

ENVIRONMENTAL LITERACY AND KNOWLEDGE SURVEY REPORT



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Introduction

This report represents the second consecutive year of AGU's initiative to assess and report on the environmental literacy of our internal stakeholders. As environmental challenges grow increasingly urgent and societal awareness continues to rise, the need for robust environmental literacy has never been more critical. Educational institutions, in particular, play a crucial role in nurturing an in-depth understanding of environmental issues, ensuring that stakeholders not only recognize but also grasp the complex interactions between human activities and the environment, and the far-reaching consequences for both current and future generations.

In response to this need, AGU launched a comprehensive survey aimed at evaluating the knowledge, attitudes, and concerns of our internal stakeholders regarding environmental matters. Our stakeholders include students, faculty members, and administrative staff, each bringing distinct perspectives from their roles within the university. This year, we went a step further by assessing the environmental literacy levels of our stakeholders separately, enabling us to address their specific needs and make targeted improvements. This more detailed approach allows us to better understand the existing gaps in knowledge and identify opportunities to enhance sustainability awareness and engagement across the university.

This report outlines the findings of the survey, offering a detailed analysis of the prevailing attitudes, knowledge, and concerns about environmental issues among AGU stakeholders. Through this analysis, we aim to identify key areas that require further attention, provide guidance for future educational programs, and inform policy development, all while reinforcing the university's commitment to fostering a culture of sustainability and environmental responsibility.

In addition, this initiative is closely aligned with AGU's goal of becoming a carbon-neutral university by 2029. The results of this survey underline the critical importance of environmental literacy in achieving this ambitious target. The active participation and involvement of all stakeholders will be essential in reaching this goal. Therefore, this report emphasizes the significance of collective action and highlights how every individual's engagement contributes to the success of our sustainability efforts.

By continuing this initiative, AGU reaffirms its dedication to sustainability and environmental stewardship, while also empowering our community to address the pressing environmental challenges of today. We aim to cultivate a university culture where understanding

environmental issues is just the beginning, and where students, faculty, and staff actively contribute to resolving them, ensuring a healthier and more sustainable planet for future generations.

Environmental Literacy and Knowledge Survey

An Environmental Literacy and Knowledge survey was conducted at AGU (refer to the Appendix). The purpose of this survey was to assess the environmental literacy and knowledge levels of AGU's internal stakeholders, including students, faculty members, and administrative personnel. The survey consisted of 24 questions covering participants' demographics, attitudes, concerns, and their knowledge regarding environmental issues. Conducted on a voluntary basis, the survey was completed by 176 participants. Below are the main findings and recommended actions to be considered:

Demographics

Please see the table below for the demographic characteristics of the participants (n=176).

Table 1. Demographics

Status within the institution	Gender						
	Female	Male	Other	Prefer not to say			
Student	36	32	1	-			
Academic staff	21	33	-	1			
Administrative staff	19	30	_	3			
Total	76	95	1	4			

Knowledge-related questions

The survey covered critical environmental topics including the greenhouse effect, renewable energy sources, global warming, water resources, waste management, international climate agreements, and hazardous waste. These questions aimed to assess stakeholders' knowledge levels regarding key environmental issues, providing valuable insights for informed decision-making and targeted interventions within the AGU community. (Please see the survey questions in Appendix.)

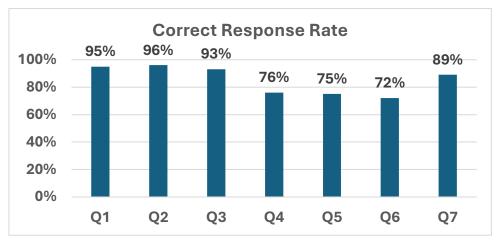


Fig. 1. Correct Response Rate (All participants)

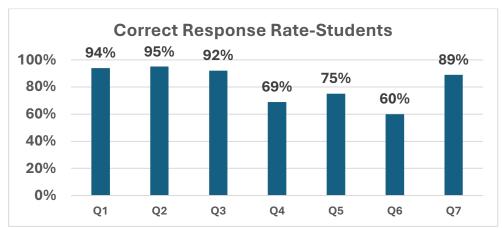


Fig. 2. Correct response Rate (Students)

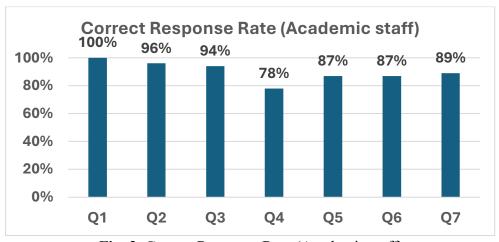


Fig. 3. Correct Response Rate (Academic staff)

