SEISMIC RESILIENCE AND ENERGY EFFICIENCY
IN PUBLIC BUILDINGS PROJECT
(SREEPB PROJECT)

HATAY MUSTAFA KEMAL UNIVERSITY (HKMU) TAYFUR SOKMEN CAMPUS
SPORTS SCIENCE FACULTY
FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES
FACULTY OF VETERINARY MEDICINE

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

MAY
2024

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Abbreviations

BMS	Building Management System
BP	Bank Procedure
CİMER	Presidency's Communication Center
Consultant	NKY Architecture Engineering
dBA	Noise Reduction and Control
dBC	Noise Rating Measure
E&S	Environmental and Social
EA	Environmental Assessment
EHS	Environment, Health, and Safety
EIA	Environmental Impact Assessment
ESF	Environmental and Social Framework
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESS	Environmental and Social Standards
GM	Grievance Mechanism
HMKU	Hatay Mustafa Kemal University
ILO	International Labor Organization
LOTO	Lock Out-Tag Out
M&E	Monitoring and Evaluation
MoEUCC	Ministry of Environment, Urbanization, and Climate Change
MSDS	Material Safety Data Sheet
OHS	Occupational Health and Safety
PES	Sports Science Faculty (PES)
PPE	Personal Protective Equipment
PUB	Project Implementation Unit
PV	Photovoltaic Panel
SEF	Stakeholder Participation Framework
SPP	Solar Power Plant
SREEPB	Seismic Resilience and Energy Efficiency in Public Buildings
WB	World Bank
WMP	Workforce Management Plan

Executive Summary

Seismic Resilience and Energy Efficiency in Public Buildings (SREEPB) Project focuses on seismic strengthening and energy efficiency in public buildings such as higher education buildings, dormitories, social service institutions, hospitals, and government buildings located in high seismic risk areas with low energy efficiency. Under the reference number DES-SUB-02, this project covers 3 structures orderly Sports Science Faculty, Faculty of Economics and Administrative Sciences Faculty of Veterinary Medicine in Hatay Mustafa Kemal University Tayfur Sokmen Campus.

This document provides information about the structural retrofitting and energy efficiency-oriented improvement works of the Sports Science Faculty, Faculty of Economics and Administrative Sciences Faculty of Veterinary Medicine in Hatay Mustafa Kemal University Tayfur Sokmen Campus and addresses the national and international legislation that is subject to the works in question, and also provides information on possible risks that may occur during the works. It includes the measures to be taken to keep or eliminate negative environmental and social impacts at an acceptable level and the measures to be taken regarding occupational health and safety. Additionally, this Environmental and Social Management Plan (ESMP) includes details about stakeholder engagement activities, and the establishment of a Grievance Mechanism (GM), and outlines the responsibilities of relevant parties within the project scope

Introduction

This Environmental and Social Management Plan (ESMP) has been prepared within the scope of the Seismic Resilience and Energy Efficiency in Public Buildings Project (SREEPB) for the seismic retrofitting and energy efficiency-focused renovation activities to be carried out in the Sports Science Faculty, Faculty Of Economics and Administrative Sciences Faculty of Veterinary Medicine in Hatay Mustafa Kemal University Tayfur Sokmen Campus. It aims to outline the measures to be taken to maintain or eliminate the potential adverse environmental and social impacts and risks at an acceptable level.

First and foremost, this ESMP has been prepared in accordance with Turkish legislation and, in addition, aligns with the policies, standards, and measures of the World Bank (WB). It clearly outlines who will implement the measures, when, how frequently, and in what manner during the various stages of project implementation.

1. General Project and Project Site Information

1.1 Project Definition

1.1.1. General Information & Objectives

The general purpose of the Seismic Resilience and Energy Efficiency in Public Buildings (SREEPB) Project; is to strengthen public buildings (educational buildings, dormitories, hospitals and administrative buildings) that are inefficient in terms of energy use and have a high earthquake risk, against earthquakes and to ensure energy efficiency.

The aim of the project is to determine the behavior of the ground and structural systems of existing public buildings with different uses against earthquakes and to eliminate the risks by structurally strengthening them, as well as to make improvements in terms of energy efficiency, to reduce energy consumption and CO2 emissions, to monitor and control energy consumption, to close the current deficit due to energy, and to develop the sector and raise awareness by creating a model for making all public buildings in Türkiye energy efficient after the project.

SREEPB Project ensures that existing buildings are strengthened against earthquakes and made more efficient, as well as increasing social awareness about earthquakes and energy efficiency.

Throughout the project, structural strengthening works include building load-bearing system improvements and additions, as well as soil improvement if needed (*limited only to the floors of the buildings in scope*). Studies focused on energy efficiency include facade and roof insulation, replacement of facade components such as windows and doors, mechanical system revisions, air conditioning system replacements, ventilation system revisions and replacements, integration of building energy monitoring and automation systems into the existing electrical system, electricity generation through solar panel installation.

Within the scope of the Environmental and Social Standards defined in the World Bank's Environmental and Social Framework (ESF), the SREEPB Project must ensure that the activities to be carried out will not create irreversible negative environmental and social impacts and risks and that the possible impacts/risks are temporary and reversible. The Environmental Risk Rating is accepted as "Moderate" level since it is at a moderate level in terms of size and quality and the sub-project sites are not in sensitive areas in terms of environmental, social risks and impacts. They are also not expected to have serious adverse effects on human health and the environment.

The structure covered by this ESMP is located within the boundaries of Antakya District, Hatay province. Because the buildings are evacuted,except for the the Sports Science Faculty, Faculty of Economics and Administrative Sciences and Faculty of Veterinary Medicine in the district are not directly affected by the project activities. Additionally, the structures within the scope will be temporarily out of use during the construction activities. Therefore, there is no overlap between the project activity schedule and the daily activities of the structures within the scope.

This ESMP has been prepared as a guidance document for the SREEPB Project to eliminate or, if not entirely possible, reduce to an acceptable level its environmental impacts such as waste generation (hazardous and non-hazardous), air and water pollution, as well as its impacts and risks on public health, safety, and occupational health and safety (OHS), in compliance with the requirements of the World Bank (WB) and relevant national legislation.

The project, funded by the World Bank (WB), will be carried out by the Ministry of Environment, Urbanization, and Climate Change (MoEUCC) General Directorate of Construction Affairs (GDCA). GDCA will be responsible for the overall implementation, control, management, and coordination of the project. The consulting firm will be responsible for preparing and supervising the implementation of the Environmental and Social Management Plan (ESMP), while the contractor will be responsible for the on-site implementation of the ESMP.

1.1.2 Project Information

The satellite image of the Sports Science Faculty, Faculty Of Economics and Administrative Sciences, Faculty of Veterinary Medicine in Hatay Mustafa Kemal University Tayfur Sokmen Campus and detailed information about the buildings within the scope of the project are provided in Figure 1 and Table 1, respectively.

Figure 1: Buildings within the Scope of the Project

Table 1. General Information of Buildings

CAMPUS NAME	Hatay Mustafa Kemal University Tayfur Sokmen Campuss
BUILDING NAMES ***(included in the project)***	Sports Science Faculty (4.582 m^2) • D Block • E Block • K Block Faculty of Economics and Administrative Sciences (4.305 m^2) • D Block • E Block • K Block Faculty of Veterinary Medicine (7.878 m2)
PROVINCE	Hatay
DISTRICT	Antakya
NUMBER OF USERS	Sports Science Faculty • ~591 students – 31 staff Faculty Of Economics and Administrative Sciences • ~1594 students– 51 staff Faculty of Veterinary Medicine • ~354 students – 94 staff
BUILDING INFORMATION	
CONSTRUCTION AREA	~16.765 m^2
THE PLANNED WORKS TO BE CARRIED OUT IN ALL BUILDINGS INCLUDED IN THE PROJECT	
STRUCTURAL REINFORCEMENT	• Existing load-bearing system reinforcement • Floor, ceiling, wall and door renovations due to structural strengthening activities
ENERGY EFFICIENCY	• Laying 6 cm glass rock wool for outer layers 15 cm for roof mat (25 cm for veterinary medicine) on the building. • Replacement of windows and joinery on the exterior of the building (Only veterinary faculty doors). • The windows will be replaced with new double-glazed ones with plastic joinery. • Boilers will change to Natural Gas-fired Wall Mounted Condensing Cascade Boilers. • Cooling needs will be met with VRV Systems. • LED fixture replacement will be in question. • The energy class of hydrophores (IE3 and IE5) will change to higher ones. • Aspirators will be replaced with EC fan motor devices. • Solar power plant facility integration will be provided (Solar power plant panels will be installed in the parking area at the back of the Hospital as shown in Figure 1). • Basic Level Building Management System (BMS) and Energy Monitoring System (EnMS) will be established.Replacing the valves on the radiators with thermostatic radiator valves • Renewal of EI 3 class circulation pumps during boiler room renovation, insulation of boiler room installation • Renewal of the hydrophore pump system • Providing ventilation with a VAM device to prevent excessive CO2 rise in the classroom,

DURATION AND SEASON OF ACTIVITIES
All work to be carried out within the scope of the project will realize in between Q2 of 2024 and Q1 of 2025. The Contractor is obliged to complete the works in the buildings within the planned time as stated in the Job Description. At the same time, the Contractor will clearly and in advance inform all stakeholders about the timeline of construction activities before starting any construction work.
EXPECTED NUMBER OF WORKERS
The total estimated number of workers in the buildings is expected to be around 232 personnel per day.

1.1.3 Locations of Campus & Buildings

Since some of the campus employees lost their homes during the earthquake, container cities were established within the University campus. In these container cities, MKU personnel stay with their families. The settlement plans of container cities are presented in Figure-2.

The satellite view of the buildings where retrofit and energy efficiency work will be carried out is shown in Figure-1. Satellite images showing the individual coordinates of the three buildings and the area where the solar panels will be installed are given in Figure 3, Figure, Figure 5 ande Figure 6.

The map showing the container settlements within the campus is given in Figure-2.

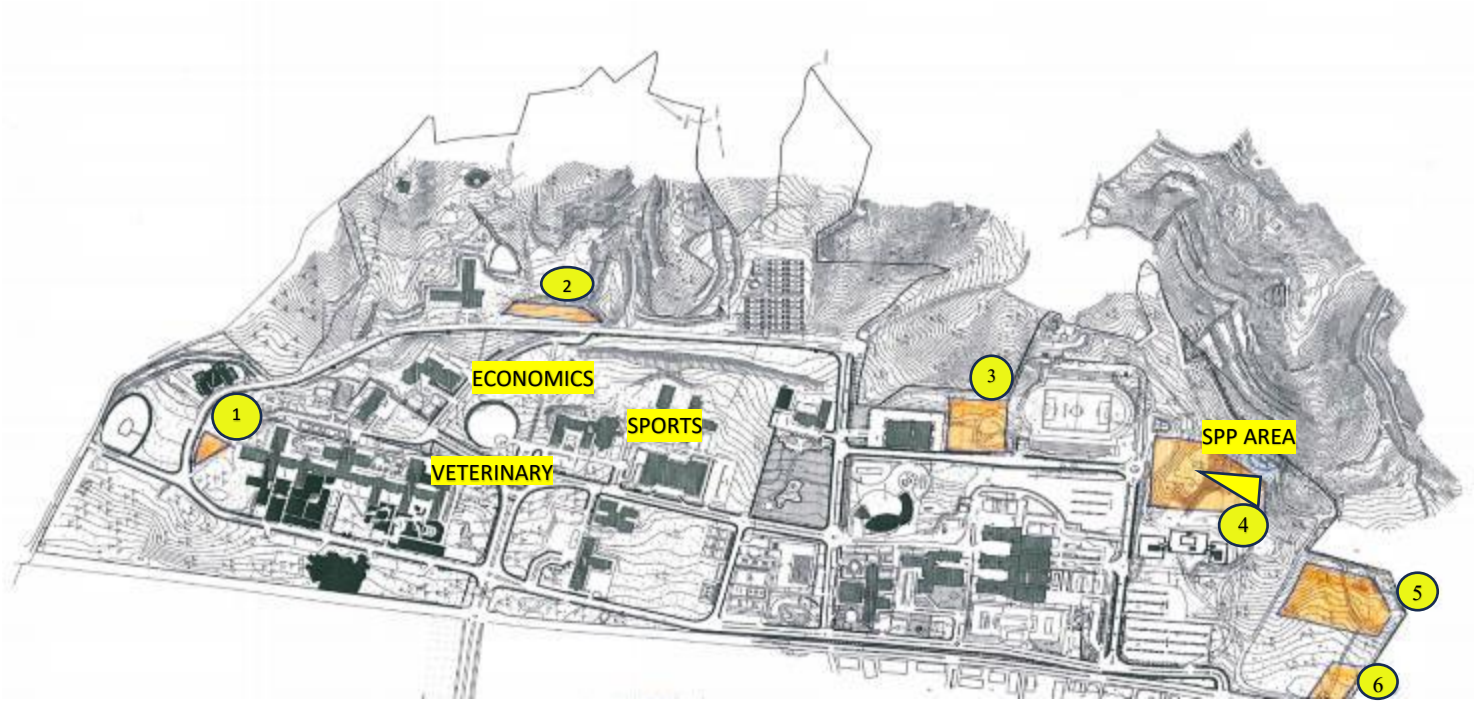


Figure 1. Container settlements (6 units) within the campus (Sensitive area)

