Report on SDG 6: Clean Water and Sanitation 2023

Indicators of achievement for SDG 6

Indicator	Significance
Volume of water used at the university: Incoming (treated/waste water)	141147
Campus population	15675,98
Percentage of water-saving appliances	5 %

In order to rationally use water resources, the university implements a set of the following measures:

6.1 Regulatory and legal, organisational and technical support of the university's activities in the field of water resources management

Local documents in the field of rational water use have been created, including 'Plan of water protection and water management measures to eliminate excessive impact on the water object in the place of water use in SamSTU', supported by the order 'On approval of environmental aspects and areas of improvement in terms of environmental protection' within the framework of the Environmental Management System.

6.2 A wide range of educational services

SamSTU implements educational programmes of training, retraining and advanced training in the field of water supply and sanitation, as well as a school 'Energy of Water' aimed at the formation of basic knowledge in the field of hydraulic engineering, technosphere safety, water supply and sanitation, as well as heating and gas supply and ventilation. The local community is provided with open access to the OP in the field of water resources management. https://samgtu.ru/vv

6.3 Eco-education

Promotion of conscious water use and rational use of water resources is carried out on an ongoing basis through environmental actions aimed at cleaning banks and water from rubbish, releasing fry into water bodies, etc.

Carrying out activities to promote conscious water use in the campus:

 $\frac{https://samgtu.com/uploads/Promoting\%20conscious\%20use\%20of\%20water\%20on\%20campus\%20(SDG\%206)\%202023\%20.pdf}{}$

Running events to promote conscious water use in the wider community:

 $\frac{https://samgtu.com/uploads/Promoting\%20conscious\%20water\%20use\%20in\%20the\%20wider\%20community\%20(SDG\%206)\%202023.pdf$

6.4 Monitoring and control of water condition

A filtration system has been installed in the SamSTU swimming pool, water saving devices on the campus and waste water discharge into the sewerage system. Non-productive water losses are reduced by eliminating leaks. 5% of water saving devices are used on the campus.

6.1.1 Access to drinking water is provided in the sanatorium-preventorium, sports and health camp 'Polytechnic', sports and health camp 'Stroitel', recreation centre 'Tourist'.

6.5 Scientific research and development

Prospective researches are carried out in the field of: application of crushed claydite for natural and waste water treatment, recycling systems of oil refineries and petrochemical plants, increase of efficiency of functioning of water supply and distribution systems, improvement of water supply and wastewater disposal systems for natural and waste water treatment of surface waste water treatment technologies, preservation of the Volga River ecology.

For many years SamSTU has been a partner of large city-forming enterprises, including LLC 'Samara Utility Systems', in terms of development, reconstruction and modernisation of water supply and wastewater disposal systems of Samara city, carrying out surveys, certification and preparation of expert opinions of design treatment facilities.

https://samgtu.com/uploads/Works%20performed%20by%20SSTU%20in%202023%20under%20agreements%20on%20cooperation%20in%20the%20field%20of%20water%20resources%20protection.pdf

In order to ensure the efficiency of the University's activity on chemical analyses of water, soil, industrial waste samples, as well as biodegradation of building structures, a hydrochemical laboratory has been created and is functioning.

In 2023 SamSTU was awarded recognition at the regional and All-Russian level:

- laureate of the regional competition 'Eco Equilibrium' of the publishing house 'Komsomolskaya Pravda' (https://samgtu.ru/news/view/politex-voshel-v-chislo-liderov-proekta-ekoravnovesie);
- EcoLeader-2023 status in the 'Education' nomination based on the results of the regional contest of the Ministry of Forestry(https://samgtu.ru/news/view/v-politexe-uchatsya-i-rabotayut-ekolidery);
- winner of the first regional student ecological festival 'Yashel Adym Green Step' of Almetyevsk State Oil Institute (Tatarstan)(https://samgtu.ru/news/view/studenty-politexa-stali-pobeditelyami-ekologicheskogo-festivalya).

