Annex 9: Environmental and Social Management Framework

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|  | **Draft Environmental and Social Management Framework (ESMF)** |  |

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| **Project Title** | **UNDP ID** | **GEF ID** |
| Facilitating Cleaner and Energy Efficient Phosphate Chemicals Industry in China (PhosChemEE) Project | PIMS 6618 | 10722 |

ESMF for public disclosure via UNDP China website

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| **Public Consultation/Disclosure Notice** | |
| Date: 16th June, 2022 | |
| The United Nations Development Programme (UNDP) launched today a public consultation on the attached draft Environmental and Social Management Framework and associated Social and Environmental Screening Procedures for the UNDP-GEF Supported PhosChemEE project.  Comments to this consultation can be sent to the following address: | |
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| **Deadline for submission of comments:** | **October 17th, 2022** |

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# Executive Summary

This Environmental and Social Management Framework (ESMF) has been prepared for the UNDP-GEF supported *Facilitating Cleaner and Energy Efficient Phosphate Chemicals Industry in China* (PhosChemEE) Project that is developed together with the Ministry of Industry and Information Technology (MIIT) and the Ministry of Natural Resources (MNR). The objective of the PhosChemEE Project is to enable the extensive application of low carbon and energy efficient technologies in the phosphate chemicals industry in China, in order to contribute to global climate change mitigation and the achievement of the United Nations sustainable development goals (SDG).

This ESMF has been prepared for the submission of the PhosChemEE Project proposal to the GEF for the purpose of establishing procedures and measures that will assist in the assessment and management of its potential environmental and social impacts. Preliminary analysis and screening conducted during the project development phase via UNDP’s Social and Environmental Screening Procedure (SESP) identified several potential social and environmental risks associated with project activities, resulting in an overall **‘high’** risk categorisation of the project.

This ESMF covers all activities of the PhosChemEE Project and with particular emphasis on implementation of the low/zero carbon energy technology application demos. Such activities involve the construction/installation and operation of systems/facilities for showcasing the application of energy saving and green and low-carbon technologies. Another aspect covered is the adverse impacts on sustainable natural resource (efficiency) management and community and labour health.

This ESMF has been prepared based on the social and environmental screening procedure (UNDP’s SESP) undertaken during the project development phase, as well as consultations with implementing partners and local communities.

This ESMF has been developed to specify the processes that will be undertaken by this project for the additional assessment of potential impacts and identification and development of appropriate risk management measures, in line with UNDP’s Social and Environmental Standards (SES).

This ESMF identifies the steps that will be followed during the inception phase of the project for:

1. **Additional risk screening** based on the draft demos design and final demos design when available:
2. **Site specific ESIAs** for the assessment of potential environmental and social risks associated with the demos (i.e. **Outputs 1.2.2, 2.2.2, 3.2.2**) i
3. The conduct of a **Strategic Environmental and Social Assessment (SESA)** that shall cover all upstream activities, and those with potential cumulative impact related implications, Activities that will fall under the scope of the SESA include (but are not limited to): **Outputs 1.1.1, 1.1.2, 2.1.1, 2.1.2, , 2.1.6, 2.2.4, 2.2.5, 3.1.1, and 3.1.2,)**
4. based on those assessments, preparing and **approving appropriate management plans** for avoiding, and where avoidance is not possible, reducing, mitigating, and managing adverse impacts, via completion of stand-alone management plans (as justified based on results of the assessment) for the project.
5. All contractors (i.e. undertaken engineering and infrastructure works as part of the project) will be required to develop, submit, and adhere to a **Labour Management Plan** that meets the requirements of both UNDP SES 7 and relevant national/host country law and regulation

This ESMF also details the roles and responsibilities for its implementation and includes a detailed budget and monitoring and evaluation plan that shall be followed by responsible project staff during the execution of the project.

# Abbreviations and Acronyms

|  |  |
| --- | --- |
| ACWF | All China Women’s Federation (ACWF) |
| ESIA | Environmental and Social Impact Assessment |
| ESMF | Environmental and Social Management Framework |
| ESMP | Environmental and Social Management Plan |
| GEF | Global Environment Facility |
| MIIT | Ministry of Industry and Information Technology |
| MNR | Ministry of Natural Resources |
| MOF | Ministry of Finance |
| NDRC | National Development and Reform Commission |
| PCI | Phosphate chemicals industry |
| PMO | Project Management Office |
| PIR | GEF Project Implementation Report |
| PRC | Peoples’ Republic of China (PRC) |
| SDG | Sustainable Development Goal |
| SECU | Social and Environmental Compliance Review Unit (UNDP) |
| SES | Social and Environmental Standards (UNDP) |
| SESP | Social and Environmental Screening Procedure (UNDP) |
| UNDP | United Nations Development Programme |
| UNFCCC | United Nations Framework Convention on Climate Change |

# Introduction

This Environmental and Social Management Framework (ESMF) has been prepared for the UNDP-supported *Facilitating Cleaner and Energy Efficient Phosphate Chemicals Industry in China (PhosChemEE) Project* that is developed together with the Ministry of Industry and Information Technology (MIIT) and the Ministry of Natural Resources (MNR) of the Peoples’ Republic of China (PRC). It was developed through extensive consultations with national and local government agencies with the support of the GEF agency – UNDP.

## Project Description

The United Nations Intergovernmental Panel on Climate Change (IPCC) warned that if global warming is not controlled within 1.5 ℃, the earth will usher in a devastating climate after 2030. To actively contribute to the global call for slowing down climate change, China put forward a more ambitious goal to the fight against climate change in 2020, as it aims to bring carbon emissions to a peak by 2030 and achieve carbon neutrality by 2060 with more forceful policies and measure.

Low-carbon transformation of the phosphate chemical industry (PCI) in China is regarded as an important component of China’s response to global climate change. However, the carbon emission problem in the PCI in China is mainly manifested in three aspects: (1) high energy consuming and GHGs emission in the chemical production process; (2) the inadequate utilization of the industry by-products particularly phosphogypsum; and (3) the ecological environment impact in the process of phosphate rock mining. Hence, actions to introduce green and clean production and circular economy in the sector are urgently needed, especially because the world will continue to depend on phosphate products in different economic sectors.

