SEISMIC RESILIENCE AND ENERGY EFFICIENCY

IN PUBLIC BUILDINGS PROJECT

(SREEPB PROJECT)

BOGAZICI UNIVERSITY

NORTH CAMPUS (SQUARE BLOCK)

ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN

APRIL

2024

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Abbreviations

BU	Bogazici University
BP	Bank Procedure
CIMER	Presidential Communication Center
Consultant	Tümaş & ATLASCert® & Hill Partnership
dBA	Noise Abatement and Control
dBC	Noise Assessment Measure
E&S	Environmental and Social
EA	Environmental Assessment
EIA	Environmental Impact Assessment
ESF	Environmental and Social Framework
EHS	Environment, Health and Safety
ESS	Environmental and Social Standards
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
MoEUCC	Ministry of Environment, Urbanization and Climate Change
GDCMM	General Directorate of Construction Affairs
GM	Grievance Mechanism
ILO	International Labour Organization
ITU	Istanbul Technical University
M&E	Monitoring and Evaluation
MSDS	Material Safety Data Sheet
OHS	Occupational Health and Safety
PIU	Project Implementation Unit
PPE	Personal Protective Equipment
PV	Photovoltaic Panel
SEF	Stakeholder Engagement Framework
SPP	Solar Power Plant
SREEPB	Seismic Resilience Enegy Efficiency Public Buildings
SGI	Social Security Institution
WB	World Bank

Executive Summary

Seismic Resilience and Energy Efficiency in Public Buildings Project (SREEPB) focused on seismic retrofitting and energy efficiency in public buildings such as higher education buildings, dormitories, social service institutions, hospitals and government mansions which are under high seismic risk and have low energy efficiency. In this context, this project with reference number WB/CS-DESSUP-01 covers 32 buildings in 11 campuses including Bogazici University (BU), Marmara University, Istanbul Technical University (ITU), Istanbul University, Sakarya Government House, Kocaeli student dormitories (2 units).

This document provides information about the structural retrofitting and energy efficiency-oriented improvement works of the Square Block building located within the BU North Campus, refers to the national and international legislation to which these works are subject, and includes the measures to be taken in order to keep the negative environmental and social impacts that may occur during the works at an acceptable level or to eliminate them, and the measures to be taken in terms of occupational health and safety. In addition, this Environmental and Social Management Plan (ESMP) provides information on the stakeholder engagement activities to be carried out within the scope of the project and the grievance mechanism (GM) to be established and sets out the duties and responsibilities of the relevant parties within the scope of the project.

Introduction

This Environmental and Social Management Plan (ESMP) has been prepared within the Seismic Resilience and Energy Efficiency in Public Buildings Project (SREEPB) to identify the measures to be taken to ensure that the adverse environmental and social impacts and risks that may be caused by the structural retrofitting and energy efficiency-oriented renovation activities to be carried out at the Square Block located in Bogazici University North Campus at Rumeli Hisarı, Hisar Üstü Nispetiye Caddesi No: 7, Sarıyer/İstanbul are kept at an acceptable level or eliminated.

This ESMP, which has been prepared primarily in accordance with the Turkish legislation and in addition to the World Bank (WB) policies, standards and measures, clearly sets out who, when, how often and in what manner will implement the measures to be taken during the project implementation phases.

1. General Project and Project Area Information

The project consists of structural retrofitting and energy efficiency-oriented renovation activities to be carried out in the "Square Block" located in Bogazici University North Campus within the scope of the Earthquake Resistance and Energy Efficiency in Public Buildings (SREEPB) Project. Square Block is located at Rumeli Hisarı, Hisar Üstü Nispetiye Caddesi No: 2/2, Sarıyer/Istanbul.

1.1. Project Description

1.1.1. General Information and Objectives

The overall objective of the Seismic Resilience and Energy Efficiency in Public Buildings (SREEPB) Project is to retrofit public buildings (education buildings, dormitories, hospitals and administrative buildings), which are inefficient in terms of energy use and at risk due to earthquakes, against earthquakes and to ensure energy efficiency in these buildings.

With the project, it is aimed 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 CO_2 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 Turkey energy efficient after the project.

SREEPB Project ensures that existing buildings are retrofitted against earthquakes and made more efficient, as well as raising social awareness on earthquakes and energy efficiency.

Structural retrofitting works throughout the project include building structural system improvements and additions, as well as ground reinforcement works *(limited to the floors of the buildings in scope), if needed.* Energy efficiency focused works 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, and electricity generation through the installation of solar panels.

Within the scope of the Environmental and Social Standards defined in the World Bank's Environmental and Social Framework (ESF), the SREEPB Project is considered to have an Environmental and Social Risk Rating of "Moderate" since the activities to be carried out will not create irreversible adverse environmental and social impacts and risks, the potential impacts/risks are temporary and reversible, the potential impacts/risks are moderate in magnitude and quality, and the sub-project sites are not in sensitive areas in terms of environmental and social risks and impacts. In addition, Project activities are not expected to have serious adverse impacts on human health and the environment.

The "Square Block" within the scope of the sub-project subject to this ESMP is located within the BU North Campus. Other buildings/structures outside the University or the district are not expected to be directly affected by the project activities. The Square Block in use will be left out of use during the construction activities, limited to the area where the activity will be carried out. Seismic isolators, an innovative method, will be used in the structural retrofitting works and the non-working areas within the building will continue to operate actively. Therefore, depending on the activity to be carried out, it is possible that the project activity schedule and the daily activities of the building workers may overlap.

This ESMP has been prepared as a guideline document for SREEPB Project in order to eliminate environmental impacts such as waste generation (hazardous, non-hazardous), air and water pollution, public health and safety and occupational health and safety (OHS) impacts and risks, taking into account the World Bank (WB) and national relevant legislation requirements, and to reduce them to an acceptable level when it is not possible to eliminate them completely.

The project will be implemented by the Ministry of Environment, Urbanization and Climate Change (MoEUCC) General Directorate of Construction Affairs (GDCA) with WB financing. GDCA will be responsible for the control, management and coordination of the overall implementation of the Project. The consultant company will be responsible for the preparation of the ESMP and control of its implementation, and the contractor company will be responsible for the implementation of the ESMP in the field.

1.1.2. Project Information

The satellite image of the Square Block located within the Bogazici University North Campus within the scope of the project and detailed information are given in Figure 1 and Table 1, respectively.

Figure 1: Bogazici University North Campus Satellite Image

Figure 2: Square Block Satellite Image

Source; BOGAZİÇİ KUZEY CAMPUS INFORMATION SYSTEM (a5medya.com)

Table 1: Building General Information

CAMPUS NAME	Bogazici University North Campus
BUILDING NAME ***(involved in the project)***	Square Block - (Net Area; 18.821 m^2 , Gross Area; 21.175 m^2)
CITY	Istanbul
PROVINCE	Sarıyer
PURPOSE OF USE	Education and Training
NUMBER OF USERS	Student: ~2,000 people/day
	Academician ~192 people/day
	Staff: 61 ~ person/day
STRUCTURE INFORMATION	
CONSTRUCTION AREA	~21.175 m^2
PLANNED PRODUCTIONS IN ALL BUILDINGS INCLUDED IN THE PROJECT	
STRUCTURAL REINFORCEMENT	• Retrofitting of existing structural system (seismic isolator) • Additional structural system fabrications • Floor, ceiling, wall, door-window renovations due to structural reinforcement activities • Structural retrofitting due to fire (fire escapes and suspended roof renovation)

ENERGY EFFICIENCY	• Facade and roof thermal insulation • Door changes • Circulation system motor/pump changes • Non-insulated installation elements, thermal insulation of heat exchangers • Thermostatic valve installation in radiator combs • Central boiler replacements • Lighting element replacements (one-to-one replacements will be carried out, there is no electrical installation intervention (lineman, column line replacement, etc.)) • Self-consumption solar power plant (rooftop) (to be integrated into the existing supply line) • Energy monitoring and automation system installation (to be integrated into the existing electricity system) • Mechanical automation and energy meter monitoring system
DURATION AND SEASON OF ACTIVITIES	
All works to be carried out within the scope of the Project will take place between the last quarter of 2024 and the second quarter of 2025. The contractor is obligated to complete the work on the buildings within the planned timeframe as specified in the Job Description. Additionally, the Contractor will inform all stakeholders clearly and in advance about the construction activities' schedule before commencing any construction work.	
NUMBER OF WORKERS EXPECTED TO WORK	
It is estimated that the number of employees in the building will average 80 personnel per day	

1.1.3. Campus & Square Block Locations

The satellite image showing the campus boundaries is presented in Figure 3.

Figure 3: Bogazici University North Campus Boundaries Satellite Image

Figure 4: Bogazici University North Campus Satellite Image

The Square Block within the scope of the sub-project subject to this ESMP is located in BU North Campus (No: 2/2).

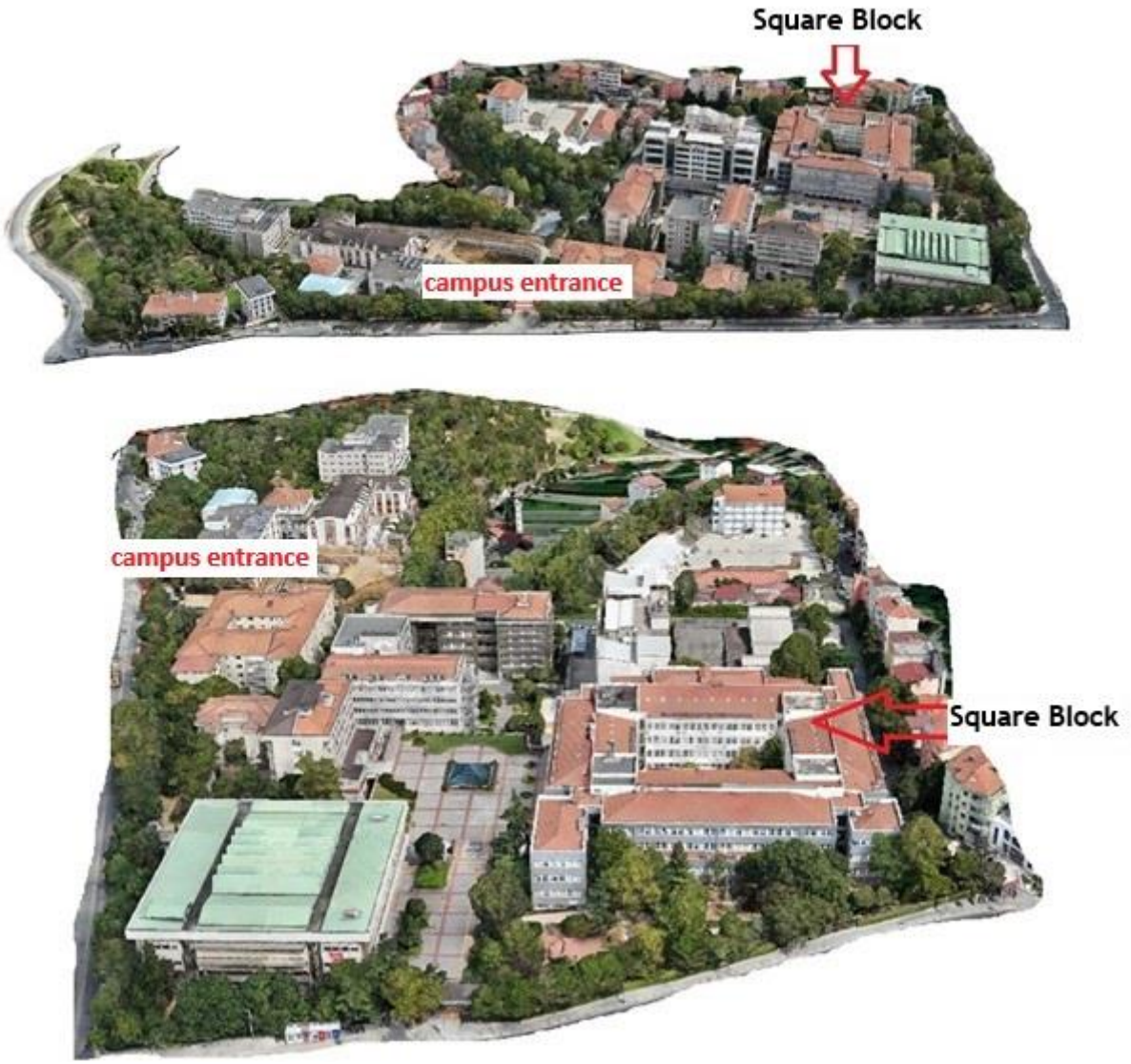


Figure 5: Bogazici University North Campus and Square Block Building Satellite Images

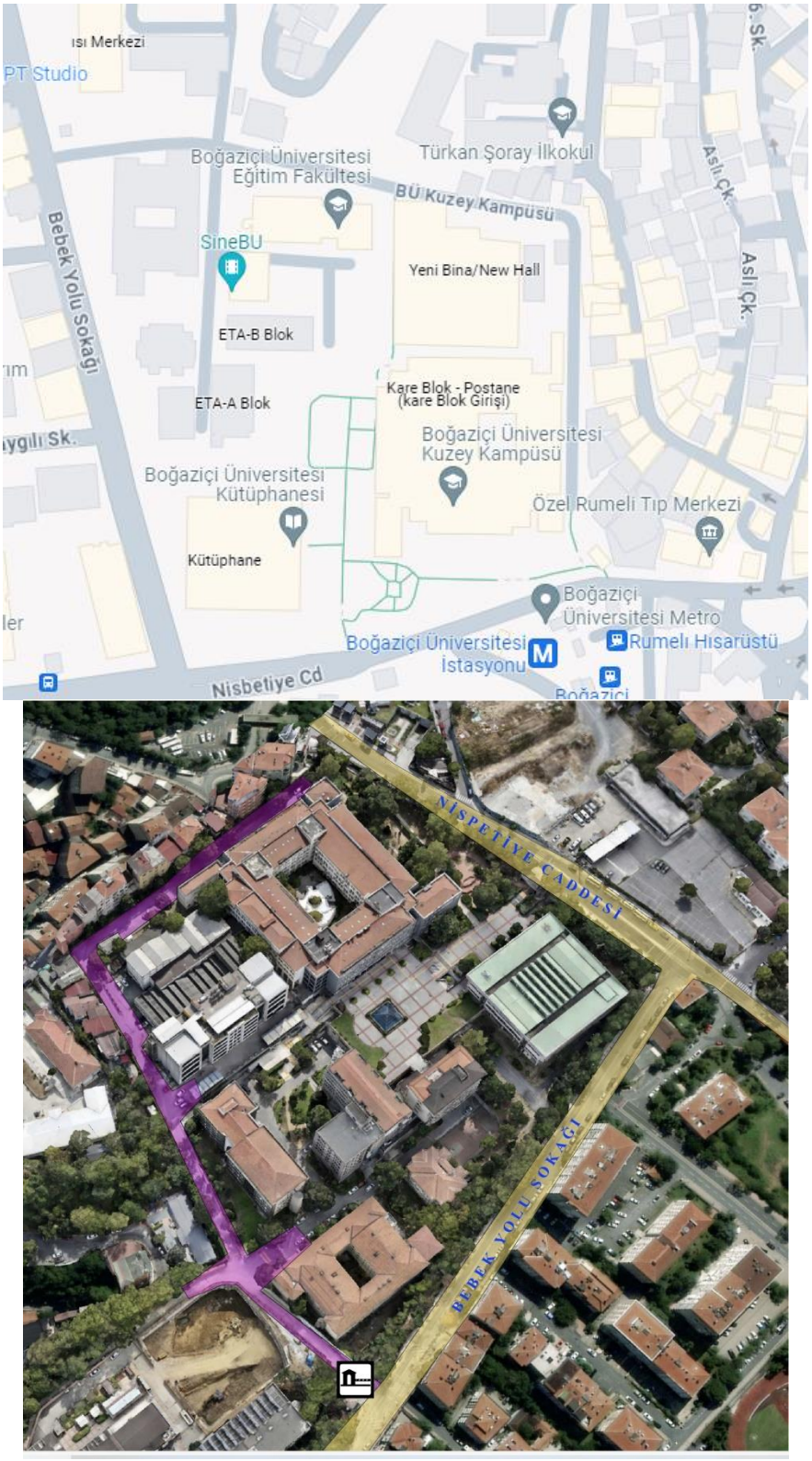


Figure 6: Square Block Google Maps Image and Transportation Route

Satellite image showing the Square Block and surrounding buildings is given in Figure 7. There are also two businesses inside the project building, Ruby Coffee and Book Store.