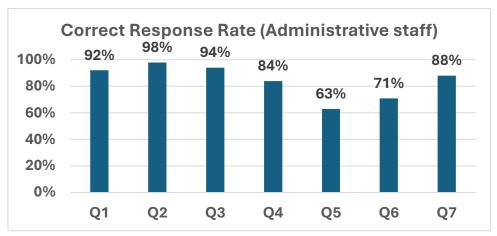


Fig. 4. Correct Response Rate (Administrative staff)

Concern-related questions

The survey explored a range of environmental concerns, encompassing smoke pollution, noise pollution, vehicle emissions, industrial pollution, hazardous waste, poor-quality drinking water, indoor air pollution, ozone layer depletion, and global warming. By examining these topics, the survey sought to elucidate stakeholders' concern levels regarding various environmental challenges, offering valuable insights to guide decision-making and interventions aimed at promoting environmental literacy within the AGU community.

Table 1. Environmental concern level of all participants

Table 1.	Liiviioiiii	Ciitai Coiic		r an partic	ipanis				
Status	Smoke pollution	Noise pollution	Vehicle emission	Industrial pollution	Hazardous waste	Poor- quality drinking water	Indoor air pollution	Ozone layer depletion	Global warming
All	4.21	3.75	4.23	4.63	4.53	4.55	4.14	4.27	4.48
Stud	4.14	3.55	4.00	4.49	4.36	4.50	3.89	4.20	4.47
Acad	4.16	3.80	4.36	4.76	4.60	4.58	4.25	4.29	4.50
Admin	4.36	3.98	4.40	4.69	4.69	4.57	4.34	4.36	4.48

 $\overline{1}$ = Not worried at all; 2 = Little worried; 3 = Undecided; 4 = Somewhat worried; 5 = Very worried

Attitude-related questions

These questions examined their level of involvement, standpoint on environmental issues. These questions examined their level of involvement, standpoint on environment, self-perceived knowledge about environmental problems, preferred sources of information on environmental issues, and opinions on environmental education. These insights provide valuable guidance for developing strategies to enhance environmental awareness and engagement within the AGU community.

Table 2. How involved are you with environmental issues? (Q1)

How involved	Status	None	Very little	Enough	A little	Very much
are you with environmental	All Student	4 2	9 2	92 32	42 22	29 11
issues?	Academic staff	1	5	28	11	10
	Administrative staff	1	2	32	9	8

All (n)= 176; Student (n)= 69; Academic staff (n)= 55; Administrative staff (n)= 52

Table 3. Which of the following is closest to your opinion? (Q2)

	Status	The environment	The environment is one of the two or	The environment is a significant problem,
Which of the following is closest		is not a problem.	three most important problems facing humanity today	but there are other more important problems
to your	All	3	135	38
opinion?	Student	1	50	18
_	Academic staff	1	43	11
	Administrative staff	2	41	9

All (n)= 176; Student (n)= 69; Academic staff (n)= 55; Administrative staff (n)= 52

Table 4. How much knowledge do you generally think you have about environmental issues and problems ?(Q3)

	Status	I have	None	A little	Enough	A lot
		no idea				
How involved	All	-	1	43	78	12
are you with	Student	1	1	23	38	6
environmental	Academic staff	-	-	18	31	6
issues?	Administrative	-	-	20	30	2
	staff					

Table 5. What is the most commonly used tool you use to access information about environmental issues? (Q4)

What is the most commonly used tool you	Status	Internet and social media	Magazine, newspaper, etc.	Non- governmental organizations (NGOs) working on environmental issues	Radio and television programs	Social environment and friends
use to access information	All	138	10	20	5	3
about environmental	Student	53	2	9	4	1
issues?	Academic staff	37	6	9	1	2
	Admin. staff	48	2	2	30	-

Table 6. What is your opinion on environmental education? (Q5)

What is your opinion on environmental	Status	The environment is very important and education on it should definitely be provided.	The environment is very important but providing education on it is not necessary.	Environmental education is unnecessary.	I am undecided.
education?	All	148	15	7	6
	Student	51	9	5	4
	Academic staff	51	3	-	1
	Administrative staff	46	3	2	1

Table 7. Have you received any education or training on environmental issues? (Q6)

	Status	Yes	No
Have you received any	All	82	94
education or training on	Student	41	28
environmental issues	Academic staff	23	32
	Administrative staff	18	34

Conclusion

The 2024 Environmental Literacy and Knowledge Survey at AGU has provided valuable insights into the environmental awareness, concerns, and knowledge levels of our internal stakeholders—students, academic staff, and administrative staff. The results show that all stakeholder groups share a high level of concern regarding various environmental issues, though there are some differences in their specific concerns. Students, for example, expressed strong concern about industrial pollution, poor-quality drinking water, and global warming, with concern levels averaging 4.49, 4.50, and 4.47, respectively. Similarly, academic staff exhibited strong concern about these issues, with their concern for industrial pollution and hazardous waste even higher, at 4.76 and 4.60, respectively. Administrative staff also showed high levels of concern, particularly about industrial pollution and hazardous waste, which reflected their overall environmental awareness.