The PhosChemEE Project aims to solve problems mentioned above through enabling the extensive application and best practices of low carbon and energy efficient technologies in the phosphate chemicals industry in China. The social and environmental objectives of the PhosChemEE Project are:

* Establish effective policy and institutional frameworks towards the development of cleaner and energy efficient phosphate chemicals industry in China.
* Improve interest and commitment of the phosphate chemical industry in the green, low carbon and energy efficient operations of the PCI industries in China.
* Enhance confidence in the feasibility of the application of green, energy efficient low carbon technologies in the PCI industries in China
* Improve the environment in underdeveloped western regions, especially by reducing greenhouse gas emissions (GHG) and improving the quality of local ecological environment; and
* Strengthen public awareness, knowledge, information management, and monitoring systems on greening and low carbon transformation in support of cleaner and energy efficient phosphate chemicals industry in China.

Table 1 presents the project components and expected outcomes:

**Table 1： PhosChemEE Project Components and Expected Outcomes**

|  |  |
| --- | --- |
| **Project Objective**: Enabling the extensive application of low carbon and energy efficient technologies in the phosphate chemicals industry in China and the achievement of the United Nations sustainable development goals (SDG). | |
| **Project Components** | **Expected Outcomes** |
| 1. Green and Low Carbon Development and Operation of Phosphate Mines | Improved interest and commitment of the phosphate chemical industry in the green, low carbon and energy efficient operations of the phosphate mining sub-sector in China; Enhanced confidence in the feasibility of the application of green, energy efficient low carbon technologies in phosrock mining and refining in China. |
| 2. Green and Low Carbon Design and Operation of Phosphate Chemicals Production Facilities | Established a green and low-carbon development model for phosphorus chemicals; Enhanced confidence in the feasibility of the application of green, energy efficient low carbon technologies in phosphate chemicals production in China. |
| 3. Green and Low Carbon Design and Operation of Waste Management Systems in the Phosphate Chemicals Industry | Enhanced commitment of, and institutional and technical arrangements for, the phosphate chemical industry in green and low carbon waste management; Increased confidence in the feasibility of the application of green and low carbon technologies in the management of waste in the phosphate chemicals Industry in China. |

The project includes the implementation of demonstration activities in the provinces of Yunnan, Guizhou, Sichuan, and Hubei. Low carbon and efficient comprehensive utilization of phosphorus resources, clean production of PCI and low-carbon reuse of phosphogypsum involve technology R&D, production, and service enterprises. The participation of enterprises and the private sector in project design can ensure that this project is based on clear understanding of the marketization of by-products of comprehensive utilization of phosphorus resources.

## Purpose and Scope of this ESMF

This ESMF is a management tool to assist in managing potential adverse social and environmental impacts associated with activities of the PhosChemEE Project, in line with the requirements of UNDP’s Social and Environmental Standards (SES). Given the fact that this project has been screened and assessed as having a High-risk category, comprehensive and robust SES due diligence, assessment and management are required. The scope of this ESMF covers all project components and sub-components and includes procedures for the screening and assessment of both upstream and downstream interventions.

The implementing partners of the projects and the relevant members of the project management units will follow this ESMF during the start of the project implementation to ensure the environmental and social risks and impacts are fully assessed and management measure in place prior to the implementation of the relevant project activities.

This ESMF identifies the steps for detailed (re-)screening and assessment of the project’s potential social and environmental risks, and for preparing and approving the required management plans for avoiding, and where avoidance is not possible, reducing, mitigating, and managing these adverse impacts.

This ESMF forms the basis upon which the implementing partners will develop their specific Environmental and Social Management Plan(s) or other plans (as required per the SES), to ensure compliance with the UNDP SES. This ESMF will be publicly disclosed in line with UNDP’s Information Disclosure Policy and SES. Free, Prior Informed Consent (FPIC) will be applied for any identified activities which may have adverse impacts on ethnic minorities, including but not limited to the implementation of the ESMF.

## Potential Social and Environmental Impacts

**Project-related positive impacts**

The social and environmental objectives of the PhosChemEE Project are:

* Establish effective policy and institutional frameworks towards the development of cleaner and energy efficient phosphate chemicals industry in China.
* Improve interest and commitment of the phosphate chemical industry in the green, low carbon and energy efficient operations of the PCI industries in China.
* Enhance confidence in the feasibility of the application of green, energy efficient low carbon technologies in the PCI industries in China
* Improve the environment in underdeveloped western regions, especially by reducing greenhouse gas emissions (GHG) and improving the quality of local ecological environment; and
* Strengthen public awareness, knowledge, information management, and monitoring systems on greening and low carbon transformation in support of cleaner and energy efficient phosphate chemicals industry in China.

It is estimated that about **35 million tons** of CO2 emissions are expected to be reduced by the end of the project.

**Potential Adverse impacts**

UNDP utilizes its Social and Environmental Screening Procedure (SESP) to identify potential social and environmental risks and opportunities associated with proposed projects. Each project is scrutinized as to its type, location, scale, sensitivity, and the magnitude of its potential social and environmental impacts. All project activities are screened, including planning support, policy advice, and capacity-building, and site-specific, physical interventions.

During PhosChemEE Project development, the project development team also reviewed the proposed activities based on the preliminary SESP. Such review was aimed at verifying the initially identified risks, as well as identifying other potential risks. The social and environmental impacts of the identified risks associated with the project activities were also identified. These primarily relate to the application of new technologies, equipment and infrastructures particularly in the construction and operation of the demo installations, the enhanced risks to local community and project workers, potentially waste generation, resource consumption and potential changes to land use, and ecosystem services in the demo areas, etc.

The project specific SESP template detail the specific environmental and social risks that apply to the PhosChemEE Project. Overall, nine (9) social and environmental risks were identified for the PhosChemEE Project. The significance of each risk based on its likelihood of occurrence and extent of the potential impact was also estimated. Based on the assessed significance of the individual risks, overall SESP risk for the PhosChemEE Project is rated “**High**”, which is the same as the highest rating allocated to an individual risk.

**High Risk:** is defined by UNDP’s SES[[1]](#footnote-1) as *“Projects that include activities with potential significant adverse social and environmental risks and impacts that are irreversible, unprecedented, and/or which raise significant concerns among potentially affected communities and individuals as expressed during the stakeholder engagement process. High Risk activities may involve significant adverse impacts on physical, biological, socioeconomic, or cultural resources. High Risk projects may have the potential to aggravate existing situations of fragility or conflict, adversely affect human rights and/or lead to extensive environmental degradation. Comprehensive forms of assessment and management plans are required.”*

The “High” risk categorization of the project is due to the following risk, identified in the SESP (Annex 9.1):

Risk 1: The PhosChemEE Project (and most specifically Component 1 which focuses on the upstream Phosphate mining and refining sub-sector) could lead to adverse impacts on enjoyment of the human rights (civil, political, economic, social, or cultural) of the affected population, including ethnic minorities and vulnerable/disadvantaged groups. This is most likely to occur under Outputs 1.2.2, 2.2.2 and 3.2.2.

