University: Navoi State University of Mining and Technologies
Country: Navoi, Uzbekistan
Web Address: https://www.nsumt.uz/

[2] Energy and Climate Change (EC)
[2.14] Impactful university program(s) on climate change

No.	The Project	Scope	Total participants	Photo	URL	Short Description
1	"Master Program in Eco-Mining Engineering and Innovative Natural Resourses Management" program (EMINReM)	International	Around 10 universities	 	https://drive.google.com/drive/folders/1_FxEKf-IDyFfWch3LLbL9NbwGNuho26y?usp=sharing	The Project "Master Program in Eco-Mining Engineering and Innovative Natural Resourses Management *(EMINReM)*" Wider Objective is to raise efficiency and ecological sustainability of mining works realization through the Partner-HEIs collaboration for training of new-generation-experts within environmental, economic and management attainments in the field of natural resources extraction and processing. It is aimed at development of the future experts` interdisciplinary openness, capability of understanding technological issues in a systematic and in-depth way, using the tools of modeling and evaluation of potential environmental risks, mitigating them in our fast developing world. MP in EMINReM will be created in response to the current challenges of sustainable development and

						market needs.
2	Studying methods of identification and breeding of dust-reducing and moisture-retaining, drought- and salt-resistant perennial plant varieties in industrial-scale areas of Navoi region	National	Navoi State University of Mining and Technologies, University of Geological Sciences in Tashkent, Navoi Regional Department of Ecology, Khatirchi and Tomdi districts		https://t.me/uzdavgeolcom/18269 https://t.me/ndktu_rasmiy/16098	This program focuses on the development of dust-reducing, moisture-retaining, drought- and salt-resistant plants in industrial-scale areas of the Navoi region. These plants help restore balance in areas impacted by mining activities.
3	"Green Space" Initiative	National	All organizations in Uzbekistan		https://parliament.gov.uz/articles/392	As part of our Green Space program, we plant trees, flowers, and other vegetation seasonally on our campuses. In Spring 2025, under the motto "Prosperity of the Neighborhood is Prosperity of the Country" over 12,000 trees were planted on our main campus. These efforts reflect our goal of making our campus greener and contributing to environmental recovery.
4	Greenhouse and Reservation field at Navoi State University of Mining and Technologies	National	Navoi State University of Mining and Technologies, Navoi Regional Department of		https://t.me/ndktu_rasmiy/10281	The greenhouse facility located on campus, primarily utilized by students and teaching staff of the university's Faculty of Agriculture for scientific research and educational purposes. The progress is observed by the specialists of Navoi

			Ecology			Regional Department of Ecology. Adjacent to the greenhouse is a 1.1-hectare reservation field, providing additional space for agricultural experiments, crop cultivation, and field-based studies. This setup supports hands-on learning, promotes innovation in sustainable agriculture, and fosters academic collaboration. The participants of this project are gradually increasing due to the inclusion of other universities that offer agricultural education programs.
5	Dust-reducing and Drought-resistant Plant Program	National	Navoi State University of Mining and Technologies, Navoi Regional Department of Ecology		https://greenmetric.nsumt.uz/impact.html	This program focuses on the development of dust-reducing, moisture-retaining, drought- and salt-resistant plants in industrial-scale areas of the Navoi region. These plants help restore balance in areas impacted by mining activities.
6	VI International Scientific and Technical Conference on Comprehensive Innovative Development of the Zarafshan Region: Achievements, Challenges, and	International	Navoi State University of Mining and Technologies, all regional organizations, 20 international and 30 local universities, 500 participants in total		https://idz.nsumt.uz/	The Conference annually organized by NSUMT is a vital platform for effective dialogue between leading scientists, engineers of industrial enterprises, and representatives of large and medium-sized local and foreign companies. These events create a unique opportunity to comprehensively discuss the pressing issues and development prospects of the Zarafshan Valley, as well as encourage the active introduction of advanced technologies and