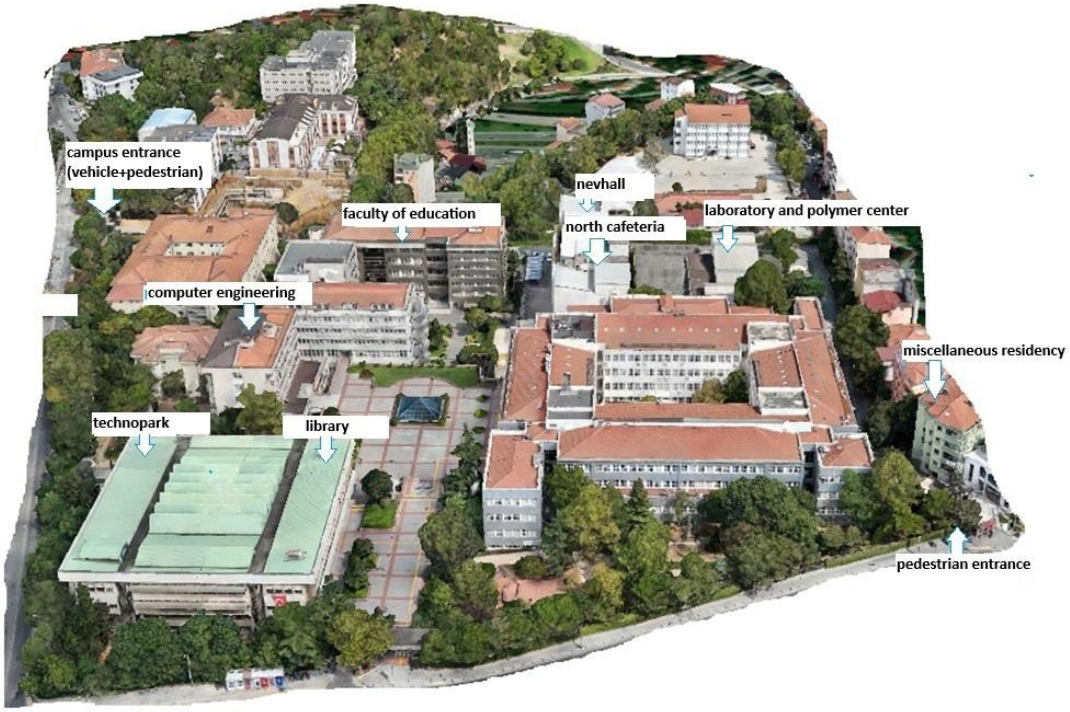


Figure 7: Satellite Image of Square Block and Surrounding Buildings

The major impact area of the project has been determined as a distance approximately 100 m from the center of the Square Block. Within the major impact area, there are North Cafeteria (20 m), Nevhall (50 m), Laboratory-Polymer Center (10 m) and library (30 m) buildings within the North Campus. In addition, there are 9 various residences (at the nearest distance; 12 m), Nafi Baba Mosque (30 m) and Private Rumeli Medical Center (65 m).

Figure 8: Satellite Image Showing Square Block Major Influence Area

Photo 1: Project Building Users (Ruby Coffee and Rumeli Kitap Evi-Book Store)

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

2.1. National Regulation

The ESMP has been prepared primarily in accordance with the legislation of the Republic of Turkey. The basic framework of Turkey's environmental legislation is the Environmental Law No. 2872, published in the Official Gazette dated 11.07.1983 and numbered 18132 and lastly revised in the Official Gazette dated 29.12.2023 and numbered 32414 regarding administrative fines, and supported by regulations. Below are the regulations that are/will be primarily 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 dated 2 April 2015 and numbered 29314.
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 was published in the Official Gazette dated 31 December 2004 and numbered 25687, and was last amended in the Official Gazette numbered 32046 dated 17 December 2022.
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.

Activities will be carried out in accordance with the Labor Law No. 4857 published in the Official Gazette dated June 10, 2003 and numbered 25134 and the Occupational Health and Safety Law No. 6331 dated June 30, 2012 and the related regulations and related legislation on

Occupational Health and Safety issues, whose material impacts are considered within the scope of the Project. The regulations to be utilized primarily are stated below.

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. Manual Handling Regulation was published in the Official Gazette No. 28717 dated 24 July 2013.
3. Regulation on Occupational Health and Safety in Temporary or Fixed-Term Works was published in the Official Gazette No. 28744 dated 23 August 2013.
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. Health and Safety Signs Regulation 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. Dust Fighting 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. Occupational Health and Safety Services Regulation 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 Attachments 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.

The Social Security and General Health Insurance Law No. 5510 dated 16.06.2006 will be implemented to determine the basic insurance rights of all workers during their employment.

Significant social and environmental impacts from the Project are likely to affect sensitive receptors[1] located near the Project site. In this context, careful management of ESMPs and OHS activities will be sufficient to mitigate environmental and social impacts.

2.2. International Conventions

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

[1] **1.1.3** Under the heading **Campus & Location of Buildings**, other buildings around the square block are indicated

2.3. World Bank Environmental and Social Framework (ESF) and Standards

Compliance with national legislation as well as the requirements of the World Bank Environmental and Social Framework[2] (ESF) and relevant Environmental, Health and Safety (EHS) Guidelines[3] will be ensured at all stages of the Project.

The Environmental and Social Standards (ESS), which are summarized in Annex II, are one of the components of the World Bank Environmental and Social Framework and set out the requirements for the project proponent in relation to the identification and assessment of environmental and social risks and impacts associated with World Bank supported projects. Applicability of the World Bank Environmental and Social Standards to SREEPB Project Table 2summarized in

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

Environmental and Social Standard	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, Land Use Restrictions and Involuntary Resettlement	No.[4]
ESS6: Conservation of Biodiversity and Sustainable Management of Living Natural Resources	No.[5]
ESS7: Indigenous Peoples/Sub-Saharan Africa Historically Under-Served Traditional Local Communities	No.[6]
ESS8: Cultural Heritage	Yes
ESS9: Financial Intermediaries	No.[7]
ESS10: Stakeholder Engagement and Disclosure	Yes

[2] https://www.worldbank.org/en/projects-operations/environmental-and-social-framework

[3] https://www.ifc.org/en/insights-reports/2000/general-environmental-health-and-safety-guidelines#:~:text=The%20Environmental%2C%20Health%2C%20and%20Safety

[4] No activities to be carried out under this project will result in land acquisition, land use restrictions and/or involuntary resettlement and all works will be carried out within the existing buildings.

[5] 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.

[6] There are no indigenous groups in Turkey that meet the definition given in ESS7.

[7] As there is no financial intermediary involved in this project, ESS9 will not be applied in this project.

3. Activities to be Conducted within the Scope of the Project

Summary technical information on the structural retrofitting and energy efficiency works to be carried out at Bogazici University North Campus located in Sarıyer/Istanbul is given below in Table 3. This ESMP will be available to all stakeholders throughout the life of the project, at construction sites and on the project website (www.kamuguclendirme.csb.gov.tr) and the official website of Bogazici University (www. bogazici.edu.tr). In addition, in order for stakeholders to have sufficient information about the project and review the document before the information meeting, it should be published on the project and Bogazici University's website (https://bogazici.edu.tr/) at least 10 days before the meeting. The Contractor will employ a full-time environmental specialist, a social specialist and an occupational health and safety (OHS) specialist; the Construction Supervision Consultant will employ an environmental specialist, a social specialist and an OHS specialist. The Consultant, Contractor and the Ministry's Project Implementation Unit will be responsible for recording and responding to stakeholder questions and comments on environmental, social and OHS issues.

Table 3: Summary Information on the Activities to be Conducted

FIELD WORK	
DEFINITION OF GEOGRAPHICAL, PHYSICAL, BIOLOGICAL, GEOLOGICAL, HYDROGRAPHIC AND SOCIO-ECONOMIC CONTEXT	 **Figure 9: Square Block West View**

Figure 10: Square Block East View

Around the exterior façade of the Square Block, ribs will be formed in order to provide building oscillation. Kuranglezes are support structures and movement gaps designed around the building in order to ensure the movement of the building with seismic isolators in case of an earthquake. It will be organized in such a way that no elements can enter into the movement cavity. These are structures with metal gratings or glass sections on top, which are built to allow natural light and air to the underground floors of the building. The ribs that will provide flexibility of movement around the building will be obtained by excavation works to be carried out in the basement and ground floor, and the plan visuals showing the areas to be excavated approximately 3 meters deep are given below. The excavation waste to be generated as a result of excavation is planned to be used primarily within the construction area, if needed. In case there is no need, it will be taken to the excavation dumping site of the Municipality and an official letter from the Municipality regarding the acceptance of the waste to the site will be obtained and submitted to the Administration. In addition, impermeable materials will be used at the base of the dryanglez to collect rainwater and transfer it to the drainage system.

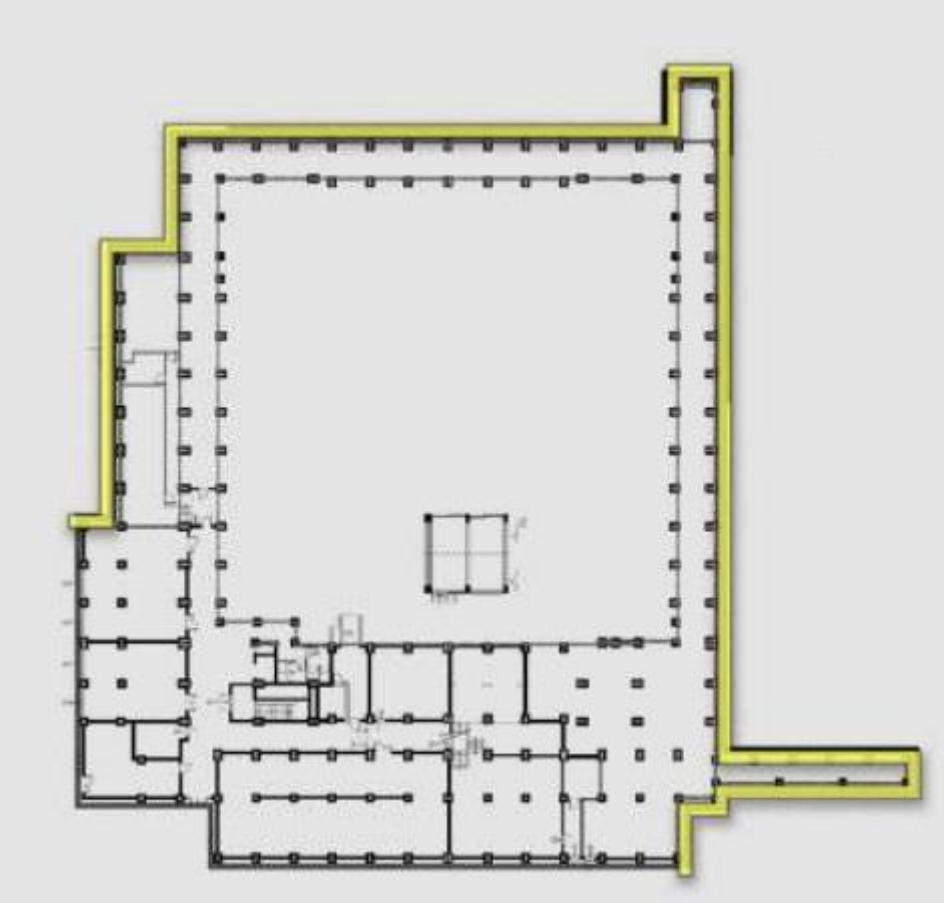


Figure 11: Basement Floor Plan Kuranglez Areas

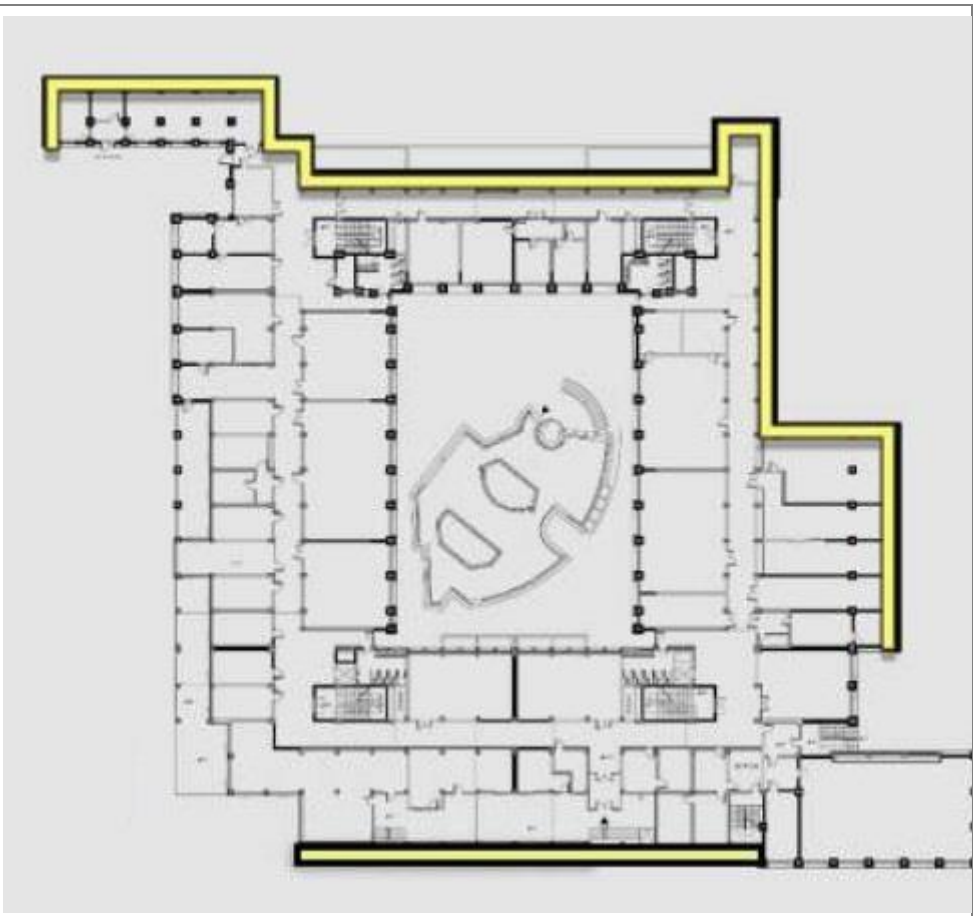


Figure 12: Ground Floor Plan Kuranglez Areas

In case there are trees in the area where excavation work will be carried out in order to ensure the release of the building, these trees will be moved. The surroundings of the buildings in question have been evaluated in this context and risky areas have been marked. During the realization of the Project activities, the soil around the buildings is expected to be affected by the construction activities. Necessary measures will be taken to prevent contamination of soil with hazardous chemicals during the works to be carried out in this area. Measures to be taken for the management of potential environmental and social impacts and risks of the Project are presented in detail in Section 5.

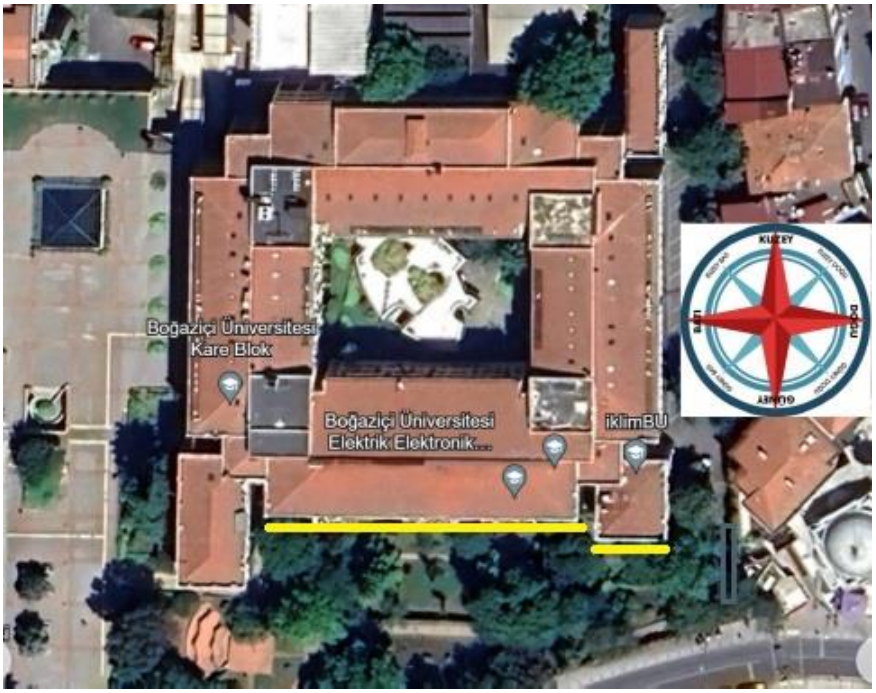


Figure 13: Square Block South Facade Perimeter Risky Vegetation

No problems are foreseen in transportation to the project area. There are ramps suitable for disabled users at the main entrance gate of the Square Block. There will be no kuranglez in the ramp area. During the realization of the project activities (scaffolding installation, painting, exterior cladding, etc.), scaffolding installation within the scope of construction activities will be designed in a way that does not prevent the usability of ramps.