Container campus no. 1, 45 people,

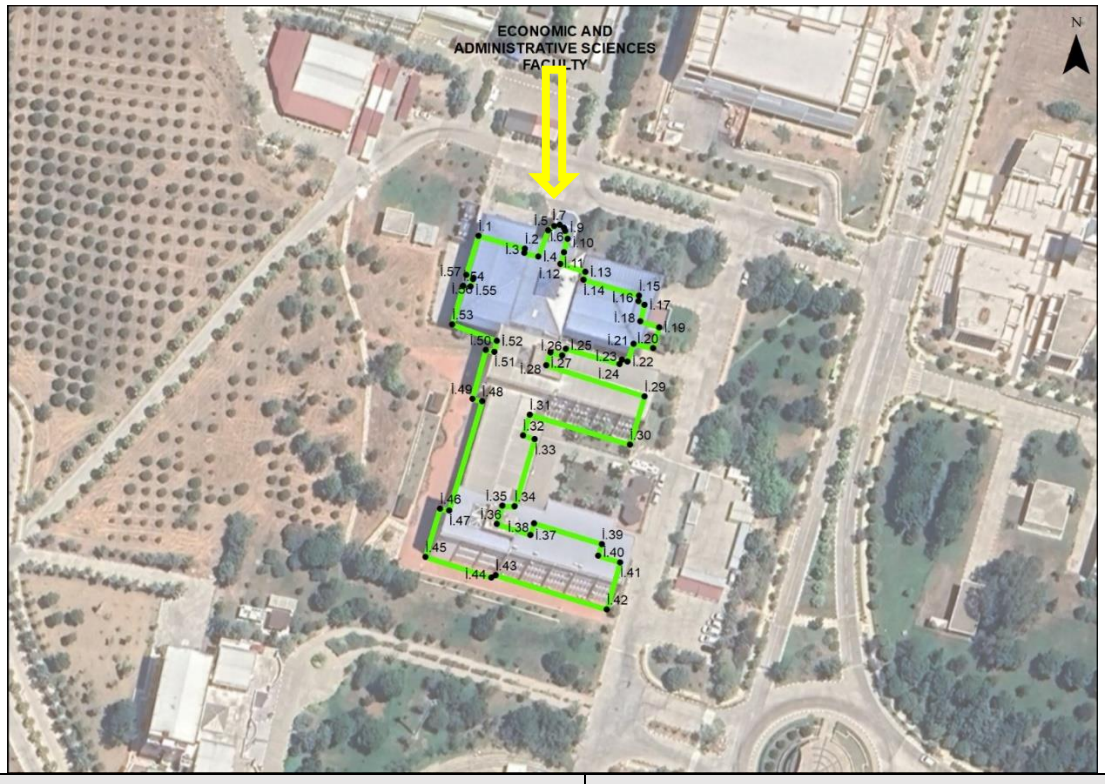
Container campus no. 2: 180 people,

Container compound no. 3: 400 people,

Container campus no. 4, 540 people,

Container campus no. 5, 180 people,

Container compound no. 6, 200 people



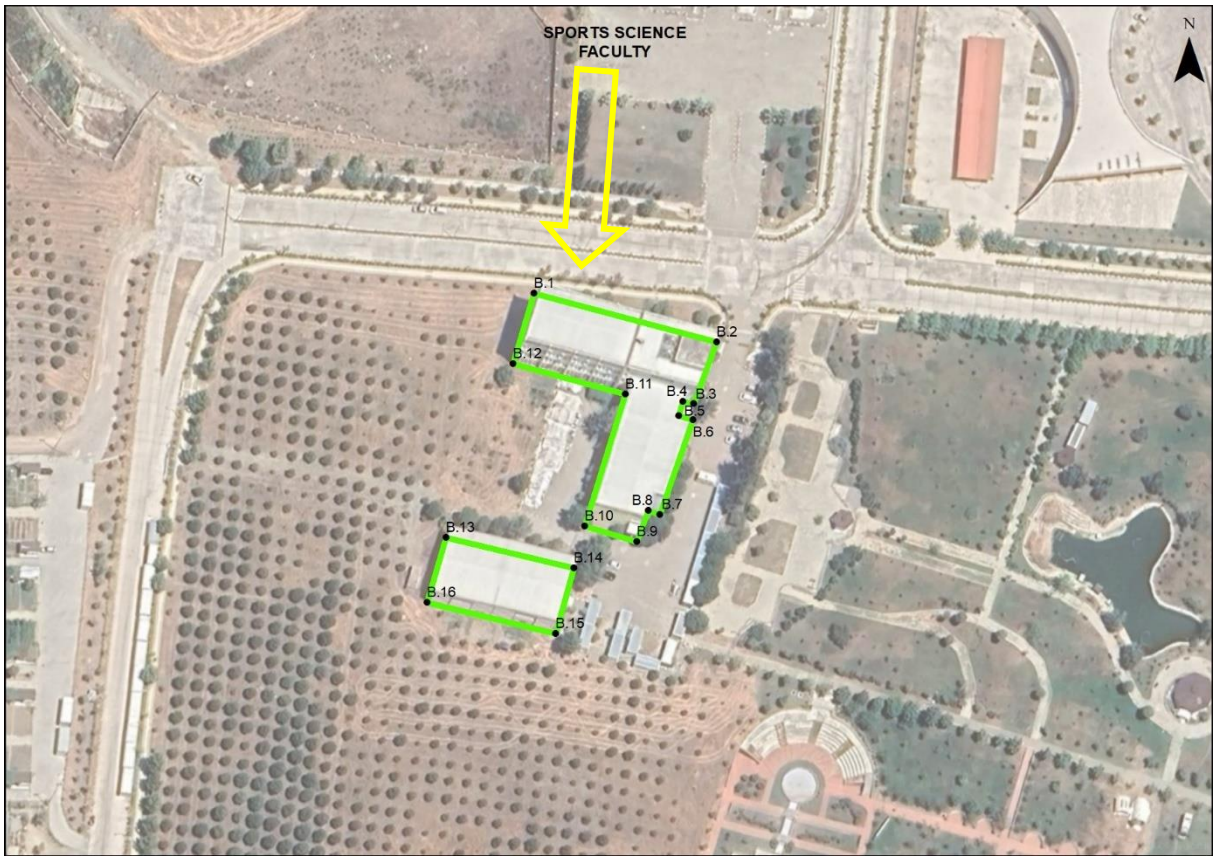
Faculty of Economics and Administrative Sciences					Faculty of Economics and Administrative Sciences				
	UTM ED50 DOM:39 ZON:37		GEOGRAFIC WGS84			UTM ED50 DOM:39 ZON:37		GEOGRAFIC WGS84	
NAME	EAST	NORTH	LATITUDE	LONGITUDE	NAME	EAST	NORTH	LATITUDE	LONGITUDE
İ.1	248240	4024400	36,330177	36,195002	İ.20	248293	4024360	36,329877	36,195609
İ.2	248254	4024390	36,330144	36,195165	İ.21	248288	4024360	36,329889	36,195546
İ.3	248254	4024390	36,330131	36,195166	İ.22	248285	4024360	36,329841	36,195523
İ.4	248258	4024390	36,330122	36,195206	İ.23	248283	4024360	36,329845	36,195501
İ.5	248260	4024400	36,330195	36,195226	İ.24	248283	4024360	36,329833	36,195501
İ.6	248260	4024400	36,330195	36,195226	İ.25	248267	4024360	36,329875	36,195317
İ.7	248264	4024400	36,330214	36,195267	İ.26	248266	4024360	36,329853	36,195306
İ.8	248265	4024400	36,330207	36,195282	İ.27	248263	4024360	36,329855	36,195270
İ.9	248266	4024400	36,330192	36,195300	İ.28	248262	4024360	36,329820	36,195258
İ.10	248267	4024400	36,330174	36,195310	İ.29	248291	4024350	36,329744	36,195593
İ.11	248267	4024390	36,330135	36,195303	İ.30	248287	4024330	36,329605	36,195547
İ.12	248265	4024390	36,330104	36,195288	İ.31	248255	4024340	36,329686	36,195193
İ.13	248273	4024390	36,330090	36,195371	İ.32	248253	4024340	36,329630	36,195173
İ.14	248272	4024380	36,330065	36,195364	İ.33	248257	4024330	36,329619	36,195213
İ.15	248289	4024380	36,330024	36,195555	İ.34	248251	4024310	36,329427	36,195155
İ.16	248289	4024380	36,330013	36,195555	İ.35	248248	4024310	36,329427	36,195120
İ.17	248291	4024380	36,330008	36,195582	İ.36	248246	4024310	36,329375	36,195103
İ.18	248290	4024370	36,329952	36,195567	İ.37	248255	4024300	36,329349	36,195205
İ.19	248295	4024370	36,329937	36,195631	İ.38	248258	4024310	36,329380	36,195231
.40	248276	4024300	36,329298	36,195443	İ.39	248277	4024300	36,329333	36,195453
İ.41	248284	4024300	36,329280	36,195525	İ.49	248238	4024350	36,329728	36,194996
İ.42	248279	4024280	36,329149	36,195482	İ.50	248242	4024360	36,329859	36,195038
İ.43	248246	4024290	36,329235	36,195102	İ.51	248245	4024360	36,329852	36,195068
İ.44	248244	4024290	36,329231	36,195085	İ.52	248246	4024360	36,329883	36,195079
İ.45	248223	4024300	36,329278	36,194853	İ.53	248232	4024370	36,329922	36,194921
İ.46	248228	4024310	36,329413	36,194897	İ.54	248235	4024380	36,330037	36,194956
İ.47	248231	4024310	36,329409	36,194933	İ.55	248238	4024380	36,330032	36,194987
İ.48	248241	4024350	36,329718	36,195034	İ.56	248239	4024380	36,330055	36,194999
					İ.57	248236	4024380	36,330068	36,194970

Figure 2. View and Coordinates of Faculty of Economics and Administrative Sciences

FACULTY of VETERINARY MEDICINE

	UTM ED50 DOM:39 ZON:37		GEOGRAFIC WGS84	
NAME	**EAST**	**NORTH**	**LATITUDE**	**LONGITUDE**
V.1	248496	4024380	36,330076	36,197859
V.2	248511	4024370	36,330041	36,198024
V.3	248509	4024370	36,329978	36,198007
V.4	248513	4024370	36,329964	36,198049
V.5	248507	4024350	36,329780	36,197990
V.6	248502	4024350	36,329788	36,197941
V.7	248501	4024340	36,329723	36,197924
V.8	248503	4024340	36,329716	36,197954
V.9	248504	4024340	36,329739	36,197967
V.10	248547	4024330	36,329641	36,198444
V.11	248541	4024310	36,329438	36,198381
V.12	248499	4024320	36,329538	36,197910
V.13	248500	4024320	36,329580	36,197920
V.14	248450	4024340	36,329698	36,197365
V.15	248454	4024350	36,329833	36,197398
V.16	248486	4024340	36,329759	36,197757

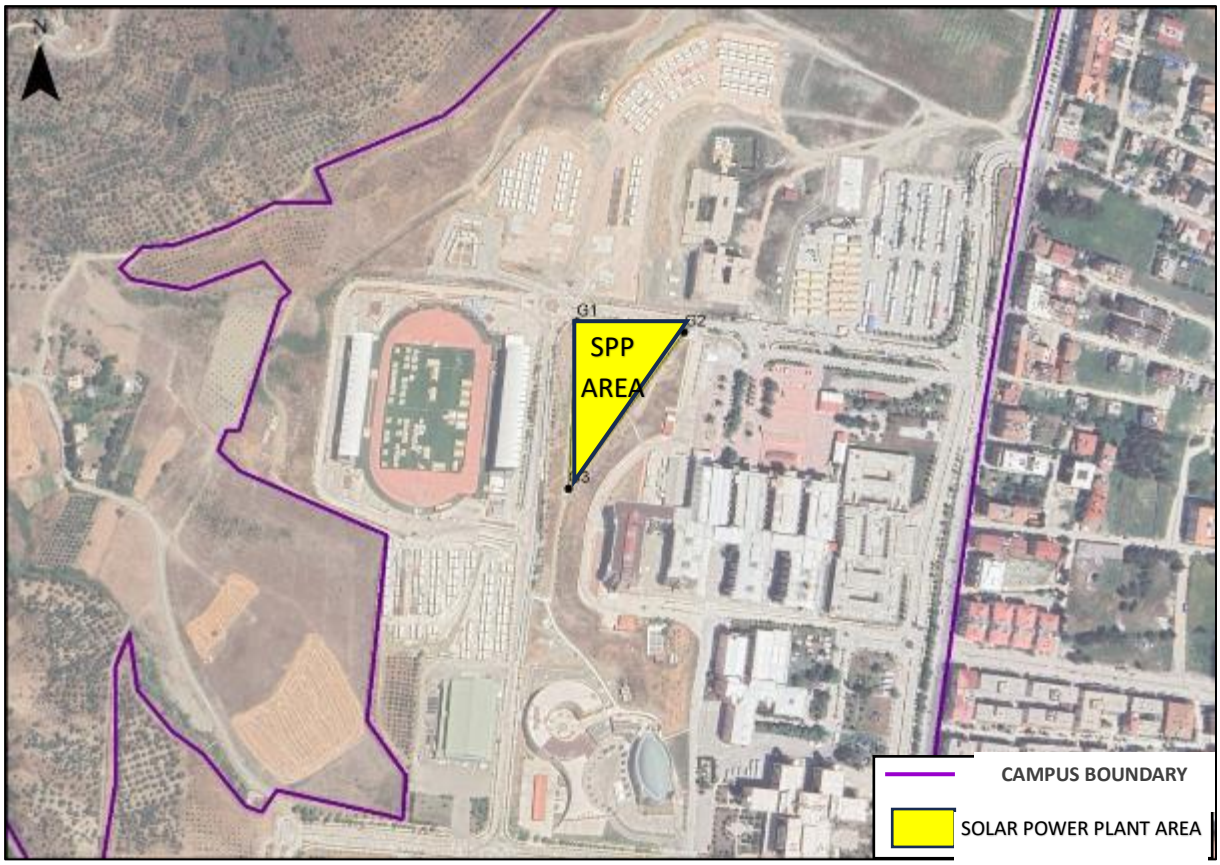
Figure 3. View and Coordinates of Faculty of Veterinary Medicine



Sports Science Faculty

	UTM ED50 DOM:39 ZON:37		GEOGRAFIC WGS84	
NAME	**EAST**	**NORTH**	**LATITUDE**	**LONGITUDE**
B.1	248218	4024740	36,333287	36,194646
B.2	248267	4024730	36,333174	36,195195
B.3	248263	4024710	36,333031	36,195154
B.4	248259	4024710	36,333040	36,195111
B.5	248257	4024710	36,332983	36,195095
B.6	248261	4024710	36,332973	36,195138
B.7	248254	4024690	36,332782	36,195072
B.8	248251	4024690	36,332788	36,195034
B.9	248249	4024680	36,332727	36,195014
B.10	248234	4024680	36,332765	36,194843
B.11	248244	4024720	36,333074	36,194949
B.12	248213	4024730	36,333148	36,194601
B.13	248195	4024680	36,332709	36,194412
B.14	248229	4024670	36,332626	36,194796
B.15	248223	4024650	36,332457	36,194739
B.16	248189	4024660	36,332542	36,194357

Figure 4. View and Coordinates of Sports Science Faculty



SPP AREA

	UTM ED50		GEOGRAFIC	
	DOM:39 ZON:37		WGS84	
No	EAST	NORTH	LATITUDE	LONGITUDE
G1	248376,31	4025211,31	36,337547	36,196259
G2	248469,85	4025202,74	36,337494	36,197303
G3	248369,01	4025066,60	36,336242	36,196225

Figure 5. View and Coordinates of SPP (Solar Power Plant)

Apart from the solar panels, the possible negative effects that may arise during the reinforcement and improvement construction of the other three buildings will primarily occur inside the building, and since there is no need for ground improvement works, limited noise and dust formation, traffic increase, parking space shortage, vibration and visual effects will be reflected outside the building. The impact distance on surrounding buildings is limited to 100 m and the major impact area is shown in Figure-8.

Solar panels will be built in the second parking area of the Campus hospital. The construction of the solar panels will take four weeks and holes will be opened on the existing concrete floor for the feet on which the panels will sit, the feet will be placed and fixed by pouring ready-mixed concrete into the holes. Metal profiles will be mounted on the legs and solar panels will be placed on them. For this reason, since there will be no excavation during the SPP installation and all operations will be carried out on the existing concrete ground, a major amount of dust formation is not expected. The most dust

and noise will be created during the drilling of the ground where thefeet will be placed, and dust formation will be reduced by irrigation in these areas. For noise generation, the hospital management near the area will be contacted and working hours will be determined together with the management and will be carried out intermittently. The major impact area of SPP panels is also shown in Figure-7.

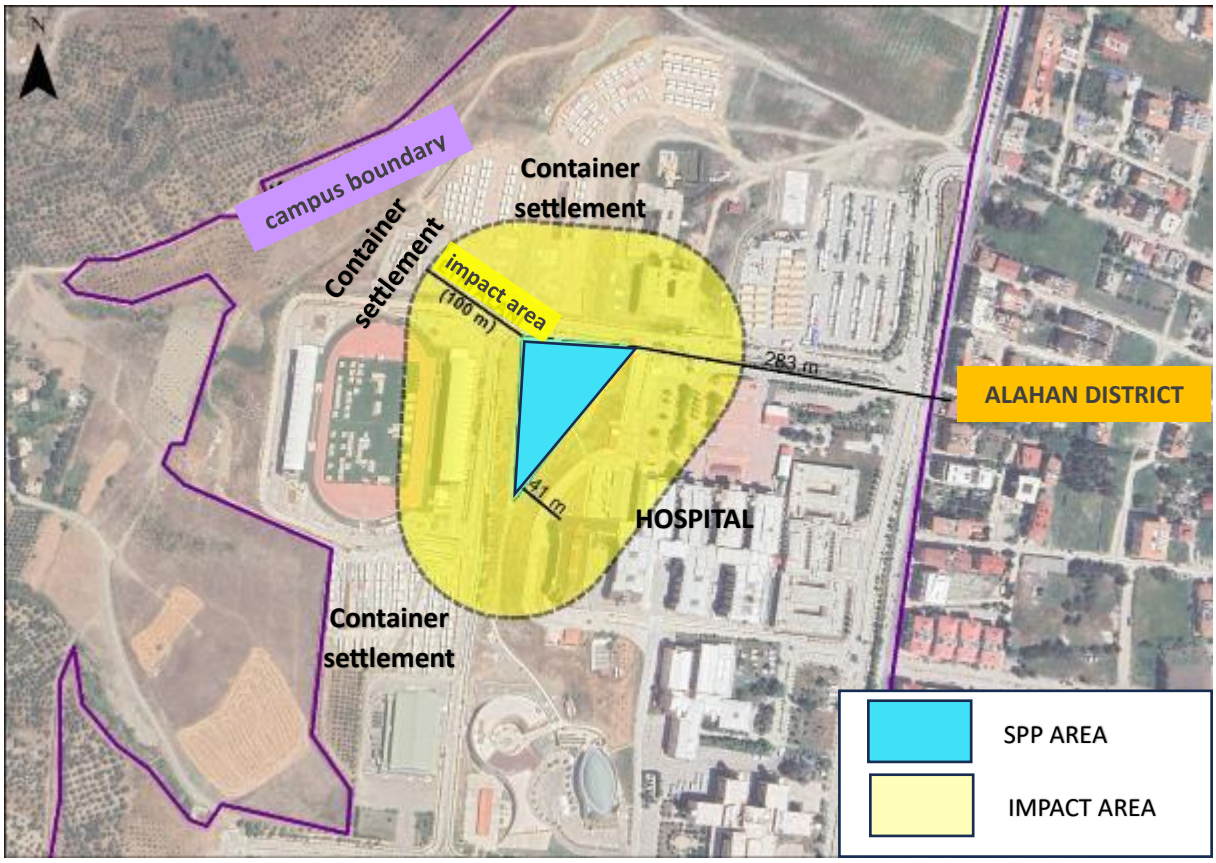


Figure 6. View of the Major Impact Area and Surroundings of the Solar Energy Panels to be built within the Scope of the Project

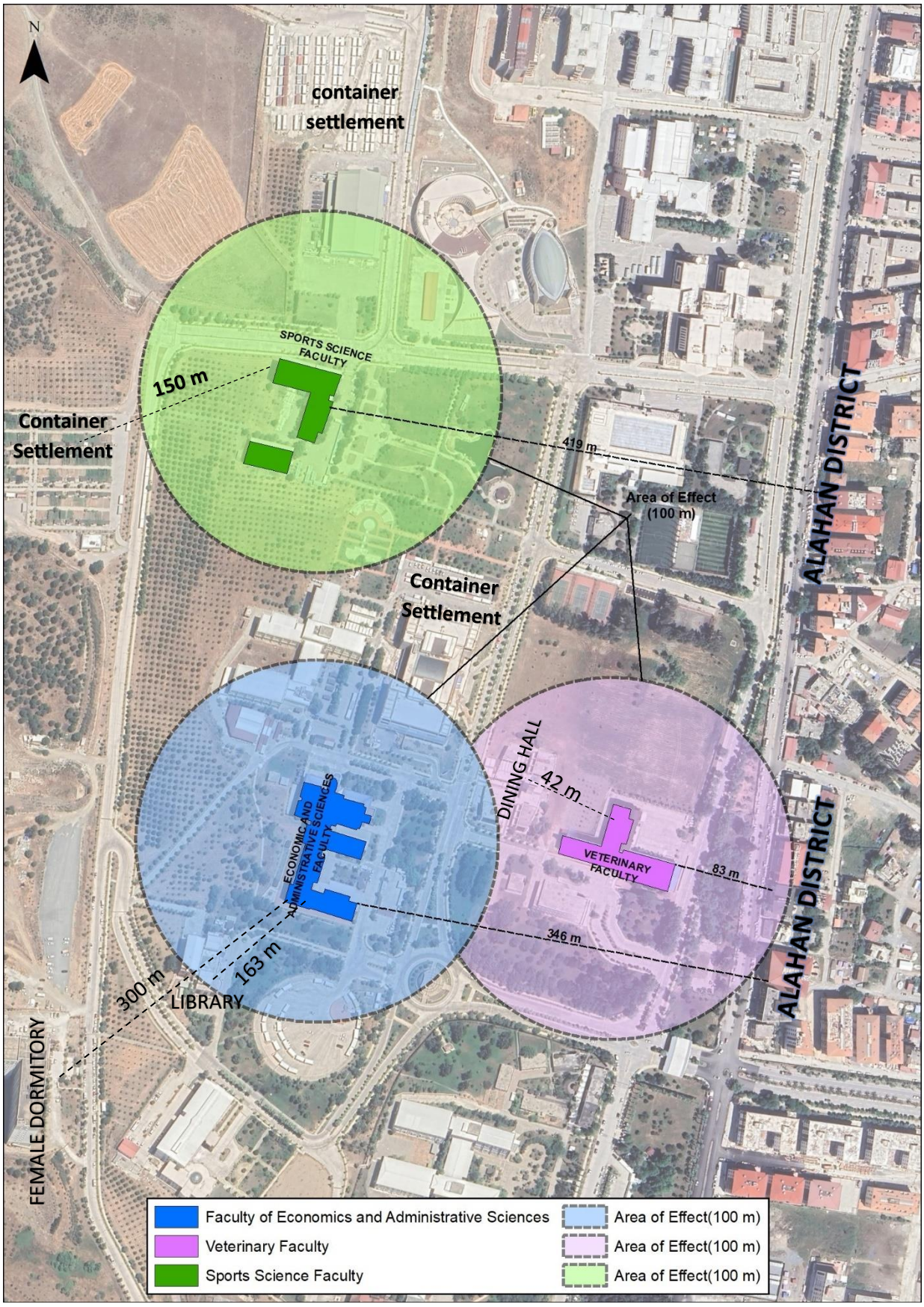


Figure 7. View of the Major Impact Area and Immediate Surroundings of the Buildings Included in the Scope of the Project

The distances of the sensitive areas closest to the Sports Science Faculty, Faculty of Economics and Administrative Sciences, Faculty of Veterinary Medicine and the Solar Power Plant area are given below.

Buildings and solar power plant area	**Distance to nearest sensitive areas (m)**		
Sports Science Faculty	419 m Alahan district	150 m container settlement (in campus)	
Faculty of Economics and Administrative Sciences	346 m Alahan district	163 m university library (in campus)	300 m Girls' dormitory (in campus)
Faculty of Veterinary Medicine	83 m Alahan district	42 m dining hall (in campus)	
Solar Power Plant Site	283 m Alahan district	41 m Hospital (in campus)	108 m container settlement (in campus)

2. Compliance with the Legal Framework and the World Bank Environmental and Social Framework (ESF)

2.1 National Legislation

The ESMP is primarily prepared in compliance with the legislation of the Republic of Türkiye. The fundamental framework of Türkiye's environmental legislation is the Environmental Law (Law No. 2872), published in the Official Gazette dated August 11 and 1983 numbered 18132, and last revised in the Official Gazette dated December 29, 2023 and numbered 32414 concerning administrative fines. This law is supported by regulations. Below are law and the regulations primarily utilized or to be utilized for the assessment and prevention of environmental impacts within the scope of this Project.