Mining companies engaged in the project might not have the capacity and knowledge to uphold their duties as per UNDP SES requirements. This includes upholding duties and requirements on FPIC as per UNDP SES 6.

In addition to the above, several “substantial” risks have been identified during the initial SES screening of the project. They are primarily linked to the potential impacts on biodiversity, ecosystems, local communities, pollution prevention and resource efficiency, and are as follows:

Risk 2: During the construction of demo activities (Output 2.2.2), and in support to the mining and refining sectors (under Component 1), potential adverse impacts to habitats and/or ecosystems and ecosystem services (e.g. non-hazardous waste from phosphogypsum reuse) may occur.

Risk 3: Inadequate disposal of waste during the operation of the phosphogypsum processing reuse demo (I.e. Outputs 3.2.1 and 3.2.2) poses a threat to the environment as well as the health and safety of workers and the community. The associated construction, operation, or decommissioning of the demo installations may have potential health and safety risks to local communities and workers due to the transport, storage, and use and/or disposal of any hazardous or dangerous materials (e.g., explosives, fuel and other chemicals) that may be used during construction and operation.

Risk 5: The Project includes activities both downstream/physical activities (like phosphogypsum processing), as well as upstream/policy-level interventions that require/could lead to significant consumption of raw materials, energy, and/or water; and involves significant extraction, diversion or containment of surface and/or ground water. That resource use, if not designed or implemented well, could lead to adverse impacts on ambient conditions in the project area and area of influence.

Risk 6: The PhosChemEE Project result in significant greenhouse gas emissions or may exacerbate climate change due to massive energy consumption in phosrock mining and refining, and in phosphate chemicals production.

Risk 7: Upstream project activities (primarily Outputs 1.1.1, 1.1.2, 2.1.1, 2.1.2, , 2.1.6, 2.2.4, 2.2.5, 3.1.1, and 3.1.2,) could result in adverse impacts to the local communities and the receptor environment if project-supported policy initiatives are not adequately screened and assessed. China accounts for more than 80% of the world's total production capacity of Phosphate. As such, the project could inadvertently lead to issues of global and/or cumulative environmental concern if not managed adequately

e “moderate” risks which are primarily linked to potential impacts on sensitivity to climate change or related climate impacts, worker safety and working conditions. They are as follows:

Risk 4: The potential outcomes of the PhosChemEE Project will be sensitive or vulnerable to potential impacts of climate change. Yunnan, Sichuan, Guizhou, and Hubei, where the demos are located, have risks of extreme weather that are exacerbated by climate change. Thus, some of the demonstration activities of the project (located outdoors) can be impacted by weather events

Risk 8: The phosphogypsum processing and reuse demos have been planned to be implemented in the existing facility. Legacy pollution issues may exists that have on-going environmental impacts which will have to be managed in line with UNDP SES requirements.

Risk 9: There is the possibility, that through some possible changes to the use of lands and resources in the phosphogypsum processing and reuse demo outputs of the project, access restrictions/economic displacement may occur as a result of indirect impacts emanating from the project’s interventions.

More detailed information on project-specific risks is contained in the completed SESP in **Annex 9.1**.

Further assessment is required as project activities are further defined during the inception phase. The main areas that will need to be further screened/assessed relate to the demo sites (i.e. Outputs 1.2.2, 2.2.2, 3.2.2) that are yet to have their final siting identified. In order to adequately identify, assess and manage/mitigate any of the impacts associated with the construction and operation of the demos, Outputs 1.2.2, 2.2.2 and 3.2.2 cannot commence until site specific risk screening and ESIA´s have been completed and reviewed by UNDP.

# Legislation and Institutional Frameworks for environmental and social matters

## National Legislation, Policies and Regulations

The following national/host country legislation, policies and regulations are relevant to the implementation of the PhosChemEE Project.

**General Environmental Management:**

President Xi Jinping put forward in the general debate of the seventy-fifth UN General Assembly: "China will enhance the state's independent contribution and adopt more effective policies and measures. **Carbon dioxide emissions will strive to peak before 2030 and strive to achieve carbon neutralization by 2060**." This goal is extremely consistent with the zero-carbon community constructed by this project.

The **Environmental Protection Law** (2015) was formulated to protect and improve the living environment and ecological environment, prevent and control pollution and other public hazards, protect human health, and promote the development of socialist modernization. This Law declares that environmental protection is the basic national policy of the country. The State adopts economic and technological policies and measures conducive to saving and recycling resources, protecting, and improving the environment, and promoting harmony between man and nature, to coordinate economic and social development with environmental protection. Among these, Article 36 stipulates that the State encourages and guides citizens, legal persons and other organizations to use products and recycled products that are conducive to environmental protection to reduce the generation of wastes; Article 40 stipulates that the state promotes cleaner production and resource recycling.

The **Environmental Impact Assessment Law** (2003, reviewed in 2018) was designed to implement sustainable development strategy, prevent adverse impact on the environment after the implementation of planning and constructions projects, and promote the coordinated development of economy, society, and environment.

Articles 4 and 6 of **the Cleaner Production Promotion Law** (2003) stipulate that the State encourages and promotes cleaner production and scientific research, technological development and international cooperation related to cleaner production. In addition, it also organizes publicity and popularization of cleaner production knowledge and promotes cleaner production technology. To promote cleaner production, the law also formulated relevant provisions on financial support and information system establishment. During the implementation of cleaner production, industry, agriculture, and service sectors have corresponding legal provisions.

**Legislation Related to Air, Water and Noise Standards:**

The aim of **Law of the People's Republic of China on the Prevention and Control of Atmospheric Pollution**（revised in 2018）is to protect and improve the environment, prevent and control air pollution, safeguard public health, promote ecological civilization and promote sustainable economic and social development. The law stipulates that the competent ecological and environmental departments of the people's governments at or above the county level shall exercise unified supervision and administration over the prevention and control of air pollution. Other relevant departments of the people's governments at or above the county level shall, within the scope of their respective functions and duties, exercise supervision and administration over the prevention and control of air pollution.

The goal of the **Law of the People's Republic of China on the Prevention and Control of Noise Pollution（2022）**is to prevent and control environmental noise pollution, protect and improve the living environment, and ensure human health. It stipulates that local people's governments at various levels shall be responsible for the quality of acoustic environment within their respective administrative areas and take effective measures to improve the quality of acoustic environment. The emission of noise and the generation of vibration shall conform to the noise emission standards, the relevant environmental vibration control standards and the requirements of relevant laws, regulations and rules.