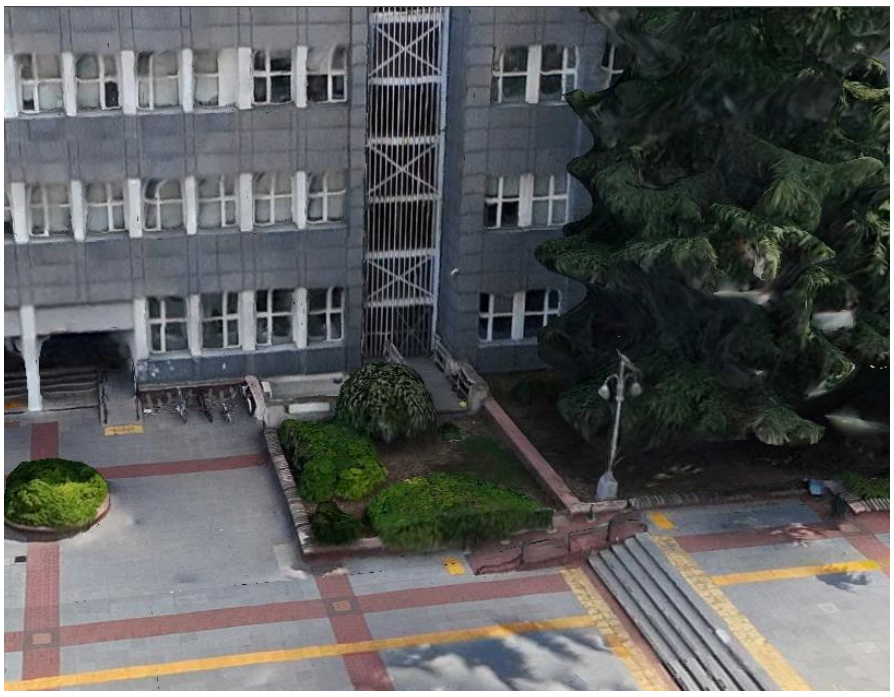


Figure 14: Ramps for Disabled Users at the Main Entrance Gate of the Square Block

	All infrastructure facilities such as electricity, water, sewerage, natural gas, internet, etc. required for the works can be accessed.
LOCATIONS AND DISTANCES TO THE NEAREST SENSITIVE RECEPTORS SUCH AS HOSPITALS, HEALTH UNITS, PUBLIC BUILDINGS, HOMES	The Project site is located within the North Campus of Bogazici University. Other buildings located outside the campus are not expected to be directly affected by the construction processes. • Activity area perimeter Figure 7 and Figure 8is shown in. Within the Major impact area, there are North Cafeteria (20 m), Nevhall (50 m), Laboratory-Polymer Center (10 m) and library (30 m) buildings. There are also 9 various residences (closest distance; 12 m), Nafi Baba Mosque (30 m) and Private Rumeli Medical Center (65 m). In addition to BU, the Project building is used by two businesses (Ruby Coffee and Book Store). The two businesses in the Project building are likely to be affected by the construction process. There is no closure of the businesses due to the Project activities and no loss of income for these businesses. The building will be in use during the retrofitting and upgrading works. • Possible problems that may be encountered in waste management such as noise, dust, vibration, spreading of excavation waste outside the construction site may adversely affect those working/living in the buildings in question. Detailed information and measures to be taken are provided in Section 5. In addition, the university management and building users will be informed at least 7 days before each stage of the construction process. The construction schedule will be kept on site, in a place visible to stakeholders, and will be continuously updated throughout the project. • The measured distances of the buildings outside the North Campus to the buildings within the scope of the project are given below. ▪ Nafi Baba Mosque (30 m/east) ▪ Private Rumeli Medical Center (65 m/east) ▪ 9 Miscellaneous Dwellings (closest distance; 12 m/east) The residences located in close proximity to the Project site are considered as sensitive receptors and the measures to be taken to protect these sensitive receptors from potential environmental and social impacts/risks within the scope of the Project are presented in Section 5. There is a Medical Center 65 m away from the Project site, a full-fledged İstinye State Hospital approximately 3 km away and a full-fledged Beşiktaş Sait Çiftçi State Hospital approximately 4 km away. Considering the traffic situation, transportation by car takes approximately 5-10 minutes. It takes approximately 25-30 minutes to reach the project site from Istinye State Hospital and approximately 30-35 minutes to reach the project site from Beşiktaş Sait Çiftçi State Hospital. This information will be taken into consideration during the preparation of OHS emergency action plans.
	The satellite image of Bogazici University North Campus and the entrance gate of the campus are given under the heading "1.1.3 Campus & Building Locations". When the satellite image in question is evaluated, it is not foreseen that there will be a problem in the transportation of the materials needed for construction activities. The Traffic Action Plan is included in Annex 6 and the Occupational Health and Safety Plan. A Community Safety and Traffic Management Plan will also be prepared by the contractor prior to commencement of works.

TRAFFIC ACTION PLAN	 **Figure 15: Traffic Action Plan**
INFRASTRUCTURE USED BY THE PROJECT SUCH AS SEWERAGE SYSTEM, ELECTRICITY, WATER NETWORK, ETC.	With the permission of the project beneficiary, the existing sewerage, electricity and water networks in the area will be used during the construction works. Domestic wastes will be disposed of by using municipal services, while temporary storage areas will be created for other wastes with the permission of the beneficiary and disposal will be provided by licensed companies. In the event that any infrastructure service procurement is required for the project (overflow due to blockage in sewerage lines (Vidanjör service procurement), long-term power outage (mobile generator), long-term water outage (dust control with water tanker, etc.), existing infrastructure facilities will be evaluated and carried out in accordance with the relevant regulations.
NATIONAL LEGISLATION AND PERMITS APPLICABLE TO THE PROJECT ACTIVITY (E.G. SPP INSTALLATION ETC.)	Existing Building Permits will be used for Solar Power Plant (SPP) facility unlicensed electricity generation application. The documents to be obtained for Unlicensed Electricity Generation are not limited to the following; • Documents required for Authorized Electricity Distribution Company-Call Letter, ▪ Unlicensed production connection application form, ▪ Fixed non-roaming subscriber number, ▪ A receipt showing that the application fee has been deposited into the relevant network operator's account, ▪ Single Line Diagram showing the technical specifications of the facility to be installed, ▪ SPP Technical Evaluation Form prepared by the General Directorate of Renewable Energy, staff program ▪ Approved coordinated application sketch, ▪ Certificate of occupancy for roof type applications, • SPP Static Projects (Roof-top SPP) Approval • "Connection Opinion" and "Call Letter for Connection Agreement" letters to be received from the relevant distribution company • System Basic Information Form • Technical projects and calculations • The online application to the authorized energy distribution company for the installation of photovoltaic panels within the scope of the District Municipality-SPP Conformity Letter (according to the Zoning Regulation Legislation) is in the process of being initiated by Bogazici University (BU).

STAKEHOLDER ENGAGEMENT PROCESS	
STAKEHOLDER ENGAGEMENT PROCESS	Before the implementation of the prepared and approved projects, relevant experts provide information about the technical, social and environmental details of the project, answer all questions of the participants about the project and obtain their opinions, in short; A stakeholder participation meeting was held on 19.04.2024 in order to convey the project to the stakeholders. Meeting; It was carried out with the participation of the administration, beneficiary institution management and technical units, PIU experts, building users and consultants. A total of 48 people (17 women, 31 men) attended the meeting, 20 people (5 women, 15 men) face to face and 28 people (12 women, 16 men) online. Participants include 3 Social Experts, 5 Environmental Experts, 1 Job Health Security Expert, 1 Energy Expert, and the participant schedule and online participant list are included in Annex-6. Before the information meeting, this ESMP will be published on both the project (https://kamuguclatma.csb.gov.tr/) and Boğaziçi University website (https://bogazici.edu.tr/) for at least 10 days and made available to stakeholders. presented. The ESMP will be accessible to all stakeholders both on the relevant websites and on construction sites throughout the life of the project. In addition, a printed copy of this ESMP was made available to stakeholders in Square Block for at least 10 days. Following the completion of the 10-day suspension period of the ESMP, a Stakeholder Information Meeting was held. Stakeholder participation is an inclusive process that will be carried out throughout the life of the project, and information about the process and details about the grievance mechanism established specifically for the project are presented in Chapter 4.
ISSUES AND CONCERNS RAISED BY BUILDING USERS	Whether students and other building users have concerns regarding these studies, the opinions/suggestions and concerns of the stakeholders expressed during the stakeholder information meeting, recorded in the meeting minutes, are included in Annex-6.
INSTITUTIONAL CAPACITY BUILDING	
EDUCATION	Within the scope of the Project, trainings will be provided by the Consultant to the Contractor's staff. As a result of the trainings, the institutional capacity of the Contractor is expected to improve. The expected and actual performance of the Contractor will be monitored by the Consultant. These trainings are listed below. • Environmental and Social Impacts • Waste Management • Response to Environmental Emergencies • Energy Efficiency • Stakeholder Engagement/Information Activities • Grievance Mechanism (GRM) • Gender Equality / Gender Based Violence/Sexual Exploitation/Sexual Assault/Sexual Harassment • Code of Conduct • Protection of Historical Heritage • OHS Plan Implementation and Monitoring Training • Tagout and Lockout Training • Work Permit System Training

4. Stakeholder Engagement and Grievance Mechanisms (GM)

A stakeholder can be defined as any person, organization or group that has an interest/stake in the project and its impacts. The purpose of stakeholder identification is to identify and prioritize, for consultation purposes, stakeholders who may be directly or indirectly, negatively or positively affected or not directly affected by the project, but who may have an interest in the project. All stakeholder groups that have an interest in the outcome of the Project and that may be affected or influenced by the Project are identified in the Project's Stakeholder Engagement Framework.

SREEPB Project Stakeholder Engagement Framework (SEF) is a framework that aims to build strong, constructive and responsive relationships by identifying the parties that may be affected by the project, which is necessary for the proper management of the environmental and social impacts of the project. The purpose of stakeholder engagement is to ensure continuous communication with stakeholders to inform them about project performance, project development and investment plans, and activities to be undertaken during construction and operation of the project, including their implementation. Stakeholder engagement is an ongoing activity throughout the planning, construction, operation and closure phases.

The purpose of stakeholder engagement is to ensure continuous communication with stakeholders to inform and solicit their views on project performance, project development and investment plans, and activities to be undertaken during the construction and operation phases of the project, including their implementation. Stakeholder engagement is an ongoing activity throughout the planning, construction, operation and closure phases.

Stakeholder engagement is an inclusive process to be carried out throughout the life of the project 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 Participation 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. Prior to the implementation of the renovation project in Square Block, where renovation activities are planned within the scope of the SREEPB Project, a stakeholder participation meeting will be held in order to provide information about the technical, social and environmental details of the project by relevant experts, to answer all questions of the participants about the project and to receive their opinions. The meeting was held after the approval and publication of the draft version of this ESMP , with the participation of the consultant company, beneficiary institution management and technical units, building users and PIU . Meeting; It was carried out with the participation of the administration, beneficiary institution management and technical units, PIU experts, building users and consultants. A total of 48 people (17 women, 31 men) attended the meeting, 20 people (5 women, 15 men) in person and 28 people (12 women, 16 men) online. Details regarding the Stakeholder participation meeting dated 19.04.2024 are presented in Annex-6.

All stakeholders; This ESMP has been kept suspended in the building where work is being carried out for at least ten (10) days in order to have information about how the project process will be carried out in the field and to receive objections and suggestions, if any.

Grievance 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 institutionally identified a number of alternative methods for collecting complaints and suggestions.

The PIU of the Ministry of Environment, Urbanization and Climate Change has developed a transparent and comprehensive GM specifically for SREEPB Project before the Project implementation starts in order to receive, evaluate and resolve grievances/opinions/suggestions that may arise during the activities to be carried out in public buildings within the scope of SREEPB Project. The GM will help all relevant stakeholders to convey their complaints/opinions/suggestions about the activities to be carried out to the relevant persons and institutions and will strengthen the participation of stakeholders in the project. This mechanism also enables all employees (PIU, Consultant, Contractor) working within the scope of the project to submit their complaints/suggestions/suggestions to the Ministry and the World Bank anonymously or with clear identity. The duties and responsibilities of the contractor, consultant and PIU are detailed in the Project's Stakeholder Engagement Framework[8] . In addition, all parties involved in the project are obliged to implement the Project's Environmental Social Management Plan, Stakeholder Engagement Framework and Labor Management Procedures.

Within the SREEPB Project, grievances will be addressed at more than one level;

a) Contractor Level: Each contractor appointed to carry out the construction works shall be responsible for receiving, recording and, where possible, resolving grievances/concerns/opinions/advice raised in writing and/or verbally by any stakeholder (public building management, building users, visitors, local communities or beneficiaries, project staff, etc.) in accordance with the Grievance Mechanism Procedure. The Contractor shall guarantee to all personnel working on the Project that they may use the Grievance Mechanism (GM) and that any grievances raised by the personnel shall not constitute an obstacle to the renewal of their employment contract in the future.

Under the heading "Grievance Mechanism for Employees" of SREEPB Project Workforce Management Procedures, all steps regarding the submission of employee complaints/opinions/suggestions are explained in detail. All employees will be able to use this mechanism with their clear identity or anonymously.

[8] https://webdosya.csb.gov.tr/db/kamuguclendirme/menu/sreepb-p175894_paydas-katilim-cercevesi- may-final_20210521122305.pdf

If the Contractor cannot resolve grievances/concerns/opinions/suggestions related to construction works carried out within the scope of the SREEPB Project, they are obliged to forward these applications to the relevant person/organizations in accordance with the Grievance Mechanism Procedure of the project.

Contractors shall also report weekly to the Consultant on the records they keep, including resolved and unresolved complaints/concerns/opinions/recommendations. The Contractor is obliged to resolve complaints within 15 calendar days at the latest.

b) Consultant Level: Grievances/concerns/opinions/recommendations that cannot be addressed at the contractor level will be addressed by the social expert of the Consulting Firm, who is the Construction Supervisor. The Project Manager and the Social Expert will issue a status report in accordance with the Grievance Mechanism Procedure, reminding the contractor of its responsibilities and ensuring that the necessary measures are taken to resolve the issue and ensure that the necessary corrective actions are implemented.

The Consultant shall assure all Project staff that they can use the CC and that any grievances from staff will not be an obstacle to renewal of their employment contract in the future. If the Project Manager is unable to resolve the grievances/concerns/suggestions/recommendations, he/she is obliged to refer them to the Ministry of Environment, Urbanization and Climate Change. The consultant company is obliged to resolve the grievances within 15 calendar days at the latest.

The Consultant will submit a weekly report to the Ministry of Environment, Urbanization and Climate Change on both verbal and/or written complaints/concerns/opinions/recommendations received directly and those submitted by the contractor.

c) MoEUCC Provincial Directorates Level: Complaints/concerns/opinions/suggestions received in relation to the activities carried out under SREEPB Project will be under the responsibility of the Provincial Directorate of Environment, Urbanization and Climate Change to the extent possible. The Directorates will also immediately forward the issues (resolved or pending) received in writing and/or verbally to the Administration.

d) MoEUCC Project Implementation Unit Level (PIU): Within the scope of SREEPB Project, MoEUCC is responsible for collecting, recording and resolving all grievances/concerns/opinions/advice raised by stakeholders through the above mentioned levels. The MoEUCC is responsible for resolving the collected complaint/concern/opinion/suggestion within 15 calendar days and informing the complainant/concern/opinion/suggestion about the outcome. However, this period may be extended to 30 calendar days for complaints requiring detailed investigation.

For complaints on gender-based violence and sexual exploitation and harassment, it is recommended to use the web-based complaints system in Annex III, which allows for anonymous complaints. To ensure confidentiality, an authorized staff member will have access to the web-based complaint system.

The Ministry of Environment, Urbanization and Climate Change has institutionally identified a number of alternative methods for collecting complaints and suggestions. The channels for submitting complaints and suggestions to the Administration are given below.

Table 4: CC Communication Channels

Call Center	ALO 181
Telephone	: 0312 586 4858
E-mail	: yigmkadev@csb.gov.tr
Complaint	: https://kadevoneri.csb.gov.tr/oneri.jsp | Suggestion and complaint boxes placed in buildings

In addition to the different levels of Grievance Mechanisms identified above, during the life of the Project, stakeholders will be able to use the national Grievance Mechanism channels detailed below.

The channels for submitting complaints and suggestions to the Administration, particularly the national grievance mechanisms such as the Communication Center of the Presidency of the Republic of Turkey (CIMER) and the Foreigners Communication Center (YİMER), are given below:

T.R. Presidential Communication Center (CIMER) Communication Channel: CIMER provides a centralized grievance system for Turkish citizens, legal entities and foreigners. CIMER will be available to Project stakeholders as an alternative and well-known channel for submitting Project-related complaints and feedback directly to government authorities.

