

 **SUSTAINABLE DEVELOPMENT GOALS**



**Azerbaijan State Oil and Industry University (ASOIU)**

**Sustainable Development Goals Report 2024**

## Introduction

Azerbaijan State Oil and Industry University (ASOIU), as a national leader in petroleum, energy, and industrial education, recognizes sustainability as a fundamental pillar of its academic, operational, and community mission. Building upon its legacy in engineering and innovation, ASOIU integrates the UN Sustainable Development Goals (SDGs) into teaching, research, campus operations, and partnerships with industry, government, and civil society.

The university's sustainability strategy focuses on three key dimensions:

1. **Sustainable Education:** integrating SDG principles into all curricula and ensuring equitable access to learning.
2. **Sustainable Research & Innovation:** using High-Performance Computing (HPC), digital modeling, and engineering innovations for global challenges such as clean energy, climate resilience, and circular economy.
3. **Sustainable Operations:** minimizing environmental impact through energy, water, and waste management policies and promoting social inclusion and well-being across the campus community.

ASOIU's mission aligns with the goals of Azerbaijan 2030 National Strategy for Sustainable Development and UNESCO's Education for Sustainable Development Framework (ESD 2030).



## **SDG 1 — No Poverty**

### **Commitment**

ASOIU’s approach to poverty reduction emphasizes educational access, social inclusion, and economic empowerment through skill-based learning and employability.

### **Implementation**

- **Financial Support Programs:**
  - The *ASOIU Student Support Fund* provides tuition exemptions and stipends to students from low-income families.
  - *Martyr Family and Veterans Scholarship* supports students whose family members served in the Karabakh conflict.
  - Discounts for families with multiple enrolled students.
- **Student Employment Opportunities:**
  - “Study & Work” programs within ASOIU’s administrative and research units allow students to earn income while gaining work experience.
  - Partnership programs with SOCAR, BP, and other enterprises ensure paid internships.
- **Social Projects:**
  - Annual “*Engineering for Social Impact*” competition rewards student projects addressing poverty through technology (e.g., low-cost water filters, solar lamps).



## **SDG 2 — Zero Hunger**

### **Commitment**

While ASOIU is not an agricultural university, it contributes to food security through innovation in food technology, biotechnology, and sustainable production.

### **Key Actions**

- **Research on Nutritional Technologies:**
  - Ongoing research on “Development of Health-Promoting Meat Products with Marine Additives” supports national goals on food safety and nutrition improvement.
  - Chemical Technology faculty collaborates with the *Institute of Food Safety* to improve preservation and nutrient retention.
- **Campus Nutrition and Food Safety:**
  - ASOIU cafeterias apply HACCP standards and ensure affordable meal pricing.
  - The *Healthy Life Initiative* educates students on balanced diets and sustainable food habits.
- **Community Engagement:**
  - Annual donation campaigns for underprivileged families in partnership with local NGOs.



## **SDG 3 — Good Health and Well-being**

### **Commitment**

ASOIU strives to ensure the mental and physical well-being of its community by promoting a healthy lifestyle, safe work conditions, and awareness on public health issues.

### **Key Actions**

- **Health & Safety:**
  - The *ASOIU Medical Service Unit* provides free health checks, vaccination drives, and COVID-19 monitoring.
  - Mandatory workplace safety courses for engineering students and laboratory personnel.
- **Mental Health Support:**
  - “Wellbeing Talks” by psychologists on stress management and resilience.
  - Confidential counseling available at the Student Center.
- **Health Campaigns:**
  - Drug awareness programs in collaboration with the Ministry of Health.
  - “Move for Health” initiative encourages physical activity and walking to campus.



## SDG 4 — Quality Education

### Commitment

ASOIU promotes inclusive, equitable, and high-quality education by aligning teaching and learning with 21st-century industry needs and sustainability competencies.

### Key Actions

- **Curriculum Integration:**
  - Over 70% of courses embed sustainability topics (energy transition, environmental safety, or social responsibility).
  - *Sustainability in Engineering Design* introduced as a core subject in 2024.
- **Capacity Building:**
  - Faculty development workshops on integrating SDGs into teaching.
  - International student exchange under Erasmus+ and THE Impact Networks.
- **Digital Access:**
  - Expansion of Moodle-based e-learning and open courses on “SDG Fundamentals.”
  - Virtual laboratories and remote simulation tools support accessible learning.



