

Sumgayit State University



# Report on “Clean Water and Sanitation” SDG 6

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# INTRODUCTION

Sumgayit State University (SSU) is dedicated to advancing the United Nations Sustainable Development Goal 6 (SDG 6): “Clean Water and Sanitation,” with a particular focus on wastewater treatment. This report outlines SSU’s key initiatives, research projects, and collaborations aimed at treating wastewater efficiently and ensuring sustainable water management practices.







On September 11, the gala evening of the forum on "Combating Climate Change in the Global Higher Education Agenda," organized jointly by the Times Higher Education (THE) International Ranking Agency, Sumgayit State University, and Azerbaijan State Oil and Industry University, was held at Sumgayit State University (SSU).





SSU is actively engaged in pioneering research on advanced wastewater treatment methods. The university's research includes:

### Bioremediation Techniques

- SSU researchers are exploring bioremediation as a sustainable approach to remove contaminants from wastewater. Studies focus on using microorganisms and plants to break down pollutants, thus offering a natural and cost-effective treatment alternative.

### Membrane Filtration Systems:

The university has invested in research on membrane filtration systems, which play a significant role in removing impurities from industrial and domestic wastewater. By developing efficient filtration techniques, SSU aims to increase water recovery rates while minimizing waste.

### Chemical Treatment Methods: industrial pollutants.

Researchers are also evaluating chemical treatment methods, including coagulation, oxidation, and advanced oxidation processes (AOPs), to remove complex contaminants. These efforts aim to improve wastewater treatment effectiveness, especially for challenging industrial pollutants.

# Educational and Outreach Activities

SSU offers educational programs to equip students and the community with knowledge on wastewater treatment, water conservation, and sustainable water management. Through these courses, students are encouraged to explore innovative solutions for water quality challenges. SSU also conducts workshops to raise awareness about the environmental impacts of untreated wastewater and the need for sustainable practices.

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# The analysis of wastewater and determination of pH by students





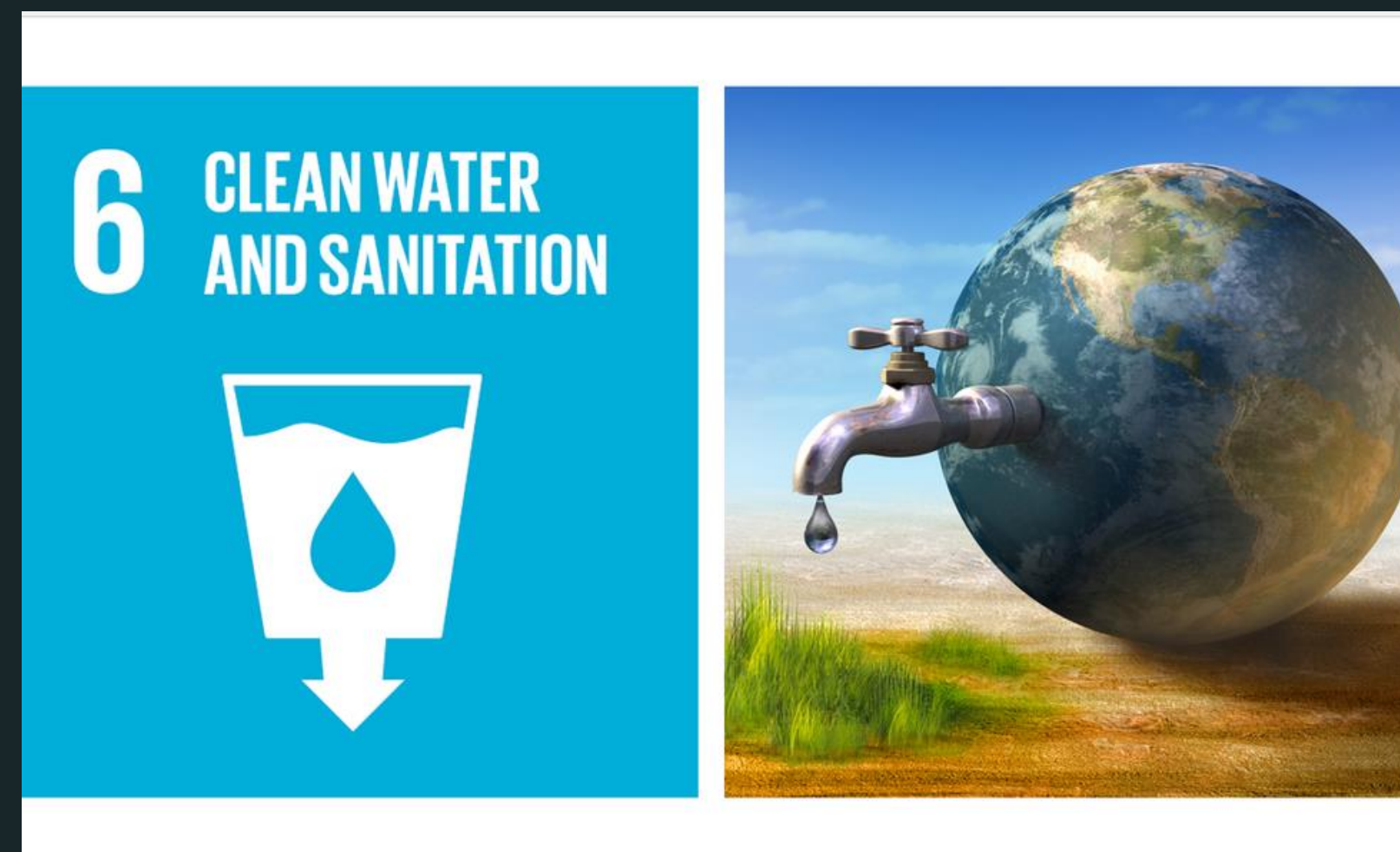
## Campus and Industry

### Collaborations

SSU actively collaborates with local industries to improve wastewater management practices. These partnerships involve:

**Wastewater Quality Monitoring:** SSU provides technical assistance to industries in monitoring wastewater quality, ensuring compliance with local and international standards.

**Technology Development:** SSU collaborates with industry experts to research and develop advanced technologies for wastewater treatment, aiming to reduce pollutants discharged into natural water bodies.





## The amount of wastewater used by Sumgayit State University



Wastewater	M 3	Sum
01.2024	2304	2304
02.2024	1251	1251
03.2024	1723	1723
04.2024	2008	2008
05.2024	2500	2500
06.2024	6733	6733