1. Waste Management Regulation was published in the Official Gazette No. 29314 dated April 2, 2015, and an amendment was made in the Official Gazette No. 30016 dated March 23, 2017.
2. Regulation on the Control of Packaging Wastes was published in the Official Gazette dated 26 June 2021 and numbered 31523.
3. Regulation on the Control of Excavation Soil, Construction and Demolition Wastes was published in the Official Gazette dated 18.03.2004 and numbered 25406, and an amendment was made in the Official Gazette numbered 31623 dated 09 October 2021.
4. Air Quality Assessment and Management Regulation was published in the Official Gazette dated 06 June 2008 and numbered 26898.
5. Regulation on the Prevention of Risks of Exposure to Biological Agents was published in the Official Gazette dated 15 June 2013 and numbered 28678.
6. Zero Waste Regulation was published in the Official Gazette No. 30829 dated 12 July 2019 and an amendment was made in the Official Gazette No. 31623 dated 09 October 2021.
7. Regulation on Control of Soil Pollution and Contaminated Sites by Point Sources was published in the Official Gazette No. 27605 dated 8 June 2010 and was last revised in the Official Gazette No. 28704 dated 11 July 2013.
8. Water Pollution Control Regulation, published in the Official Gazette dated December 31, 2004, with the latest amendment published in the Official Gazette dated May 12, 2023, with the number 32188.
9. Environmental Noise Control Regulation was published in the Official Gazette No. 32029 dated 30 November 2022.
10. The Regulation on Noise Emission in the Environment Created by Equipment Used in Open Areas was published in the Official Gazette No. 26392 dated 30 December 2006 and an amendment was made in the Official Gazette No. 30088 dated 06 June 2017.

Within the scope of the project, activities related to Occupational Health and Safety will be carried out in compliance with the legislation taking into account the primary impacts, including the Labor Law No. 4857 published in the Official Gazette dated June 10, 2003, with issue number 25134, and the Occupational Health and Safety Law No. 6331 Published in the Official Gazette dated June 30, 2012, with issue number 6331, along with related regulations. Below are the regulations that will be primarily utilized.

1. The Regulation on Health and Safety Measures in Working with Asbestos was published in the Official Gazette No. 28539 dated 25 January 2013 and an amendment was made in the Official Gazette No. 28884 dated 16 January 2014.

2. The regulation on Manual Handling was published in the Official Gazette No. 28717 dated 24 July 2013.
3. The Regulation on Occupational Health and Safety in Temporary or Fixed-Term Works was published in the Official Gazette dated 23 August 2013 and numbered 28744.
4. Regulation on Health and Safety Measures in Working with Chemical Substances was published in the Official Gazette No. 28733 dated 12 August 2013.
5. Regulation on the Use of Personal Protective Equipment in Workplaces was published in the Official Gazette dated 02 July 2013 and numbered 28695.
6. Regulation on Health and Safety Signs was published in the Official Gazette No. 28762 dated 11 September 2013.
7. The Regulation on the Vocational Training of Those to be Employed in Hazardous and Very Hazardous Class Jobs was published in the Official Gazette dated 13 July 2013 and numbered 28706, and an amendment was made in the Official Gazette dated 11 May 2017 and numbered 30063.
8. Control of Dust Regulation was published in the Official Gazette dated 5 November 2013 and numbered 28812.
9. Regulation on Occupational Health and Safety in Construction Works was published in the Official Gazette No. 28786 dated 5 October 2013 and an amendment was made in the Official Gazette No. 30642 dated 31 December 2018
10. Regulation on the Protection of Employees from Noise-Related Risks was published in the Official Gazette No. 28721 dated 28 July 2013.
11. The Regulation on the Procedures and Principles of Occupational Health and Safety Training of Employees was published in the Official Gazette No. 28648 dated 15 May 2013 and an amendment was made in the Official Gazette No. 30430 dated 24 May 2018.
12. The Regulation on Health and Safety Conditions in the Use of Work Equipment was published in the Official Gazette No. 28628 dated 25 April 2013 and an amendment was made in the Official Gazette No. 31754 dated 18 February 2022.
13. The Regulation on the Duties, Powers, Responsibilities and Training of Occupational Safety Experts was published in the Official Gazette dated 29 December 2012 and numbered 28512, and an amendment was made in the Official Gazette dated 6 July 2021 and numbered 31533
14. Regulation on Occupational Hygiene Measurement, Test and Analysis Laboratories was published in the Official Gazette dated 24 January 2017 and numbered 29958.
15. Regulation on Occupational Health and Safety Services was published in the Official Gazette No. 28512 dated 29 December 2012 and an amendment was made in the Official Gazette No. 31533 dated 6 July 2021.
16. Occupational Health and Safety Risk Assessment Regulation was published in the Official Gazette No. 28512 dated 29 December 2012.
17. The Regulation on Emergency Situations in Workplaces was published in the Official Gazette No. 28681 dated 18 June 2013 and an amendment was made in the Official Gazette No. 31615 dated 1 October 2021.
18. The Regulation on Suspension of Work in Workplaces was published in the Official Gazette No. 28603 dated 30 March 2013 and an amendment was made in the Official Gazette No. 29621 dated 11 February 2016.
19. The Regulation on the Duties, Powers, Responsibilities and Training of Workplace Physicians and Other Health Personnel was published in the Official Gazette dated 20 July 2013 and numbered 28713, and an amendment was made in the Official Gazette dated 6 July 2021 and numbered 31533.

20. Regulation on Health and Safety Measures in Working with Screened Vehicles was published in the Official Gazette No. 28620 dated 16 April 2013.
21. Regulation on the Protection of Employees from Vibration-Related Risks was published in the Official Gazette No. 28743 dated 22 August 2013.
22. Regulation on Supporting Occupational Health and Safety Services was published in the Official Gazette No. 28861 dated 24 December 2013.
23. Regulation on Occupational Health and Safety Boards was published in the Official Gazette No. 28532 dated 18 January 2013.
24. Regulation on Health and Safety Measures to be Taken in Workplace Buildings and Extentions was published in the Official Gazette No. 28710 dated 17 July 2013.
25. The Regulation on the Working Conditions of Pregnant or Breastfeeding Women, Breastfeeding Rooms and Child Care Dormitories was published in the Official Gazette No. 28737 dated 16 August 2013, and an amendment was made in the Official Gazette No. 30881 dated 7 September 2019.
26. The Regulation on the Working Conditions of Female Employees in Night Shifts was published in the Official Gazette No. 28717 dated 24 July 2013 and an amendment was made in the Official Gazette No. 30159 dated 19 August 2017.

To determine the basic insurance rights during the employment of all workers, the Social Security and General Health Insurance Law No. 5510 dated June 16, 2006, will be applied.

Additionally, the Environmental Impact Assessment (EIA) Regulation, under Article 10 of the Environmental Law, was first published in the Official Gazette dated February 7, 1993, with issue number 21489, and was last revised and published in the Official Gazette dated July 29, 2022, with issue number 31907. Since the construction activities will take place in publicly-owned existing buildings, the project is not subject to the EIA Regulation.

Significant social and environmental impacts resulting from the project are likely to affect sensitive receptors located near the project area. In this context, the careful management of ESMPs and OHS activities will be sufficient to reduce environmental and social impacts.

2.2 International Agreements

1. European Union Council Directive 89/391/EEC dated 12/6/1989, concerning measures to improve the health and safety of workers at work.
2. International Labour Organization (ILO) Convention No. 155, concerning Occupational Safety and Health and the Working Environment.
3. International Labour Organization (ILO) Convention No. 161 concerning Occupational Health Services.
4. International Labour Organization (ILO) Convention No. 187 concerning the Promotional Framework for Occupational Safety and Health.
5. International Labour Organization (ILO) Convention No. 167 concerning Safety and Health in Construction.
6. United Nations Framework Convention on Climate Change.
7. Paris Agreement on Climate Change.
8. Long-Range Transboundary Air Pollution Convention.

2.3 Word Bank Environmental and Social Frame (ESF) and Standards

At all stages of the project, compliance with national legislation and the requirements of the World Bank Environmental and Social Framework (ESF) [1] and relevant Environment, Health and Safety (EHS) Guidelines [2] will be ensured.

Environmental and Social Standards (ESS), summarized in Annex II, are one of the components of the World Bank Environmental and Social Framework and establish requirements for the project owner regarding the identification and assessment of environmental and social risks and impacts associated with projects supported by the World Bank. The applicability of the World Bank Environmental and Social Standards to the KADEV Project is summarized in Table 2.

Table 2. Applicability of World Bank Environmental and Social Standards to the Project

Environmental and Social Standards	Applicability
ESS1: Assessment and Management of Environmental and Social Risks and Impacts	YES
ESS2: Labor and Working Conditions	YES
ESS3: Resource Efficiency and Pollution Prevention and Management	YES
ESS4: Community Health and Safety	YES
ESS5: Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement	NO[3]
ESS6: Biodiversity Conservation and Sustainable Management of Living Natural Resources	NO[4]
ESS7: Indigenous Peoples/ Sub-Saharan African Historically Underserved Traditional Local Communities	NO[5]
ESS8: Cultural Heritage	YES
ESS9: Financial Intermediaries	NO[6]
ESS10: Stakeholder Engagement and Information Disclosure	YES

[1] https://www.worldbank.org/en/projects-operations/environmental-and-social-framework
[2] https://www.ifc.org/en/insights-reports/2000/general-environmental-health-and-safety-guidelines#:~:text=The%20Environmental%2C%20Health%2C%20and%20Safety,and%20in%20IFC's%20Performance%20Standards
[3] None of the activities to be carried out within the scope of this project will cause land acquisition, any restrictions on land use and/or involuntary resettlement, and all works will be carried out within existing buildings.
[4] There will be no interaction with natural resources and/or biodiversity elements due to any activities to be carried out within the scope of the project.
[5] There are no indigenous groups in Türkiye that meet the definition given in ESS7.
[6] Since there is no financial intermediary institution involved in this project, ESS9 will not be applied in this project.

3. Activities to be Conducted Within The Project

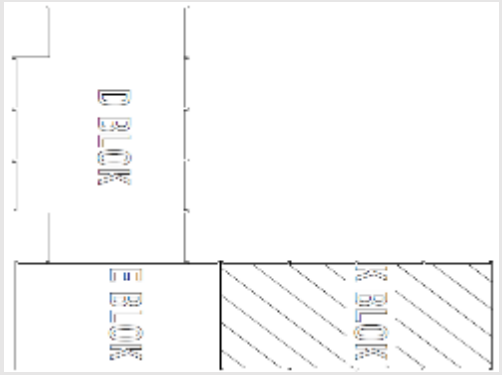
Summary technical information about the structural strengthening and energy efficiency works to be carried out at the Sports Science Faculty (PES), Faculty of Economics and Administrative Sciences and Faculty of Veterinary Medicine located at Hatay Mustafa Kemal University Tayfur Sökmen Campus is given in Table 3 below. This ESMP; It will be accessible to all stakeholders throughout the life of the project, at construction sites and on the project website (https://kamuguclendirme.csb.gov.tr/). In addition, the draft ESMP will be published on the official website of Hatay Mustafa Kemal University (https://www.mku.edu.tr) at least 10 days before the meeting to ensure that stakeholders participate in the meeting with sufficient information about the project before the information meeting. A full-time environmental, social and occupational health and safety (OHS) specialist within the contractor; An environmental expert, a social expert and an OHS expert will be employed within the Construction Control Consultancy firm. The Consultant, the Contractor and the Ministry's Project Implementation Unit (PIU) will be responsible for recording and answering the questions and opinions regarding environmental, social and OHS issues received by the stakeholders.

Table 3. Summary Information About the Activities to be Conducted

FIELD STUDIES

DEFINITION OF THE GEOGRAPHICAL, PHYSICAL, BIOLOGICAL, GEOLOGICAL, HYDROGRAPHIC, AND SOCIO-ECONOMIC CONTEXT	**FACULTY OF VETERINARY MEDICINE**   **FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES**  

SPORTS SCIENCE FACULTY

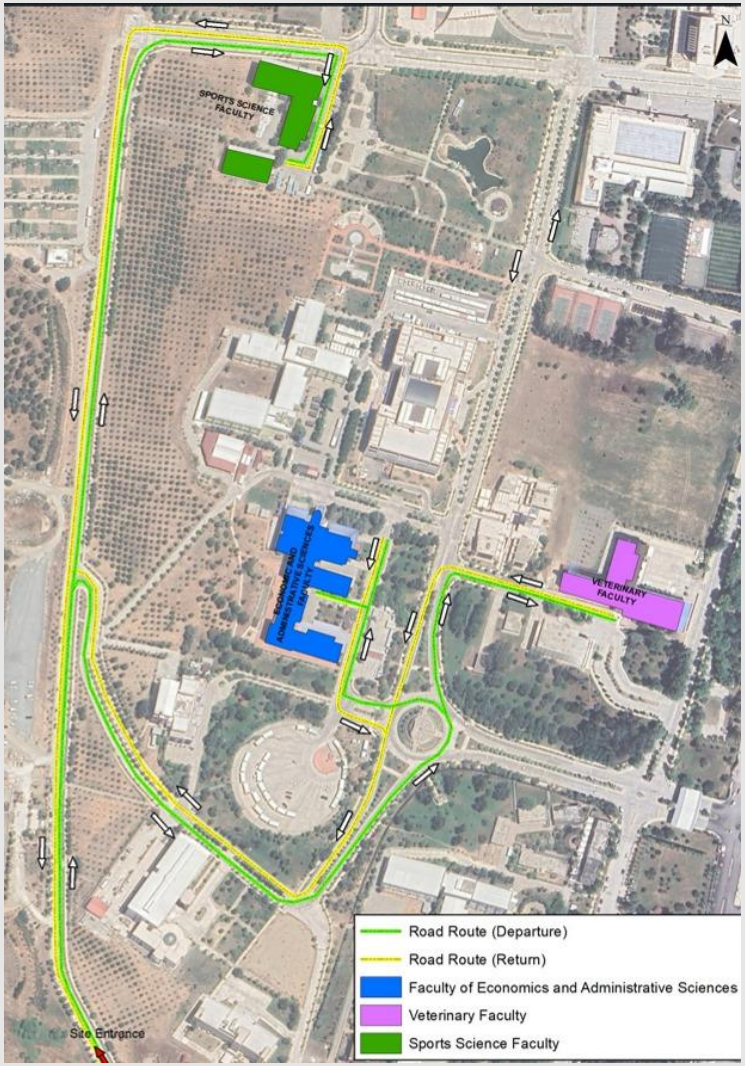


SSP SITE (LOCATED OVER THE SECOND PARKING AREA)

During the implementation of the project activities (such as scaffolding installation, painting, exterior cladding, installation of solar panels, etc.), it is expected that the soil around the buildings will be affected by the construction activities. Necessary precautions will be taken to prevent hazardous chemicals from contaminating the soil during the work will be carried out in the project area. The measures to be taken to manage the possible environmental and social impacts and risks of the project are presented in detail in Chapter 5. No problems are foreseen in transportation to the project area. All infrastructure facilities required for the works, such as electricity, water, sewerage, natural gas and internet, are available.

LOCATIONS AND DISTANCE WHERE THE CLOSEST SENSITIVE RECEPTORS ARE LOCATED, SUCH AS HOSPITALS, HEALTH UNITS, PUBLIC BUILDINGS, HOMES.	The project site is within the borders of Hatay Mustafa Kemal University Tayfur Sökmen Campus. The majority of the strengthening and improvement works will be carried out inside the building. However, mearures to preventig the close settlements around the project area from being negatively affected by construction activities is presented in this ESMP and will be kept under control and managed with impact mitigation measures. The buildings of the Sports Science Faculty, Faculty of Economics and Administrative Sciences, Faculty of Veterinary Medicine and other buildings located outside the SPP construction area are not expected to be directly affected by the construction operations. • Within the major impact area (Figure-8) arising from the operations to be carried out within the scope of seismic strengthening and energy efficiency in the Sports Science Faculty, Faculty of Economics and Administrative Sciences and Faculty of Veterinary Medicine, possible problems that may be encountered in waste management such as noise, dust, vibration, and the spread of excavation waste outside the construction site. These problems may negatively affect those working/living in the buildings in question. Detailed information on the subject and precautions to be taken are included in Chapter 5. In addition, Hatay Mustafa Kemal University Tayfur Sökmen Campus Rectorate/faculty and college management (faculties are still out of use due to the earthquakes in February 2023) will be informed at least 7 days before each stage in the construction process. The construction schedule will be kept on site, in a place where stakeholders can see it, and will be constantly updated throughout the project. • Within the scope of increasing energy efficiency, Solar Panels will be placed in the spare parking area of the Hospital within the Campus. Effects such as noise, dust, vibration and waste within the major impact area (Figure-7) resulting from the operations to be carried out during the installation of the solar power plant may spread outside the construction site and negatively affect the patients working in the hospital and visiting patients and those living in nearby container settlements. Detailed information on the subject and precautions to be taken are included in Chapter 5. • Container settlements located within the campus close to the SPP area, settlements adjacent to the south gate, and the common road, library and student dormitories are within the impact area. The measures to be taken within the scope of the project to prevent these sensitive receptors from being affected by possible environmental and social impacts/risks are presented in detail in Chapter 5. Hatay Mustafa Kemal University Campus is located 18 km from the city center and Hatay Airport.
TRAFFIC ACTION PLAN	Considering the activity area and its immediate surroundings, it is not foreseen that there will be any problems during the transportation of the materials needed for construction activities. Access roads and rules are specified in the Traffic Action Plan. The traffic action plan is included in the Occupational Health and Safety Plan prepared by the Consultant. In addition, the Community Safety and Traffic Management Plan will be prepared by the contractor before the construction phase

	begins. The map and traffic management plans showing the traffic route of the three buildings and the areas where the Solar Panels will be installed are given below.