When it comes to knowledge, students demonstrated high awareness of greenhouse gases and global warming, with over 94% and 95% of students correctly answering these questions. However, their knowledge of freshwater and international agreement to combat with Climate Change were lower, indicating a need for further education in this area. Academic staff exhibited a strong understanding of environmental issues, with particularly high levels of knowledge regarding the greenhouse effect (100%) and renewable energy sources (96%). However, their understanding of freshwater usage was less comprehensive, suggesting that there is room for improvement in this area. Administrative staff showed moderate knowledge levels, with a slightly lower score compared to academic staff and students, particularly regarding global warming and the greenhouse effect. However, their understanding of waste management and international agreement to combat with Climate Change were less comprehensive, suggesting that there is room for improvement in this area.

Attitudinally, the results indicated a clear support for environmental education across all groups. A significant portion of both students and academic staff agreed that environmental education is an important issue and should be provided. Administrative staff also expressed strong support, recognizing the importance of environmental education. Despite this general agreement, a gap remained in the actual training received by the participants. For example, fewer than half of the academic and administrative staff had received any environmental education or training, highlighting an area for growth in future educational initiatives. Moreover, the results revealed that internet and social media are the most commonly used tool

to access information about environmental issues, highlighting the role of new media in delivering the information about environmental issue and inspring AGU to adopt digital tools for this purpose.

Overall, the survey findings demonstrate that AGU's stakeholders are deeply invested in environmental issues, with a strong desire for more education and involvement in sustainability initiatives. These findings also show that AGU strongly reflects its commitment in this area to all its internal stakeholders. To sum up, these findings provide a solid foundation for AGU to continue fostering a culture of environmental stewardship, addressing knowledge gaps, and further engaging all stakeholders in the university's sustainability goals, particularly in achieving carbon neutrality by 2029.

Primary Precautions and Recommendations

The findings from the 2024 Environmental Literacy and Knowledge Survey provide valuable insights into the current environmental literacy levels and concerns of AGU stakeholders. Based on these findings, several key precautions and recommendations are proposed to further enhance environmental awareness, promote sustainable practices, and contribute to AGU's goal of becoming a carbon-neutral university by 2029.

- 1. Increase awareness of freshwater resources: Stakeholders, particularly students and staff, demonstrated lower levels of knowledge about the world's freshwater resources, which are critical for sustainability. By enhancing awareness and knowledge about water conservation and management, AGU can foster a more water-conscious community. This initiative will lead to more sustainable water use practices, both on and off-campus, reducing the university's overall environmental footprint. Improved knowledge in this area will directly contribute to sustainability efforts, as responsible water use is essential to achieving sustainability objectives.
- 2. **Enhance knowledge of international climate agreements**: The survey highlighted a knowledge gap regarding international climate agreements like the Paris Agreement. By providing targeted training on these agreements, AGU will equip stakeholders with the knowledge necessary to engage in meaningful discussions on climate action. This understanding will be crucial in supporting AGU's carbon neutrality goal. By aligning the university's efforts with global climate agreements, stakeholders will be better