## SDG 5 — Gender Equality

### Commitment

ASOIU champions gender equality in academia and the oil and gas sector, empowering women in leadership and STEM.

### Key Actions

- **Policy Framework:**
  - Gender Equality Plan adopted in 2022 ensuring non-discrimination, equal pay, and parental leave.
  - Gender-sensitive language adopted in official communications.
- **Programs:**
  - *“Parla for Girls” Bootcamp* trains women in programming, robotics, and entrepreneurship.
  - *Women in Engineering Forum* connects female students with industry mentors.
- **Scholarships & Recognition:**
  - Annual awards for outstanding women researchers in engineering and geoscience.



## **SDG 6 — Clean Water and Sanitation**

### **Commitment**

ASOIU focuses on sustainable water management and pollution reduction, with an emphasis on engineering-based water reuse systems.

### **Key Actions**

- **Research and Innovation:**
  - Projects on industrial wastewater treatment and desalination under *Environmental Engineering Department*.
  - Pilot system for aquifer extraction and reuse installed in campus facilities.
- **Education and Awareness:**
  - “Water Reuse and Sustainability” lectures integrated into Environmental Science programs.
  - Annual *World Water Day* student exhibition.
- **Campus Operations:**
  - Smart water meters and leak detection systems installed in 2024.



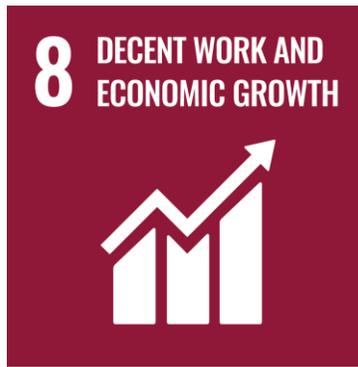
## **SDG 7 — Affordable and Clean Energy**

### **Commitment**

As an oil and energy-focused university, ASOIU plays a pivotal role in transitioning to clean and renewable energy solutions.

### **Key Actions**

- **Research & Innovation:**
  - *BP Renewable Energy Lab* focuses on hydrogen storage, solar materials, and wind optimization models.
  - Publication output on renewable energy increased by 28% in 2024.
- **Training & Capacity Building:**
  - Annual *Energy Transition Workshop* for students and industry professionals.
  - Energy audits conducted for university buildings.
- **Sustainable Infrastructure:**
  - 100% LED lighting and solar-powered parking illumination installed.
  - Collaboration with the Ministry of Energy for net-zero roadmap.



## **SDG 8 — Decent Work and Economic Growth**

### **Commitment**

ASOIU promotes responsible economic growth and decent employment by linking academia with industry and fostering entrepreneurship.

### **Key Actions**

- **Curriculum Alignment:**
  - 80% of business and management courses include sustainability and corporate responsibility components.
- **Industry Partnerships:**
  - Over 40 MoUs with industrial partners ensuring paid internships.
  - *Annual Career and Innovation Fair* connects 2,000+ students with employers.
- **Entrepreneurship:**
  - The *ASOIU Start-Up Hub* supports 15 active student-led start-ups.



## **SDG 9 — Industry, Innovation, and Infrastructure**

### **Commitment**

ASOIU drives technological innovation through its high-performance computing, robotics, and industrial research ecosystems.

### **Key Actions**

- **Innovation Ecosystem:**
  - *HPC & Cybersecurity Center* supports computational modeling for sustainable drilling and clean technologies.
  - *Digital Energy Lab* engages students in smart grid design and data analytics.
- **Student Innovation:**
  - *Innovation 72 Hours Bootcamp* encourages prototype development and patent filing.
  - Participation in the *Creative Spark Big Idea Challenge*.



## **SDG 10 — Reduced Inequalities**

### **Commitment**

ASOIU ensures equality, inclusivity, and diversity for all community members.

### **Key Actions**

- **Accessibility:**
  - Inclusive building design (ramps, lifts, and Braille signage).
  - Support services for students with disabilities.
  
- **Internationalization:**
  - Scholarships for students from developing countries.
  - Diversity and inclusion training for staff.



## **SDG 11 — Sustainable Cities and Communities**

### **Commitment**

ASOIU promotes urban sustainability through campus design, research, and community partnerships.

### **Key Actions**

- **Green Campus Program:**
  - Tree planting, waste recycling, and eco-transport campaigns.
  - Collaboration with Baku municipality for sustainable transport research.
- **Community Culture:**
  - Student orchestra and cultural programs strengthen community engagement.
  - Annual *Sustainable Architecture Forum* for smart city innovation.