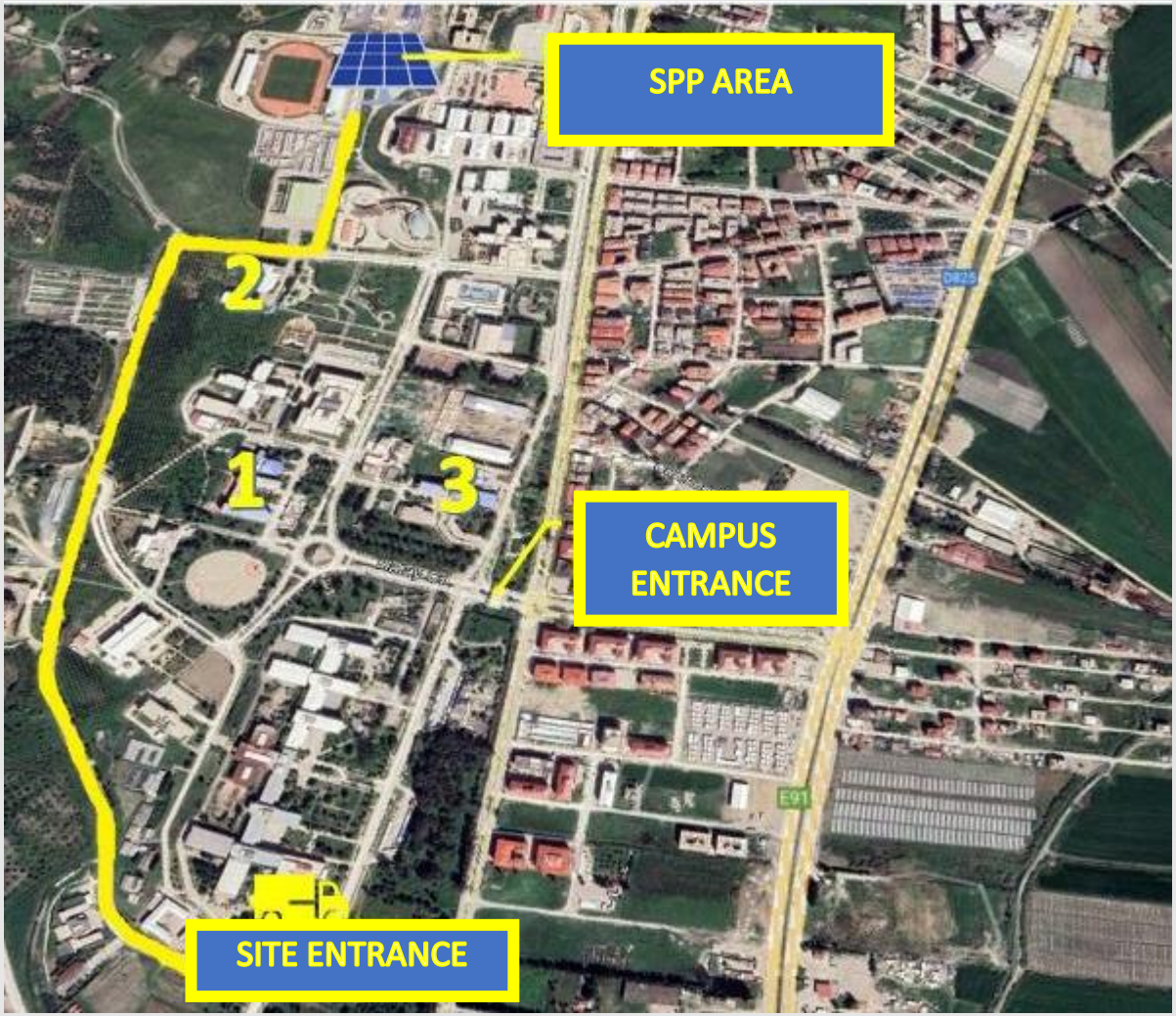


Map showing traffic route

Faculty Of Economics And Administrative Sciences Traffic Plan

Sports Science Faculty

Faculty of Veterinary Medicine



SPP Area Traffic Managament

SEWER SYSTEM, ELECTRICITY, WATER NETWORK ETC. INFRASTRUCTURES USED BY THE PROJECT	During the construction works, the sewerage, electricity and water networks already existing in the region will be used, with the approval of the Beneficiary Institution. Domestic waste will be disposed of using municipal services, while temporary storage areas will be created for other wastes and disposed of by licensed companies. In case any infrastructure service procurement is required specific to the project (overflow as a result of clogging in sewer lines (purchase of sewage truck service), long-term power outage (mobile generator), long-term water outage (fighting dust with water tankers, etc.), existing infrastructure opportunities will be evaluated and the relevant regulations will be met. will be carried out appropriately.
NATIONAL LEGISLATION AND PERMITS APPLICABLE TO THE PROJECT ACTIVITY (E.G. SPP INSTALLATION ETC.)	The Solar Power Plant (SPP) facility will be used for unlicensed electricity generation application. The solar power plant, which will benefit all three buildings, will be built in the second parking lot of the Hospital on campus. There are two car parks belonging to the hospital. Solar panel installation work will take place in just one parking area, and the other parking area will be in used during the works. The area to be used for solar power installation does not belong to a private enterprise and is located within the campus area. The installation of solar panels is planned to be completed in an average of 3-4 weeks. • Documents to be obtained for Unlicensed Electricity Generation include but are not limited to the following; Documents required for the Authorized Electricity Distribution Company - Call Letter, ▪ Unlicensed production connection application form, ▪ Fixed non-roaming subscriber number, ▪ Receipt showing that the application fee has been deposited into the account of the relevant network operator, ▪ Single Line Diagram showing the technical features of the facility to be installed, ▪ Solar Technical Evaluation Form prepared by the General Directorate of Renewable Energy, personnel program ▪ Application sketch with approved coordinates, ▪ Certificate of residence, Approval of SPP Static Projects • Connection Opinion" and "Invitation Letter for Connection Agreement" letters to be received from the relevant distribution company • System Basic Information Form • Technical projects and calculations • District Municipality-SPP Compliance Letter (according to Zoning Regulation Legislation) Within the scope of the "Regulation on Unlicensed Electricity Production in the Electricity Market", the online application to the authorized energy distribution company for photovoltaic panel installation is in the process of being initiated by the Consultant.
STAKEHOLDER ENGAGEMENT PROCESS	
STAKEHOLDER ENGAGEMENT PROCESS	A stakeholder participation meeting was held on 13.05.2024. Detailed information about the retrofit and energy efficiency renovations to be made within the scope of the project was given and the anticipated environmental and social impacts were explained. The beneficiary institution management and technical units, building users, consultant company experts and PIU experts attended the meeting. A total of 27 people (6 women, 21 men) physically attended the meeting. 87 people (33 women and 54 men) participated via Zoom.

	Before the information meeting, this ESMP was disclosed on the Mustafa Kemal University website and within the campus for 10 days and made available to stakeholders. The ESMP will be accessible to all stakeholders both on the relevant website and at the construction sites throughout the life of the project. Details about the Grievance Mechanism established specifically for the project are presented in Chapter 4.
ISSUES AND CONCERNS RATED BY BUILDING USERS	At the meeting, building users were informed about the structural strengthening and energy efficiency renovation process and asked if they had any concerns, opinions, suggestions and/or questions regarding these possible activities. The presentation is in the Annex. All suggestions and opinions submitted were recorded in stakeholder participation meeting minutes and are included in the Annex. This document has been revised in the light of additional data obtained as a result of the mentioned meeting.
INSTITUTIONAL CAPACITY DEVELOPMENT	
TRAINING	Within the scope of the project, it is expected that the institutional capacity of the contractor company will improve as a result of the training that the Consultant will provide to the Contractor personnel. These trainings are listed below. • Environmental and Social Impacts • Waste Management • Response to Environmental Emergencies •Energy efficiency • Stakeholder Participation/Information Activities • Grievance Mechanism (GM) • Gender Equality / Gender-Based Violence/Sexual Exploitation/Sexual Assault/Sexual Harassment • Code of Conduct • Preservation of Historical Heritage • OHS Plan Implementation and Monitoring Training • • Log Out and Tag OutTraining Permit to Work System Training

4. Stakeholder Engagement and Grievance Mechanism (GM)

Stakeholder Engagement is an inclusive process to be carried out throughout the project lifecycle and supports the establishment of strong, constructive and responsive business relationships that are important for the successful management of the project's environmental and social impacts and risks. The Stakeholder Engagement Meeting helps manage stakeholder expectations that will affect the management of risks, possible disputes and project delays by ensuring early, frequent and open communication throughout the life of the project.

The ESMP specific to this sub-project will be published on the website of the KADEV Project (https://kamuguclatma.csb.gov.tr/) throughout the life of the project so that all stakeholders have information about how the project process will be carried out in the field and to receive objections and suggestions, if any. It was hung on 02.05.2024 at Mustafa Kemal University Tayfur Sökmen Campus within the scope of the project. Following the completion of the suspension process, a Stakeholder Participation Meeting was held again on 13.05.2024, in order to provide information about the technical, social and environmental details of the project by relevant experts, and to answer all questions of the participants about the project and obtain their opinions, before the projects prepared and approved were implemented. The meeting was held with the participation of the contractor, beneficiary institution management and technical units, consultant company employees and relevant experts of the Project Implementation Unit. (27 people, 6 women and 21 men, attended the meeting.) 87 people (33 women and 54 men) participated via Zoom. Details about the Stakeholder Participation Meeting are presented in the Annex.

Grivance Mechanism

The Grievance Mechanism is to provide access to an effective procedure for project-affected or interested parties. Grievances can be an indicator of stakeholder concerns and can escalate if not identified and resolved. Identifying and responding to grievances supports the development of positive relationships between Project staff, local communities and other stakeholders.

The Ministry of Environment, Urbanization and Climate Change has determined many alternative methods for collecting institutional grievances and suggestions.

The Ministry of Environment, Urbanization, and Climate Change PIU has developed a transparent and comprehensive Grievance Mechanism (GM) specific to the SREEPBProject to receive, evaluate, and resolve grievances/opinions/suggestions that may arise during the activities carried out in public buildings within the scope of the SREEPB Project. This mechanism is designed to assist all relevant stakeholders in conveying their grievances/opinions/suggestions about the activities to the relevant individuals and institutions, thereby strengthening stakeholder emgagement in the project. The mechanism also enables all employees involved in the project (PIU, Consultant, Contractor) to submit their grievances/suggestions/opinions to the Ministry and the World Bank either anonymously or with open identification. The responsibilities of the Contractor, the consulting firm, and PIU are detailed in the Project Stakeholder Engagement Framework (https://webdosya.csb.gov.tr/db/kamuguclendirme/menu/KADEV-p175894_paydas-katilim-cercevesi-mayis-final_20210521122305.pdf). Additionally, all parties involved in the project are obliged to implement the Project's Environmental and Social Management Plan, Stakeholder Engagement Framework, and Labor Management Procedure.

Within the scope of the SREEPB Project, grievances will be addressed at multiple levels;

a) **Contractor Level:** Each contractor appointed to carry out construction works will be responsible for receiving, recording, and, if possible, resolving grievances /concerns/opinions/suggestions expressed by any stakeholder (building management, building users, visitors, local communities or beneficiaries, project staff, etc.) in accordance with the Grievance Mechanism Procedure. The contractor will ensure that all personnel involved in the project are aware that they can use the Grievance Mechanism (GM) and that grievances from staff will not be an obstacle to renewing their employment contract in the future. The steps for transmitting grievances/opinions/suggestions from employees are detailed under the "Grievance Mechanism for Employees" heading in the SREEPB Project Workforce Management Procedures. All employees can use this mechanism openly or anonymously.If the Contractor cannot resolve grievances/concerns/opinions/suggestions related to construction works carried out within the scope of the KADEV Project, they are obliged to forward these applications to the relevant person/organizations by the Grievance Mechanism Procedure of the project.Contractors will also report the records they keep, including resolved and unresolved grievances/concerns/opinions/suggestions, to the Consultant weekly. The contractor is obliged to resolve grievances within 15 calendar days at the latest.

b) **Consultant Level:** Concerns/opinions/recommendations that cannot be addressed at the contractor level will be handled by the social specialist of the Consultant Firm. The Project Manager, following the Grievance Mechanism Procedure, will prepare a status report, reminding the contractor of their responsibilities and ensuring that necessary corrective actions are taken to resolve the issue.The Consultant will assure all personnel involved in the project that they can use the GM, and that using it will not affect the renewal of their contracts in the future. If the Project Manager cannot resolve grievances /concerns/opinions/recommendations, they are obliged to refer them to the Ministry of Environment, Urbanization, and Climate Change. The Consultant firm is responsible for resolving within a maximum of 15 calendar days. The Consultant will also report both direct grievances/concerns/opinions/recommendations they receive and those conveyed by the contractor to the Ministry of Environment, Urbanization, and Climate Change on a weekly basis.

c) **MoEUCC Provincial Directorates Level:** To the extent possible, the Provincial Directorate of Environment, Urbanization, and Climate Change will be responsible for grievances /concerns/opinions/recommendations received regarding activities carried out within the scope of the SREEPB Project. Provincial directorates will also promptly forward all grievances/concerns / opinions / recommendations received, whether or not they resolve them, to the Administration.

d) **MoEUCC Level (PIU):** Within the scope of the KADEV Project, MoEUCC is responsible for collecting, recording, and resolving all grievances/concerns/opinions/recommendations expressed by stakeholders through the levels mentioned above. MoEUCC is responsible for resolving the collected grievances/concerns/opinions/recommendations within 15 calendar days and informing the complainant about the results. However, in cases requiring detailed investigation, this period can be extended to 30 calendar days.

For grievances regarding gender-based violence and sexual exploitation and harassment, it is recommended to use the web-based Grievance Mechanism provided in Annex III, which allows for anonymous registrationIn order to ensure confidentiality, authorized personnel will have access to this web-based Grievance Mechanism.

In addition to the Grievance Mechanisms at different levels defined above, throughout the life of the Project, stakeholders will also be able to use the national Grievance Mechanism channels detailed below. The channels for communicating grievances and suggestions to the Administration, especially the national Grievance Mechanism such as the CIMER Communication Center, are given below:

Table 4. CİMER Communication Channels

Website	: https://www.cimer.gov.tr
	https://giris.turkiye.gov.tr
Call Center	: Alo 150
Mailing Address	: T.C. Cumhurbaşkanlığı Külliiyesi 06560 Beştepe - Ankara
Phone	: 0312 590 20 00
Fax	: 0312 473 64 94

Table 5. GM Communication Channels

Call Center	: ALO 181
Phone	: 0312 586 4858
E-mail	: yigmkadev@csb.gov.tr
Grievance	: https://kadevoneri.csb.gov.tr/oneri.jsp |
	Suggestion and grievance boxes installed in buildings

The communication channels for the GM include wall posters in all buildings (posted on walls where suggestion and grievance boxes are located) and the distribution of project brochures to raise awareness. Additionally, all project personnel are responsible for informing stakeholders in their surroundings about the suggestions and grievance mechanisms. They will be provided with information on this matter before the project commences. Further details on this issue are explained in the Stakeholder Engagement Framework (SEF) (https://webdosya.csb.gov.tr/db/kamuguclendirme/menu/KADEV-p175894_paydas-katilim-cercevesi-mayis-final_20210521122305.pdf).

The Construction Contractor is responsible for receiving, recording, and resolving, grievances/concerns/opinions/recommendations during the renovation of public buildings. Every contractor appointed to carry out construction work will establish a system to receive and record, opinions, and suggestions related to construction activities from building management, employees, visitors, and beneficiaries. The contractor will record grievances, opinions, and suggestions using the Grievance and Suggestion Form and the Grievance Closeout Form provided in Annexes IV and V. Verbal, opinions, and suggestions will be recorded by the responsible personnel of the contractor by filling out the Grievance and Suggestion Form. The contractor is obliged to send the recorded grievances to the Project Manager every week. The Project Manager is responsible for reporting the received, suggestions, and requests to the MoEUCC weekly.

Records related to grievances, opinions, and suggestions will be regularly shared by MoEUCC with the World Bank (WB). Additionally, individuals or communities who believe they have been adversely affected by projects supported by the WB can submit their grievances through the project-level Grievance Mechanism (GM) available or directly to MoEUCC, or through the WB's Grievance Redress Service (GRS) at (https://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service).

Stakeholders affected by the project can also submit their grievances to the WB Inspection Panel. This panel determines whether individuals or communities who file grievances have been or could be harmed as a result of a violation of one or more of the WB's performance criteria. The Panel can directly communicate its concerns about received grievances to the WB, at which point the WB has the opportunity to respond to the grievances. For information on how to submit grievances to the WB Inspection Panel, please visit www.inspectionpanel.org.

5. Environmental and Social Risks & Impacts and Precautions to be Taken

Table 6. List of Environmental & Social Effects and Measures to be Taken

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
Renovation and Retrofitting Works for Seismic Resilience and Energy Efficiency Improvement in Public Buildings	***a) OHS*** Possible adverse health and safety effects for workers, local residences and employees due to: - Possible injuries that employees may be exposed to due to reasons such as working at height, working with hazardous materials, and electrical tools; - Failure to comply with national and international occupational health and safety requirements in the workplace;	• Local construction and environmental inspection authorities and communities will be informed about the planned activities. • The public will be informed through stakeholder participation, in the media, and/or in public places through appropriate notifications. • All necessary legal permits for construction and/or improvement studies will be obtained. • Regular site inspections will be conducted by the Project Implementation Unit (PIU) and the Consultant to ensure that all construction activities are carried out in compliance with national laws and regulations, including the regulations regarding building fire protection, and the requirements of World Bank standards. • Detailed information and analyses regarding occupational health and safety are included in the Occupational Health and Safety Plan prepared for the same campus.	Project Implementation Unit (PIU) Consultant
		• In areas where the underground natural gas pipeline passes, the Natural Gas Provider Company is responsible for the necessary work before the start of Phase II (Construction Phase) of the projects. All processes related to the Natural Gas Pipeline will be carried out by the Service Provider Local Distribution Company, and before the Site Handover, all necessary conditions will be created with all checks and tests completed entirely, and the delivery will be made as specified in the projects. For all processes related to the natural gas pipeline, the Property Owner must apply in accordance with the relevant legislation. Therefore, neither the Consulting Firm nor the Contractor will intervene in any way in the natural gas pipeline. • The Contractor shall immediately inform the MoEUCC in the event of a significant incident. MoEUCC will report all types of significant incidents (such as accidents, leaks, deaths, etc.) to the World Bank within 48 hours and will submit an accident-incident investigation report along with a corrective action plan to the World Bank within 30 business days.	Consultant PIU Contractor

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
		• Regular site inspections will be carried out by the PIU and the Consultant to ensure and monitor that all construction activities are carried out in accordance with national laws and regulations and the requirements of the World Bank standards. • Health and safety measures and environmental measures regarding the restructuring of the public building will be explained in detail in the site-specific Waste Management Plan and Occupational Health and Safety Management Plan. • Occupational Health and Safety Plan for Hatay Mustafa Kemal University Tayfur Sökmen Campus Sports Science Faculty, Faculty of Economics and Administrative Sciences, Faculty of Veterinary Medicine was prepared by the Consultant. Work will be carried out in the site in accordance with the measures determined in the OHS Plan. • The Contractor will prepare its own OHS plan for the works to be carried out, taking into account the Occupational Health and Safety (OHS) Plan prepared by the Consultant. • Before construction works begin, a Risk Assessment study will be carried out for all works to be carried out. Relevant procedures and plans will be developed by contractors by adding risk assessment, safety procedures, training, monitoring, incident investigation and reporting, health and safety plans including emergency plans, site-specific risk assessments, procedures and instructions. See Annex-8 of the ESMF https://webdosya.csb.gov.tr/dbamuguclatma/menu/kadevp175894_csyc_final100521--mayis_20210510070430.pdf-) • Proper signage on construction sites will inform workers of the basic rules and regulations they will follow. • Employees will be given Occupational Health and Safety (OHS) training indicating possible risks related to the work site and the work to be done, and weekly and monthly site occupational safety meetings will be held. • The Contractor formally acknowledges that all work will be carried out in a safe and disciplined manner designed to minimize impacts on local residents and the environment. • The Contractor appoints a personnel/person in charge/expert who has the relevant certificate and experience responsible for occupational health and safety.	