The purpose **of Law of the People's Republic of China on the Prevention and Control of Water Pollution**（revised in 2017）is to protect and improve the environment, prevent and control water pollution, protect water ecology, ensure drinking water safety, safeguard public health, promote ecological civilization construction, and promote sustainable economic and social development. The law stipulates that the discharge of water pollutants shall not exceed the national or local standards for the discharge of water pollutants and the total discharge control targets of key water pollutants. In particular, people's governments at or above the county level may delimit protection zones for water bodies in scenic spots, important fishery water bodies and other water bodies of special economic and cultural value and take measures to ensure that the water quality in the protection zones meets the water environmental quality standards for specified purposes.

**Legislation relating to Cultural Heritage:**

Cultural heritage includes material cultural heritage and intangible cultural heritage. Cultural heritage refers to cultural relics with historical, artistic and scientific value. Intangible cultural heritage refers to various traditional cultures that exist in non-material forms and are closely related to people's life and inherited from generation to generation.

In order to inherit and carry forward the fine traditional culture of the Chinese nation, **Law of the People's Republic of China on the Protection of Cultural Relics** (revised in 2017) stipulates thatpeople's governments at all levels shall attach importance to the protection of cultural relics, correctly handle the relationship between economic construction, social development and the protection of cultural relics, and ensure the safety of cultural relics. Capital construction and tourism development must abide by the guidelines for the protection of cultural relics, and their activities shall not cause damage to cultural relics. Public security organs, administrative departments for Industry and commerce, customs, urban and rural construction planning departments and other relevant state organs shall earnestly perform their duties of protecting cultural relics according to law and maintain the order of cultural relics management.

**Intangible cultural heritage law of the People's Republic of China (2011)** stipulates that the State adopts measures such as identification, recording and filing to preserve intangible cultural heritage, and adopts measures such as inheritance and dissemination to protect intangible cultural heritage that embodies the excellent traditional culture of the Chinese nation and has historical, literary, artistic and scientific values.

**Legislation Relating to Community Health and Working Conditions:**

Workers' right to working environment is the right of workers to protect their physical and mental health from being harmed by working environment. **Law of the People’s Republic of China on employment Ccontracts** (revised in 2012) stipulates that where an employing unit is under any of the following circumstances, it shall be subject to administrative punishment according to law. If such a case constitutes a crime, criminal responsibility shall be investigated according to law. Those who cause damage to laborers shall be liable for compensation

**Legislation relating to Land Rights (resettlement)**:

China has a long history of establishing and implementing laws and regulations associated with displacement and resettlement, many of which have been associated with hydroelectric water projects. The National Construction Land Acquisition Measures, promulgated in 1953, was the first statute on land acquisition, demolition, removal, and resettlement. These measures outlined the principles and procedures for land acquisition and set the standards for payment of compensation for acquired land, serving as the basis for the subsequent Land Administration Law. The ***Land Administration Law*** has been updated and amended several times, with regulations added to enhance the land law, including the Land Acquisition and Resettlement Regulation for Construction of Large and Medium-Sized Water Conservation Projects (1991 and 2006). The 2006 Regulations added subsidies for relocation and training for livelihoods, annual post-relocation fund support of RMB 600 per year per capita for 20 years[[2]](#footnote-2), and community infrastructure rehabilitation and improvement based on the needs of resettled people. Additional guidelines promulgated in 2006 – Guidelines for Provision of Job Retraining and Social Insurance for Farmers that Lose Land – stipulated that the compensation and rehabilitation package also include a social security fund for rural farmers whose land is acquired and become urban citizens, and long-term compensation annually. The aim of both the 1991 and 2006 Regulations was to maintain or surpass pre-resettlement living standards which aligned China’s resettlement policy with the international standards of organizations such as the World Bank and Asian Development Bank.[[3]](#footnote-3)

Administration of Resettlement: The administration and implementa­tion of resettlement policy is essentially decentralized. Under the decentralized model of resettlement administration and management, provinces issue their own administrative standards within the guidelines of national regulations. Different provinces and even different counties apply different standards of compensation. The county government sets the multiplication figure within the range of the national standard. Major projects of national interest, such as highways and energy development (including large dams), tend to attract lower compensation standards than commercial projects. Paddy fields attract a higher multiplication factor than mountainous woodlands, and orchards have a higher multiplication factor than economic woodlands. The 2006 Regulations are also weighted towards compensation as a means of restor­ing rights rather than benefit sharing or development.

**Legislation relating to Ethnic Minorities**:

There are a total of 56 ethnic groups identified in China, mainly based on their similarities such as common [ancestry](https://en.wikipedia.org/wiki/Ancestry), [language](https://en.wikipedia.org/wiki/Language), [society](https://en.wikipedia.org/wiki/Society), and [culture](https://en.wikipedia.org/wiki/Culture). Of the 56 ethnic groups, Han ethnicity is the ethnic majority and the other 55 ethnic groups are considered ethnic minorities. The term “*indigenous peoples*” is not used in China.

The ***Constitution* (1982, revised in 2004)** addresses the issue of PA through confirming the state and collective ownership of land and natural resources and prescribing the State’s responsibility in environmental and resource protection. The Constitution emphasizes that all nationalities in the People’s Republic of China are equal. The State protects the lawful rights and interests of minority nationalities and upholds and develops a relationship of equality, unity, and mutual assistance among all of China’s nationalities. The State assists areas inhabited by minority nationalities in accelerating their economic and cultural development according to the characteristics and needs of the various minority nationalities. Regional autonomy is practiced in areas where people of minority nationalities live in concentrated communities; in these areas organs of self-government are established to exercise the power of autonomy. And in exploiting natural resources and building enterprises in the national autonomous areas, the State shall give due consideration to the interests of those areas. And all these provisions are reiterated in the ***Regional Ethnic Autonomy Law*** (1984, revised in 2001)[[4]](#footnote-4).

The ***Rules of the State Council on the implementation of the Law of the People's Republic of China on Regional National Autonomy*** (2005)[[5]](#footnote-5) stipulates that the state strengthens the poverty alleviation and development of the ethnic autonomous areas, and emphasizes the infrastructure and the basic construction of the farmland in the poor rural areas of the autonomous areas, which focus on water, electricity, access, radio, television construction, and the transform of thatched house and dilapidated house, and ecological migration. And all these activities are based on the residents’ willingness.