Table 5: CIMER Communication Channels

Website	**:**	www.cimer.gov.tr
Call Center	**:**	150
Telephone Number	**:**	+90 312 525 55 55
Fax Number	**:**	+90 0312 473 64 94
Mail Address	**:**	Republic of Turkey Presidential Complex 06560 Beştepe-Ankara

Foreigners Communication Center (YİMER) Communication Channel: YİMER will be offered to foreign national stakeholders of the Project as an alternative and well-known channel to communicate their grievances and feedback on the Project directly to government authorities.

Table 6: YIMER Communication Channels

Website	**:**	www.yimer.gov.tr
Call Center	**:**	157
Telephone Number	**:**	+90 312 5157 11 22
Fax Number	**:**	+90 0312 920 06 09
Mail Address	**:**	Çamlıca Mahallesi 122. Sokak No: 4 Yenimahalle- Ankara

These communication channels will be promoted through wall posters and project brochures in all buildings. In addition, all employees working on the project will be responsible for informing the stakeholders around them about the suggestion and grievance mechanisms. All employees will be informed about this prior to the work. Details on this issue are explained in the Stakeholder Engagement Framework (SEF)[9] .

The Construction Contractor will be responsible for receiving, recording and resolving grievances/comments/suggestions during the renovation of public buildings. Each contractor appointed to carry out construction works shall define a system to receive, record and resolve grievances/comments/suggestions received by the public building management and employees, visitors and beneficiaries regarding the construction works. The contractor shall record the grievances/comments/suggestions through the Grievance and Suggestion Form and Grievance Closure Form provided in Annex V and Annex VI. Verbal complaints/opinions/suggestions will be recorded by the Contractor's responsible personnel by filling out the Complaint and Suggestion Form. The Contractor is obliged to send the recorded complaints to the Project Manager at the beginning of each week. The Project Manager is obliged to notify the complaints/suggestions/requests to the MoEUCC on a weekly basis.

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

Project-affected stakeholders can also submit their grievances to the WB Independent Review Panel. This panel determines whether the complainants or communities have suffered or may suffer harm as a result of violations of one or more of the WB's performance criteria. The Panel may communicate its concerns about complaints received directly to the WB. At this stage, the WB has the opportunity to respond to the complaints.

Complainants may submit their complaints to the Bank's independent Inspection Panel by using the following means of communication.

Table 7: World Bank Communication Channels

Website	**:**	https://www.inspectionpanel.org/how-to-file-complaint
Telephone Number	**:**	+1 202 458 5200
Email Address	**:**	ipanel@worldbank.org
Mail Address	**:**	Control Panel, Mail Stop MC10-1007, 1818 H Street, NW, Washington, DC 20433, USA

[9] https://webdosya.csb.gov.tr/db/kamuguclendirme/menu/sreepb-p175894_paydas-katilim-cercevesi- may-final_20210521122305.pdf

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

The list of environmental and social impacts and measures to be taken are tabulated below.

Table 8: List of Environmental and Social Impacts and Precautions to be Taken

APPLICATION CONSTRUCTION PHASE	RISK & IMPACTS	PRECAUTIONS	RESPONSIBLE
Renovation and retrofitting works to improve earthquake resistance and energy efficiency in public buildings	**a) OHS** Potential adverse health and safety impacts for workers, local population, employees and citizens due to - Working at height, - Working with hazardous substances, - Working with electrical appliances, adverse injuries that workers may suffer as a result of such causes; -Failure to comply with national and defined international occupational health and safety requirements at the workplace;	• Local construction and environmental authorities and communities will be informed before the start of activities. • Citizens will be informed through stakeholder engagement, media and/or notifications in public places. • All legally required permits for construction and/or improvement will be obtained. • Regular field supervision will be carried out by the Project Implementation Unit (PIU) and the Consultant to ensure and monitor that all construction activities to be implemented are carried out in accordance with the requirements of the regulations on fire protection of buildings and World Bank standards. • Detailed information and analysis on occupational health and safety is included in the Occupational Health and Safety Plan prepared by the Consultant for Bogazici University North Campus (University). Works will be carried out on site in accordance with the measures specified in the OHS Plan. • In the areas where the underground natural gas pipeline passes, the Natural Gas Provider Company is responsible for the necessary works before the start of Phase II (Construction Phase) of the projects. All operations related to the Natural Gas Pipeline will be delivered by **the Service Provider Local Distribution Company in the** manner specified in the projects, with all controls and tests fully ready to create the necessary environment before the Ground Delivery is realized. The Property Owner is required to apply for all transactions related to the natural gas pipeline in accordance with the relevant legislation. For this reason, neither the Consultant Company nor the Contractor shall interfere with the natural gas pipelines. • The Contractor shall immediately notify the MoEUCC in the event of a significant incident. The MoEUCC shall notify the World Bank of any	Project Implementation Unit (PIU) Consultant Contractor

		significant incident (accident, leakage, death, etc.) within 48 hours and send an incident investigation report with a corrective action plan to the World Bank within 30 working days. • Regular site supervision will be carried out by the PIU and the Consultant to ensure and monitor that all construction activities to be implemented are carried out in accordance with national laws and regulations and the requirements of World Bank standards. • Health and safety measures and environmental measures for the reconstruction of the public building will be detailed in the project specific Waste Management Plan and Occupational Health and Safety Management Plan. • Square Building Occupational Health and Safety (OHS) Plan has been prepared by the Consultant. All works on site shall be carried out taking into account the precautions in this plan. The Contractor shall also prepare its own OHS Plan based on the OHS Plan prepared by the Consultant. • Before the start of construction works, a Risk Assessment will be carried out for all works to be carried out. Relevant procedures and plans: Health and Safety Plans, which will include risk assessment, safety procedures, training, monitoring, incident investigation and reporting, Emergency Plans (Health and Safety Plans will be prepared by the audit consultants and developed by the contractors by adding site specific risk assessments, procedures, instructions), together with relevant procedures such as the procedure for removal of asbestos containing structures (including requirements and precautions for working with asbestos) presented in Annex 8 of the ESMF[10]. • Appropriate signage on construction sites will inform workers about the basic rules and regulations to be followed. • Employees will be provided with Occupational Health and Safety (OHS) trainings on potential risks related to the work site and the work to be performed, and weekly and monthly site safety meetings will be held. • The Contractor formally agrees that all works will be carried out in a safe and disciplined manner designed to minimize impacts on residents and the environment. • The Contractor shall assign personnel/responsible/experts with relevant certificates and experience responsible for occupational health and safety.	

[10] https://webdosya.csb.gov.tr/db/kamuguclendirme/menu/kadev-p175894_csyc_final100521--mayis_20210510070430.pdf

		• The Contractor shall provide a safe working environment for the workers and provide personal protective equipment (PPE) in accordance with international best practices and Turkish legislation (hard hats at all times and masks where necessary, safety glasses, safety belts and safety boots, etc.) prior to construction activities. • A suitable environment for employees to rest between work will be provided by the contractor company (number of employees, rest hours) in consultation with the building management and with permission. • Employees' eating places will be established in areas determined by the building technical units under the written permission and approval of the university administration. • Changing areas (lockable) for employees will be provided inside the building with the written permission and approval of the university administration. These areas will be determined by the technical staff of the building and the use of areas outside these areas is strictly prohibited. The employees will be informed by the contractor company that the employees should not keep their valuables in these areas and that the building management bears no responsibility for any negativities such as theft etc. that may occur in the said area. The issue in question will be announced with warning signs. • The toilet needs of the employees will be met from the building infrastructures under the written permission and approval of the university management. In case the existing infrastructure cannot be used, WC containers will be arranged by the contractor for the use of the workers, and the containers will contain all materials for hygiene. However; • Employees will be able to use the restrooms allowed/allocated to them in the building. The contractor company will inform its employees about the allowed/allocated restrooms in line with the number of employees. Follow-up and control regarding this restriction will be under the responsibility of the contractor company. • The contractor will warn the employees of the contractor company about the use of these toilets in accordance with the hygiene rules, and if use outside the rules is detected, the cleaning responsibility will belong to the contractor company. • All kinds of materials that employees will need for hygiene will be provided by the contractor company. • The contractor will provide work clothes showing the project name so that employees can be easily distinguished.	

		• It is strictly forbidden for employees to enter into discussions with building technical units and campus users for any reason. In case of individual or activity-related problems, the employee will immediately report the situation to his/her 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 carried out with the knowledge and approval of the building management. • If applicable, approval for night work will be obtained from the building management. All activities will be implemented in line with both the Occupational Health and Safety Law (Official Gazette No. 28339 dated June 30, 2012) and related regulations, as well as the World Bank Group (WBG) Environment, Health and Safety (EHS) Guidelines. • In the event of any epidemic or pandemic/infectious disease, the guidance, guidelines and recommendations to be 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. • Unauthorized third parties will be prevented from entering the construction site. • The names of the personnel to be employed at the construction site shall be submitted to the Consultant in a list together with the necessary training documents, and employees with appropriate training and personal protective equipment shall enter the construction site with their badges. • Persons under 18 years of age 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 washbasin needs will be provided in the areas shown by the technical units in the building where the work will be carried out. This issue will be within the knowledge of the university administrations. Employees who will take part in the project will not leave the allocated areas. • Hygiene materials required for the use of workers will be provided by the contractor. Sewerage infrastructure in the region will be used for wastewater. • Packaged water (pet bottles, glass bottles, etc.) will be provided to workers as drinking water. • Clean domestic water will be supplied through the building's existing installations. Drinking of such water will be prohibited. The Contractor shall	

		provide a healthy and safe working environment for employees, provide, monitor and control the use of 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 (use of hard hats at all times, respiratory protection where necessary, goggles, full body safety harnesses and foot protection, etc.). • PPE and work clothes and employees' own clothes will be kept in separate places and closed changing areas will be created within the building for this purpose. • In case of work accidents with lost days, an accident investigation will be conducted and reported. • Employees who will work at height (facade insulation, roof insulation, etc.) will be given theoretical and practical training on working at height. The opinion that the persons who will work at height can work at height in the health report will be stated by the workplace physician. A work at height plan will be prepared before the work and a work permit will be obtained. Work at height will be carried out under the supervision of a competent person and occupational safety specialist. Fall protection systems and working at height equipment will be selected in accordance with the relevant legislation, and their control, maintenance and repair will be carried out by specially trained personnel. • All work machinery and equipment to be used will have the necessary periodic inspections and / or maintenance, compliance with standards and CE certificates will be checked, relevant records will be kept, otherwise they will not be taken to the work area. Job-specific training will be given to employees in charge of using work equipment. • Maintenance forms of the work equipment to be used in the field will be provided, regular maintenance and repairs will be carried out, and persons responsible for maintenance and repair works will be assigned. • Risk analyses will be updated when there are new equipment and innovations in the execution of work, and information/training about the changes will be updated to all workers. • All lifting vehicles, pressure vessels and boilers that will enter the site will be approved to enter the site (by the consultant) after periodic controls are checked.	

		• All machinery, equipment (including scaffolding) and hand tools that will enter the site will be checked for compliance with TSE standards and CE certificate and entry approval will be given by the consultant. • Planning of procurement, shipment processes and storage areas for materials will be ensured. • The Contractor shall have a First Aider Certified employee for every ten (10) employees working in the same building, and shall have at least one (1) first aider if the number of workers is below 10. Each team 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 field by checking the safety data sheets. • Employees without professional competence certificates will not be employed. • All employees will start working after completing basic OHS trainings and induction trainings. Trainings will be updated when required by the legislation. • Indoor and outdoor renovation areas will be separated by warning/warning bands. Warning signs will be installed in sufficient number to restrict access to these areas. • Visitors will not be allowed to approach the renovation areas. However, if necessary, the technical staff of the building for process follow-up will be able to participate in the said areas under the supervision of authorized employees in order to take the necessary security measures within the framework of their expertise and to use the necessary PPE. Training documents will also be prepared for those who will enter the site under the supervision of authorized employees and these persons will be trained before entering the site. • A construction method and risk assessment will be carried out for each activity to be carried out on site. • A work permit system will be established for hazardous work such as night work, work at height, excavation work, welding work, etc. • A lock and tag system will be established for work on energized lines such as maintenance and repair work, work with dangerous voltage. Special training will be provided to employees regarding this system. • A disciplinary system for OHS nonconformities in the field will be established and all employees will be trained on this issue.	

		• It is essential that construction activities are carried out during the day. However, in case of night work, the entire work area, passageways and hazardous areas shall be well illuminated. • In order to control situations that may occur during the construction activities of the Project and require emergency intervention (fire, earthquake, chemical spillage, etc.), procedures that will also cover public and environmental health will be prepared and shared with all employees. • If there will be electricity, water, natural gas interruptions in the long or short term due to construction activities, necessary safety measures will be taken and building users will be informed a reasonable time before the interruption. • All documents and records required to be prepared and provided within the scope of OHS legislation such as health screenings of employees, employment documents (personal files), training documents, PPE delivery minutes, approved notebooks will be kept in the work area. All these documents will be ready for presentation for Consultant and Ministry audits. • An organizational chart indicating duties, authorities and responsibilities under the title of OHS and including contact information will be created. • In case of changes in public building entrances during construction works, appropriate structures will be created for disabled users. • Public health will be included in the OHS Plan to be prepared, and a person and position to ensure communication with building users and local community will be defined in the plan. • Records will be kept of all activities and events (meetings, audits, inspections, supervision, training, accidents, fires, etc.) during the construction phases. • In accordance with the Workforce Management Procedures of SREEPB Project and in a manner to cover all of the Contractor and its subcontractors, the Contractor and all subcontractors shall establish a written and signed social policy/written undertaking that they will not use forced/forced labor, employ child labor and uninsured workers, and will not engage in any discrimination (age, gender, religion, language, race, etc.), coercion, ill-treatment, bullying, insult and humiliation among their workers in accordance with the Workforce Management Procedures of the Project. This document will also emphasize that all contractor employees should pay attention to these issues in their relations and communication with each other. • The Contractor and all subcontractors shall take measures to prevent the spread of communicable diseases (including STIs and infections such as HIV) and non-communicable diseases arising from the performance of the Works, recognizing that particularly vulnerable and fragile groups of society	

		are at different levels of risk. Implement measures to prevent the spread and mitigate the impact of communicable diseases that may arise from temporary or permanent labor mobility in connection with the Convention.	
	b) OHS Energy Survey Project Specialists and support personnel working in the field did not encounter asbestos-containing materials during the works. There is no use of techniques such as testing, chemical analysis, etc. for asbestos detection. Adverse health impacts to workers and citizens as a result of asbestos fiber and dust emissions during the removal, transportation and final disposal of possible asbestos sheets	• The project site will be illuminated throughout the night. • No waste will be dumped in the surrounding area and this area will be kept clean. Waste must be collected and removed from the construction site. • Any glass broken in the process will be cleaned immediately. • Work areas will be separated from demolition and residential areas of the building using physical barriers. • The entire procedure to be implemented 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 Measures for Work with Asbestos and the requirements of the relevant legislation. • The cleaning schedule of the building will be supplemented to remove the extra dust and dirt generated by the demolition work; • Safety guidelines for the storage, handling and distribution of hazardous materials will be followed in order to minimize the possibility of misuse, leaks and accidental human exposure. • Old windows and doors will be temporarily stored in a secure place designed to prevent access by unauthorized persons. • Vehicles will be regularly maintained to minimize potential serious accidents caused by equipment failure or premature failure. • Both trainings and incidents (fatalities, lost time accidents, spills, major events such as fire) will be recorded. • The Contractor shall immediately notify the MoEUCC in the event of a significant incident. The MoEUCC shall notify the WB within 2 days (48 hours) of any significant incident (such as accidents, spills, fatalities) and submit an incident investigation report with a corrective action plan to the WB within 30 working days.	Consultant Contractor
	c) Security	• The contractor will be responsible for the safety of life and property of the students, all personnel on duty and other individuals within the construction site from the moment the application/construction work starts. • If any damage occurs during the construction works, the Contractor shall compensate the Beneficiary Institution, Employer and/or 3rd Party for all damages incurred.	Contractor