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
		• The Contractor will ensure a safe working environment for workers and provide personal protective equipment (PPE) prior to construction activities (such as hard hats at all times and, where necessary, masks and safety glasses, seat belts and safety boots) in accordance with international best practices and Turkish Legislation. • A suitable working environment and rest break for employees during work will be provided by the contractor company. • Employees' dining areas will be established in areas determined by the building technical units under the written permission and approval of the campus management. • Dress changing areas (lockable) for employees will be provided within the building with the written permission and approval of the campus management. The areas in question will be determined by the building technical staff and the use of areas except these areas are strictly prohibited. Employees should not keep their valuable things in these areas in case of theft that may occur. In case of negativities, the contractor company will notify the employees that the campus management bears no responsibility. The issue in question will also be announced with warning signs. • Employees' toilet needs will be met from the building infrastructure under the written permission and approval of the campus management. If the existing infrastructure cannot be used, portable WCs will be arranged by the contractor for the use of workers, and the containers will contain all materials for hygiene. However; • Employees will be able to use the toilets allowed/allocated to them in the building. The contractor company will notify its employees about the toilets allowed/allocated in line with the number of employees. Monitoring and control regarding the restriction in question will be the responsibility of the contractor company. • The contractor company will warn its employees to use the toilets in question in accordance with the hygiene rules, in case of unhygienic conditions are detected, the responsibility for cleaning will belong to the contractor company. • Any materials that employees will need for hygiene will be provided by the contractor company. • The contractor company will provide work uniforms that display the project name so that employees can be easily distinguished.	

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
		• Employees are strictly prohibited from arguing with building technical units or campus users for any reason. In case of individual or activity-related problems, the employee will immediately report the situation to his manager (the responsible manager and contact information will be notified to all employees by the contractor company). The contractor company will record such situations and forward them to the consultant. Any decision/action regarding this process will be made with the knowledge and approval of the building management. • In case of night shifs approval will be obtained from the Campus management. All activities will be implemented in line with both the Occupational Health and Safety Law (Official Gazette No. 28339, dated 30 June 2012) and relevant regulations, as well as the World Bank Group (WBG) Environment, Health and Safety (EHS) Guidelines. • In case of any epidemic or pandemic/communicable disease, the guidanceand recommendations provided by the Ministry of Health, Ministry of Labor and Social Security and the World Health Organization will be followed and all relevant measures will be taken in terms of occupational health and safety for both employees and workplaces. • Third parties who are not on duty will be prevented from entering the construction site. • The names of the personnel will be submitted to the Consultant in a list along with the necessary training documents, and employees with appropriate training and personal protective equipment will enter the construction site with their badges. • People under the age of 18 will not be allowed to enter the construction site. • Smoking areas on the construction site will be determined by the contractor. • Food and beverage, break/rest, toilet and sink needs will be provided in the areas indicated by the technical units within the building where the work will be carried out. This issue will be within the knowledge of the campus managements. Employees who will work in the project will not leave the allocated areas. • Hygiene materials required for the use of workers will be provided by the contractor. The sewage infrastructure in the region will be used for wastewater. • Packaged water (pet bottles, glass bottles, etc.) will be provided to workers as drinking water.	

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
		• Clean domestic water will be provided through the existing installations of the building. Drinking the water inside the building facilities will be prohibited. The Contractor will provide a healthy and safe working environment for employees, provide personal protective equipment (PPE) in accordance with Turkish Legislation, including international best practices and pandemic-related health and safety measures provided by the Ministry of Health and the Ministry of Labor and Social Security, will monitor and control its use. (Always use a hard hat, respiratory protection, protective glasses, full body seat belt and foot protection, etc. when necessary). • PPE, work clothes and employees' own clothes will be stored in separate places, and closed changing areas will be created within the building for this purpose. • In case of work accidents with loss day, root cause investigation will be conducted and reported. • Employees who will working at heights (facade insulation, roof insulation, etc.), working at height training will also be given theoretically and practically. The statement that people who working at height can work will be clearly stated in the health report prepared by the workplace physician. Before the work, a work plan for working at height will be prepared and a permit to work will be obtained. Working at height will be carried out under the supervision of a qualified person and an occupational safety expert. Fall protection systems and equipment for working at height will be selected in accordance with the relevant legislation, and their control, maintenance and repairs will be carried out by specially trained personnel. • Necessary periodic checks and/or maintenance of all work machines and equipment to be used will be carried out, compliance with standards and CE certificates will be checked, relevant records will be kept, otherwise they will not be allowed to enter to the work area. Job-specific trainings will be provided to the workers who are assigned to use a spesific equipment.Maintenance forms for the work equipment to be used in the field will be provided, regular maintenance and repairs will be carried out, and people responsible for maintenance and repair works will be appointed with writing.	

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
		• When there are new equipment and innovations in the execution of the work, risk analyzes will be updated and information/training about the changes will be updated in all studies. • After the periodic checks of all lifting vehicles, pressure vessels and boilers will be used at the site are checked (by the consultant), after control the approval to entering to the site will be given after all necessary controls will be done. • All machinery, equipment (including scaffolding) and hand tools using at the site will be checked for compliance with TSE standards and CE certification, and entry approval will be given after all necessary controlles will be done. • Planning of purchasing, transferring and storage of materials will be ensured. • The Contractor will have one employee with a First Aider Certificate for every ten (10) employees who will work in the same building, and if the number of workers is less than 10, the contractor will have at least one (1) first aider. Each teams are working in different buildings will be evaluated separately. • Preparation of the procedure for working with hazardous chemicals and creation of storage areas for materials will be ensured. Chemical substances will be taken to the site after their Turkish material safety data sheets are obtained and checked. • Employees without professional competency certificates will not be employed. • All employees will start working after completing basic OHS training and induction training. Training will be updated when required by legislation. • Interior and exterior renovation areas of the building will be separated with warning tapes. Warning signs required to restriction of the access to the areas in question will be obtained in sufficient numbers. • Visitors will not be allowed to approach renovation areas. However, when necessary, building technical staff will be able to attend the work areas under the supervision of authorized employees to take the necessary security measures within the framework of their expertise and use the necessary PPE for process monitoring. Training documents will also be prepared for those who will enter the site under the supervision of an authorized employee, and these people will be provided with training before entering to the site.	

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
		• Construction method and risk assessment will be made for each activity to be carried out on the site. • A permit to work system will be established for hazardous work such as night work, working at height, excavation work, welding work, etc. • Lock out and tag out system will be installed for work on live lines such as maintenance and repair work, work with dangerous voltage. Special training will be given to employees regarding the system in question. • A disciplinary enforcement system regarding OHS non-conformances will be established in the site and all employees will be trained on this subject. • It is essential that construction activities be carried out during the day. However, in case of working at night will be necessity, the entire work area, passageways and hazardous areas will be well illuminated. • In order to control situations that may occur during the construction activities of the project and require urgent intervention (fire, earthquake, chemical spill, etc.), procedures that will also cover public and environmental health and safety will be prepared and shared with all employees. • If there will be an electricity, water or natural gas cut in the long or short term due to construction activities, necessary security measures will be taken and building users will be informed a reasonable time before the cut. • All documents and records that need to be prepared and provided within the scope of OHS legislation, such as health screenings of employees, employment documents (personnel files), training documents, PPE delivery minutes will be kept in the work area. All these documents will be ready for presentation for the Consultant and Ministry audits. • An organizational chart will be created under the title of OHS, indicating duties, authorities and responsibilities and including contact information. • In case of changes in public building entrances during construction works, suitable structures for disabled users will be created. • Community health and safety will also be covered in the OHS Plan to be prepared, and a person that will be assigned to ensure communication with building users and local people will be defined in the plan.	

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
		• Records of all activities and events (meetings, inspection, surveillance, training, accident, fire, etc.) carried out during the construction phases will be kept. • In accordance with the KADEV Project Workforce Management Procedures and covering all Contractors and subcontractors: • The Contractor and all subcontractors, in accordance with the Project's Workforce Management Procedures, declare that they will not use any kind of forced labor, child labor or uninsured workers, and that they will not engage in any discrimination (age, gender, religion, language, race, etc.), use of force among their workers. A written and signed social policy/written commitment will be created stating that there will be no bullying, insults or humiliation. This document will also emphasize that all contractor employees should pay attention to these issues in their relationships and communication with each other. • The contractor will take necessary measures to prevent the spread of contagious diseases (including Sexually Transmitted diseases and infections such as HIV virus) and non-communicable diseases caused by the performance of Construction Works, and will act with the awareness that especially sensitive and vulnerable community groups are at risk at different rates in this context. It will implement measures to prevent the spread and reduce the effects of infectious diseases that may arise from contract-related temporary or permanent labor mobility.	
Renovation and reinforcement works to improve earthquake resistance and energy efficiency in public buildings	**a)** ***Possible adverse health effects to workers, facility users, children and the general public as a result of asbestos fiber and dust emissions during debris***	• The project site will be illuminated throughout the night. • No waste will be thrown into the surrounding area and this area will be kept clean. Waste must be collected and removed from the construction site. • Broken glasses during the works will be cleaned immediately. Work areas will be separated from the demolition and residential areas of the building using physical barriers. • The entire procedure to be applied regarding asbestos is included in Annex-8 of the Environmental and Social Management Framework document. Work will be carried out in accordance with Annex 8 and the Regulation on Health and Safety Precautions in Working with Asbestos and the relevant legislation requirements.The building's cleaning schedule will be added to remove additional dust and dirt created by demolition work;	Contractor

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
	transportation and final disposal	safety guidelines for the storage, transportation and distribution of hazardous materials will be followed to minimize the possibility of misuse, leaks and accidental human exposure. • Old windows and doors will be stored temporarily in a secure location designed to prevent access by unauthorized persons. • Regular maintenance will be carried out on vehicles to minimize possible serious accidents caused by hardware failure or premature failure. • Both training and incidents (major events such as deaths, lost-time accidents, leaks, fire) will be recorded. • The Contractor immediately informs the MoEUCC in case of a significant event. The MoEUCC will notify the World Bank of any significant incidents (such as accidents, leaks, deaths, etc.) within 2 days (48 hours) and send an incident investigation report with a corrective action plan to the World Bank within 30 business days.	
	b) Safety	• The contractor will be responsible for the life and property safety of all personnel and other individuals on duty at the construction site from the moment the application/construction work begins. • If any damage occurs during construction works, the Contractor will compensate all losses incurred by theThe Beneficiary Institution Employer and/or the 3rd party. • The safety rules of the Ministry of Labor and Social Security and the rules of the Ministry of Health will be taken into account during the studies. The relevant rules are to be used as general reference during the execution of the works. • The Contractor will have authorized a personnel on site who will specifically deal with safety and protection against accidents, and this personnel will deal with all workers and workforce of the contractor, as well as the Project Manager, the employer's personnel, equipment, offices and other facilities at the construction site. This person will be a person who has the qualifications required for this job, has the authority to give instructions and can take all necessary precautions to prevent accidents, and will constitute a team established by the Contractor especially for this purpose. The Contractor will take all necessary safety precautions to prevent damage to the materials,	Contractor

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
		equipment and productions that will not be changed and will be used in the places where the production will be carried out. • A security team consisting of the required number of security guards will cooperate with the Legal Security Forces and will carry out its duties by strictly complying with all rules and instructions received from them. The Contractor will employ at least 1 (one) night watchman for the work site. • Scraps of the replaced machinery, equipment and systems will be delivered to the building management without any damage. • The machinery, equipment and system parts in question will be transported by the contractor company to the area requested by the building management (inside the building and/or within the campus). Transportation and delivery operations will be carried out with a delivery report. As of the date when the said report is signed by the parties, the responsibility for the scrap will belong to the building management.	
Renovation and reinforcement works to improve earthquake resistance and energy efficiency in public buildings	***c) Waste Management*** Possible adverse environmental and health effects may occur due to various waste streams and improper waste management (inappropriate waste management can create direct and indirect pollution in water and soil and affect air quality)	**General Information** • PIU and the consultant will monitor the practices regarding environmental and social impact mitigation measures specified in the Environmental and Social Management Plan through field inspections. • Regular site inspections will be carried out by the PIU and the Consultant to ensure and monitor that all construction activities are carried out in accordance with national laws and regulations and World Bank ESSE requirements. • The Waste Management Plan will be prepared by the contractor as specified within the scope of the Environmental and Social Management Framework. • Waste collection and disposal routes and sites for all waste types expected to arise from renovation, demolition and construction activities will be defined in site-specific Waste Management Plans. • Daily visual site inspections will be conducted by the consultant to monitor the implementation of mitigation measures.	PUB Advisor Contractor

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
		• During construction activities, all waste types will be collected separately at the source and transported to selected temporary waste storage areas within the site, in accordance with the project and legislation requirements determined with the knowledge of the beneficiary. (Temporary storage period is limited to 6 months.) • Temporary storage areas will be determined by the contractor company by obtaining permission from Administrator of the Hatay Mustafa Kemal University Tayfur Sökmen CampusSports Science Faculty, and the consultant will be notified of the areas in question. • If a protocol is signed between the contractor company and the beneficiary institution, the existing waste management system can be used. However, with the protocol made, the contractor will be obliged to cover the costs arising from his own waste. • The Contractor will reuse and recycle appropriate and applicable materials whenever possible. • Documents regarding waste disposal and recycling will be regularly recorded. A Waste Record Information Form will be prepared to keep these records. • Hazardous wastes will be sent to licensed disposal facilities using the waste management application via the Integrated Environmental Information System (I-EIS) in the online programs of the Ministry of Environment, Urbanization and Climate Change. For this purpose, the Contractor will register with I-EIS. • In cases where vehicle tires need to be changed during construction activities; Old tires will be disposed of through tire distribution and sales companies and vehicles licensed for transportation. **Solar panels:** • Unused and/or end-of-life solar panels will be temporarily stored in an area determined by the beneficiary for a maximum of 6 months, in a way that does not pose any safety and environmental risks. The waste of solar panels will be delivered to licensed companies. • PV panels taken to licensed facilities with licensed vehicles after temporary storage will be primarily recycled, and those that are not recycled will be final disposed of in accordance with the relevant legislation.	Contractor

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
		Construction and Excavation Wastes: • In case of debited material belonging to the building as a result of the dismantling activities, a document will be obtained from the building management stating that the material has been delivered. • Recycling of construction/demolition wastes and especially their reuse as infrastructure material will be prioritized. Excavation waste will be sent to the waste storage facility of the relevant municipality. An official letter will be received from the relevant municipality stating that the waste will be accepted to the site and will be submitted to the Administration. **Waste Batteries and Accumulators:** • Waste batteries and accumulators will be delivered to licensed facilities through authorized transportation companies. **Hazardous Wastes:** • The wastes will be stored within the project area in sturdy, leak-proof, safe containers that comply with internationally accepted standards, the phrase hazardous waste will be placed on the containers, and the waste code, amount, content, properties, preservation conditions and storage date of the stored substance will be stated on the containers in case of temporary storage of hazardous waste at the project site. Hazardous substances can be stored temporarily for a maximum of 6 months. (Temporary storage areas will be determined by the contractor company in accordance with the legislation, with permission from the University Administration based on the project, and the areas in question will be notified to the consultant.) • Containers where hazardous substances are stored and waste oils will be placed in sealed concrete areas to prevent spillage and leakage to the ground. • Paints with toxic content, solvents or lead-based chemicals will not be used. • Management of hazardous wastes will be carried out in accordance with the Waste Management Regulation.	Contractor Contractor

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
		• Hazardous chemicals and wastes that are likely to be generated at the construction site will be sent to licensed disposal facilities using the waste management application via the Integrated Environmental Information System (E-EIS) online program of the Ministry of Environment, Urbanization and Climate Change. • Spillage and leakage absorbent pad kits will be available at work sites. All personnel on duty will be subject to protection and emergency training regarding hazardous chemical leaks and spills. • In case of medium and large-scale environmental accidents, accident investigation will be conducted and reported. In this regard, the Waste Management Regulation will be followed. • Used fluorescent lamps removed during renovation/construction works will be disposed of in licensed facilities. Necessary documents regarding the transportation and disposal of the material will be kept at the construction site and will be submitted to the MoEUCC and the World Bank if requested. **Domestic Waste:** • Domestic wastes that will be generated will be separated at the source (plastic, glass, paper, etc.) and recyclable ones will be recycled. Employees will be trained to properly separate waste. • Wastes that cannot be recycled will be collected in closed sanitary garbage bins and sent to regular landfills through the solid waste collection system of Antakya Municipality. **Asbestos:** If asbestos is found at the project site, it will be clearly marked as hazardous material. • In case of asbestos in the project site, it will be properly preserved and sealed to minimize the impact of asbestos. • In cases where asbestos must be removed, a wetting agent will be used to keep asbestos dust at a minimum level before removal.	