**Legislation relating to Energy Development and Transition:**

The **Energy Conservation Law** (1998, revised in 2018) states that resource conservation is the basic national policy of China. The law establishes a set of energy-saving legal documents, such as energy-saving management and energy-saving technology progress. Article 7 mentions that the State encourages and supports the development and utilization of new and renewable energy. For rural areas, Article 59 stipulates that people's governments at or above the county level shall, in accordance with the principles of suiting measures to local conditions, complementing each other's various energies, comprehensive utilization and stressing efficiency, strengthen the work of energy conservation in agriculture and rural areas, and increase the investment in the popularization and application of energy-saving technologies and products in agriculture and rural areas.

The **Renewable Energy Law** (2016) was formulated to promote the development and utilization of renewable energy, increase energy supply, improve energy structure, ensure energy security, protect the environment, and achieve sustainable economic and social development. Article 18 stipulates that the State encourages and supports the development and utilization of renewable energy in rural areas. The energy management departments of the local people's governments at or above the county level shall, together with the relevant departments, formulate plans for the development of renewable energy in rural areas in accordance with the actual situation of local economic and social development, ecological protection and comprehensive health management, and promote the application of technologies such as biogas conversion, household solar energy, small wind energy and small water energy.

The **Strategic Action Plan for Energy Development** (2014-2020) adheres to the strategic principle of "saving, clean and safe", speeds up the construction of a clean, efficient, safe and sustainable modern energy system, and focuses on the implementation of four strategies: first, the priority strategy for saving (intensive and efficient development of energy, scientific and rational use of energy, and vigorously improving energy efficiency); second, the strategy based on the domestic strategy; third, the green low-carbon strategy (optimizing the energy structure, taking the development of clean low-carbon energy as the main direction of adjusting the energy structure); the last is the innovation driven strategy (strengthening the construction of energy science and technology innovation system, relying on major projects to promote independent innovation in science and technology, and building a strong country in energy science and Technology). In addition, in order to achieve the goal of non-fossil energy accounting for 15% and 20% of primary energy consumption in 2020 and 2030, accelerate the establishment of a clean and low-carbon modern energy system and promote the sustainable and healthy development of renewable energy industry, the national development and Reform Commission has formulated **the 13th Five Year Plan for Renewable Energy Development** (2016). According to the data of the National Bureau of statistics, in 2020, China's total energy consumption will be about 4.97 billion tons of standard coal, achieving the goal of controlling at 5 billion tons of standard coal; the proportion of coal consumption will be reduced to 56.7%, achieving the goal of less than 58%; The proportion of natural gas, hydropower, nuclear power, wind power and other clean energy consumption has risen to 24.5%, and the target of increasing the proportion of non-fossil energy consumption to more than 15% has been achieved in 2019, and the energy structure has been continuously optimized; the power generation in 2020 will be 7.4 trillion kwh, slightly higher than the 7.2 trillion kwh level proposed in the plan. According to the national energy administration, the 14th five year plan for renewable energy development is under preparation, and more positive development goals are initially considered to promote the large-scale and high proportion development and utilization of renewable energy.

Since the promulgation of the **Renewable Energy Law** (2016), the national development and Reform Commission at the central level, various construction departments and various provinces at the local level have successively issued relevant policies, which constitute a policy framework system to promote the development of renewable energy, mainly covering policy planning, cost sharing, compulsory acquisition, supporting electricity prices and financial and tax incentives. Some of these policies are implemented nationwide, such as the **Interim Measures for the management of special funds for renewable energy development** (2015), the **directory of renewable energy industry** (2005), and the **notice on establishing and improving the “guarantee mechanism” for renewable energy power consumption** (2019). In the other part, the central government formulates measures and regulations, and each local government arranges time schedule and standards according to its own situation, such as the **Trial Measures for the management of renewable energy power generation price and cost sharing** (2006), the **Interim Measures for the allocation of additional income from renewable energy electricity price** (2007), the **relevant regulations for the management of renewable energy power generation** (2006), the **full guarantee purchase management of renewable energy power generation** (2015), and the **pilot measures for priority power generation of peak shaving units with renewable energy** (2016).

**Low-carbon transformation and green development of the PCI chain:**

(1) Promotion of energy conservation and emission reduction in phosphate rock mining through the strategy of building "green mine". In 2017, the Ministry of Land and Resources (MLR), the Ministry of Finance (MoF), the Ministry of Environmental Protection, the General Administration of quality supervision, inspection and Quarantine of the People's Republic of China, China Banking Regulatory Commission and China Securities Regulatory Commission jointly issued the implementation opinions on speeding up the construction of green mines. It requires all newly-built mines to meet the requirements of green mine construction. In 2019, there were 953 mines in China that met the green mine standard, of which 37 were phosphate mines, accounting for about 4%. About 12.3% of all phosphate mines in China passed the green mine selection. In 2019, the Ministry of Natural Resources (MNR) issued the notice of its General Office on updating the catalogue of advanced and applicable technologies for savings and comprehensive utilization of mineral resources. It requires the technical progress recommended by the provincial natural resources department authorities through selection and comprehensive demonstration and screening with the first 6 batches of 334 technologies from 2012 to 2017. There were 360 technologies that were selected, including 19 technologies on phosphate rock development.

(2) The phosphate chemical industry has policy constraints on environmental protection and energy saving. The Ministry of Ecology and Environment (MEE) issued the implementation plan for the special investigation and remediation action of "three phosphorus" in the Yangtze River, focusing on the pollution of "three phosphorus" on May 2, 2019. The plan specifies the overall requirements and work arrangements for the special investigation and regulation of "three phosphorus" projects in the Yangtze River, which can be summarized as three key points and five stages. China Inorganic Salt Industry Association put forward the 13th Five Year Plan development idea of PCI and put forward the target of energy utilization efficiency of the industry. The Ministry of Industry and Information Technology (MIIT) also supports the research and development of key technologies for green and low-carbon development of phosphate chemical industry.

(3) The government has gradually attached importance to the treatment and disposal of phosphogypsum. In 2011, the MIIT issued the "guidance on comprehensive utilization of industrial by-product gypsum", to improve the tax preferential policy of industrial by-product gypsum used in cement retarder production, and guide enterprises to use industrial by-product gypsum as cement retarder. Local governments have gradually attached importance to the comprehensive utilization of phosphogypsum. In 2017, Guizhou Province formulated a special plan for the development of phosphogypsum industry and implemented the "fixed production by use" of phosphogypsum. Governments in Hubei, Sichuan, Yunnan, and other provinces have issued policies to promote green transformation of the PCI in their provinces. The MIIT issued the "industrial green development plan (2016-2020)", which proposed to promote a number of advanced and applicable technology and equipment around phosphogypsum and other industrial solid waste and promote enhanced resource utilization.