SamSTU holds significant events of ecological orientation, highlighting topical issues of water resources protection and rational water use, such as:

- Subbotniks: 'Big Clean Water 'https://vk.com/ecoclub_zhizn?w=wall-202687368_1084; on the territory of 'Tsarev Kurgan'; in the Botanical Garden; in Bakhilova Polyana village; near the bank of the Volga river together with ANO 'Clean Water Bodies 'https://vk.com/ecoclub_zhizn?w=wall-202687368_1261;
- Environmental actions: cleaning of the bank of the Tatyanka river together with the newspaper 'Komsomolskaya Pravda 'https://vk.com/ecoclub_zhizn?w=wall-202687368_1302; for the Volga Day https://vk.com/ecoclub_zhizn?w=wall-202687368_1313; on the island of Proran; 'River Marathon' on the territory of Samara region https://vk.com/ecoclub_zhizn?w=wall-202687368_1311.

In 2023 SamSTU became a regional platform for the federal educational project of the Ministry of Education and Science of Russia - IX Youth Festival 'VuzEcoFest', uniting more than 450 participants - schoolchildren, students, teachers, industry experts. This year it was dedicated to the theme 'Mentoring in the field of environmental protection and environmental safety'.

https://samgtu.ru/news/view/v-universitete-vnov-projdet-vuzekofest https://samgtu.ru/news/view/v-universitete-zavershilsya-vuzekofest

In 2023, the next, already ninth international environmental congress ELPIT-2023, which is held every two years, was organised on the basis of SamSTU. This time the congress was attended by more than 500 people, including well-known scientists from Italy, Portugal, Latvia and colleagues from Moscow, St. Petersburg, Kazan, Saratov, Kirov, Orenburg, Yekaterinburg, Magadan and other cities of Russia, as well as managers and specialists of industrial partners of the university - the largest industrial enterprises - JSC 'AVTOVAZ', PJSC 'KuibyshevAzot', LLC 'Togliattikauchuk' and others. The Young ELPIT scientific and innovation forum for young scientists was held as part of the event. https://samgtu.ru/news/view/mezhdunarodnyj-kongress-elpit-2023-zavershil-rabotu

The University is an active participant of a large-scale action - the federal educational project 'Russian Ecological Week'. The central event of the thematic week was the educational session 'Days of Ecology', which brought together representatives of the Russian Ecological Society branch, the Ecological Department of LLC 'EcoStroyResurs', the Ministry of Forestry, Environmental Protection and Nature Management of the Samara region. Educational events were organised in schools in Samara and Samara region, including on the topic of clean water and sanitation. At the end of the environmental week, a large-scale clean-up day on the shores of Lake Grannoye was organised jointly with EcoStroyResource, Samara Region's regional operator for solid municipal waste management https://samgtu.ru/news/view/v-universitete-proshla-ekologicheskaya-nedelya.

Broadcasting of rational use of water resources and conscious water consumption on the territory of the University is realised mainly through scientific research and innovative solutions, such as:

https://samgtu.ru/news/view/uchenye-politexa-pomogayut-soxranit-ekosistemu-ozera-bajkal

https://samgtu.ru/news/view/v-politexe-znayut-kak-predotvratit-cvetenie-vodoemov

https://samgtu.ru/news/view/aspirant-politexa-issleduet-toksichnost-vodoxranilishha-na-volge

https://samgtu.ru/news/view/komanda-politexa-pobedila-v-texnologicheskom-konkurse

https://samgtu.ru/news/view/uchenye-politexa-sozdayut-novuyu-texnologiyu-dezinfekcii

SamSTU scientists pay special attention to research and development related to wastewater treatment:

https://tolyatti.bezformata.com/listnews/stochnih-vod-predlozhili-predpri/119450038/

https://tehnopolis.samgtu.ru/article/31

https://akpars.ru/articles/34841/v-samarskom-gtu-sozdali-shemu-effektivnoj-ochistki-stochnyh-vod/

https://sgpress.ru/news/402749

https://www.ecopravda.ru/nauka/ria-novosti-v-samgtu-uchenye-razrabotali-novuyu-tehnologiyu-ochistki-stochnyh-vod/

https://news.myseldon.com/ru/news/index/282226412

https://ria.ru/20230418/nauka-1864767697.html

https://samgtu.ru/news/view/uchenye-sozdayut-novuyu-texnologiyu-ochistki-stochnyx-vod https://samgtu.ru/news/view/v-politexe-razrabotali-novye-texnologii-ochistki-stochnyx-vod