AZERBAIJAN STATE OIL AND INDUSTRY UNIVERSITY

SDG – 14 REPORT



ASOIU plays a crucial role in supporting the objectives of **SDG 14: Life Below Water** by promoting sustainable industrial practices, environmental consciousness in petroleum engineering, and research with implications for the **Caspian Sea** ecosystem. Through strategic education, research, and collaboration, ASOIU ensures that future industry leaders are trained to act responsibly in their interaction with water bodies and marine ecosystems.

1. Institutional Commitment to SDG 14

- Environmental Responsibility in Strategic Vision: ASOIU's development strategy (2021–2030) emphasizes ecological awareness in all educational and research programs. While focused on the oil and industry sectors, sustainability—especially in relation to aquatic ecosystems—is a growing priority.
- **UNESCO-Aligned Values:** As a UNESCO UNITWIN Chair host institution, ASOIU aligns its environmental focus with global standards, including sustainability in the **Caspian Basin** region.

2. Teaching and Curriculum

- Curriculum Integration: Programs such as Environmental Engineering and Petroleum Ecology include units on:
 - Offshore platform waste management
 - Marine pollution from industrial sources
 - Oil spill contingency planning



- Student Theses: Students have completed capstone projects and bachelor theses on topics such as:
 - Simulating oil spill dispersion in the Caspian Sea
 - Evaluating eco-friendly drilling fluids
 - Marine biodiversity near Azerbaijan's coastal drilling zones

3. Research and Innovation

• Applied Research in Caspian Context: ASOIU researchers study the ecological impact of oil extraction in the Caspian region. In 2024, the university co-hosted the Caspian Basin Conference on Georesources and Environmental Impact, showcasing interdisciplinary work on seabed ecosystems and hydrocarbon mitigation technologies.



• Laboratory Innovation: The university's laboratories support environmentally safe technologies, such as materials for spill absorption and treatment of wastewater containing hydrocarbons.

5. Student & Community Engagement

- Student-Led Environmental Projects: Through the Student Scientific Society and ECO Clubs, ASOIU students conduct:
 - o Awareness campaigns about marine plastic pollution
 - Field visits to the Caspian coast for coastal monitoring exercises
 - o Urban waste collection campaigns to prevent river-to-sea waste flow



• Hackathons & Eco Challenges: Events such as the UFAZ Environmental Hackathon 2024 included water sustainability themes, such as marine sensors and ocean-cleaning robotics.



6. Future Directions

- Establishment of a Caspian Environmental Research Group within the university to focus on water pollution and biodiversity.
- Integration of "Blue Economy" concepts into the Petroleum Economics and Industrial Policy curriculum.

• Expansion of Coastal Studies Field Courses in partnership with the Ministry of Ecology and Natural Resources.

7. Conclusion

Though its primary mission is engineering and industry, ASOIU makes a **measurable and meaningful contribution to SDG 14** by training responsible professionals, conducting relevant research, and embedding ecological ethics in its academic culture. By aligning its activities with the **protection of the Caspian Sea**, ASOIU supports global efforts to preserve life below water.