## UNDP’s Social and Environmental Standards

The PhosChemEE Project framed by this ESMF will comply with UNDP’s Social and Environmental Standards (SES), which came into effect 1 January 2015 and were updated to take effect in January 1, 2021. These Standards underpin UNDP’s commitment to mainstream social and environmental sustainability in its programs and projects to support sustainable development and are an integral component of UNDP’s quality assurance and risk management approach to programming. Through the SES, UNDP meets the requirements of the GEF’s Environmental and Social Safeguards Policy.

The objectives of the SES are to:

* Strengthen the social and environmental outcomes of Programs and Projects.
* Avoid adverse impacts to people and the environment.
* Minimize, mitigate, and manage adverse impacts where avoidance is not possible.
* Strengthen UNDP and partner capacities for managing social and environmental risks.
* Ensure full and effective stakeholder engagement, including through a mechanism to respond to complaints from project-affected people.

In accordance with UNDP SES policy, the Social and Environmental Screening Procedure (SESP) has been applied to the PhosChemEE Project during the project development phase. In accordance with UNDP SES policy, a SES principle or standard is ‘triggered’ when a potential risk is identified and assessed as having either a ‘moderate’, ‘substantial’ or ‘high’ risk rating based on its likelihood of occurrence and extent of impact. Risks that are assessed as ‘low’ do not trigger the related principle or standard.

The screenings conducted during project development indicate that all eight of the social and environmental standards have been triggered due to ‘high’, ‘substantial’ or ‘moderate’ risks:

* Principle 1: Human Rights
* Principle 2: Gender Equality and Women’s Empowerment
* Principle 3: Accountability
* Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management (due to some possible changes to the use of lands and resources in the implementation of the planned demonstration activities)
* Standard 2: Climate Change Mitigation and Adaptation (due to the risk that project outcomes will be vulnerable to impacts of climate change)
* Standard 3: Community Health, Safety and Working Conditions (due to potential health and safety risks to local communities due to the transport, storage, and use and/or disposal of any hazardous or dangerous materials)
* Standard 4: Cultural Heritage
* Standard 5: Displacement and Resettlement
* Standard 6: Indigenous Peoples
* Standard 7: Labour and Working Conditions
* Standard 8: Pollution Prevention and Resource Efficiency (due to potential generation of waste during the construction and operation of the RE/EE installation).

A summary of the risk significance under each SES principle and standard, and the project-level safeguard standards triggered by each project (indicated with ticks) are shown in **Table 2**.

**Table 2: Summary of Risk Rating and Safeguards Triggered by the PhosChemEE Project**

| **The PhosChemEE Project** | |
| --- | --- |
| **Overarching Principle / Project-level Standard** | **Risk rating** |
| Principle 1: Human Rights | **High** |
| Principle 2: Gender Equality and Women’s Empowerment | **High** |
| Principle 3: Accountability | **High** |
| Principle 4: Sustainability & Resilience | |
| -Standard 1: Biodiversity Conservation and Sustainable Natural Resource Management | **Substantial** |
| -Standard 2: Climate Change Mitigation and Adaptation | **Substantial** |
| -Standard 3: Community Health, Safety and Working Conditions | **Substantial** |
| -Standard 4: Cultural Heritage | **Substantial** |
| -Standard 5: Displacement and Resettlement | **Moderate** |
| -Standard 6: Indigenous Peoples | **High** |
| -Standard 7: Labour and Working Conditions | **Substantial** |
| -Standard 8: Pollution Prevention and Resource Efficiency | **Substantial** |
| **Number of risks in each risk rating category** | |
| **High** | 1 |
| **Substantial** | 5 |
| **Moderate** | 3 |
| **Low** | - |
| **Total number of project risks** | 9 |
| **Overall Project Risk Categorization** | **High** |
| **Number of safeguard standards triggered** | **8** |

## Gaps in Policy Framework

Further analysis of the legal and policy frameworks that apply to the PhosChemEE Project will be completed during the implementation of this ESMF (i.e. during the completion of further studies / targeted assessment) to determine which standard (national, international or UNDP’s SES) must be followed for each risk area.

# Procedures for Screening, Assessing and Managing Social and Environmental Impacts

As detailed earlier, the project underwent an initial risk screening (pre-SESP) during the concept stage which resulted in the project being categorized as ‘high’ risk. During the conduct of the PPG SESP, a selection of further assessments and management tools were identified as necessary. In the case of this Project, assessments and the development of these specific management plans may need to take place during project implementation due to the fact that many site-specific activities are not yet known and that project resources from the budget are needed to complete the assessment and management plans for forthcoming project activities.

As such, this ESMF has been developed to serve as a framework/tool that guides the screening and categorization, level of impact assessment, required institutional arrangements, and processes to be followed for components or activities that will be further specified during project implementation. The ESMF ensures that appropriate management measures that comply with the SES are adopted prior to implementation of the relevant forthcoming activities.

In addition to the ESMF, many of the initially identified risks were also addressed by including specific elements in the design of its activities. Four focused assessments were prepared during PPG phase: i) a Stakeholder Engagement Plan (Annex 7 of the ProDoc); ii) a Gender Analyses and Gender Action Plan (Annex 10 of the ProDoc); and iii) the project’s SESP. These assessments establish measures to manage the associated risks.

In addition to the focused assessments/frameworks listed above (that were undertaken during the project [preparation phase), screening, assessment, and management/mitigation for future upstream (i.e. via SESA) and downstream (via scoped ESIAs) will need to take place. The procedures and requirements for both are outlined below.

This ESMF has been developed as part of UNDP’s due diligence process in the project cycle, following the screening of the PhosChemEE Project with the SESP template. Based on the project risk categorization, the following procedures for screening, assessing, and managing those risks must be undertaken during the inception phase.

## Screening

The SESP has identified foreseen project impacts which apply across the construction, operation, and maintenance of demos. As currently constituted, the risks are based on the broad scope of project activities, outputs and outcomes currently identified, and the allocated significance rating is based on a precautionary approach, reflecting a worst-case scenario. Given the final siting of demo activities/interventions is not known at this juncture, re-screening will need to occur once decisions on siting have been completed (and before any related construction/instalment is undertaken).