		• The safety rules of the Turkish Ministry of Labor and Social Security and the rules of the Ministry of Health will be taken into consideration during the works. The relevant rules will be used as a general reference during the construction of the works. • The Contractor shall have a competent person on site who will deal exclusively with safety and protection against accidents, and who will take care of all the Contractor's workers and workforce, as well as all components (office, equipment, etc.) on the construction site. This person will be a person with the qualifications required for this job, authorized to give instructions and able to take all necessary measures to prevent accidents and will constitute a team set up by the Contractor specifically for this purpose. • The Contractor shall take all necessary safety measures to prevent damage to the materials and equipment and productions that will not be changed and used in the places where the contractor will manufacture. • A security team consisting of the required number of guards shall cooperate with the City Security Forces and shall carry out its duties in strict compliance with all rules and instructions from them. The Contractor shall provide at least 1 (one) night watchman for the work site. • The scraps of the replaced machinery, equipment and systems will be delivered to the building management without any damage. • The said machinery, equipment and system parts will be transported by the contractor company to the area requested by the building management (within the building and/or on campus). Transportation and delivery operations will be carried out with a delivery report. As of the date of signature of the said report by the parties, the responsibility for the scraps will belong to the building management.	
	d) Waste Management Negative impacts and pollution on the environment (air, soil, water) and adverse health impacts on people can occur due to various waste streams and incomplete and/or improperly implemented waste management plans.	**General Information** • The PIU and the consultant will monitor the implementation of the environmental and social mitigation measures as outlined in the Environmental and Social Management Plan through field inspections. • Regular site supervision will be carried out by the PIU and the Consultant to ensure and monitor that all construction activities to be implemented are carried out in accordance with national laws and regulations and WB ESA requirements.	PIU Consultant

		• The Waste Management Plan will be prepared by the consultant as specified in the Environmental and Social Management Framework[11] Annex 9. • Waste collection, temporary storage, recovery and/or disposal routes and sites for all waste types expected to be generated from renovation, demolition, construction and excavation 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.	Consultant
		• Storage and/or disposal of waste generated at the construction site will be minimized. • During construction activities, all waste types will be collected separately at source and stored in temporary waste storage areas that meet the project and legislative requirements determined within the knowledge of the beneficiary within the site. Temporary waste storage period is limited to 6 months. • The temporary storage area will be determined by the contractor with the permission of the University Administration and notified to the consultant. • By signing a protocol between the contractor company and the beneficiary institution, the contractor can integrate the waste management into the waste management system of the beneficiary institution. However, the contractor will cover the costs arising from its own waste. • The Contractor shall reuse and/or recycle/recover suitable and applicable materials (excluding asbestos) where possible. • Wastes will be recorded for recycling/recovery and/or disposal. Waste Registration Information Form will be prepared and records will be kept regularly. In cases where vehicle tires need to be replaced during construction activities; old tires will be recycled / disposed of through tire distribution and sales businesses and transport licensed vehicles. **<u>Solar Panels:</u>** • Unused and/or end-of-life solar panels will be temporarily stored for a maximum of 6 months in an area determined together with the beneficiary in a way that does not pose OHS and environmental risks.	Contractor

[11] https://webdosya.csb.gov.tr/db/kamuguclendirme/menu/kadev-p175894_csyc_final100521--mayis_20210510070430.pdf

		• After temporary storage, PV panels taken to licensed facilities by licensed vehicles will first be recycled and those that are not recycled will be disposed of in accordance with the relevant legislation. **<u>Construction and Excavation Waste</u>** • In the event that there is embezzled material belonging to the building as a result of activities such as dismantling, demolition, etc., the material will be delivered to the building management and a certificate of delivery will be obtained. • Excavation work will be carried out around the building to ensure building sway in case of earthquake. It is planned that the excavation waste will primarily be used within the construction area as needed. In case there is no need, it will be dumped at the excavation dumping site of Sarıyer Municipality and an official letter stating that the waste will be accepted to the site will be obtained and submitted to the Administration. **<u>Waste Batteries and Batteries</u>** • Waste batteries and accumulators will be delivered to waste battery and accumulator disposal facilities located within the boundaries of the Municipality through authorized transportation companies. **<u>Hazardous Waste</u>** • Hazardous wastes at the construction site will be temporarily (limited to 6 months) stored in the temporary waste storage area. • Hazardous wastes will be stored on impermeable concrete floor in order to prevent leaks that may occur from hazardous wastes from mixing with the soil • Wastes will be stored in robust, leak-proof, secure containers in accordance with internationally recognized standards, the containers will be labeled as hazardous waste and the waste code, quantity, content, properties, protection conditions and storage date of the stored material will be indicated on the containers. • Absorbent pads / sawdust and fire extinguisher tubes will be kept ready for possible accidents.	

		• A temporary waste storage area supervisor will be identified, training will be provided to project staff and supervisors, and drills will be conducted. • Toxic paints, solvents, lead-based chemicals will not be used. • Hazardous waste management will be carried out according to the Waste Management Regulation and the Waste Management Plan. • Hazardous chemicals and wastes likely to be generated at the construction site will be sent to licensed recovery/disposal facilities using MOTAT waste management application through the Integrated Environmental Information System (EÇBS), an online program of the Ministry of Environment, Urbanization and Climate Change. • In case of medium and large scale environmental accidents, the accident will be investigated, root cause analysis will be conducted and reported. • Fluorescent lamps dismantled during renovation/construction works will be sent to a licensed facility. Necessary documents regarding the transportation and disposal of the material will be kept at the construction site and submitted to the MoEUCC and the World Bank upon request. **Non-Hazardous Waste** • Domestic wastes will be separated at source (plastic, glass, paper, etc.) and recyclable ones will be recycled. • Employees will be trained for proper waste segregation. • Non-recyclable wastes will be collected in sealed sanitary bins and sent to landfills through Sarıyer Municipality's solid waste collection system. **Asbestos Waste** • If asbestos is present on the project site, it will be clearly marked as hazardous material. • If asbestos is present at the Project site, it will be properly contained and sealed to minimize its impact. • Where asbestos removal is required, a wetting agent will be used to keep asbestos dust to a minimum prior to removal.	

		• The full procedure to be applied in relation to asbestos is contained in Annex 8 of the Environmental and Social Management Framework[12] . The Contractor shall comply with this content. • If asbestos material is to be stored temporarily, the waste must be kept securely in sealed enclosures and appropriately marked. Security measures will be taken against unauthorized removal from the site. • The removed asbestos will not be reused and will be disposed of according to national regulations and sent to licensed facilities. Necessary documentation regarding the transportation and disposal of the material will be kept at the construction site and submitted to the MoEUCC and the World Bank upon request. • Paints containing toxic components or solvents or lead-based paints shall not be used.	
	e) Pollution Prevention Demolition and construction activities can cause pollution at construction sites.	• Site Specific Pollution Prevention Plans to be prepared by the Contractor will be reviewed by the Consultant and approved by the PIU. • Regular site supervision will be carried out by the Consultant and as needed by the PIU to ensure and monitor that all construction activities to be implemented are carried out in accordance with national laws, regulations and WB ESA requirements.	PIU Consultant Contractor
		• Ambient air pollution related to dust generation is specified in the "g. Air quality/emission" section of this Table. • Measures will be taken in the designated temporary waste storage area to prevent hazardous materials, spillage and tipping. • Semi-used chemical containers shall be capped and kept closed when not in use. • Residual (leftover) concrete in concrete mixers will not be allowed to spill on, around or on access roads to the construction site. Concrete mixer drivers will be trained on the subject. • In case of any leakage of hazardous substances or hazardous waste, leakage prevention methods will be applied to limit the exposure area. • Seepage embankments will be placed at the required points in the construction sites. • For any possible leakage situation, an emergency response team will be identified, trainings will be given to the emergency response team and drills will be conducted.	Contractor

12 https://webdosya.csb.gov.tr/db/kamuguclendirme/menu/kadev-p175894_csyc_final100521--mayis_20210510070430.pdf

		• Training and exercise records will be kept on site.	
	f) Noise Renovation/construction works at the construction site and transportation, movement of transport vehicles will increase noise and vibration levels.	• Regular site supervision will be carried out by the Consultant and as needed by the PIU to ensure that all construction activities to be implemented are carried out and monitored in accordance with national laws and regulations and WB ESA requirements. • Noise during demolition and construction will be limited to the restricted periods agreed in the permit. • During the activities, the engine covers of generators, air compressors and other electrical mechanical devices will be closed and placed as far away as possible from the common areas and residential areas of the students. The use of plastic chocks is mandatory for all such equipment. In this way, excessive noise due to vibration will be prevented. Attention should be paid to these issues in the selection of 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 set noise exposure levels at 70 dB for a 24-hour period and 85 dB for a 1-hour period to prevent hearing impairment. In addition, Table 1.7.1 of the World Bank Environmental, Health and Safety Guidelines stipulates that noise exposure levels should not exceed 55 dB between 07:00-22:00 and 45 dB between 22:00-07:00 for residences/educational institutions and public institutions.[13] This will be taken into consideration during field inspections. • Following the start of construction, noise levels will be measured by accredited laboratories once indoors and once outdoors during the demolition process and necessary measures will be determined as a result of the measurements. In case the measurements exceed the levels permitted in the legislation and World Bank Guidelines, measurements will be made at regular intervals every week. • As a result of the measurements made, noise curtains will be installed to prevent noise impact on nearby settlements, especially residences, if necessary. • Site assessments will be carried out according to the World Health Organization Environmental Noise Guidelines for the European Region.	Contractor

13 https://www.ifc.org/content/dam/ifc/doc/2023/ifc-general-ehs-guidelines.pdf

		• In case the noise level increases during the construction phase, care will be taken not to operate the construction machinery at the same time. • The work schedule for jobs that generate high levels of noise will be planned in coordination with people in nearby buildings. • Necessary communication with the public in the nearest settlement will be ensured in order to determine the impact of noise during construction works and to take necessary measures. • Measures will be taken to minimize the noise level, such as using new model vehicles as much as possible. • Within the scope of the project, unnecessary use of horns and sirens by vehicles transporting machinery, equipment, materials and personnel will be prohibited. Contact information will be placed on the vehicle so that citizens can submit their complaints on the subject.	
	Air Quality / Emissions	• Rubble will be kept in a controlled area and water will be sprayed regularly to reduce dusting. The necessary water will be supplied from the campus site infrastructure, and in case of prolonged water shortages and/or inability to obtain permission from the beneficiary, the necessary water will be provided by tankers. • Following the start of construction, dust measurements will be carried out by accredited laboratories once indoors and once outdoors during the demolition process. The principles for the prevention of air quality problems during demolition activities will be set out in the Construction Methods (to be prepared by the contractors and approved by the PIU). • Dust generated during excavation and cutting operations will be suppressed by continuous water spraying and/or dust curtain enclosures to be installed around the construction site. • The surrounding environment (sidewalks, roads) will be cleared of debris to minimize dust. • Construction materials/waste etc. will not be burned within the construction site. • Construction vehicles will not be idled for long periods of time on the construction site. • In cases where material transportation is required, the trucks will be covered and their maximum speed will be 20 km/h. All vehicles to be used will have exhaust emission permits and the vehicles will be regularly maintained.	Consultant Contractor
	g) Water Quality	• Since the distance of the campus to the sea is approximately 750 m, it is not expected to have a negative impact on surface waters.	Consultant

	Uncontrolled disposal of construction site wastewater	• Vehicles and machinery used at the construction site will be washed in areas where water runoff has no impact on surface waters.	Contractor
	h) Soil Quality Mixing of hazardous substances and wastes into the soil	• Waste management will be implemented in a disciplined manner. • Hazardous wastes/chemicals will be stored in a temporary storage area that meets the sealing conditions. • Prior to the use of chemicals, the OHS specialist and workplace physicians will check the MGBFs and the relevant personnel will be informed. Leakage kits will be kept on site against possible point source pollution (paint spillage, oil spillage, etc.), leakage & spillage training will be given regularly to the working personnel and drills will be carried out.	Consultant Contractor
	i) Required Resources	• Contractors will obtain the necessary permits from the beneficiary to use water from the network for construction activities. In case of problems in obtaining permission, water will be brought to the construction sites by tankers by purchasing from the market. • Concrete will be supplied from local licensed ready-mixed concrete plants. • Permission will be obtained from the beneficiaries for electricity to be used in construction activities. If permission cannot be obtained, electricity will be supplied by generators to be provided by the Contractor. Records of electricity, fuel (for generators) and water consumption for construction activities will be kept at the construction sites.	Contractor
		• Regular field supervision will be carried out by the Consultant and as needed by the PIU to ensure and monitor that all construction activities to be implemented are carried out in accordance with national laws and regulations and the requirements of World Bank standards.	PIU Consultant
	j) Community Health and Safety / Traffic and Pedestrian Safety	• Regular site supervision will be carried out bi-monthly 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 and the requirements of World Bank standards and the Occupational Health and Safety Plan prepared for the Campus. • The 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 developed by the Contractor and the Consultant, taking into account the needs of persons with disabilities.	Consultant Contractor

		• As required by national regulations and the WB ESF, the contractor will ensure that the construction site is properly secured and construction-related traffic is regulated. • Signposts, warning signs, barriers and traffic diversions; the construction site will be clearly visible and the public will be warned of all potential hazards. • Traffic management system and staff training will be provided, especially for access to and heavy traffic near the construction site. Safe crossings and crossings for pedestrians will be provided at intersections with construction traffic. • Working hours will be adjusted according to local traffic patterns, e.g. avoiding large transport activities during peak hours or when animals are being transported. • Active traffic management will be carried out by trained and visible personnel on site if necessary for the safe and comfortable passage of the public. • Construction areas will be surrounded by health and safety signs to prevent potential accidents. • If there will be electricity, water, natural gas interruptions in the long or short term due to construction activities, in this case, the building technical units will be notified in advance and approval will be requested. • Construction areas will be separated by warning/caution bands and security will be ensured. • It will be ensured that all kinds of vehicles that will work during the construction period comply with the specified speed limit. • Traffic signs and warning signs will be placed around and near the Project site. A Traffic Action Plan is included in the Occupational Health and Safety Plan prepared by the Consultant. In addition, the Contractor shall specify the safety measures to be taken in more detail in the Community Safety and Traffic Management Plan to be prepared prior to commencement of work.	

IMPLEMENTATION / OPERATION PHASE	RISK & IMPACTS	PRECAUTIONS	RESPONSIBLE
Operational phase impacts and risks	**a) Waste Management** Possible adverse environmental and health impacts may occur due to waste management, various waste streams and inappropriate waste management (inappropriate waste management may cause direct and indirect pollution of soil and the environment and may affect air quality).	• Waste will be minimized at source and employees will be trained accordingly. • Waste streams will be collected and stored separately at source and waste will be sent to licensed facilities for recovery/disposal in line with national laws and regulations. • Monitoring of records of waste collected, stored or shipped will be ensured.	Relevant beneficiary organization
	b) OHS Risks Maintenance and repair activities for the proper functioning of the building can lead to OHS risks for workers.	• Relevant OHS risks will be mitigated through provisions set out in national legislation. • Regular preventive measures and maintenance measures for the proper functioning of the building (regular checks and maintenance of the roof, windows, doors, any leaks) • Keeping records of the Master Design Project and related project documents for easy maintenance and renovation of any part of the building	Relevant beneficiary organization
Project Lifetime	**Stakeholder Feedback (Suggestion, Complaint, Opinion)**	• Grievances/opinions/suggestions arising from construction activities will be collected, recorded and forwarded to the Administration by the responsible employee of the construction Contractor at the site scale through the forms given in Annex III and Annex IV. Grievances will be closed through the Grievance Closure Form in Annex V. • The contractor's field supervisor and social specialist will be trained on the operation of the Consultant's Social Expert Grievance and Resolution Mechanism. • Corrective actions will be taken within 15 calendar days for the grievances/opinions/suggestions collected within the scope of the Project, and in case the resolution period is longer than 15 days (resolution period will be maximum 30 calendar days), this should be agreed between the contractor/PIU and the complainant. At the end of the process, the applicant will be informed that the request is closed.	Project Implementation Unit (PIU) Consultant Contractor

		• Complaints of gender-based violence, sexual exploitation and harassment will be treated confidentially, taking into account the possibility of retaliation. • In case of a Sexual Abuse Crime, legal action (transferring the situation to law enforcement, referral to the relevant public institution) will be taken immediately 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 shall comply with SREEPB Project CC Procedure in all works related to CC. • All personnel working within SREEPB Project (PIU, Consultant Company, 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 CC in the Workforce Management Procedures prepared for SREEPB Project. • The contractor company will announce the contact information specified in this report for the collection of suggestions and complaints with information signs allocated outside and inside the building (at least one for each floor). • The principles for receiving feedback are explained under the heading "4. Stakeholder Engagement and Grievance Mechanisms" of this document.	

6. Environmental and Social Monitoring Plan

The environmental and social monitoring plan is tabulated below.