	Prospects					innovative solutions into production. Participants of the conference will not only be able to present the results of their latest research and developments, but also establish new business relations, exchange views with colleagues from various fields of science and industry, and find potential partners for joint projects. The university not only effectively carries out educational and research activities, but also creates a strong and effective ecosystem for innovation and sustainable development in the Zarafshan Valley, consistently strengthening its status as one of Uzbekistan's key industrial, scientific and technological centers.
7	Development of Innovative Technologies for Efficient Generation of Green/Blue Hydrogen for Realization of a Carbon-neutral Society with Consideration of Industrial and Environmental Characteristics in the Region	International	Navoi State University of Mining and Technologies, Japan's Science and Technology Research Partnership for Sustainable Development, Navoi Mining and Metallurgy Combine		https://greenmetric.nsumt.uz/impact.html#	Under the project "Development of Innovative Technologies for Efficient Generation of Green/Blue Hydrogen for Realization of a Carbon-neutral Society with Consideration of Industrial and Environmental Characteristics in the Region" funded by Japan's Science and Technology Research Partnership for Sustainable Development, the following modern technologies will be studied by NSUMT scientists in Kyushu University laboratories: - use of deserts, steppes, and solar energy for the power supply to produce hydrogen through electrolysis and green hydrogen production; - production of blue hydrogen by utilizing

						residual oil from oil fields; - production of green hydrogen using high-efficiency steam electrolysis powered by solar batteries and solar heat as a thermal source.

IMPACTFUL PROGRAMS (ARTICLES WIDELY USED AS EDUCATIONAL MATERIALS) BY UNIVERSITY PROFESSORS ON ENERGY EFFICIENCY AND CLIMATE CHANGE				
No.	**Name of the article/program**	**Where it was published**	**Link**	**Authors**
1	**Assessment of the Technical Potential of Solar Energy in the Navoi Region**	SCOPUS Conference of "GeoTech – 2024: geotechnology, mining and rational use of natural resources", 2024, Navoi, Uzbekistan		Askar Karshibaev Golib Xolboev
2	**Экспериментальные обследования режимов работы погружных насосов в горно-геологических условиях Навоийского ГМК**	Ежемесячный научно-технический и производственно-экономический журнал «Уголь»	https://www.ugolinfo.ru/index.php?article=202110016	Худайбердиев Ш.М. Каршибоев А.И.
3	**ANALYSIS OF CLIMATE-METEOROLOGICAL FACTORS AFFECTING ELECTRICITY CONSUMPTION OF MINING**	INTERNATIONAL SCIENTIFIC CONFERENCE "INNOVATIVE TRENDS IN SCIENCE, PRACTICE AND EDUCATION", 2024, Munchen,		Jumayev Zavqiyor Ismatilloyevich Karshibayev Asqar Ilashovich

	ENTERPRISES	Germany		
4	**Analysis of climate-meteorological and technological factors affecting electricity consumption of mining enterprises**	68th International Conference on Vibroengineering, 2024, Almaty, Kazakhstan	https://www.extrica.com/article/24047 https://www.researchgate.net/publication/379595911_Analysis_of_climate-meteorological_and_technological_factors_affecting_electricity_consumption_of_mining_enterprises	Zavqiyor Ismatilloyevich Jumayev Asqar Ilashovich Karshibayev Muzaffar Karimtoshevich Sayidov Sohibjon Gulom ogli Shirinov
5	**Methods for Increasing the Power of the Valve Generators**	International Journal of Advanced Research in Science, Engineering and Technology *(Vol. 8, Issue 7, July 2021)*	www.ijarset.com	A. I. Karshibaev J.A.Mavlonov X.Sh.Murodov A.O.Norqulov Sh.N.Xayrullayev
6	**Diagnostics of the technical condition of energy devices based on the monitoring of**	SCOPUS Conference of "GeoTech – 2024: geotechnology, mining and rational use of		Qarshibaev Asqarbek Ilashevich Narzullaev Bobur

	phase voltages and currents.	natural resources", 2024, Navoi, Uzbekistan		SHirinboevich
7	**Analysis of the process of balanced charging of the battery group with high capacity**	AGRITECH-X 2024 E3S Web of Conferences 548, 03012 (2024)	https://doi.org/10.1051/e3sconf/202454803012	Khasan Murodov Askarbek Karshibayev Shukhrat Abdullayev
8	**Expanding the level of forecasting and operational planning of electric consumption at mining enterprise**	GEOTECH-2023 E3S Web of Conferences 417, 03015 (2023)	https://doi.org/10.1051/e3sconf/202341703015	Asqar I. Karshibayev Zavqiyor I. Jumayev
9	**Development of the management system of technical indications of high-power chargerdischarger rectifier device**	GEOTECH-2023 E3S Web of Conferences 417, 03012 (2023)	https://doi.org/10.1051/e3sconf/202341703012	Khasan Murodov Askarbek Karshibayev

Additional evidence link *(i.e., for videos, more images, or other files that are not included in this file)*:

Articles and programs 1

Articles and programs 2

Articles and programs 3
Articles and programs 4
Articles and programs 5
Articles and programs 6
Articles and programs 7
Articles and programs 8
Articles and programs 9