In addition to the screening that is required once demo sites have been finalized (and the full designs completed), the project as a whole will be re-screened with the UNDP SESP as needed in the course of conducting the required assessments; as prescribed by the projects’ management plan(s); when determined necessary by the respective Project Manager (after consideration of the advice from PMO staff with responsibility for safeguards), the Project Steering Committee, or UNDP; and/or when project circumstances change in a substantive or relevant way.

## Assessment

In accordance with UNDP’s SES policy, High Risk projects require comprehensive forms of assessment. To meet the assessment requirements of high-risk UNDP supported projects, several key tools/avenues for further assessment of environmental and social risk have been developed for the PhoschemEE project. This includes and assessment of direct, indirect, cumulative, upstream, and downstream impacts that may arise because of project interventions. As such, tailored SES assessment tools have been proposed to adequately assess each of these potential impact areas. The required assessment studies for the project are as a follows:

### Site Specific ESIAs for demo activities

The (site-specific) ESIAs for the PhosChemEE Project will be developed and carried out by independent experts in a participatory manner with stakeholders during the implementation phase. An annotated annex/template for the site-specific ESIAs has been included within this ESMF as Annex II.

Each ESIA will further identify and assess social and environmental impacts of each project and its area of influence; evaluate alternative; and design appropriate avoidance, mitigation, management, and monitoring measures, especially the potential impacts of the planned construction and operation of new advanced PCI technology infrastructures on sustainable natural resource (efficiency) management and community health. It will address all relevant issues related to the SES Overarching Principles and Project-level Standards.

These ESIAs will include appropriate consultation with affected communities, including FPIC consultations with ethnic minorities if required for SES compliance, to consult on potential impacts and management measures and ensure community participation in planning, implementation, and monitoring. The SESP completed during project development phase will be used as the basis of this targeted assessment, and assessment reports will inform revision of the SESP, and the development of management plans.

The design of the demo will take climate-related events and risks into consideration by utilizing the findings of the risk assessment that shall be conducted as part of the ESIAs. Appropriate measures will be taken based on the specific climate-related events. For instance, the adverse impact of flood on demos can be eliminated by constructing diversion ditches, while sunshade roofs and cooling spray can reduce the impact of extreme high temperatures.

The demo site activities (which will require site specific ESIs) are not to commence until the reports have been produced and disclosed (following UNDP SES requirements on information disclosure periods).

### Life-cycle analysis

With regard to the design of the demos, and to assist with the implementation of Activity 2.1.3 (*Implementation of the demos of new feasible and cost-effective RE technology application models designed in Activity 2.1.2*) and Activity 2.2.1 (*Development and approval of engineering designs and implementation plans of demos of new and cost-effective EE/EC technologies*) life-cycle analysis (LCA) will be applied to assess the amount of raw materials, energy, and water used by each technology. This will allow a comparison to be made as to the relative merits of each demo technology. LCA is a recognized framework for assessing the environmental impacts of specific technologies or products.

The steps in LCA are (1) goal and scope definition, (2) life cycle inventory analysis (LCI), (3) life cycle impact assessment (LCIA), and (4) interpretation of the results. Based on LCA assessments, the project will be designed to seek cleaner and more energy-efficient phosphate chemicals production and processing of phosphogypsum.

International practice for water and energy conservation will be applied in demos, especially the wastewater management and reuse technologies. Emergency accident pools will be designed in each demo in accordance with the requirement of contamination avoidance. Additionally, the demos will establish the resource efficiency monitoring mechanism, including using benchmarking data to the relative level of efficiency and reporting water and energy consumption periodically. This will ensure that the new and advanced technologies of phosphate chemicals production and phosphogypsum processing will reduce or optimize resource consumption, so that the project’s water consumption does not have significant adverse impacts on communities, other users or the environment and ecosystems.

### Strategic Environmental and Social Assessment for Upstream impacts

To adequately assess the potential impacts that may arise due to upstream/policy-level project interventions and support, a Strategic Environmental and Social Assessment (SESA) will be conducted for this project.

The scope of the SESA will include the following key project outputs; Outputs 1.1.1, 1.1.2, 2.1.1, 2.1.2, ,2.1.6, 2.2.4, 2.2.5, 3.1.1, and 3.1.2.

The SESA will be carried out by independent experts in accordance with UNDP’s SES policy and the [UNDP SES Guidance Note on Assessment and Management](https://info.undp.org/sites/bpps/SES_Toolkit/SES%20Document%20Library/Uploaded%20October%202016/UNDP%20SES%20Assessment%20and%20Management%20GN%20-%20FInal%20Nov2020.pdf) to identify and assess social and environmental impacts associated with the proposed regulations in a participatory manner with stakeholders as follows:

* 1. Identify social and environmental priorities to be included in planning and policy processes
  2. Assess gaps in the institutional, policy, and legal frameworks to address these priorities
  3. Identify potential adverse social and environmental impacts associated with policy options
  4. Engage decision makers and stakeholders to ensure a common understanding and broad support for implementation
  5. Formulate policy and institutional measures needed to close policy and legal gaps, address institutional weaknesses, and avoid adverse social and environmental impacts.

The SESA process will ensure that impacts to local communities, their livelihoods, rights, resources, and the biophysical receptor environment are taken into consideration in the decision-making process while developing legislative tools and strategies. Any institutional and capacity gaps identified during this process will be addressed through the training that will be conducted for the specified activities.

The SESA will be comprised of a concise report that summarizes the main findings and results of SESA, including (a) SESA stakeholder engagement process; (b) key social and environmental priorities and issues associated with chosen policy/strategy initiative; (c) institutional arrangements for coordinating integration of social and environmental issues into chosen policy/strategy initiative; (d) legal, regulatory, policy, institutional and capacity recommendations to address any identified gaps for managing the social and environmental priorities and implementing applicable social and environmental policies; (e) results of assessment of social and environmental risks/impacts associated with the implementation of the proposed regulations; (f) identification of measures (e.g. policies, institutional strengthening, governance reform) to address and manage anticipated adverse social and environmental risks and impacts, including a summary Action Matrix.

## Management

### Environmental and Social Management Plans

The High-Risk PhosChemEE Project will create the Environmental and Social Management Plans (this has initially been identified to cover the impacts associated with the demo sites, which will be further understood after the conduct of the ESIAs as outlined in Section 3.2.1), which will be informed by the SESP (overall and site-specific), assessment reports, and other management plans including the Gender Action Plan. The ESMPs will provide a set of avoidance, mitigation, monitoring and institutional measures – as well as actions needed to implement these measures – to achieve the desired social and environmental sustainability outcomes. Complementing what has already been identified in the ProDocs, the ESMP will further identify project activities that cannot take place until the relevant mitigation measures are approved and put in place. The measures will be adopted and integrated into the project activities, monitoring and reporting framework and budget, and captured in a revised SESP for each project.