Table 9: Environmental and Social Monitoring Plan

What *parameter will be monitored?*	**Where** *parameter will be monitored?*	**How** *parameter will be monitored?*	**When** *parameter will be monitored (frequency of measurement)?*	**Why** *parameter will be monitored?*	**Responsibility**
Renovation and Reinforcement Works Site Preparation Activities					
Community health and safety management and protection measures implemented	Around the project site	Visual controls Field Control Existence and Implementation of an Active Community Health and Traffic Management Plan	At the beginning of renovation/retrofitting works (first day) Every working day during project activities	Ensure that health and safety risks and mechanical injuries to local residents are minimized	• Consultant • Contractor
OHS protection measures for workers on construction sites	Project site and buildings near the project site	Visual controls Field Control Existence and implementation of Occupational Health and Safety Plan	Every working day during project activities	Minimizing risks related to occupational health and safety of workers, in particular protective equipment and clothing for workers who will remove asbestos-containing roofing membranes Compliance with the Occupational Health and Safety Law, related regulations, communiqués, circulars and other regulations	• Consultant • Contractor
Avoid and minimize safety and health risks to Project Affected Persons	In the building and on the project site	Visual controls	Renewal/Reinforcement at the beginning of the work and continuously every working day	Prevent Post Activation Potential (PAP) injury due to inhalation of asbestos fibers or other construction dust	• Consultant • Contractor

The start and end time of renovation/retrofitting works and especially the dismantling time of existing asbestos-containing parts	At the project site	Field inspection Examination of document records Visual controls	Every day (In case asbestos is detected)	Avoid environmental, health and safety risks Compliance with the Regulation on Health and Safety Measures in Working with Asbestos	• Consultant • Contractor • Asbestos Removal Specialist
Renovation and Strengthening Construction Works					
OHS protection measures in place for workers on site *(working at height, working with hazardous substances work with rotating equipment work with electrical appliances* *during operation, etc.)*	Project site Buildings near the project site	Control of documents related to relevant OHS Certificates and trained workers Inspection of inappropriate working conditions, child labor, unregistered employment Visual checks on the use of protective equipment Implementation of the OHS Plan and site specific Health and Safety instructions Field inspection Control of records	Before starting demolition works Every working day during project activities	Minimizing the risks related to occupational health and safety of workers Compliance with the Occupational Health and Safety Law, relevant regulations, communiqués, circulars and other regulations	• Consultant • Contractor

Manufacturing Operation and Delivery (pipeline manufacturing and construction)	Project Site	Visual Controls, Field Control Records, Required Tests, Control of Personnel Competence by the relevant authority	During the relevant manufacturing process in the project and when the manufacturing is completed	Confirm the completion of pipeline construction before delivery, preventing a potential disaster after production and delivery to the end user	• Beneficiary Institution • Service Provider Organization OHS Department • Counselor • Contractor
Work and working conditions	Project site	Final OHS Plan check Field inspection Grievance mechanism (feedbacks)	Every working day during project activities	Compliance with the Occupational Health and Safety Law, relevant regulations, communiqués, circulars and other regulations	• Consultant • Contractor
Health and Safety records	Project site	Health and Safety site documentation check	Weekly	To ensure that the necessary Occupational Health and Safety records are kept at construction sites	• Contractor • Consultant
Air Quality	Across access roads to project sites Project site Buildings near the project site	Field inspections Measurements to be carried out in case of complaints	Every working day during project activities	Minimize dust generation to prevent negative impact on local residents and the environment Compliance with Air Quality Assessment and Management Regulation	• Contractor • Consultant

Noise	Project site Buildings near the project site	Visual inspection of the implementation of the specified noise reduction measures, including the method statements complied with Monitoring at the nearest building receptor points with a noise measuring device Field inspections Measurements to be carried out in case of complaints	Every working day during construction activities	Minimize noise to avoid negative impact on local residents and the environment Compliance with Environmental Noise Control Regulation	• Contractor • Consultant
Waste Management	Project site	Waste records Field inspection Visual Control	Every working day during construction activities	Prevent pollution to protect construction workers, beneficiaries' employees, local residents and the environment	• Contractor • Consultant
Domestic Waste	Project site	Waste records Field supervision Visual control	Project lifetime/Daily	Regulation on Control of Packaging Waste Compliance with Waste Management Regulation	• Contractor • Consultant
Hazardous Waste	Project site	Waste records Field inspection Visual control	Project lifetime/Daily	Separating hazardous waste (glue, paint, insulation material, packaging waste) from non-hazardous waste and biodegradable waste	• Consultant • Contractor

Identification, proper packaging and labeling of asbestos-containing waste as hazardous waste	Project construction sites Before removal/dismantling works begin	Identification of asbestos-containing waste according to the waste list Field inspection Examination of document records	Project lifetime/Daily If detected	Regulation on Health and Safety Measures in Work with Asbestos	• Consultant • Contractor
Proper temporary storage, packaging and labeling of the removed waste	Project site	Waste records Field supervision Visual controls	Project lifetime/Daily	Prevent environmental pollution, Ensuring that inventory is kept properly. Compliance with Waste Management Regulation	• Consultant • Contractor
Excavation and Construction Waste	Project site	Visual inspection Transportation records Field supervision	Following the removal of all parts of the buildings containing hazardous substances Project lifetime/daily	Ensure that construction debris is disposed of in accordance with applicable national regulations and the Project's Demolition plan Compliance with the Regulation on Control of Excavated Soil, Construction and Demolition Wastes	• Consultant • Contractor
Soil pollution	Project sites, external storage areas and access roads	Training records check (spill, leakage training) Chemical absorbent kit control (Field, mobile construction equipment) Field Inspection	Project lifetime/daily	Protection of soil and groundwater quality. Regulation on Soil Pollution Control and Point Source Contaminated Sites, Water Pollution Control Regulation Regulation on the Protection of Groundwater against Pollution and Degradation	• Consultant • Contractor

Vehicle and Pedestrian Safety	Project sites and access roads	Visual control Use appropriate signs and signals Field inspection Implementation of the Community Safety and Traffic Management Plan	On a daily basis	Protecting construction workers, beneficiaries' employees and local residents from injuries and fatalities related to traffic accidents.	• Consultant • Contractor
Stakeholder Engagement	North Campus	Number of Stakeholder Engagement Meeting participants (gender disaggregated) Promotional materials related to the project (announcement posters, web publications, etc. control)	Daily	Fulfillment of the requirements of the Stakeholder Engagement Framework.	• PIU • Consultant • Contractor

Grievance Mechanism	Project site Buildings near the project site	Complaint and Suggestion Forms Grievance Closure forms Total number of grievances (pending/resolved and gender disaggregated) Number of complaints received Number of resolved complaints Complaint Log Availability of announcement posters on the Grievance Mechanism (GRM) Physical condition of suggestion and complaint boxes Status of locking mechanisms for suggestion and complaint boxes	Weekly (throughout project lifetime)	Environmental Social Management Plan (ESMP) Grievance Mechanism (GRM) Stakeholder Engagement Framework (SEF) Ensuring that stakeholders directly or indirectly affected by the project can raise their complaints/opinions/suggestions on project activities, contribute to the project and benefit from the project at the highest level	• Consultant • Contractor • PIU
Renovation / Retrofit Works Operation Process					
Waste Streams	Renovated/Reinforced buildings	Implementation of waste management requirements on site	Regularly (throughout the life of the project)	Ensure proper collection and disposal of waste according to national legal requirements	Bogazici University

Health and Safety	Renovated/Reinforced buildings	Regular inspections and maintenance of the roof, windows, doors, leaks, etc.	Regularly (throughout the life of the project)	Ensuring the health and safety of building occupants/users	Bogazici University

7. Duties & Responsibilities

It is the responsibility of the MoEUCC/PIU to manage the issues specified in the ESMP prepared for the healthy execution of the Project and to ensure that the necessary mechanisms are developed and implemented by the Contractor. Duties-responsibilities and responsible parties within the scope of the ESMP Table 10is given in.

Table 10: List of Duties and Responsibilities

Responsible Party	Duties and Responsibilities
MoEUCC/PIU	• Monitoring project implementation and use of funds, • Employment of at least one full-time Environment, Social and OHS specialist, • Realization and follow-up o f necessary correspondence with official authorities, • Monitoring and ensuring that project-specific ESMPs are in compliance with both national regulations and WB policies, • Submission of the prepared ESMPs to the WB after the relevant controls • Establishment of a Grievance Mechanism, • Organizing and conducting project information meetings, • Guidance of consultants and contractors, • Summarizing environmental and social issues related to project implementation through regular progress reports and submission to the WB, • Coordination and liaison for WB supervision missions to assess project implementation in terms of environmental and social safeguards policies, • Audit the contractor's implementation of the ESMP and document performance, recommendations and future activities as needed as part of the overall project audit, • In case of non-compliance with the ESMP, ensuring that the contractor implements the correct practice and informing the WB about the issue, • Assisting the consultant if needed to obtain the necessary permits during the project, • Report any major incidents (such as accidents, spills, fatalities) to the World Bank within 48 hours and submit an incident investigation report with a corrective action plan to the World Bank within 30 working days.
CONSULTANT	• Conducting a preliminary field assessment before the project starts, • Employment of at least one full-time Environment, one Social and one OHS specialist, • Preparation of project-specific ESMP and Occupational Health and Safety Plan, • Monitoring, evaluation and submission to the Administration of 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, • Preparing reports and providing feedback to the MoEUCC on project and ESMP processes, • Reviewing the Contractor's ESMP and sub-management plans such as Waste Management Plan, Pollution Prevention Plan, OHS Plan, etc. that the Contractor is required to prepare before the start of construction and submitting them to the Contracting Authority for approval, • Review and approval of the Construction Methods prepared by the Contractor, • Application for photovoltaic panel (PV) installation to the energy distribution company by Bogazici University (BU), • Providing contractor trainings *(Environmental Impacts, Waste Management, OHS Plan Implementation and Monitoring Training, Response to Environmental Emergencies, Energy Efficiency, Stakeholder engagement information activities, Code of Conduct, Grievance Resolution Mechanism, Gender Based Violence/Sexual Exploitation/Sexual Abuse/Sexual Harassment, Labeling and*

	Lockout Trainer Training (LOTO), Work Permit System Training, Protection of Cultural Assets)
CONTRACTOR	• Employment of at least one full-time Environmental, one Social and OHS specialist, • Appointment of an experienced Environmental and an OHS Officer to ensure full on-site management and follow-up of the site-specific ESMP and OHS Plan, • Implementation of the ESMP and OHS Plan included in the tender documents and prepared by the Consultant, as well as the relevant laws, regulations and ordinances on site, • Proper implementation of the relevant laws and regulations contained in the tender documents, • Updating the content of the ESMP and OHS Plan together with the Consultant when necessary during the implementation of the ESMPs and OHS Plan in the field, • Preparation of the OHS Plan for the activities to be carried out, taking into account the OHS Plan prepared by the Consultant Monitoring of the field activities defined in the ESMPs prepared specific to the project at regular intervals *(daily, monthly, etc.*), • Preparation of Community Safety and Traffic Management Plan, • Operating the Grievance Mechanism in compliance with GM Procedure established by the Ministry. • Review of the ESMP prepared by the consultant, commitment to its implementation or preparation of the Contractor's ESMP by the contractor, and preparation of the ESMP's relevant sub-management plans (e.g. Waste Management Plan, Pollution Prevention Plan, Community Safety and Traffic Management Plan, Occupational Health and Safety Plan, etc.) and work-specific construction/implementation methods, • Preparation of the Incidental Finding Procedure when deemed necessary, • Preparation of ESMP progress reports for review by the MoEUCC • Applying to the authorized energy distribution company and local gas distribution company depending on the work to be carried out. • Establishing the Employee Grievance Mechanism, the details of which are provided in the Labor Management Procedures, before any construction work begins and ensuring that it operates in a transparent manner, • Preparing the Labour Management Plan specific to the project considering SREEPB Labor Management Plan (LMP)[14] .

14 https://webdosya.csb.gov.tr/db/kamuguclendirme/menu/kadev-p175894_isgucuyonetimprosedurleri-nihai_tr_20210527081102.pdf

8. Reporting

Details on the reporting requirements of the Project are provided in the Environmental and Social Management Framework published on the SREEPB Project website (https://kamuguclendirme.csb.gov.tr), and summary information is provided in the Environmental and Social Management Framework. Table 11is presented in

Table 11: Reporting Process Requirements List

Responsible Party	Reporting Process Requirement
MoEUCC/PIU	• Preparation of 6-monthly Project Progress Report and submission to the World Bank (WB) • Notify the World Bank within 48 hours of any major incident, such as accidents, leaks, fatalities, etc., and submit an incident investigation report with a corrective action plan to the World Bank within 30 business days • Monthly briefing of the WB on the operation of the Grievance Mechanism.
CONSULTANT	• Preparation of ESMP implementation result reports for review by the administration • Preparation of monthly ESMP progress reports and submission to the Administration • Preparation of weekly CC reports and submission to the Administration • Immediate reporting of all major incidents such as accidents, spills, deaths, sexual harassment/abuse to the PIU.
CONTRACTOR	• Preparation of monthly ESMP progress reports and submission to the Consultant for approval • Weekly preparation of GM reports and submission to the Project Manager of the Consultant. • Immediate reporting of all major incidents such as accidents, leaks, deaths, sexual harassment/abuse to the Supervisor. • Preparation of Incident/Incident and Root Cause Analysis Reports • Report content details are presented in the Environmental and Social Management Framework.

List of Annexes

Annex-1 Square Block Building Drawings and Site Plan

Annex-2 World Bank (WB) Environmental and Social Standard Summaries

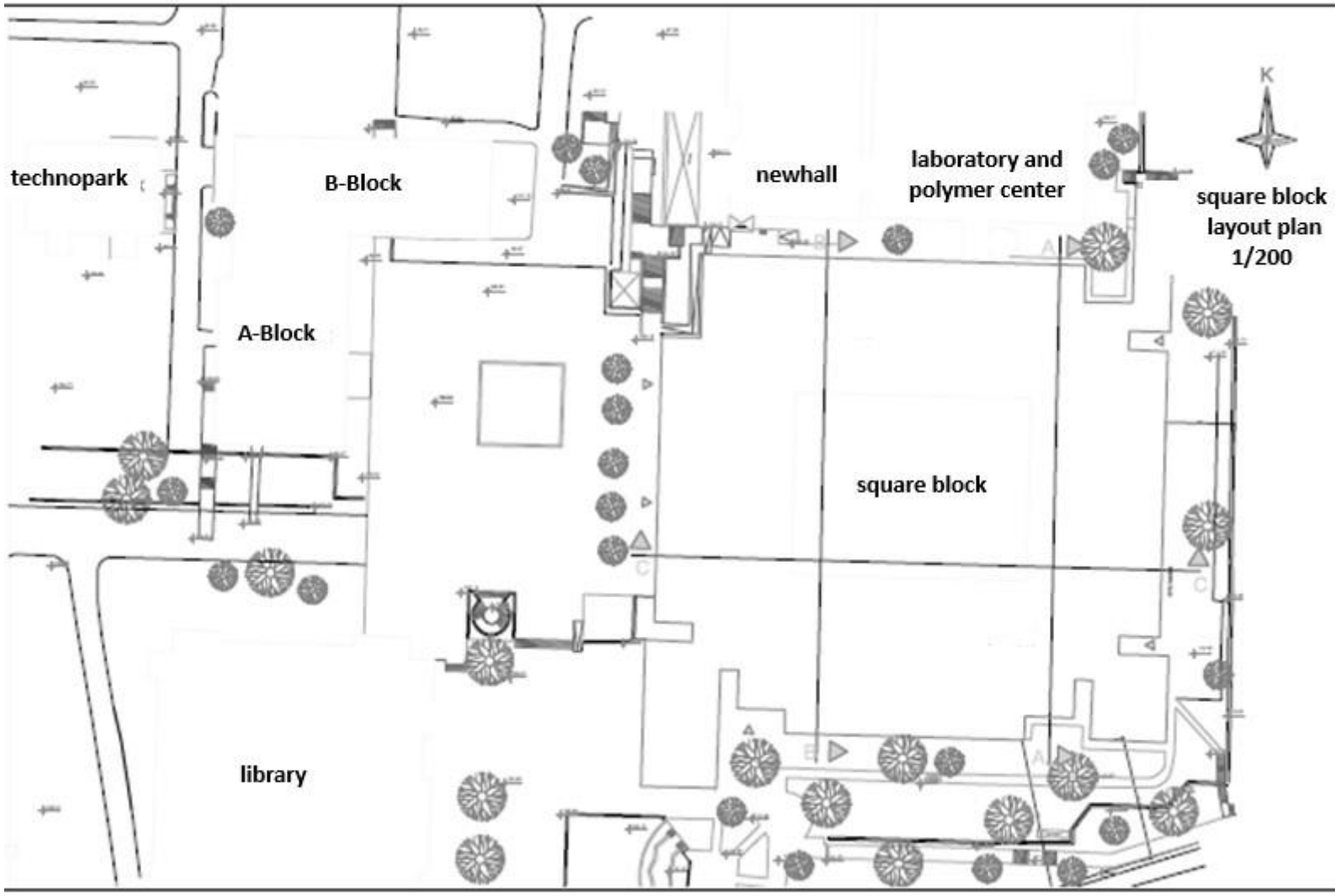
Annex-3 Suggestion & Complaint Form (Internet)

Annex-4 Suggestion & Complaint Form (Printed)

Annex-5 Complaint Closure Form

Annex-6 Traffic Action Plan

Annex-1 Square Block Building Drawings and Site Plan


technopark
B-Block
newhall
laboratory and
polymer center
K
square block
layout plan
1/200
A-Block
square block
library

Annex-2 World Bank (WB) Environmental and Social Standard Summaries

SUMMARY OF WORLD BANK ENVIRONMENTAL SOCIAL STANDARDS		
ESS	**SUBJECT**	**SUMMARY REQUIREMENT**
ESS1	Assessment and Management of Environmental and Social Risks and Impacts	ESS1 sets out the Borrower's responsibilities to assess, manage, and monitor the environmental and social risks and impacts associated with each phase of a project supported by the World Bank through Investment Project Financing to achieve environmental and social results consistent with the Environmental and Social Standards (ESSs). The environmental and social assessment will be carried out on the basis of up-to-date information/data to describe the project and all relevant aspects, to identify and characterize risks, impacts and mitigation measures. The assessment will assess the potential environmental and social risks and impacts of the project, prioritizing disadvantaged and/or vulnerable social groups, examine project alternatives, and identify ways to improve the design and implementation of the project to apply the mitigation hierarchy for adverse environmental and social impacts. The environmental and social assessment will also explore opportunities to enhance the positive impacts of the project. The environmental and social assessment will include stakeholder engagement as an integral part of the assessment as per ESS10. According to ESS1, the Borrower will identify, assess and manage the environmental and social risks and impacts of the project in a systematic manner throughout the project life cycle.