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
		• The entire procedure to be applied regarding asbestos is included in Annex 8 of the Environmental and Social Management Framework document (https://webdosya.csb.gov.tr/db/kamuguclendirme/menu/kadev-p175894_csyc_final100521--mayis_20210510070430.pdf).The Contractor will act in accordance with the content in question. • If asbestos material is to be stored temporarily, waste should be kept securely in closed containers and appropriately marked. Security measures will be taken against unauthorized removal from the site. • The extracted asbestos will not be reused and will be disposed of in accordance with national regulations and sent to licensed facilities. Necessary documents regarding the transportation and disposal of the material will be kept at the construction site and will be submitted to the MoEUCC and the World Bank if requested. • Paints containing toxic components or solvents or lead-based paints will not be used.	
Renovation and reinforcement works to improve earthquake resistance and energy efficiency in public buildings	***d) Pollution Prevention*** Demolition and construction activities can cause pollution at construction sites.	• Site-Specific Pollution Prevention Plans to be prepared will be examined and approved by PIU. • Regular site inspections will be carried out by the PIU and the Consultant to ensure and monitor that all construction activities are carried out in accordance with national laws and regulations and World Bank ES requirements.	PUB Advisor Contractor
		• Ambient air pollution related to dust formation is specified in the "Air Quality/Emissions" section of this Table. • Hazardous material will be secured in the designated storage area to prevent spillage and tipping. Up-to-date material safety forms for chemicals will be kept in areas where they are stored. • Semi-used chemical containers will have lids and be tightly closed when not in use. • Residual (abandoned) concrete in concrete mixers will not be allowed to be poured into the construction site, its surroundings or access roads of the construction sites. Concrete mixer drivers will be given training on this. • In the event of any leak of hazardous materials or hazardous waste, leak prevention methods will be implemented to limit the area of exposure.	Contractor

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
		• Leakage sets will be placed at appropriate points on construction sites. • In case of any leakage, workers who will respond to such incidents are determined and training is given on emergency response to leaks. • Training records will be kept at construction sites.	
Renovation and reinforcement works to improve earthquake resistance and energy efficiency in public buildings	***a) Noise*** ***The presence of workers at the construction site, renovation/construction works and movements of transportation vehicles will increase the noise and vibration levels.***	• Regular site inspections will be carried out by the PIU and the Consultant to ensure and monitor that all construction activities are carried out in accordance with national laws and regulations and World Bank ESF requirements. • Noise during demolition and construction will be limited to limited periods agreed in the permit. • During activities, engine covers of generators, air compressors and other electrical and mechanical devices will be closed and placed as far away from residential areas as possible. • During the works carried out during the construction phase, generators, air compressors and other working mechanical equipment will be placed as far away as possible from student areas and other buildings on campus that are not included in the scope of the project. It is necessary to use plastic wedges for all equipment in question. In this way, excessive noise due to vibration will be prevented. This should be taken into account when choosing the device. • Impact noise that may occur as a result of construction site activity will not exceed 100 dBC in terms of LC Max noise indicator as specified in the Environmental Noise Control Regulation. In terms of occupational health and safety, the World Health Organization (WHO) has determined noise exposure levels of 70 dB in a 24-hour period and 85 dB in 1 hour to prevent hearing impairment. In addition, according to the World Bank Environmental, Health and Safety Guide Table 1.7.1, it should not exceed 55 dB between 07:00-22:00 for residences/educational institutions and public institutions, and 45 dB between 22:00-07:00. It is foreseen (https://www.ifc.org/content/dam/ifc/doc/2023/ifc-general-ehs-guidelines.pdf). This situation will be taken into account during field inspections. • Following the start of construction, noise levels will be measured once inside and outside by accredited laboratories during the demolition process and the necessary precautions	Contractor

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
		will be determined as a result of the measurements. If measurements exceed the levels allowed by legislation and World Bank Guidelines, measurements will be made at regular intervals every week. • As a result of the measurements, if necessary, placing noise barriers, reducing the simultaneous operation of machines, etc. in order to prevent nearby settlements from being affected by noise. Precautions will be taken by the Contractor. • Site evaluations will be carried out in accordance with the World Health Organization Environmental Noise Guidelines for the European Region. • If the noise level increases during the construction phase, it will be ensured that work machines are not operated at the same time. • The schedule of works that create high levels of noise will be planned in coordination with people in nearby buildings. • Necessary communication will be provided with the public in the nearest settlement in order to determine the impact of noise that will occur during construction works and to take the necessary precautions. • Precautions will be taken to minimize the noise level, such as using new model vehicles whenever possible. • Within the scope of the project, unnecessary use of horns and sirens will be prohibited in vehicles transporting machinery, equipment, materials and personnel. This rule covers off-campus as well as on-campus. Contact numbers will be attached to the vehicles so that complaints regarding such issues can be received and resolved. • The second parking lot of the Hospital, where the Solar Panels will be built, is located at a distance of approximately 41 m behind the hospital buildings. It is close to the hospital and noise will be generated during the opening of the holes where the feet of the profiles on which the panels will be placed will be placed. This process will be done in a small area and will take approximately 1 week. Since the solar power plant installation is planned to be done in the summer months, the number of students and staff who will use the university will be relatively low. It is thought that the noise impact will decrease slightly due to issues such as the construction being carried out during daylight hours, being completed in a short time, and being located at the back of the Hospital. During these	

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
		procedures, in case of complaints from the Hospital and the container settlement, additional measures will be taken, such as using temporary noise barriers and not operating unnecessary work machines. Again, the sensitivities on this subject will be given training and conveyed to the personnel who will work in the SPP installation. The procedures to be performed will be shared with the Hospital Management beforehand and in special cases, the procedures will be paused and proceed.	
Renovation and reinforcement works to improve earthquake resistance and energy efficiency in public buildings	**b) *Air Quality /Emission***	• Debris will be kept in a controlled area and water will be sprayed to reduce debris dust. (Water will be supplied from the infrastructure of the campus area. The invoice for the spent water will be covered by the Contractor. In case of long-term water outage or if permission cannot be obtained from the Administration, water tanker may be used.) • Following the start of construction, during the demolition process, dust measurements will be carried out by the Contractor once, both indoors and outdoors, through accredited laboratories. The principles for preventing air quality problems occurring during demolition activities will be determined in the Construction Methods (which will be prepared by the contractors and approved by the PIU). • Improvement and strengthening works will mainly take place within the building. Dust generated in pneumatic excavation during scraping and stripping operations will be suppressed by continuous water spraying. • Solar panels to be built in order to increase energy efficiency will be built on the second parking lot behind the Hospital within the campus. There will be no excavation during the construction of the SPP panels, only the fixing of the profile legs and the installation of the SPP panels will be carried out on the existing parking lot floor. At this stage, dust formation will be reduced by humidifying the area in question. Before the procedures to be performed, the work schedule will be shared with the Hospital Management and in special cases, the operations will be paused and proceed. • Dust generated in pneumatic excavation during excavation will be suppressed by continuous water spraying and/or by installing dust barriers enclosures at the construction site if necessary. • In case of debris waste, a rubble disposal chimney will be used after the first floor.	Consultant Contractor

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
		• The surrounding environment (sidewalks, roads) will be cleared of debris to minimize dust. • Construction materials/waste will not be burned in open areas at the construction site. • Construction vehicles will not be idled for excessive periods of time at construction sites. • In cases where materials need to be transported, trucks will be covered outside the campus. The speed of these types of vehicles on campus is limited to 20 km. • All vehicles to be used will have exhaust emission permits and all vehicles will be regularly maintained or their maintenance will be inspected.	
• Renovation and reinforcement works to improve earthquake resistance and energy efficiency in public buildings	***c) Water Quality*** Uncontrolled disposal of wastewater/waste generated at the construction site	• Storage or disposal of waste generated at the construction site will be minimized. • Since the campus is far away from water sources such as seas and lakes, it is not expected to have a negative impact on surface waters. • Construction vehicles and machinery will be washed only in areas where surface runoff will not pollute natural surface water bodies. • Precautions will be taken during operations with chemicals, use pans, thick nylon tarpaulins, etc. to prevent possible spills.	Consultant Contractor
	d) Soil Quality Hazardous substances and wastes mixing with the soil	• The waste management mentioned in the previous sections must be carried out in a disciplined manner. • All hazardous chemicals (including contaminated waste) will be kept in temporary storage areas that meet sealing conditions. • Before using chemicals, MSDSs must be checked by OHS Specialists and Workplace Physicians and users must be informed. Leak pads will be available on the field against point source pollution (paint spilled on the field, oil leaking from vehicles, etc.), and all employees will be subject to leak & spill training. These trainings will be reinforced with exercises. At least one leakage and spillage kit will be available for each structure and each mobile work machine.	

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
Renovation and reinforcement works to improve earthquake resistance and energy efficiency in public buildings	**e) *Required Resources***	• Contractors will obtain the necessary permissions from university administrations to use water from the network to be used in construction activities. The cost of the water used will be covered by the Contractor. In case of problems in obtaining permission, water will be brought to the construction sites by tankers. • Concrete will be supplied from locally licensed ready-mixed concrete facilities. • Permission will be obtained from the beneficiaries for the electricity to be used in construction activities. If permission cannot be obtained, electricity will be provided through generators to be provided by the Contractor. Records regarding electricity, fuel (for generators) and water consumption to be used for construction activities will be kept at the construction sites, and their costs will be covered by the Contractor.	Contractor
		• Regular site inspections will be carried out by the PIU and the Consultant to ensure and monitor that all construction activities are carried out in accordance with national laws and regulations and the requirements of the World Bank standards.	PIU Consultant

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
Renovation and reinforcement works to improve earthquake resistance and energy efficiency in public buildings	***k) Public Health and Safety/Traffic Safety***	• Regular site inspections will be carried out every two months by the PIU and daily by the Consultant to ensure and monitor that all construction activities to be implemented are carried out in accordance with national laws and regulations, the requirements of the World Bank standards and the Occupational Health and Safety Plan prepared for the activity. • PIU will review and approve the site-specific Community Safety and Traffic Management Plan prepared in accordance with the Occupational Health and Safety Plan. • The Contractor and the Consultant will develop the Traffic Action Plan created by the Contractor, taking into account the needs of the disabled people. • In accordance with national regulations and the World Bank ESFS, the contractor will ensure that the construction site is appropriately secured and construction-related traffic is regulated. • The construction site will be clearly visible and the public will be warned of all possible dangers with signboards, warning signs, barriers and traffic directions. • Traffic management system and personnel training will be provided, especially for access to the construction site and heavy traffic near the construction site. Safe crossings and passages will be provided for pedestrians at places that intersect with construction traffic. • Working hours will be adjusted to local traffic patterns, for example major transport operations will be avoided during peak hours or when animals are being transported. • Active traffic management will be carried out by trained and visible personnel at the construction site, if necessary, for the safe and comfortable passage of the public.	Consultant Contractor

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
		• Construction areas will be surrounded by health and safety signs to prevent possible accidents. • If there will be an electricity, water or natural gas outage in the long or short term due to construction activities, the building technical units will be notified in advance and approval will be requested. • Construction areas will be separated with warning tapes and their safety will be ensured. • All vehicles that will operate during construction will be ensured to comply with the determined speed limit. • The surroundings of the project site will be arranged with traffic signs and warning signs. The Traffic Action Plan is included in the Occupational Health and Safety Plan prepared by the Consultant. In addition, the security-related measures to be taken into account will be specified in more detail in the Community Safety and Traffic Management Plan that the Contractor will prepare before starting work. • Visibility of the project site will be ensured. • Pedestrian paths and vehicle passageways within the site will be separated from each other. These roads will be included in the traffic plan. • Local people, building visitors and users will be informed about possible dangers and risks through warning signs and, if necessary, informational meetings. • In case of any epidemic, the company will be informed about the work to be done, including the measures taken, using appropriate media and/or printed materials and signs in areas accessible to the public users and other stakeholders (including work sites). • Pedestrian paths and vehicle passageways within the site will be separated from each other. These roads will be included in the traffic plan. • Activities that will affect regional traffic will be planned taking into account peak traffic hours as much as possible. All drivers who will take part in the project will be informed about road safety, speed limits, traffic rules to be followed during the project and conditions to be taken into consideration. • The weights of all vehicles to be used within the scope of the project will not exceed the limits given in the relevant legislation. If hazardous chemicals or waste are stored on the	Consultant Contractor

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
		site, the transfer of these wastes will be carried out by licensed carriers in a way that does not pose a threat to public health. • Special loads will use routes prepared in agreement with the competent authorities. The specified routes will be programmed to prevent traffic congestion on the roads and will be published in advance to prevent possible disturbance. • The entire organization regarding traffic will be discussed and planned with the authorized institutions.	
Operational phase impacts and risks	***b) Waste Management*** Waste management, various waste streams and possible negative environmental and health effects due to improper waste management (inappropriate waste management can create direct and indirect pollution in the soil and the environment and affect air quality)	• Waste types will be collected and stored separately and will be recycled/disposed of through licensed companies and in line with national legislation requirements.	Relevant beneficiary institution
Operational phase impacts and risks	***b) OSH risks*** Maintenance and repair activities for the proper functioning of the building may cause OSH risks for workers.	• Relevant OHS risks will be reduced through the provisions specified in national legislation. • Regular preventive measures and maintenance measures will be taken for the proper functioning of the building (regular checks and maintenance of any leaks on the roof, windows, doors) • Keeping records of the Master Design Project and related project documents for easy maintenance and renovation of any part of the building	Relevant beneficiary institution

IMPLEMENTATION / CONSTRUCTION PHASE	RISK & IMPACTS	MEASURES	RESPONSIBILITY
Throughout the project lifecycle	***Stakeholder Feedback (Suggestion, Complaint, Opinion)***	• The responsible employee of the Construction Contractor will collect, record and forward the complaints/opinions/suggestions arising from the construction activities at the field scale to the administration through the forms given in Annex III and Annex IV. Complaints will be closed via the Complaint Closing Form in Annex V. • The Contractor's field manager will be given training on the functioning of the Consultant firm's Social Expert Complaint and Resolution Mechanism. • Corrective actions will be taken within 15 calendar days for the complaints/opinions/suggestions collected within the scope of the project, and if the solution period is more than 15 days (the solution period will take a maximum of 30 calendar days), this issue must be agreed between the contractor/PIU and the complainant. At the end of the process, the applicant will be notified that the request has been closed. • Complaints about gender-based violence, sexual exploitation and harassment will be processed in accordance with the principle of confidentiality, taking into account the possibility of retaliation. • If a crime of sexual abuse is encountered, legal action will be taken immediately (transferring the situation to law enforcement forces, referral to the relevant public institution), with the consent and knowledge of the survivor of this crime. If such a situation is encountered, the PIU Social Specialist will be informed on the same day. • The Contractor will take action in accordance with the KADEV Project GM Procedure in all works related to GM. • All personnel working within the KADEV Project (PIU, Consultancy Firm, Contractors) will be able to report their complaints/opinions/suggestions to the Administration and/or the World Bank by following the process in the Employee DM included in the Workforce Management Procedures prepared for the KADEV Project. • The contractor company will announce the contact information specified in this report to collect suggestions and complaints through information signs allocated outside and inside the building (at least one for each floor). The principles regarding receiving feedback are explained under the title in “4. Stakeholder Engagement and Grievance Mechanism".	PIU Consultant Contractor

6. Environmental and Social Monitoring Plan

Table 7. Environmental and Social Monitoring Plan

What *parameters will be monitored?*	**Where** *parameters will be monitored?*	**How** *parameters will be monitored?*	**When** *parameters will be monitored (measurement frequency)?*	**Why** *parameters will be monitored?*	**Responsibility**
Site Preparation Activities					
Community Health and Safety Management and Implemented Protective Measures	Around the project site	Visual Inspections Site Inspection Availibility of active Community Safety and Traffic Management Plan	At the beginning of the renovation/reinforcement works (first day) Every working day throughout the project activities	To minimize health and safety risks and mechanical injuries to local communities	• Contractor • Consultant
Occupational Health and Safety (OHS) protection measures for construction site workers	Project site and buildings near the project site	Visual Inspections Site Inspection Availibility of OHS plan	Every working day throughout the project activities	Compliance with the Occupational Health and Safety Law, relevant regulations, notifications, directives, and other regulations.	• Contractor • Consultant
To avoid and minimize health and safety risks for individuals affected by the project	In the building and at the project site	Visual Inspections	At the beginning of the renovation/strengthening work and continuously every working day	Preventing Post Activation Potential (PAP) injury due to inhalation of construction dust.	• Contractor • Consultant

What *parameters will be monitored?*	**Where** *parameters will be monitored?*	**How** *parameters will be monitored?*	**When** *parameters will be monitored (measurement frequency)?*	**Why** *parameters will be monitored?*	**Responsibility**
Construction Works					
Occupational Health and Safety (OHS) Protection Measures for Site Workers (Working at Heights, Working with Hazardous Materials, Working with Rotating Equipment, Working with Electrical Devices, etc.)	Project site Buildings near the project site	Verification of Relevant OHS Certifications and Documents for Trained Workers Visual Inspections for the Use of Personel Protective Equipment Implementation of the OHS Plan and Site-Specific Health and Safety Instructions Site Inspections Record Verification	Before starting demolition work Every working day throughout the project activities	Minimizing risks to workers' occupational health and safety Compliance with the Occupational Health and Safety Law, relevant regulations, communiqués, circulars and other regulations Compliance with international standards	• Contractor • Consultant
Employment and working conditions	Project site	Final OHS Plan Review Site Inspection Grievance Mechanism (Feedback)	Every working day during the project activities	Compliance with the Occupational Health and Safety Law, relevant regulations, communiqués, circulars and other regulations	• Contractor • Consultant
Health and Safety records	Project site	Health and Safety construction site documentation control	Weekly	Ensuring that necessary Occupational Health and Safety records are kept at construction sites	• Contractor • Consultant
Air Quality	Project sites, across access roads Project site Buildings near the project site	Site Inspection Measurements to be carried out in case of grievance	Every working day throughout the project activities	Minimizing dust generation to avoid negative impact on local communities and the environment Air Quality Assessment and Management Regulation	• Contractor • Consultant

What *parameters will be monitored?*	**Where** *parameters will be monitored?*	**How** *parameters will be monitored?*	**When** *parameters will be monitored (measurement frequency)?*	**Why** *parameters will be monitored?*	**Responsibility**
Noise	Project site Buildings near the project site	Visual control of the implementation of established noise abatement measures, including declarations of methods followed Monitoring at the nearest building receiver points with a noise-measuring device (Alahan neighborhood) Site inspections Measurements to be carried out in case of grievance	Every working day during construction activities	Minimizing noise to avoid negative impact on local communities and the environment Compliance with Environmental Noise Control Regulation	• Contractor • Consultant
Waste Management	Project site	Waste Records Site Inspection Visual Inspections	Every working day during construction activities	Prevent pollution to protect construction workers, beneficiaries' employees, local communities and the environment	• Contractor • Consultant
Domestic Wastes	Project site	Waste Records Site Inspection	Throughout the project lifecycle/Daily	• Regulation on Control of Packaging Wastes Waste Management Regulation	• Contractor
Hazardous Wastes	Project site	Waste Records Site Inspection Visual Inspections	Throughout the project lifecycle/Daily	Separating hazardous waste (adhesive, paint, insulation material, packaging waste) from non-hazardous waste and biodegradable waste	• Contractor • Consultant

What *parameters will be monitored?*	**Where** *parameters will be monitored?*	**How** *parameters will be monitored?*	**When** *parameters will be monitored (measurement frequency)?*	**Why** *parameters will be monitored?*	**Responsibility**
Proper temporary storage, packaging and labeling of the extracted waste	Project site	Waste Records Site Inspection Visual Inspections	Throughout the project lifecycle/Daily	To minimize injuries, To prevent environmental pollution, Ensuring that inventory is kept properly. •Waste Management Regulation	• Contractor • Consultant
Excavation and Construction Waste	Project site	Visual inspection Transport records Site inspection	After the removal of all parts of the buildings containing hazardous materials Throughout the project lifecycle/daily	Ensuring that construction debris is disposed of in accordance with applicable national regulations and the Project's Demolition plan • Regulation on the Control of Excavation Soil, Construction and Demolition Waste Waste Management Regulation	• Contractor • Consultant
Soil Pollution	Project sites, external storage areas and access roads	Training records check (spill, leak training) Chemical absorbent kit control (Field, mobile work machines) Site Inspection	Throughout the project lifecycle/daily	Protection of soil and groundwater quality. • Regulation on Soil Pollution Control and Contaminated Sites by Point Sources, • Regulation on Water Pollution Control • Regulation on the Protection of Groundwater Against Pollution and Deterioration	• Contractor • Consultant

What *parameters will be monitored?*	**Where** *parameters will be monitored?*	**How** *parameters will be monitored?*	**When** *parameters will be monitored (measurement frequency)?*	**Why** *parameters will be monitored?*	**Responsibility**
Vehicle and Pedestrian Safety	Project sites and access roads	Visual inspection Using appropriate signs and signals Site inspection Community Health and Safety Traffic Management Plan	Daily	Protecting construction workers, their beneficiaries' employees, and local communities from injuries and deaths related to traffic accidents.	• Contractor • Consultant