- equipped to contribute to actions that reduce greenhouse gas emissions, a central component of achieving carbon neutrality.
- 3. Periodical training on industrial pollution and hazardous waste: Both students and staff expressed strong concern about industrial pollution and hazardous waste. Providing regular, targeted training on these issues can help stakeholders recognize the importance of reducing pollution, properly managing waste, and controlling concerns. This can also promote sustainable practices within AGU, leading to cleaner, greener campus operations. Additionally, better waste management and pollution reduction strategies are essential for minimizing AGU's environmental impact, especially as the university works toward carbon neutrality.
- 4. **Regular environmental education activities**: The survey showed strong support for environmental education among all stakeholder groups. By increasing the frequency of environmental education programs, AGU can reinforce sustainability principles and foster a culture of responsibility. Regular educational activities can create long-lasting behavioral changes, motivating stakeholders to actively participate in sustainability initiatives. This continuous engagement will contribute to the university's carbon neutrality goal by encouraging energy-saving practices, waste reduction, and overall more sustainable behaviors among the AGU community.
- 5. Foster more involvement in sustainability initiatives: With a high level of concern about environmental issues, particularly among students and staff, there is an opportunity to channel this concern into practical action. AGU can encourage further involvement in sustainability initiatives, such as green campus programs, sustainability challenges, and campus-wide environmental events. Increased participation in such initiatives will create a sense of ownership and collective responsibility toward achieving carbon neutrality. This community-driven approach will help AGU build momentum towards its goal of becoming a carbon-neutral university by 2029.
- 6. Implement sustainability-driven curriculum integration: Although stakeholders have expressed high concern and knowledge about environmental issues, integrating sustainability into the university's curriculum can amplify this awareness. Developing interdisciplinary courses that focus on sustainability, climate change, and environmental responsibility will equip future graduates with the knowledge and skills to tackle global environmental challenges. This will not only help AGU meet its sustainability goals but also shape the next generation of environmental leaders, making them advocates for the university's carbon neutrality objectives.

7. Improve sustainability communication and transparency: Stakeholders have shown strong support for environmental education but indicated gaps in receiving clear, accessible information. AGU should invest in improving communication on sustainability efforts, such as the progress of its carbon neutrality goal, by using multiple platforms—websites, newsletters, and social media—to keep stakeholders informed. Transparent communication will increase engagement, build trust, and ensure that everyone is aligned with AGU's sustainability goals. Clear communication about sustainability efforts, particularly the path to carbon neutrality, will further enhance stakeholders' commitment and active participation.

Environmental Literacy and Knowledge Questionnaire (Cevre Okuryazarlığı ve Bilgisi Anketi)

This questionnaire aims to measure the environmental literacy and knowledge levels of AGU's students and academic/administrative staff. The questionnaire consists of 24 questions. The first seven questions have true answers, while the remaining questions do not. For the study to yield accurate results, it is imperative that participants provide sincere responses to the questions. Responses will be evaluated collectively and strictly used for the intended research purposes. (Bu anket, AGÜ öğrencileri ile akademik/idari personelin çevre okur yazarlığı ve bilgi düzeylerini ölçmeyi amaçlamaktadır. Anket, 24 sorudan oluşmaktadır. İlk yedi sorunun doğru cevapları vardır, geri kalan soruların ise doğru bir cevabli yoktur. Çalışmanın doğru sonuçlar vermesi için katılımcıların sorulara samimi cevaplar vermesi önemlidir. Yanıtlar toplu olarak değerlendirilecek ve sadece araştırma amaçları doğrultusunda kullanılacaktır.)

Abdullah Gül University

Sustainability Coordination Office (Sürdürülebilirlik Koordinatörlüğü)

Please indicate your status within the institution (Lütfen kurum içindeki statünüzü belirtiniz.)

- -Student (Öğrenci)
- -Academic staff (Akademik personel)
- -Administrative staff (İdari personel)

What is your gender? (Cinsiyetiniz nedir?)

- -Female (Kadın)
- -Male (Erkek)
- -Other (Diğer)
- -Prefer not to say (Belirtmek istemiyorum.)
- 1. Which of the following gases is primarily responsible for the greenhouse effect? (Aşağıdaki gazlardan hangisi sera etkisinin başlıca sorumlusudur?)
- a) Oxygen (Oksijen)
- **b)** Nitrogen (Nitrojen)
- c) Carbon dioxide (Karbondioksit)
- d) Hydrogen (Hidrojen)
- **2.** Which of the following is a renewable energy source? (Aşağıdakilerden hangisi venilenebilir bir enerji kaynağıdır?)
- a) Coal (Kömür)
- b) Natural gas (Doğal gaz)
- c) Solar power (Güneş enerjisi)
- d) Nuclear power (Nükleer enerji)