ESS2	Labor and Working Conditions	The objectives of ESS2 are to: (i) promote safety and health in the workplace; (ii) promote fair treatment, non-discrimination and equal opportunity for project workers; (iii) appropriately protect workers, including women, persons with disabilities, children (of working age as per ESS2) and vulnerable workers such as migrant workers, contract workers, community workers and primary supply workers; (iv) prevent the use of all forms of forced labor and child labor; (v) uphold the principles of freedom of association and collective bargaining of project workers in accordance with national law; and (vi) provide project workers with accessible means to raise workplace concerns. The applicability and scope of application of ESS2 depends on the environmental and social assessment described in ESS1 and the type of employment relationship between the Borrower and project workers. The requirements of ESS2 include the development and implementation of a written Labor Management Procedure (LMP) applicable to the project. These procedures will set out the manner in which project workers will be managed in accordance with the requirements of national law and this ESS and will include the identification of: (i) management of labor relations and trade union relations, including working conditions and terms and conditions of employment, non-discrimination and equal opportunity (such as the development and implementation of labor management procedures applicable to the project and Code of Conduct to be followed by project contractors); (ii) labor protection, including minimum age for workers, prohibition of child labor and forced labor; (iii) establishment and operation of a grievance mechanism for workers, including arrangements for recourse to the national system for any potential risks of Sexual Exploitation and Abuse/Sexual Harassment (SEA/SST); (iv) occupational health and safety; (v) contract workers; (vi) community workers and (vii) primary supply workers are also included in the framework.

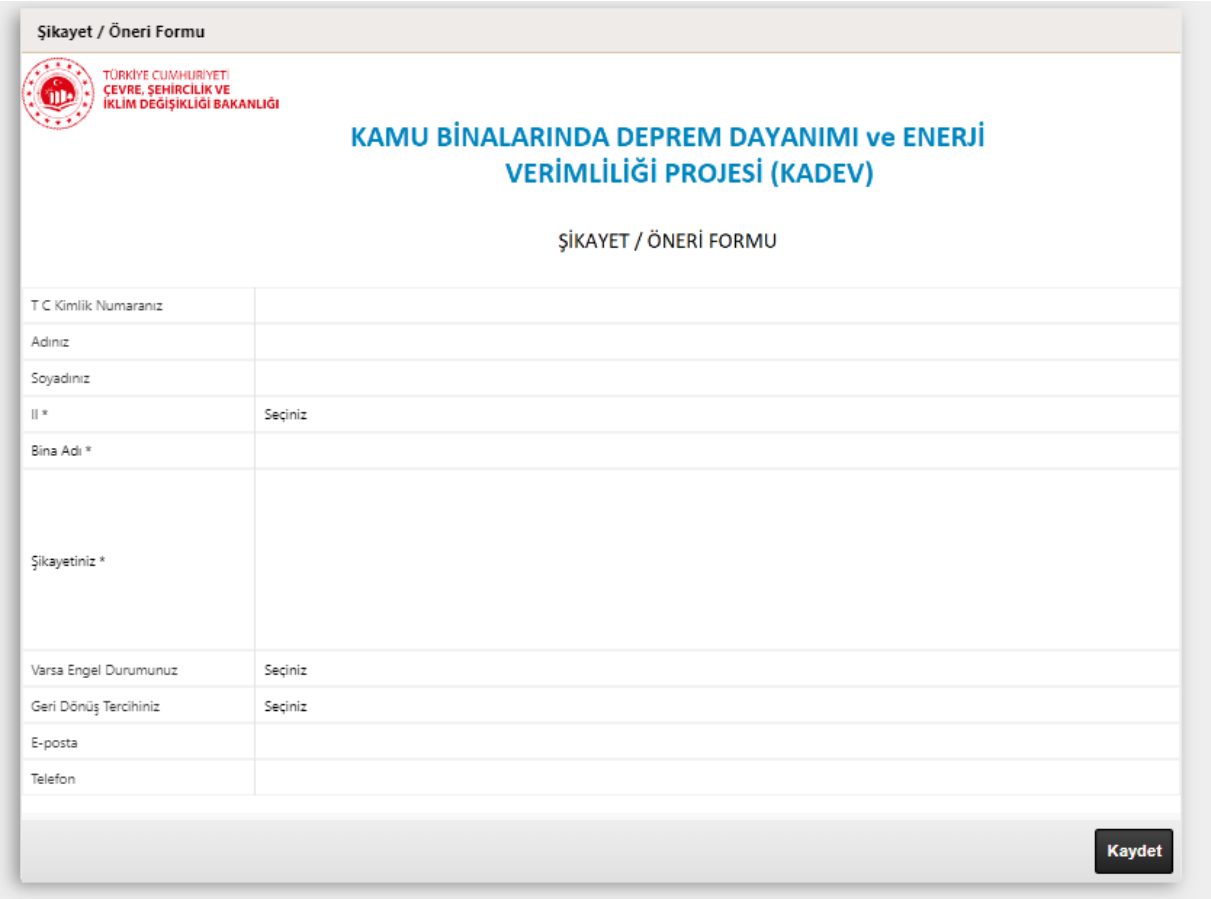
ESS3	Resource Efficiency and Pollution Control and Management	ESS3 recognizes that economic activity and urbanization often pollute air, water and soil and deplete finite resources that can threaten people, ecosystem services and the environment at local, regional and global levels. Current and projected atmospheric concentrations of greenhouse gases (GHGs) threaten the well-being of current and future generations. At the same time, technologies and practices for more efficient and effective resource utilization, pollution prevention, and GHG emission avoidance and reduction have become more accessible and available. This ESS sets out the requirements for addressing resource efficiency and pollution prevention and management throughout the project lifecycle, consistent with Good International Industry Practice. Assessment of risks and impacts and proposed mitigation measures related to relevant ESS3 requirements, including raw materials, water use, air pollution, hazardous substances and hazardous waste, are included in the ESMF and ESMP.
ESS4	Community Health and Safety	ESS4 recognizes that project activities, equipment and infrastructure may increase community exposure to risks and impacts. In addition, communities already exposed to the impacts of climate change may also be more exposed to impacts from project activities. ESS4 addresses health, safety and security risks and impacts on project-affected communities and the Borrowers' responsibilities to prevent or minimize such risks and impacts, with particular attention to people who may be harmed due to their particular circumstances.
ESS5	Land Acquisition, Land Use Restrictions and Involuntary Resettlement **(This ESS is not applicable to the SREEPB Project)**	ESS5 recognizes that project-related land acquisition and restrictions on land use may have negative impacts on communities and individuals. Project-related land acquisition or restrictions on land use may result in physical displacement (displacement, loss of residential land or shelter), economic displacement (loss of income sources or other livelihoods as a result of loss of access to land, assets or assets), or both. The term "involuntary resettlement" refers to these impacts. Resettlement is considered involuntary when affected persons or communities do not have the right to refuse land acquisition or land use restrictions that result in displacement.

ESS6	Biodiversity Conservation and Sustainable Management of Living Natural Resources **(This ESS is not applicable to the SREEPB Project)**	The environmental and social assessment set out in ESS1 will consider direct, indirect and cumulative Project-related impacts on habitats and the biodiversity they support. This assessment will consider threats to biodiversity such as habitat loss, degradation and fragmentation, invasive alien species, over-exploitation, hydrological changes, nutrient loading, pollution and incidental capture, as well as projected climate change impacts. It will determine the importance of biodiversity or habitats based on their vulnerability and irreplaceability at the global, regional or national level, and will also take into account the different values placed on biodiversity and habitats by project-affected parties and other interested parties.
ESS7	Historically Under-Served Indigenous people/Sub-Saharan Africa Traditional Indigenous Communities **(This ESS is not applicable to the SREEPB Project)**	This ESS recognizes that Historically Under-Served Indigenous Peoples/Sub-Saharan African Traditional Indigenous Communities have different identities and observations from mainstream groups in national societies and are often disadvantaged by traditional development models.
ESS8	Cultural Heritage	The Borrower shall avoid impacts on cultural heritage. Where avoidance is not possible, the Borrower will identify and implement measures to address impacts on cultural heritage in accordance with the mitigation hierarchy. Where appropriate, the Borrower will develop a Cultural Heritage Management Plan.
ESS9	Financial Intermediary Institutions **(This ESS is not applicable to the SREEPB Project)**	FIs will establish and maintain an ESMS to identify, assess, manage and continuously monitor the environmental and social risks and impacts of subprojects.

ESS10	Stakeholder Engagement and Information Sharing	This ESS recognizes the importance of open and transparent engagement between the Borrower and project stakeholders as a key element of good international practice. Effective stakeholder engagement can enhance the environmental and social sustainability of projects, strengthen project acceptance and contribute significantly to successful project design and implementation. The Client will engage with stakeholders throughout the project lifecycle, beginning as early as possible in the project development process and at a time that allows for meaningful consultation with stakeholders on project design. The nature, scope and frequency of stakeholder engagement will be proportionate to both the nature and scale of the project and its 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 that are important for the successful management of a project's environmental and social risks. Stakeholder engagement is most effective when initiated at an early stage of project development and is an integral part of early project decisions and the process of assessing, managing and monitoring the project's environmental and social risks and impacts. In consultation with the Bank, the Borrower will develop and implement a Stakeholder Engagement Framework (SEF) commensurate with both the nature and scale of the project and its potential risks and impacts.

Annex-3 Suggestion & Complaint Form (Internet)

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



Şikayet / Öneri Formu

TÜRKİYE CUMHURİYETİ
ÇEVRE, ŞEHİRCİLİK VE
İKLİM DEĞİŞİKLİĞİ BAKANLIĞI

KAMU BİNALARINDA DEPREM DAYANIMI ve ENERJİ VERİMLİLİĞİ PROJESİ (KADEV)

ŞİKAYET / ÖNERİ FORMU

T C Kimlik Numaranız	
Adınız	
Soyadınız	
İl *	Seçiniz
Bina Adı *	
Şikayetiniz *	
Varsa Engel Durumunuz	Seçiniz
Geri Dönüş Tercihiniz	Seçiniz
E-posta	
Telefon	

Kaydet

Annex-4 Suggestion & Grievance Form (Printed)

The Grievance/Suggestion Form in the Grievance Boxes is given below.

TÜRKİYE CUMHURİYETİ ÇEVRE, ŞEHİRCİLİK VE İKLİM DEĞİŞİKLİĞİ BAKANLIĞI	**SEISMIC RESILIENCE AND ENERGY EFFICIENCY IN PUBLIC BUILDINGS PROJECT (SREEPB PROJECT)**
	COMPLAINT / SUGGESTION FORM
	BOGAZICI UNIVERSITY
Your Turkish Identity Number	
Your Name	
Your last name	
Province	Istanbul
Building	Square Block
Your complaint	
Disability Status, if any	☐ Visually Impai ☐ Hearing Impa ☐ Mobility Impai ☐ Other ☐ e
Your Return Preference	☐ Email Doesn't ☐ for a Phone ☐
E mail	
Telephone	

Annex-5 Grievance Closure Form

The design of the Grievance Closure Form is presented to your attention below.

Complaint Closure No.		
Definition of Urgent Action Required:		
Long Term Action Description (if required):		
Is compensation necessary?	[ ] YES	[ ] NO
Corrective Action and Control of Decision		
Stage of Corrective Action	Deadline and Responsible Institution	
1.		
2.		
3.		
4.		
5.		
6.		
7.		
8.		
9.		
10.		

COMPENSATION AND FINAL GRADES

This section will be completed and signed by the complainant after receiving the compensation fees and after the grievance has been resolved.

Notes

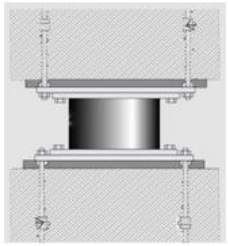
History:

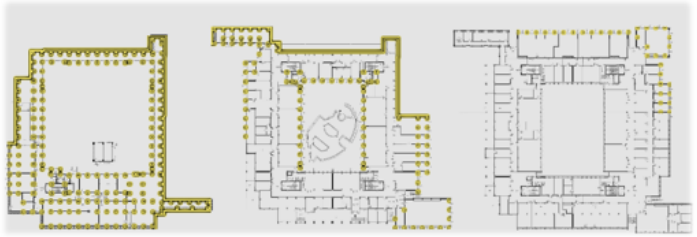
Complainant

Annex-6 Stakeholder Participation Meeting Content and Records

Meeting Date		: 19.04.2024
Meeting Start and End Time		: 14:15 15:30
Place of Meeting		: Boğaziçi University, North Campus, New Hall (New Classroom) Building, Hall No. NH402
Start time	**End time**	**Activity**
14:15	14:20	Meeting Start Speech
		General information was provided regarding meeting registration and processing of personal data within the framework of the Personal Data Protection Law. There are no participants who object to the meeting recording. As of 14:20, the entire meeting was recorded in *.mp4 format. Also a question and answer phase*. It was recorded in txt format.
14:20	14:25	Information was given about the SREEPB project and its goals. SREEPB Earthquake Resistance & Energy Efficiency in Public Buildings Project SQUARE BLOCK

		 **Photo 2: Presentation File Shared Sections 01** Your presentation; It was announced that he will give information about structural strengthening and energy efficiency-oriented improvement works in Square Block, located in Boğaziçi University North Campus .
14:25	14:35	Information was given about structural strengthening and energy efficiency-oriented works determined and projected within the scope of feasibility and study studies.

		The construction phase **Structural Strengthening** • Reinforcement of existing carrier system with seismic isolator • Additional carrier system manufacturing • Flooring, ceiling, wall, door-window renovations due to structural strengthening activities • Structural reinforcement due to fire (fire escapes and suspended ceiling renovations) **Energy efficiency** • Facade and roof thermal insulation • Door replacements • Circulation system motor/pump changes • Non-insulated installation elements, thermal insulation installation for heat exchangers • Thermostatic valve installation for radiator honeycombs • Central boiler replacements • 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 (on the roof) (to be integrated into the existing supply line) • Energy monitoring and automation system facility (to be integrated into the existing electrical system) • Mechanical automation and energy measurement monitoring system **Photo 3: Presentation File Shared Sections 02**
14:35	14:45	Information was given about structural strengthening works and the seismic isolators to be carried out in this context. **Structural Strengthening** **Existing Structural System Reinforcement with Seismic Isolator** Seismic isolators, an innovative method, will be used in structural strengthening works, and Life and activities will continue outside the areas where insulators will be placed.  

		Structural Strengthening **Existing Structural System Reinforcement with Seismic Isolator** Seismic isolators are a structural strengthening method used to prevent or reduce damage to buildings during earthquakes. These isolators reduce the friction between the building and the ground, keeping the movement of the building under control during an earthquake. The application areas of the seismic isolators to be used in the foundation (basement, ground and 1st floor) are shown below.  **Photo 4: Presentation File Shared Sections 03**
14:45	14:55	Within the scope of the SREEPB Project, the targeted improvements in terms of energy efficiency have been detailed by implementing the precautionary scenarios determined specifically for the Square Block. Information was given about energy efficiency-oriented studies.

Energy Efficiency Focused Studies

Rooftop Solar Power Plants

On the terrace roofs of the Kare Block building; A Solar Power Plant with a production capacity of 302.5 kWp will be installed with 550 PV panels.