What *parameters will be monitored?*	**Where** *parameters will be monitored?*	**How** *parameters will be monitored?*	**When** *parameters will be monitored (measurement frequency)?*	**Why** *parameters will be monitored?*	**Responsibility**
Grievance Mechanism	Project site Buildings near the project site	Complaint and Suggestion Forms Complaint Closing forms Total number of complaints (pending/resolved and gender issues) Number of complaints received Number of complaints resolved Complaint Register Log Availability of announcement posters regarding the Grievance Mechanism (GM) Physical condition of suggestion and complaint boxes Suggestion, status of complaint box locking mechanisms	Weekly (throughout the project lifecycle)	• Environmental Social Management Plan (ESMP) • Grievance Mechanism (GM) • Stakeholder Engagement Framework (SEF) Ensuring that stakeholders who are directly or indirectly affected by the project can bring forward their complaints/opinions/suggestions regarding project activities, contribute to the project and benefit from the project at the highest level.	• Contractor • Consultant • PIU

What *parameters will be monitored?*	**Where** *parameters will be monitored?*	**How** *parameters will be monitored?*	**When** *parameters will be monitored (measurement frequency)?*	**Why** *parameters will be monitored?*	**Responsibility**
Stakeholder Engagement	Hatay Mustafa Kemal University Tayfur Sökmen Campus	Number of Stakeholder Engagement Meeting participants (by gender) Promotional materials related to the project (announcement posters, webcasts, etc. control)	Daily	Fulfilling the requirements of the Stakeholder Engagement Framework.	• PIU • Consultant • Contractor
Renovation/Reinforcement Works Operation Process					
Waste streams	Renovated/Retrofitted buildings	Waste management requirements on site Complying with the University Zero Waste system	Regularly (throughout the project lifecycle)	Ensuring proper collection and disposal of waste in accordance with national legal requirements Waste Management Regulation Packaging Waste Control Regulation Zero Waste Regulation	Sports Science Faculty Faculty of Economics and Administrative Sciences Faculty of Veterinary Medicine
Health and Safety	Renovated/Retrofitted buildings	Regular inspections and maintenance of the roof, windows, doors, leaks, etc.	Regularly (throughout the project lifecycle)	Ensuring the health and safety of building users	Sports Science Faculty Faculty of Economics and Administrative Sciences Faculty of Veterinary Medicine

7. Duties and Responsibilities

Table 8. Task Distribution List

RESPONSIBLE PARTY	RESPONSIBILITY
MoEUCC /PIU	• Implementation and monitoring of the project, and utilization of funds. • Employment of at least one full-time Environmental, Social, and Occupational Health and Safety (OHS) expert. • Conducting necessary correspondence with official authorities and ensuring follow-ups. • Supervising and ensuring compliance of Environment and Social Management Plans (ESMPs) with both national regulations and WB policies specific to the project. • Presenting the prepared ESMPs to the WB after relevant checks. • Establishment of a Grievance Mechanism. • Organizing and conducting project informational meetings. • Guiding consultants and contractors. • Summarizing environmental and social issues related to project implementation in regular progress reports submitted to the WB. • Coordinating and liaising with WB's inspection missions regarding the evaluation of project implementation in terms of environmental and social mitigation policies. • Supervising the contractor's ESMP implementation and documenting necessary performance, suggestions, and future activities as part of the general project audit. • Ensuring the contractor corrects the application if ESMP is not followed and informing the WB about the issue. • Assisting the consultant if needed to obtain necessary permits throughout the project. • Reporting any significant events (such as accidents, leaks, deaths, etc.) to the World Bank within 48 hours and submitting an incident investigation report with a corrective action plan within 30 working days.
CONSULTANT	• Conducting a preliminary site assessment before the project starts, • If at least one Environmental, one Social and one OHS expert is employed full-time • Preparation of the project-specific ESMP and OHS Plan, • Monitoring, evaluating and submitting to the Administration the activities defined as the responsibility of the contractor in the ESMP and OHS Plan, • Ensuring the operation of the Grievance Mechanism established by the Ministry, • Providing feedback to MoEUCC by preparing reports about the project and ESMP processes, • Review and approval of Construction Methods prepared by the contractor, • Applying for energy efficiency for photovoltaic panel (PV) installation, • Providing training for the contractor (Environmental Impacts, Waste Management, OHS Plan Implementation and Monitoring Training, Response to Environmental Emergencies, Energy Efficiency, Stakeholder Engagement and Information Activities, Code of Conduct, Grievance Mechanism, Gender-Based Violence/Sexual Exploitation/Sexual Abuse/Sexual Harassment, Lockout-Tagout Training (LOTO), Work Permit System Training, Conservation of Cultural Assets)
CONTRACTOR	• Employing at least one full-time Environmental and one full-time OHS expert. • Appointing an experienced Environmental and OHS Officer for the comprehensive management and monitoring of the site-specific ESMP and OHS Plan.

RESPONSIBLE PARTY	RESPONSIBILITY
	• Implementing laws, regulations, and rules related to ESMP and OHS Plan attached to the tender documents as defined by the Consultant. • Implementing relevant laws and regulations mentioned in the tender documents appropriately. • Preparation of the Community Safety and Traffic Management Plan, • Updating ESMP and OHS Plan content in coordination with the Consultant during the implementation of ESMPs and OHS Plan in the field as necessary. • Preparation of the OHS Plan for the activities to be carried out, taking into account the OHS Plan prepared by the Consultant, Monitoring the field activities defined in the ESMPs prepared specifically for the project at regular intervals (daily, monthly, etc.), • Operating the Grievance Mechanism in compliance with GM Procedure established by the Ministry. • Examination of the ESMP prepared by the Consultant, commitment to implement it or preparation of the Contractor ESMP by the contractor and relevant sub-management plans of the ESMP (e.g. Waste Management Plan, Pollution Prevention Plan, Community Safety and Traffic Management Plan, Occupational Health and Safety plan, etc.) and preparation of work-specific construction/application methods, • Preparing the Chance Find Procedure if deemed necessary. • Preparing ESMP progress reports for MoEUCC's review. • Applying to the authorized energy distribution company and local gas distribution company depending on the works to be carried out. • Establishing the Employee Grievance Mechanism detailed in the Labor Management Procedure before any construction work starts and ensuring its transparent operation. • Maintaining the operation of the Grievance Resolution Mechanism established by the Ministry in accordance with the GM activities,

8. REPORTING

The details regarding the reporting requirements of the project are presented within the Environmental and Social Management Framework disclosed on the website of the KADEV Project (https://kamuguclendirme.csb.gov.tr). A summary of this information is provided in Table 9.

Table 9: Reporting Process Requirement List

RESPONSIBLE PARTY	REPORTING PROCESS REQUIREMENT
MoEUCC /PIU	• Preparation of the 6-month Project Progress Report and submission to the World Bank (WB). • Reporting any significant events such as accidents, leaks, deaths, etc., to the World Bank within 48 hours and submitting an incident investigation report along with a corrective action plan within 30 working days. • Monthly updates to the WB about the functioning of the Grievance Mechanism
CONSULTANT	• Preparation of end-of-implementation ESMP reports for the Administration's review. • Preparation of monthly of ESMP progress reports and submission to the Administration. • Preparation of weekly of GM reports and submission to the Administration • Immediate reporting of any important events such as accidents, leaks, deaths, sexual harassment/abuse to the PIU.
CONTRACTOR	• Monthly preparation of ESMP progress reports and submission for approval by the Consultant. • Weekly preparation of GM reports and submission to the Project Manager of the Consultant. • Immediate reporting of any significant events such as accidents, leaks, deaths, sexual harassment/abuse to the Consultant. • Incident/Accident and Root Cause Analysis Reports will be prepared. • Report content details are presented within the Environmental and Social Management Framework.

Annex I Buildings within the Scope of the Project

FACULTY OF VETERINARY MEDICINE

FACULTY OF ECONOMICS AND ADMINISTRATIVE SCIENCES

SPORTS SCIENCE FACULTY

SPP AREA (LOCATED IN SECOND PARKING AREA)

Annex II Summaries of World Bank (WB) Environmental and Social Standards

Summary explanations of the World Bank Environmental and Social Standards (ESS) are included in Table 1.

Annex-2/Table 1: World Bank Environmental Social Standards Summary

ESS	SUBJECT	SUMMARY REQUIREMENT
ESS1	Assessment and Management of Environmental and Social Risks and Impacts	ESS1 aims to achieve environmental and social outcomes consistent with Environmental and Social Standards (ESS) by defining the responsibilities for assessing, managing, and monitoring environmental and social risks and impacts associated with a project supported by the World Bank through Investment Project Financing at every stage. Environmental and social assessments will be conducted based on current information/data to define and describe the project and all related aspects and identify the nature of risks, impacts, and characteristics of mitigation measures. The assessment will prioritize disadvantaged and/or vulnerable social groups, evaluate potential environmental and social risks and impacts of the project, examine project alternatives, and identify ways to improve project design and implementation to mitigate adverse environmental and social effects. The environmental and social assessment will also explore opportunities to enhance the positive impacts of the project. According to ESS1, stakeholder participation is an integral part of the assessment, following ESS10. Under ESS1, the Borrower will systematically identify, evaluate, and manage environmental and social risks and impacts throughout the project's lifecycle.

ESS	SUBJECT	SUMMARY REQUIREMENT
ESS2	Labor and Working Conditions	The objectives of ESS2 are as follows: (i) promote safety and health in the workplace; (ii) encourage fair treatment of project workers, prevent discrimination, and promote equal opportunities; (iii) protect workers, including vulnerable workers such as women, disabled individuals, children (according to ESS2 working age), migrant laborers, contracted workers, community workers, and primary supply workers, in an appropriate manner; (iv) prevent all forms of forced labor and child labor; (v) support the principles of organizing and collective bargaining freedom for project workers in a manner consistent with national law; and (vi) provide accessible means for project workers to raise workplace concerns. The applicability and scope of ESS2 depend on the type of employment relationship between the Borrower and project workers, as well as the environmental and social assessment described in ESS1. ESS2 requirements cover the development and implementation of a written Labor Management Procedure (LMP) that will be applicable to the project. These procedures will determine how project workers are managed in compliance with national law and the requirements of this ESS. They will also define (i) working conditions and employment, including non-discrimination and equal opportunity provisions, which will be monitored by project contractors following the procedures for labor management and behavior rules; (ii) protection of workers, including the prohibition of child labor and forced labor; (iii) the establishment and operation of a grievance mechanism for workers, including regulations for potential risks of Sexual Exploitation and Abuse/Sexual Harassment (SEA/SH), and (iv) occupational health and safety. Furthermore, it will encompass (v) contracted workers, (vi) community workers, and (vii) primary supply workers.
ESS3	Resource Efficiency and Pollution Prevention and Management	ESS3 recognizes that economic activities and urbanization largely pollute the air, water, and soil and consume limited resources at local, regional, and global levels, threatening people, ecosystem services, and the environment. The current and projected atmospheric concentration of greenhouse gases (GHG) threatens the well-being of current and future generations. Additionally, technologies and practices to achieve more efficient and effective resource use, pollution prevention, and avoidance of greenhouse gas emissions have become more accessible and available. This ESS establishes the requirements for addressing resource efficiency and pollution prevention and management throughout the project life cycle, consistent with Good International Industry Practices. Risks and impacts related to relevant ESS3 requirements, including raw materials, water use, air pollution, hazardous substances, and hazardous waste, are assessed, and proposed mitigation measures are included in the ESMF and ESMP.

ESS	SUBJECT	SUMMARY REQUIREMENT
ESS4	Community Health and Safety	ESS4 acknowledges that project activities, equipment, and infrastructure can increase communities exposure to risks and impacts. Additionally, communities already exposed to the effects of climate change may be further exposed to impacts due to project activities. ESS4 addresses health, safety, and security risks and their impacts on communities affected by the project, with special attention to individuals who could be harmed due to their specific circumstances.
ESS5	Land Acquisition, Restrictions on Land Use, and Involuntary Resettlement **(This ESS is not applicable to the KADEV Project)**	ESS5 recognizes that project-related land acquisition and restrictions on land use can have adverse effects on communities and individuals. Project-related land acquisition or restrictions on land use can lead to physical displacement (relocation, loss of housing or shelter), economic displacement (loss of livelihoods or access to assets resulting in loss of income sources), or both. The term "involuntary resettlement" refers to these effects when affected individuals or communities do not have the right to refuse land acquisition or restrictions on land use.
ESS6	Biodiversity Conservation and Sustainable Management of Living Natural Resources **(This ESS is not applicable to the KADEV Project)**	The environmental and social assessment specified in ESS1 will consider direct, indirect, and cumulative effects on habitats and the biological diversity they support. This assessment will consider threats to biological diversity such as habitat loss, degradation and fragmentation, invasive alien species, overuse, hydrological changes, nutrient loading, pollution, and incidental capture, as well as the anticipated impacts of climate change. It will determine the importance of biodiversity or habitats based on their global, regional, or national vulnerabilities and irreplaceability. It will also consider different values placed on biodiversity and habitats by stakeholders affected by the project and other relevant stakeholders.
ESS7	Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities **(This ESS is not applicable to the KADEV Project)**	This ESS acknowledges that Historically Underserved Indigenous Peoples/Sub-Saharan African Traditional Indigenous Communities have distinct identities and perspectives from mainstream groups in national societies and are often disadvantaged by traditional development models.
ESS8	Cultural Heritage	The Borrower will avoid impacts on cultural heritage. In situations where avoidance of impacts is not possible, the Borrower will identify and implement measures to address the impacts on cultural heritage in accordance with the hierarchy of mitigation. When appropriate, the Borrower will develop a Cultural Heritage Management Plan.

ESS	SUBJECT	SUMMARY REQUIREMENT
ESS9	Financial Intermediaries **(This ESS does not apply for the KADEV Project)**	Financial intermediaries will establish and maintain an ESMS to identify, assess, manage, and continuously monitor the environmental and social risks and impacts of sub-projects.
ESS10	Stakeholder Participation and Information Disclosure	This ESS recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as a fundamental element of good international practice. Effective stakeholder engagement can enhance the environmental and social sustainability of projects, strengthen project acceptance, and significantly contribute to successful project design and implementation. The Client will engage with stakeholders throughout the project life cycle, starting this engagement at the earliest possible stage of the project development process and at a meaningful time for stakeholder input into project design. The nature, scope, and frequency of stakeholder engagement will be proportionate to both the nature and scale of the project and the potential risks and impacts. Stakeholder engagement is a comprehensive process conducted throughout the project life cycle. When properly designed and implemented, it supports the development of strong, constructive, and responsive relationships crucial for the successful management of the environmental and social risks of a project. Stakeholder engagement, initiated at an early stage of the project development process, is the most effective and integral part of the process of assessing, managing, and monitoring the environmental and social risks and impacts of the project. In consultation with the Bank, the Borrower will develop and implement a Stakeholder Engagement Plan (SEP) proportional to both the nature and scale of the project and the potential risks and impacts.

Annex III Suggestion & Grievance Form (Online)

The internet form visual, which can be accessed at https://kadevoneri.csb.gov.tr/oneri.jsp, is below.

Annex IV Suggestion & Grievance Form (Printed)

The Compliant / Suggestion Form in the Complaint Boxes is given.

TÜRKİYE CUMHURİYETİ
ÇEVRE, ŞEHİRCİLİK VE
İKLİM DEĞİŞİKLİĞİ BAKANLIĞI

THE WORLD BANK

GRIEVANCE FORM

Reference No	
Full name	
Please choose channel you want to be contacted (mail, phone, email)	
Province/District/Location	
Date	

Grievance Categories	
1. Abandonment (public)	
2. Assets/properties affected by the project	
3. Infrastructure	
4. Reduction or total loss of income	
5. Environmental problems (e.g. pollution)	
6. Employment	
7. Traffic, transportation and other risks	
8. Other (Please specify)	
Description of the grievance/ What happened? When did it happen? Where did it happen? What was the result of the problem?	
What do you think needs to be done to solve the problem?	
Although it is not mandatory to give name and address, some problems may occur due to lack of information during the feedback process regarding the grievance.	

Signature: Date:

NKY

Annex V Grievance Closeout Form

Grievance Closing Form is submitted at the below.

Complaint Closure No:		
Description of immediate action required:		
Long-term action description (if required):		
Is compensation required?	[ ] YES	[] NO
Corrective Action and Decision Control		
Stage of corrective action		Term and Responsible Institution
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		

COMPENSATION AND FINAL RATINGS

This part will be filled out and signed by the complainant after receiving the compensation fees and resolving the complaint.

Notes:

Date:

Complaint Owner:

Annex VI Minutes of Stakeholder Engagement Meeting

Meeting Minutes

Venue: Mustafa Kemal Universitesi Tayfur Sokmen Campus
Date: 13.05.2024
Start – End Time: 15.15 – 16.45

Start Time	End Time	Activity
15.15	16.45	The meeting has been recorded. There are no participants who object to the meeting recording.
15.15	15.20	Information was given about the KADEV project and its goals. Annex VII: Slide no: 1-5 - Information was given about the reinforcement works and prepared reports. - The importance of energy efficiency was underlined. It was said that studies were being carried out on how to make the current system at the university work more efficiently. - It was stated that the studies started firstly with three faculties. 
15.20	15.30	Information was given about the reinforcement works. Appendix VII: Slide number: 6-11 - It was stated that emphasis was given to core drilling work. - It was decided to strengthen the buildings with additional curtains in the load-bearing system. -The university's consent on the subject has been received. 
15.30	15.45	Information was given about energy efficiency. Annex VII: Slide no:12-19

		-Efficient use of all existing equipment was aimed. - A car park type solar system will be installed in the area next to the hospital. The energy of 7 faculties will benefit from this system. - The heating system will be converted to natural gas. - It is planned to convert the parts used with fluorescent to LED system. - An automation system that will control the heating system is planned. The energy monitoring system will also be installed with automation for saving purposes. 
15.45	15.55	Environmental Social Management Plan; It was announced that the environmental and social impacts of the project has been determined. Appendix VII: Slide number: 20-25 -All occupational safety precautions to be taken are stated in the plan. -Information was given about periodic control, operator's certificate, personal protective equipment to be used, worker's health reports, training, use of electrical equipment, traffic action plan, emergency action plan. -The traffic route to be used during the construction period was determined. 
15.55	16.00	Information about environmental impacts, risks and management is provided. Annex VII: Slide no:26-32 -All transactions will take place on campus. Off-campus impact level is low. Contractors will benefit from existing infrastructure. Garbage will be placed in the container area. There will not be much waste. Mobile waste tracking system for hazardous waste will be used when necessary.
16.00	16.05	The importance of stakeholder participation was highlighted and grievance channels were explained. Information regarding privacy and gender-based violence is provided. At

		the end of the presentation, the details of the communication were explained. Annex VII Slide no:33-36
16.05	16.45	Participants' questions were answered. A closing speech was made and the meeting ended.