## **SDG 12 — Responsible Consumption and Production**

### **Commitment**

ASOIU ensures ethical procurement and circular resource management across operations.

### **Key Actions**

- **Sustainable Procurement Policy:**
  - Prefers local and environmentally certified suppliers.
  - Requires lifecycle evaluation for purchases.
- **Waste Management:**
  - 3R program (Reduce–Reuse–Recycle) active since 2024.
  - Laboratory waste separation and collection for safe disposal.



## **SDG 13 — Climate Action**

### **Commitment**

ASOIU prioritizes climate education, carbon reduction, and resilience.

### **Key Actions**

- **Research & Education:**
  - Climate modeling and carbon capture studies under the *Environmental Engineering Department*.
  - “Climate Action in Engineering” integrated into core curricula.
- **Policy Commitment:**
  - Net Zero 2040 institutional roadmap under implementation.
  - Annual *ASOIU Climate Week* for student-led awareness.



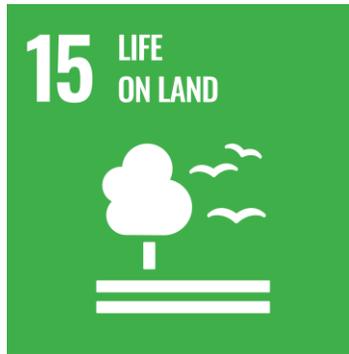
## **SDG 14 — Life Below Water**

### **Commitment**

ASOIU supports marine ecosystem protection through applied environmental engineering.

### **Key Actions**

- **Research:**
  - Caspian Sea pollution and sediment analysis projects.
  - Collaboration with the *Institute of Ecology and Hydrometeorology*.
- **Education & Engagement:**
  - *Blue Caspian Campaign*—student clean-up events.
  - Environmental engineering thesis projects on marine waste management.



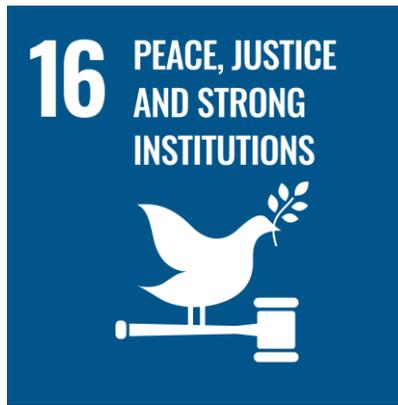
## **SDG 15 — Life on Land**

### **Commitment**

ASOIU promotes biodiversity and responsible land management.

### **Key Actions**

- **Research & Fieldwork:**
  - Joint soil and land degradation studies with Ministry of Ecology.
  - Annual *World Soil Day* seminar hosted by ASOIU Environmental Department.
- **Campus Initiatives:**
  - Tree planting drives and biodiversity-friendly landscaping.
  - Food sourcing policy prioritizing sustainable producers.



## **SDG 16 — Peace, Justice and Strong Institutions**

### **Commitment**

ASOIU cultivates ethical leadership, institutional integrity, and civic engagement.

### **Key Actions**

- **Curriculum:**
  - Courses on “Ethics in Engineering,” “Human Rights,” and “Leadership for Justice.”
  - Mediation training for management students.
- **Governance:**
  - Transparent procurement, anti-corruption policy, and open budget statements.



## **SDG 17 — Partnerships for the Goals**

### **Commitment**

Global and local partnerships define ASOIU's sustainability agenda.

### **Key Actions**

- **International Partnerships:**
  - Collaborations with University of Warwick, Delta University, and others on renewable energy and SDG-based curricula.
  - Member of EURAS, UI GreenMetric Network, and THE Impact consortium.
- **National Cooperation:**
  - Active cooperation with SOCAR, Ministry of Energy, and the Committee for Family, Women, and Children's Issues.
- **Flagship Programs:**
  - *SDG Learncast* knowledge-sharing platform.
  - *Green Campus Leaders Program* and *Student Innovation Lab for SDGs*.

## **Conclusion**

ASOIU's commitment to sustainability transcends compliance—it defines its identity as a modern, forward-looking institution bridging engineering, innovation, and responsibility. Through education, research, and policy alignment, ASOIU is helping to shape Azerbaijan's path toward the 2030 Sustainable Development Agenda, ensuring that technology and knowledge serve both people and the planet.