Energy Efficiency Focused Studies

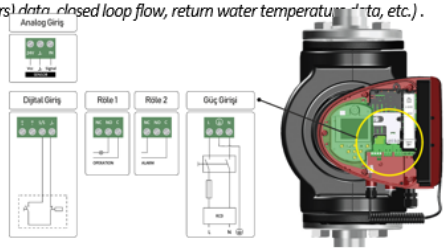
Heating Center Renovation

The existing heating system will be replaced with a floor type condensing boiler and the heating system will be rehabilitated. In this way, variable demands can be met with high efficiency. The plumbing structure will be re-established in accordance with this renovation.

Energy Efficiency Focused Studies

Motor & Pump Replacement

The entire circulation motor & pump element in the Kare Block building installation *(consisting of low-efficiency asynchronous motor and pump) will be replaced* **with integrated frequency-controlled high-efficiency motor & pump systems or IE4 motor & pump combination with external frequency converters** . Circulation system flow control and adjustment *(motor frequency change) will be carried out* with the mechanical automation system to be installed within the scope of this project *(manual, differential pressure sensor (transmitters) data, closed loop flow, return water temperature data, etc.)* .



Energy Efficiency Focused Studies

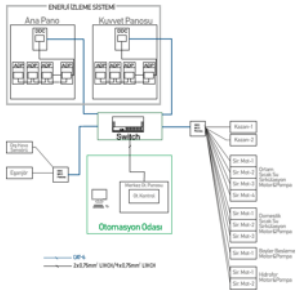
Lighting Elements LED Conversion

All 3,754 lighting elements within the Square Block structure will be replaced with **LED lighting fixtures with similar illumination intensity and color temperature** .

Energy Efficiency Focused Studies

Automation System

To the Kare Block building; The energy monitoring system *(heating system, domestic hot water production, circulation motors & pumps, solar power plant)* and mechanical automation system will be installed in accordance with EN ISO 50001 Energy Management System conditions.



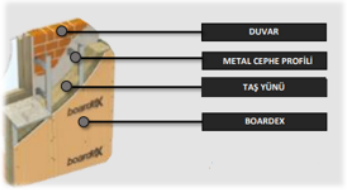
Energy Efficiency Focused Studies

Facade Insulation

It has been determined through the project and field measurements that there is no insulation on the external walls of the building. The building has no thermal insulation.

Within the scope of the project, a stone wool cladding system will be applied on the facade. Since the thermal conductivity of rock wool insulation materials is low, heat transfer from inside to outside or from outside to inside is prevented. Stone wool structure is designed to isolate vibrations and noise from urban transportation systems

External walls will be insulated with 6 cm EPS and the roof will be insulated with 10 cm glass wool.



		Energy Efficiency Focused Studies **Terrace Roof Insulation** As a result of the on-site inspection, no insulation was observed on the terrace roof of the Square Block Building. In addition, due to defects in the waterproofing of the roof, physical defects *(swelling, spilling, etc.)* have been detected at many points on the ceiling and wall surfaces, especially on the upper floors . Physical defects on the roof will be improved and insulated with 10 cm glass wool.   **Energy Efficiency Focused Studies** **Exterior Window and Door Replacement** It is recommended to replace the existing exterior elements of the Square Block structure, windows and doors, with thermally insulated metal doors, which do not have thermal insulation.  **Photo 5: Presentation File Shared Sections 04**
1 4:55	15:00	General explanations have been made regarding occupational health and safety plans, and within this framework; • Structural Strengthening • Excavations

		• Wall, Door and Window Dismantling Works • Seismic Isolator Installation Works • Energy Efficiency Studies A separate evaluation was made within the scope of **Job health security** The issues that our stakeholders should pay attention to regarding these studies are as follows: Within the Scope of Structural Strengthening; • All power tools (mobile concrete mixer, vibrator, concrete pump, etc.) must be PAT tested. PAT test reports will be requested and checked before work. During field inspections, the presence of PAT control and approval labels on electrical devices will be checked. The use of devices and equipment without a conformity label is not allowed. (Extension cables are also included in this scope.) • Before the site concrete pouring, it will be checked that the work machines have normal maintenance and periodic checks. • The pump's connection elements will be checked again before the start of work. • The boom hose will be checked safely while working with the concrete pump. • The vehicle's impact area will be controlled and an observer will be assigned to ensure that personnel and vehicles do not approach the impact area. • According to the construction site plan, the area where the concrete pump will be installed will be arranged in advance. **Job health security** Within the Scope of Excavations; • All works will be carried out under the supervision of an authorized Civil Engineer. • Before the excavation works begin, natural gas, electricity, water pipes, waterways, sewage and similar infrastructures passing underground related to infrastructure projects will be identified. • Before the excavation works, written applications will be made to the Natural Gas Local Distribution Company, Electricity Local Distribution Company, Local Government Infrastructure and Technical Affairs Directorates. • If you come across electrical cables, gas pipes, water pipes or waterways, sewers or similar installations during the excavation, the excavation process must be stopped immediately and the responsible and relevant persons must be notified. The excavation process will continue after the necessary precautions are taken by the responsible and relevant persons. • If there is any possibility of slippage or collapse from the upper side during the excavation, the work site should be left immediately. Those responsible and concerned should be notified immediately. The excavation process will continue after the necessary precautions are taken. • Excavators, bulldozers and similar work machines will not be allowed to enter or approach the movement area.

Job health security

Within the Scope of Excavations;

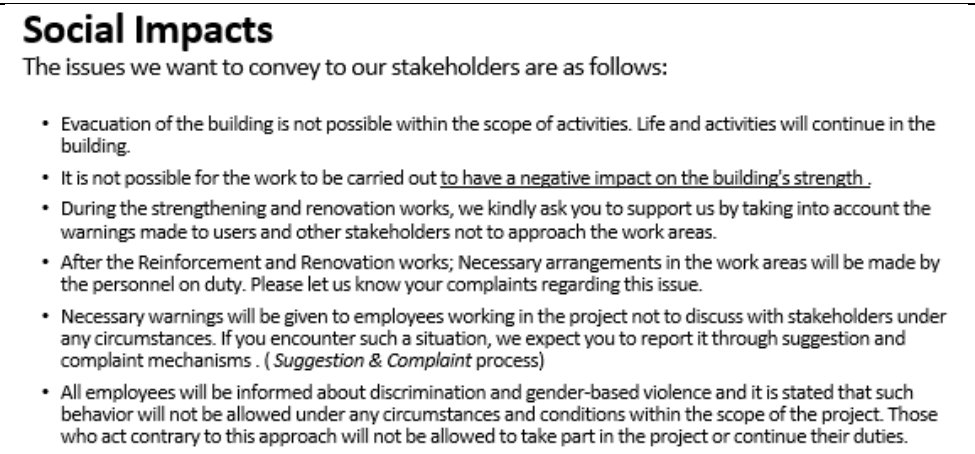
- The gaps created as a result of excavation work should be covered and surrounded. Gaps will not be approached.
- As a result of the excavation carried out around the Kare Block before the installation of the Seismic Isolator, entrances and exits to the building will be made via portable bridges.
- Warning tapes will be installed around the excavated areas. If night work is carried out, the tapes in question will be reflective and the excavation area will be illuminated at night.
- Responsible operators must be informed before the work to prevent damage to the walls and reinforced components that need to be protected during maneuvers with the work machine in narrow spaces. Construction methods for the use of the work machines in question within the building will be communicated to the consultant in advance. (This document should state whether there is a risk of permanent damage during transportation of the work machine to the work site, walls to be demolished to get it into the building, maneuvering inside the building and work.)

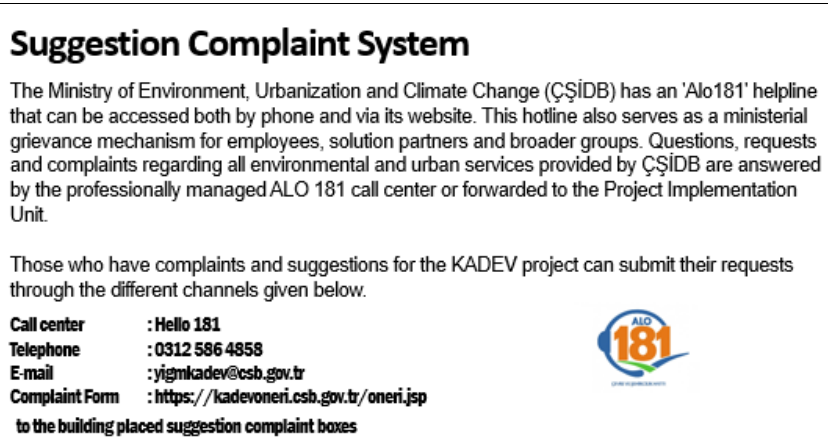
Job health security

Within the Scope of Wall, Door and Window Dismantling Works;

- Walls, windows and doors for the application areas of the seismic isolators to be used in the foundation will be marked and demolished using sledgehammers and crushers, starting from the top floor.
- Reinforced areas should be marked before wall demolition. It is essential that the reinforced elements (carriers) in question are not damaged. The demolition team will be warned about this on a daily basis.
- In case of wall demolition affecting the exterior of the building, impact zones must be determined and entry to these areas will be prohibited.

		Job health security • The areas where employees will gather in case of emergency have been determined, taking into account the earthquake risk, and shown in the site plans.   **Photo 6: Presentation File Shared Sections 05**
15:00	15:10	Environmental and Social Impacts were evaluated. **Environmental Impacts** • **North Cafeteria, Nevhall , Laboratory-Polymer Center, Library Building** and **those located outside the campus borders,** which are excluded from the scope of the project within the major impact area due to the operations to be carried out within the scope of seismic strengthening and energy efficiency; There is **Nafi Baba Mosque, Private Rumeli Medical Center and Various Residences** . Possible problems that may be encountered in waste management, such as noise, dust, vibration, and the spread of excavation waste outside the construction site, may negatively affect those working/living in the buildings in question. Detailed information on the subject and the measures to be taken are included in Chapter 5 *(Environmental and Social Risks & Impacts and Measures to be Taken) of the ENVIRONMENTAL AND SOCIAL MANAGEMENT PLAN. In addition, the university management (there are no users because the buildings have been evacuated)* will be informed at least 7 days before each stage of 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.

		 **Photo 7: Presentation File Shared Sections 06**
15:10	15:15	stakeholder participation, receiving and evaluating suggestions and complaints , and informing relevant parties about this process (decisions taken regarding suggestions and complaints, additional measures implemented, etc.). • complaints can be received via digital form, telephone, e-mail addresses and QR code . • complaints can be conveyed via the Alo 181 call line by specifying the name of the building . • Printed feedback forms were introduced, and information was given about the suggestion and complaint boxes and control periods to be established in the building. • complaints regarding gender-based violence (harassment, abuse, etc.) and gender-based discrimination within the scope of the project will also be evaluated within the scope of the complaint resolution mechanism.

		 **Photo 8: Presentation File Shared Sections 07**
15:15	15:30	Participants' questions were answered. A closing speech was made and the meeting ended.  **Photo 9: Presentation File Shared Sections 08**

Questions and Answers					
No.	Name surname	Title	Communication	Question	Reply
1	Participant 1	BU Student Representative Board - Student		Will the building continue to be used after the project starts? When will the project start and finish?	Kübra ERDOĞAN (ÇEVTAŞ) answered; The project is planned to start in the last quarter of 2024 and planned to be completed within 4 periods. Stakeholders will be informed before starting construction. In case of any changes on construction items, the university will provide information within the scope of the Project at certain periods.
2				Will water and sewer infrastructures be affected?	Kübra ERDOĞAN (ÇEVTAŞ) answered; There is no work that will affect the infrastructure. The water need will be provided from the existing water supply network. For domestic wastewater, the existing sewage system will be used. There is no infrastructure work involved.
3				Will buildings within 100 m diameter be affected?	Kübra ERDOĞAN (ÇEVTAŞ) answered; The area with a diameter of 100 m was determined as the major impact area. In this area, there is no direct impact, but it is possible that the visual landscape structure will be affected and social impacts may occur.
4				Will demolition occur in the following years after the reinforcement?	Ebru AKKOL (BU Construction Works) answered; It won't happen.
5				It was said that there is a 2,5 ton chemical tank under the Square Block and that it has a risk of explosion in case of a severe earthquake. This risk	Ferhat ULGUN (Project Company) answered; In practice, the chemical tanker in question will not be affected. The purpose of the application is to make the building earthquake resistant. It will be applied on approximately 300 columns and no structural changes will be made on the building.

				was also discussed at ÖTK meetings. Is it possible to transport and isolate the chemical tanker?	
6	Participant 2	BU Construction Works - Civil Engineer		Has any measures been taken for noise during construction work?	Kübra ERDOĞAN (ÇEVTAŞ) answered; There will be crushing activities that will cause noise emissions in the basement/ground floor of the building. Activities that will cause noise are planned to be carried out especially during lunch breaks, when students are not busy. There is no actively used classroom on the basement floor. Noise curtains and additional measures may be taken if deemed appropriate within the scope of the works. Noise measurements will be made within the scope of local regulations, and mandatory measures will be taken if limit values are exceeded. In case of a complaint, immediate action will be taken.
7				Will the transformer on ground floor be relocated or improved?	Ferhat ULGUN (Project Company) answered; The current state of the transformer will be preserved and no changes will be made.
8				Will there be an improvement in the columns on the upper floors?	Ferhat ULGUN (Project Company) answered; Insulators will be placed only on floors where columns are located. Work will be carried out on the basement and ground floor and the columns on the 1st floor.
9	Participant 3	BU- Civil Engineer		There were also different projects within the scope of the project. Was a separate allowance received for the Square Block where	Ebru AKKOL (BU Construction Works) answered; Square Block is within the scope of SREEPB Project.

				the project will be carried out?	
10	Participant 4	BU-FEF/Department of Chemistry-Assoc.Prof.Dr .		Has any geotechnical study been carried out on the ground before starting the strengthening work?	Ferhat ULGUN (Project Company) answered; Within the scope of the project, ground geotechnical survey work was carried out.
11th				It was said that surrounding area of basement and ground floor will be digged like a dike. Is the most affected period will be this dike digging period? Will parking lot be available for use?	Ferhat ULGUN (Project Company) answered; Areaways will be created around the exterior of the Square Block to ensure building oscillation. Necessary precautions will be taken during the areaway excavation process. Additionally, the use of disabled ramps and barriers will not be restricted. The use of the parking lot will continue throughout the project and no activities will be carried out in the parking area.
12				Some devices in the electrical/electronics, physics departments and machinery department analysis laboratory are sensitive to vibrations/shocks above 2 Hz. Has any precautions been planned in this context?	Ferhat ULGUN (Project Company) answered; At the time of demolition or implementation, work will be coordinated with the relevant departments and units. The practitioner will be notified before starting work in sensitive units and areas.
13				In the basement there is a chemical warehouse used by the chemistry department, which has flammable and explosive	Tülün Yıldırım (Ministry of Environment, Urbanization and Climate Change) answered; With the determination of the contractor of the project, this issue will be brought to the agenda again and the

				properties. Transportation and storage should be done meticulously. Has a special area been designated for transport and storage?	necessary precautions/transportation regarding the chemical warehouse will be provided.
14	Participant 5	BU- Chief		Will the work be done during the day?	Kübra ERDOĞAN (ÇEVTAŞ) answered; It is currently planned to work during the daytime. When work is planned to be done at an hour other than the daytime, an announcement will be made.
15	Participant 6	BU- System and Network Management Branch Office Specialist		Will it negatively affect the internet and electricity infrastructure? If the operation of electrical devices will be affected, have precautions been taken? Is there an agreement with the relevant contractor in case of possible negligence or error, damage to the device or cable within the scope of the excavation? Has a period been determined for compensation after possible damage?	Ferhat ULGUN (Project Company) answered; The existing cable network of the building has been identified. As a result of the current determinations, the cables and the columns to be crushed do not coincide. Within the scope of the project, demolition will be done 2 m above the ground. And The cables proceed from above. Considering our range of motion, there are no cables. In case of any destruction, immediate action will be taken. Information will be provided to BU System and Network Management Branch Directorate at all stages.

16	Participant 7	BU System and Network Management Branch Office - Network Unit		Main fibers are collected in the fiber room and go through fiber lines. when the reinforcement is to be made, will we be consulted about where the fiber lines pass?	Ferhat ULGUN (Project Company) answered; Necessary information will be provided by contacting the relevant units. The work schedule will be prepared after the tender process of the project. Within the framework of the work program, practitioners, users and all stakeholders will be informed about when and how which work will be carried out in which area.
17	Participant 8	BU Construction Works - Mechanical Engineer		The boiler room also feeds different buildings nearby. Will the boilers be decommissioned at the right time during the winter months of next year, when the project is expected to continue ?	Tülin YILDIRIM (Ministry of Environment, Urbanization and Climate Change) answered; Particular attention will be paid to this issue during the tender process.

Participant List and Contact Information
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.
Photos of the Meeting

Photo 10: Photos of the Meeting