Visuals from the meeting

Questions and answers raised during the meeting:

	Name-Surname	Question	Answer
1	Participant 1	How will the equipments in the building be transported during the retrofit process? How will the tender process proceed?	Bülent Canbolan (NKY): The equipments will be transported by the contractor. Necessary studies are being carried out to start the tender process.
2	Participant 2	How will the central heating system be arranged? Is the purchase of cameras for buildings included in the tender?	Duran Duran (NKY): Each building was designed with its own system. Camera system is out of scope. The project process continues.
3	Participant 3	When can the second stage be finished? Are there any precautions that need to be taken for transporting the equipment in the laboratory?	Duran Duran (NKY): The contractor and the university will work in coordination. Details will be included in the tender document.
4	Participant 4	Will the natural gas system be used in animal breeding, research and application units on campus, independent of the faculties?	Bülent Canbolan (NKY): A natural gas system will be installed at every point in the building.
5	Participant 5	Approximately how long do you expect the strengthening process of the Faculty of Veterinary Medicine to be completed? In this process, how is the entrance and exit of students and faculty members to the buildings planned in terms of occupational health and safety?	Aysun Oğuz (NKY): There will be no entry or exit of people during the work.
6	Participant 6	Will FEAS use the same heating system as the conference room? What are your works regarding sewage?	Duran Duran (NKY): We will only build the boiler room. Since it was out of scope, we requested the university to build this area. Studies are being carried out on the separation of waste water and clean water.
7	Participant 7	Will the roofs change?	Duran Duran (NKY): Necessary areas on the roofs will be repaired and strengthened.
8	Participant 8	Once the details of the project are determined, will you share them with us in written form?	The university will provide written information.
9	Participant 9	We request the use of the Faculty of veterinary medicine and sports sciences in the statements.	The participant stated a comment. Note is taken.
10	Participant 10	Will workers be accommodated on campus?	Aysun Oğuz (NKY) and Tülün Yıldırım (OHS Expert): Workers will not be accommodated on campus.

	Name-Surname	Question	Answer
11	Participant 11	Can you give an estimated date or month for the start of the Faculty of Veterinary Medicine renovation process?	Bülent Canbolan (NKY): The tender preparation process will continue.
12	Participant 12	I request sound insulation in the renovation of damaged and undamaged interior walls.	Duran Duran (NKY): Sound insulation will be provided.
13	Participant 13	I request that the traffic route be changed. There are many student paths. Will I be able to park in the parking lot after installing SPP? Will MRF have both a natural gas system for heating?	Duran Duran (NKY): You will be able to park. We plan to renew the boiler room in the heating system and provide the same service.
14	Participant 14	In order to provide better service to our patients in the Animal Hospital Department and to make our service areas more useful, we have requests for new doors to be opened and some minor revisions to some open areas, especially in the Large Animal Department. We have previously conveyed our requests regarding the issue to the Department of Construction Affairs from the Chief Physician. We would be very pleased if our demands are realized during the strengthening and renovations.	Bülent Canbolan (NKY): The university will evaluate the matter.
15	Participant 15	How do you plan to build the roof system at the Faculty of Veterinary Medicine?	Duran Duran (NKY): Roof repair and strengthening activities will be carried out.
16	Participant 16	Will the strengthening of these three faculties be started simultaneously or sequentially?	Duran Duran (NKY) This is a situation that can be determined according to the tender period and the contractor's preference.

The list of participants participated via zoom

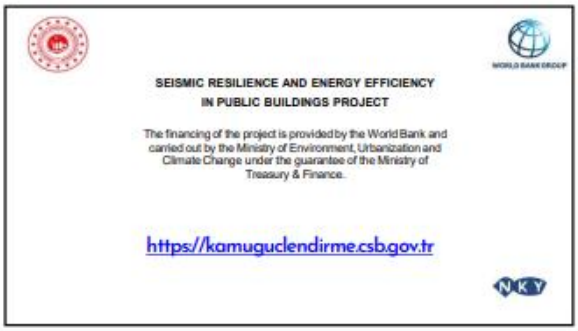
87 people (33 women and 54 men) attended the meeting via zoom link. The number of participants in the meeting room was 27 (6 women and 21 men).

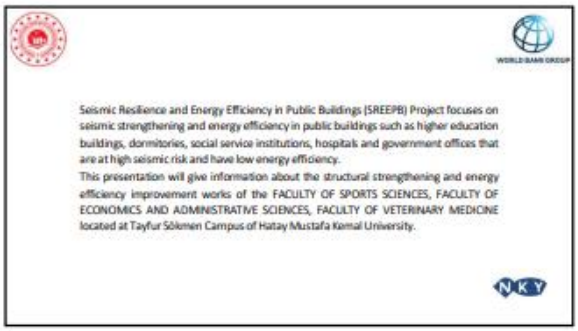
Within the scope of the Law on the Protection of Personal Data Personal (Law No. 6698), participants' clear identity information cannot be shared. However, records of the meeting are kept by the PIU.

The list of participants participated to the meeting (Physical attendance)

Within the scope of the Law on the Protection of Personal Data Personal (Law No. 6698), participants' clear identity information cannot be shared. However, records of the meeting are kept by the PIU.

Annex VI Presentation of Stakeholder Engagement Meeting





Construction Phase

As a result of the survey studies, renovations focused on structural strengthening and energy efficiency were determined and designed. These renovation studies are listed under the main headings below:

Structural Strengthening

- Existing carrier system reinforcement, additional carrier system manufacturing,
- Floor, ceiling, wall and door renovations due to structural strengthening activities

Energy Efficiency

- Facade and roof thermal insulation
- Circulation system motor/pump changes
- Non-insulated installation elements, thermal insulation installation for heat exchangers
- VRV transformation
- Lighting element replacements (one-to-one replacements will be made, electrical installation intervention (line, column line replacement, etc.) is out of the question)
- Self-consumption focused solar power plant facility
- Energy monitoring (to be integrated into the existing electrical system)
- Mechanical automation and energy measurement monitoring system

Structural Strengthening

A total of 3 buildings on the campus will be strengthened according to TBDY-2018 principles and their earthquake performance will be brought to the targeted level.

Structural reinforcement is planned to be carried out mainly by placing additional reinforcement curtains in appropriate places, so as not to disrupt the existing architectural functions of the buildings.

Column sheathing can also be done when necessary.

It is planned to replace the existing damaged brick walls in the buildings with lighter gypsum panel walls.

Earthquake safety of undamaged brick walls will be ensured by using steel reinforcement elements.

Since the existing and new ground surveys showed that the ground properties were sufficient, no ground improvement or foundation strengthening was deemed necessary.

Structural Strengthening

Carrier System Reinforcement

The walls in the axes where reinforcement curtains and column jackets will be installed will be marked and demolished using sledgehammers and crushers, starting from the top floor. Before wall demolition, doors, windows, sanitary ware, countertops, electrical and mechanical installation equipment that are at risk of damage will be removed and will be temporarily stored in areas designated by the beneficiary institution.

Structural Strengthening

Carrier System Reinforcement

After the dismantling process, in order to connect the reinforcement elements to the foundations, the sub-basement concrete must be broken and the foundation fill must be excavated in order to open the perimeter of the curtain and column sheath. These demolition and excavation operations will be carried out manually (with the help of a breaker and sledgehammer) and/or with small machines that can enter the structure (bobcat, etc.).

Structural Strengthening

Carrier System Reinforcement

After the demolition and excavation operations are completed, anchor rods are nailed to the existing columns, beams and foundations. Anchor holes are made by drilling holes in the existing elements with drills in accordance with the measurements in the detail projects, cleaning the hole with an air compressor, squeezing the epoxy adhesive into the hole and inserting the previously prepared anchor bar into the hole.

Structural Strengthening

Carrier System Reinforcement

Along with the anchor manufacturing, the laying of reinforcement will begin. After the reinforcement sample checks, the Plywood molds are closed and "self-compacting concrete" (concrete with fine aggregate, super plasticizer additive) is poured into the mold through the hole opened from the upper floor slab or through the funnels manufactured from the mold, also called bird's mouth.

Structural Strengthening

Finishing Works

After the completion of the rough construction, repair works begin. The interior and exterior surfaces of reinforcement curtains must be coated with plaster, paint, insulation, etc. Reinforcement works are completed by applications, leveling concrete and coating material arrangements on deteriorated floors, electrical and mechanical installation installations and, if necessary, door and window manufacturing.

Energy Efficiency Studies

Solar power plant facility integration will be provided. Solar panels will be installed in the parking area behind the hospital. The energy obtained here will be transferred to the transformer and some of the electricity needs of the 3 buildings will be met from here.

Energy Efficiency Studies

Heating and cooling systems

- In all buildings within the scope of the project, a detached heating center will be established instead of a central heating center, and wall type condensing high efficiency boilers will be installed and the installation and insulation will be renewed.Split air conditioners will be replaced with VRF systems.

Energy Efficiency Studies

Lighting Elements LED Transformation

In all buildings within the scope of the project, lighting equipment will be replaced with LED lighting fixtures with similar illumination intensity and color temperature, and motion sensors will be applied to spaces such as corridors and WCs.

Energy Efficiency Studies

Automation System

By establishing and ensuring the effectiveness of the energy monitoring system (heating system, circulation motors & pumps, solar power plant) and mechanical automation system, covering all structures, in accordance with EN ISO 50001 Energy Management System conditions, it has been calculated that 0.15% electricity and 0.15% natural gas savings can be achieved in total energy consumption.

Energy Efficiency Studies

Facade Insulation

Calculations made as a result of exterior facade controls showed that TS 825 minimum requirements were not met, even in insulated sections.
In this context;

- ✓ In the veterinary building; 3,167.11 m2
- ✓ In the Economy Building; 1,734.15 m2
- ✓ In the Sports Sciences Building; "2,499.80 m2 wall will be insulated with 6 cm rock wool insulation material.

Energy Efficiency Studies

Roof Insulation

As a result of the on-site inspection, calculations made on the roofs reveal that the existing thermal insulation does not meet the requirements of TS 825. In this context;

- The unused attic space in other blocks of the Faculty of Veterinary Medicine is 25 cm thick
- The unused attic space in other blocks of the Faculty of Economics and Administrative Sciences is 15 cm thick
- The unused attic space in other blocks of the Faculty of Sports Sciences is 15 cm thick glass wool roof mat placed with one side covered with aluminum foil (0.035 ≤ Thermal conductivity ≤ 0.040W/(m.K)) (Applicationarea 1805.78m2).

Energy Efficiency Studies

Window and Door Replacement

Mevcut pencereler, doğramalar ve Veteriner fak kapıları, TS 825 asgari şartlarınınkarşılanmadığı gösterilmiştir.

Pencere ve kapıde ğişimleri yapılacaktır. Bu çerçevede;

- Replacement of 209 single-glazed existing windows (4+11+4) with a total area of 717.25 m2 located in other blocks of the Faculty of Veterinary Medicine with new ones with double glass and plastic joinery with a U value of 1.75
- Replacement of 9 doors of 23.86 m2, located in other blocks of the Faculty of Veterinary Medicine, with wood/plastic components with U = 3.5, and new ones with automatic transition or good heat insulation, with a U value of 2.4
- Replacement of 255 single-glazed existing windows (4+11+4) with a total area of 620.16 m2 in other blocks of the Faculty of Economics and Administrative Sciences with new ones with double glass and plastic joinery with a U value of 1.75.
- The existing windows (4+11+4) with 132 single-glazed windows of 298.60 m2 and 144 double-glazed windows of 460.42 m2 in the other blocks of the Faculty of Sports Science were replaced with new ones with double glazing and plastic joinery with a U value of 1.75.

Energy Efficiency Studies

As a result of the calculations, by implementing the precautionary scenarios determined specifically for the three faculties, 63.08% savings in total energy consumption can be achieved and approximately **627.94 tons/year of greenhouse gas emissions can be prevented**. By operating these renovations and renewed systems in accordance with EN ISO 50001 Energy Management System conditions, annual savings of **1,202,052.47 kWh of electricity and 285,539.98 kWh of natural gas** can be achieved. The material size of the savings in question is approximately 6,923,809.04 ₺/year.

Occupational Health and Safety

Occupational health and safety plans have been prepared for the construction process. Contractor company;

- In line with the OCCUPATIONAL HEALTH AND SAFETY PLAN prepared by the Consultant, it is mandatory to prepare their own OCCUPATIONAL HEALTH AND SAFETY PLAN and Risk Analysis, covering all the work for which he is responsible, and submit it to the approval of the Consultant.
- However, the work will begin after the plan and analyses are deemed appropriate.

The issues that our stakeholders should pay attention to regarding these studies are as follows:

- It is essential that periodic inspection reports of all work machines such as mobile cranes and compressors are provided and kept ready in the machines. These machines can be used only by authorized operators. Operators must have their authorization documents ready and be able to declare them in line with the requests of authorized OHS experts during site controls and inspections.

Occupational Health and Safety

- **PAT tests** must be performed to show that all electrical devices/equipment used in the site are electrically safe.
- All of the equipment in question must have labels indicating conformity on the device.
- Employees with the appropriate **Professional Competence Certificate** will be allowed to enter the field.
- All employees must have appropriate **personal protective equipment** and use it effectively within the scope of their duties.
- It is mandatory for all employees to have received **"Basic OHS Training"** and **"Risk Analysis Training"**.
- It is mandatory for personnel who will work at heights to have received **"Working at Height Training"**.
- It is mandatory for all employees to have received the **" LOTO – Log Out Tag Out Training"**.
- It is mandatory for employees to receive other relevant training specified in the **"OCCUPATIONAL HEALTH AND SAFETY PLAN"** before start to work.
- It is essential that work scaffolds meet **TS EN 12811-1** standard conditions.
- It is mandatory for all personnel to work on the scaffolds in question to be trained to work at height and to use parachute type safety belts and fall arrest equipment.
- Action must be taken in accordance with the **"TRAFFIC ACTION PLAN"** specified in the **OCCUPATIONAL HEALTH AND SAFETY PLAN** on campus.
- Emergency action plans should be developed specifically for this work area and drills should be carried out covering all employees.

Occupational Health and Safety

All employees are obliged to use the personal protective equipment specified in the OCCUPATIONAL HEALTH AND SAFETY PLAN in a disciplined manner.

Those who do not carry/use the equipment in question appropriately will not be allowed to work.

Example of some personal protective equipment;

- Helmet - TS EN 397+A1
- Earplug - TS EN 352-2
- Protective Glasses - TS EN ISO 16321-3
- General Purpose Work Gloves - TS EN ISO 21420
- Work Shoes - TS EN ISO 20347
- Half Face Mask - TS EN 140
- Parachute Type Seat Belt - TS EN 361 (Only personnel working at height)

Occupational Health and Safety

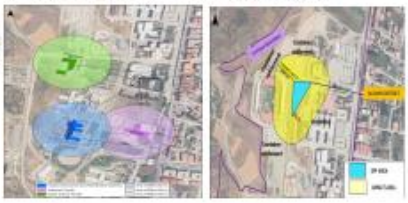
- The areas where employees will gather in case of emergency are determined by taking into account the earthquake risk and are shown in the site plans.

Traffic Management Plan

- Limits regarding vehicle use on campus are specified in the **OCCUPATIONAL HEALTH AND SAFETY PLAN.**

Health & Safety Organization

Environmental Impacts



Environmental Impacts

During the construction works, the sewerage, electricity and water networks already existing in the region will be used.

- Domestic waste will be disposed of using municipal services, while temporary storage areas will be created for other wastes and disposed of by licensed companies.
- In case any infrastructure service is required for the project (overflow due to blockage in sewer lines (purchase of sewage truck service), long-term power outage (mobile generator), long-term water outage (fighting dust with water tankers, etc.), existing infrastructure facilities (generator, etc.).) will be evaluated and carried out in accordance with the relevant regulations.

Environmental Impacts

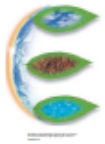
As a result of the training that the Consultant will provide to the Contractor company personnel within the scope of the project, it is expected that the institutional capacity of the contractor company will improve.

These trainings are listed below.

- **Environmental and Social Impacts**
- **Waste Management**
- **Response to Environmental Emergencies**
- **Energy efficiency**
- **Grievance Mechanism (GM)**

Environmental Impacts

Waste Management



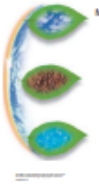
Construction Excavation Wastes:

- In the event that defrauded material belonging to the building is created as a result of the dismantling activities, **a document will be obtained** from the building management stating that the material has been delivered.
- Recovery of construction/demolition waste and especially its reuse as infrastructure material will be prioritised. Excavation waste will be sent to the waste storage facility of the relevant municipality. An official letter will be received from the Municipality stating that the waste will be accepted to the site and will be submitted to the Administration.

Environmental Impacts

Waste Management

Hazardous Wastes;



Management of hazardous waste will be carried out in accordance with the **Waste Management Regulation.**

- In case of temporary storage of hazardous wastes at the project site, wastes; It will be stored within the project area in sturdy, leak-proof, safe containers that comply with internationally accepted standards, the phrase hazardous waste will be written on the containers, and the waste code, amount, content, properties, preservation conditions and storage date of the stored substance **will be stated on the containers**.
- Dangerous substances can be stored temporarily **for a maximum of 6 months**. (Temporary storage areas will be determined by the contractor company in accordance with the legislation, with permission from the University Administration, and the consultant will be notified of the areas in question.)
- Containers where harmful substances are stored and waste oils will be placed in **sealed concrete areas** to prevent spillage and leakage into the ground.
- No toxic paints, solvents or lead-based chemicals will be used.

Environmental Impacts

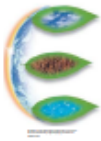
Waste Management

Hazardous Wastes;

- Hazardous chemicals and wastes that are likely to be generated at the construction site will be sent to licensed disposal facilities using the waste management application via the **Integrated Environmental Information System** (E-ÇİS), the online program of the Ministry of Environment, Urbanization and Climate Change.
- Spillage and leakage **absorbent pad kits** will be available at work sites.
- All personnel on duty will be subject to protection and emergency training regarding hazardous chemical leaks and spills.
- In case of medium and large-scale environmental accidents, **accident investigation** will be conducted and reported.
- Used fluorescent lamps removed during renovation/construction works will be disposed of in **licensed facilities.**
- Necessary documents regarding the transportation and disposal of the material will be kept at the construction site and will be submitted to the MoEU,CC and the World Bank if requested.

Environmental Impacts

Waste Management



Domestic Wastes:

- Domestic wastes that will be generated will be separated at their source (plastic, glass, paper, etc.) and recyclable ones will be recycled.
- Employees will be trained to properly separate wastes. Wastes that cannot be recycled will be collected in closed sanitary garbage bins and sent to regular landfills through the solid waste collection system of the Authorized Municipality.

Packaging Wastes:

- **Uncontaminated recyclable waste** (plastic, glass, paper, etc.) will be recycled.
- Employees will be trained to properly separate waste. All waste contaminated with hazardous substances will be evaluated as hazardous waste.

Monitoring and Management

- Community Health and Safety
- Trainings
- Human Resources
- Stakeholder Participation
- Grievance Mechanism (GM)

For grievances about gender-based violence and sexual exploitation and harassment, it is recommended to use the web-based grievance system provided below, which also allows anonymous grievances, for confidentiality reasons. In order to ensure confidentiality, an authorized personnel will have access to this web-based complaint system.

Suggestion and Grievance Mechanism

Project's web site	https://kamuguclendirme.csb.gov.tr/
Grievance and suggestion form	https://kadevoneri.csb.gov.tr/oneri.jsp
Tel	0312 586 48 58
Support line	Alo 181

Thank you for your understanding!