kontrollerinin gerçekleştirilmesi için; TS EN ISO 14064:2018 standardının ilgili prensipleriyle uyumlu, sera gazı beyanının hedeflenen kullanımı ile tutarlı, sera gazı beyanının doğruluğu ve tamlığını temin edecek, rutin ve tutarlı kontrolleri sağlayacak, hatalar ve ihmalleri ortaya çıkaracak bilgi yönetim sistemi faaliyetleri de dahil olmak üzere ilgili sera gazı kayıtlarının nasıl dokümanite edileceğini ve arşivleneceğini açıklayan dokümanter sistem hazırlanmıştır.

Verilerin toplanması, işlenmesi ve raporlanması prosesleri saha denetimleri ile doğrulanmıştır.

Hesaplama metodolojisi, faaliyet verilerinin emisyon faktörü ile çarpılması şeklinde ifade edilmektedir.

Elektrik için Tier 2, diğer hesaplamalarda Tier 1 yaklaşımı kullanılmıştır.

Kapsam dahilindeki sera gazları EN ISO 14064-1:2018 standardının kapsadığı yedi (7) sera gazını içermektedir.

CO₂ karbondioksit, CH₄ metan, N₂O nitrozoksit, NF₃ nitrojen trifluorid, HFCs hidroflorokarbonlar, PFCs perflorokarbonlar SF₆ kükürtheksaflorid.

7- Evaluation of GHG Statement / Sera Gazı Beyanı Deęerlendirmesi

The evidences obtained in the evaluation of the controls are sufficient according to the greenhouse gas data, information and the criteria of the current greenhouse gas program and support the greenhouse gas statement.

Kontrollerin deęerlendirilmesinde elde edilen deliller, sera gazı verileri ve bilgileri ile yürürlükteki sera gazı programı kriterleri yeterli olup, sera gazı beyanını desteklemektedir.

Category 1- Direct Emissions / Doğrudan emisyonlar	883,00	t CO ₂ eq
Category 2- Emissions from imported energy / İthal edilen enerji kaynaklı emisyonlar	1.387,16	t CO ₂ eq
Category 3- Emissions from transportation / Ulaşım kaynaklı emisyonlar	207,51	t CO ₂ eq
Category 4- Emissions from products, service used / Kullanılan ürün - hizmet kaynaklı	757,37	t CO ₂ eq
Category 5- Emissions from associated with the use of the product / Ürün kullanımı	1.514,86	t CO ₂ eq
Category 6- Other Emissions / Diğer emisyonlar	138,72	t CO ₂ eq
Total Emissions (Location Based) / (Lokasyon Bazlı)	4.888,63	t CO₂ eq
Total Emissions (Market Based) / (Market Bazlı)	4.888,63	t CO₂ eq
Category 2- Emissions (Location Based) / (Lokasyon Bazlı)	1.387,16	t CO ₂ eq
Category 2- Emissions (Market Based) / (Market Bazlı)	1.387,16	t CO ₂ eq

I-REC Reference Number/ I-REC Referans No:

Approving The Report on Behalf Of QSI Okay KAYHANLI General Manager

QSI Belgelendirme
Muayene ve Test Hizmetleri Ltd. Şti.
Beştepe Mah. 5317 Sokak
Mira Ofis B. Blok Kat: 2. Kat - Beştepe - Ankara
Tel: +90 312 472 60 67 / Fx: +90 312 472 60 68
Doğanbey V.D.: 39605779385
Mersis No: 0396057938500016



ABDULLAH GÜL
UNIVERSITY

sustainability@agu.edu.tr