- 3. What is the term for the phenomenon where Earth's average temperature gradually increases over time? (Dünya'nın ortalama sıcaklığının zamanla kademeli olarak artması olayına ne ad verilir?)
- a) Global warming (Küresel ısınma)
- b) Biodiversity (Bioçeşitlilik)
- c) Greenhouse effect (Sera gazı etkisi)
- d) Ozone depletion (Ozon tabakasının delinmesi)
- **4.** What percentage of Earth's water is freshwater available for human use? (Dünya'daki suyun yüzde kaçı insan kullanımına uygun tatlı sudur?)
- a) 2.5%
- b) 5%
- c) 7.5%
- d) 12.5%
- 5. Which of the following is NOT a component of the waste management hierarchy? (Aşağıdakilerden hangisi atık yönetimi hiyerarşisinin bir bileşeni değildir?)
- a) Reuse (Yeniden kullanım)
- b) Replant (Yeniden dikim)
- c) Reduce (Azaltım)
- d) Recycle (Geri dönüşüm)
- 6. Which international agreement aims to combat climate change by reducing greenhouse gas emissions? (Hangi uluslararası anlaşma sera gazı emisyonlarını azaltarak iklim değişikliğiyle mücadele etmeyi amaçlamaktadır?)
- a) Paris Agreement (Paris Anlaşması)
- b) Kvoto Protocol (Kyoto Protokolü)
- c) Montreal Protocol (Montreal Protokolü)
- d) Copenhagen Accord (Kopenhag Mutabakatı)
- 7. Which of the following household wastes can be classified as hazardous waste? (Aṣağıdaki evsel atıklardan hangisi tehlikeli atık olarak sınıflandırılabilir?)
- a) Plastic packaging (Plastik ambalaj)
- b) Glass (Cam)
- c) Battery (Pil)
- d) Leftover foods (Atık yemek)

8. The following questions were prepared to measure how concerned you are regarding environmental problems. (Aşağıdaki sorular çevre problemleri ile ilgili olarak ne kadar endişeli olduğunu ölçmek için hazırlanmıştır.)

	Not worried at all (Hiç endişelenmiyorum)	Little worried (Az endişeleniyorum)	Undecided (Kararsizim)	Somewhat worried (Biraz endişeleniyorum)	Very worried (Çok endişeleniyoum)
Smoke pollution: Duman kirliliği					
Noise pollution: Ses kirliliği					
Vehicle emissions: Otomobil emisyonları					
Industrial pollution: Endüstriyel kirlilik					
Hazardous waste: Zararlı atıklar					
Poor-quality drinking water: Kalitesiz içme suyu					
Indoor air pollution: Kapalı alanlarda oluşan hava kirliliği					
Ozone layer depletion: Ozon tabakasının delinmesi					
Global warming: Küresel ısınma					

- **9.** How involved are you with environmental issues? (*Çevre sorunları ile ne kadar ilgilisiniz*?)
- a) Hiç (None)
- b) Very little (Pek az)
- c) A little (Biraz)
- d) Enough (Yeteri kadar)
- e) Very much (Çok fazla)
- **10. Which of the following is closest to your opinion?** (*Aşağıdakilerden hangisi sizin düşüncenize en yakındır?*)
- a) The environment is not a problem. (Cevre bir problem değildir.)
- b) The environment is not a significant problem. (Çevre önemli bir problem değildir.)
- c) The environment is a significant problem, but there are other more important problems. (Çevre önemli bir problemdir, ama daha önemli başka problemler de vardır.)
- d) The environment is one of the two or three most important problems facing humanity today. (Çevre günümüzde insanların karşı karşıya kaldığı en önemli iki ya da üç problemden biridir.)
- 11. How much knowledge do you generally think you have about environmental issues and problems? (Çevre konuları ve problemleri ile ilgili genel olarak ne kadar bilginiz olduğunu düşünüyorsunuz?)
- a) I have no idea. (Fikrim yok.)
- b) None. (Hiç)
- c) A little. (Biraz)
- d) Enough. (Yeteri kadar)
- **e) A lot.** (*Çok*)

- 12. What is the most commonly used tool you use to access information about environmental issues? (Çevre konuları ile ilgili bilgiye ulaşırken en sık kullandığınız araç hangsidir?)
- a) Internet and social media (İnternet ve sosyal media)
- b) Radio and television programs (Radyo ve TV Programları
- c) Magazines, newspapers, etc. (Dergi, gazete vb.)
- d) Social environment and friends (Sosyal çevre ve arkadaşlar)
- e) Non-governmental organizations (NGOs) working on environmental issues (Çevre konuları üzerinde çalışan STK'lar)
- f) Other (Diğer)
- **13. What is your opinion on environmental education?** (*Çevre eğitimi konusundaki düşünceniz nedir?*)
- a) The environment is very important and education on it should definitely be provided. (*Çevre konusu çok önemlidir ve eğitimi mutlaka verilmelidir*.)
- b) The environment is very important but providing education on it is not necessary. (Cevre konusu çok önemlidir ama eğitiminin verilmesi şart değildir.)
- c) Environmental education is unnecessary. (Çevre eğitiminin verilmesi gereksizdir.)
- d) I'm undecided. (Kararsızım.)
- **14.** Have you received any education or training on environmental issues? (*Çevre konusunda herhangi bir eğitim/ders aldınız mı?*)
- a) Yes (Evet)
- b) No (Hayır)