In addition, ESMPs are dynamic, and will require amending as new project activities are identified, screened, assessed, and implemented. Additional required mitigation and impact management measures must be integrated into management plans, and in some cases may require, or benefit from, input from the Project Gender Specialist. An annotated outlined for the ESMP that are to be produced for this project is included as Annex III to this document.

**3.3.2 Labour Management Procedure**

In addition to the ESMP that are to be produced for the PhoschemEE project, targeted management plans will be required to address residual SES3 and SES 7 impacts.

As outlined earlier (see section 3.2.1), site-specific environmental and social assessments will be conducted for each demo to identify the critical health and safety risks. Where public access is available, appropriate engineering and administrative controls (e.g., detours, traffic calming, signs) will be considered and implemented in advance during the construction and operation of demos.

All contractors (i.e. undertaken engineering and infrastructure works as part of the project) will be required to develop, submit and adhere to a Labour Management Plan that meets the requirements of both UNDP SES 7 and relevant national/host country law and regulation.

Appropriate training will be provided to workers to ensure that they install and operate the installed system correctly and safely, and properly control and manage the release or disposal of waste. Training will also be provided to local governments to enhance their regulation capacity to control potential risks in the demonstration. This will minimize or avoid any community health risks and safety issues for the communities regarding construction work involved in the installation of the demos, and the minimization and management of waste generated from these demos (e.g., explosives, fuel and other chemicals).

An annotated outlined for the Labour Management procures that are to be developed and followed by contractors for the project has been included in this document as Annex I.

# Institutional Arrangements and Capacity Building

## Roles and Responsibilities for Implementing this ESMF.

The roles and responsibilities of project staff and associated agencies in implementation of this ESMF is as follows. This ESMF does not cover the roles and responsibilities associated with implementation of the subsequent stand-alone management plans; those will be defined in demo projects’ subsequent management plan that is developed in the project inception phase.

**Implementing Partners: Ministry of Industry and Information Technology (MIIT) and Ministry of Natural Resources (MNR)**

* Ensure that the required assessment (targeted assessment, as above) and assessment report and the required management plan(s) (stand-alone management plan, as above) are developed, disclosed for public consultation and approved, and management measures are adopted and integrated during project implementation;
* Report, fairly and accurately, on project progress against agreed work plans in accordance with the reporting schedule and required formats.
* Maintain documentation and evidence that describes the proper and prudent use of project resources in conformity to the signed Project Document and in accordance with applicable regulations and procedures (e.g. SES).
* Ensure all requirements of UNDP’s SES and national regulatory/policy frameworks have been addressed.
* Hold responsibility and accountability to UNDP for overall management of the project, including compliance with UNDP SES.

**Project Steering Committee:**

|  |
| --- |
| * Ministry of Finance (MOF) * Ministry of Industry and Information Technology (MIIT) * Ministry of Natural Resources (MNR) * National Development and Reform Commission (NDRC) * All China Women’s Federation (ACWF) * United Nations Development Program (UNDP) |

* Monitor implementation of this ESMF and compliance with national and international regulations, and UNDP social and environmental standards.
* Decision making for the adoption of necessary measures including full integration of management measures within project Outputs and annual work plans.
* Establish and support GRM mechanism to address any grievances.

**UNDP:**

* Provide oversight on all matters related to safeguards.
* Inform all the stakeholders and right-holders involved in, or potentially impacted, positively or negatively, by the GEF-financed projects, about the UNDP’s corporate Accountability Mechanism (described below).
* Ensure that the Compliance Review and the Stakeholder Response Mechanisms are operational during the lifetime of the projects.
* Ensure adhere to the SES for project activities implemented using funds channelled through UNDP’s accounts, and undertake appropriate measures to address any shortcomings.
* Verify and document that all UNDP SES requirements have been addressed.
* Provide technical guidance on implementation of this ESMF and administrative assistance in recruiting and contracting expert safeguards services (as required), and monitor adherence of each project to the ESMF and UNDP policies and procedures.

**Project Management Office (PMO):**

* Supervise and manage implementation of measures defined in this ESMF.
* Assign specific responsibilities for implementation of this ESMF, including monitoring, and community consultations on the draft management plans to a staff member(s) of the PMO.
* Maintain relevant records associated with management of environmental and social risks, including updated SESPs, impact assessments, a log of grievances together with documentation of management measures implemented.
* Report to the Implementing Partner, the Project Steering Committee and UNDP on the implementation of the ESMF.
* Ensure that all service providers are informed of their responsibilities for the day to day compliance with the ESMF.

As noted above, the projects’ subsequent ESMPsand stand-alone management plan**s** as required**,** will describe the roles and responsibilities in the implementation of those plans. Those new roles and responsibilities will be assessed and integrated, as appropriate, as part of the participatory decision making and implementation proceedings of the project.

## Capacity Building

Specialists with relevant expertise in social and environmental safeguards will be engaged to support the completion of targeted assessment, and the subsequent development of any stand-alone management plans. These experts will offer an induction session for Project Management Units (and implementing partners, as needed) on safeguards responsibilities and approaches.

The UNDP-NCE Unit will provide advice to project teams as needed to support the implementation of this ESMF and the preparation, implementation, and monitoring of social and environmental management plans/measures.

Project Steering Committee will have the final responsibility for the integration of a stand-alone management plan in the execution of the project. The integration of that plan will need to consider particular institutional needs, including a review of the required budget allocations for each measure, as well as the authority and capability of institutions at different administrative levels (e.g. local, regional, and national), and their capacity to manage and monitor management plan implementation. Where necessary, capacity building and technical assistance activities will be included to enable proper implementation of the management plan.

# Stakeholder Engagement and Information Disclosure

Discussions with project stakeholders, including local communities at project sites, commenced during the project development phase of each project. **A list of the stakeholders engaged in these consultations should be** **Annexed to the Project Documents**. The PhosChemEE Project also has a Stakeholder Engagement Plan and Gender Action Plan, which is annexed to the Project Documents. These Plans will be followed to ensure that stakeholders are engaged in project implementation and particularly in the further assessment of social and environmental impacts and the development of appropriate management measures. The Project Stakeholder Engagement Plan will be updated during project implementation based on the assessments and management plans conducted in line with this ESMF, as needed.

Potentially affected stakeholders will be engaged during the implementation of this ESMF. As part of the stakeholder engagement process, UNDP’s SES require that project stakeholders have access to relevant information. Specifically, the SES (SES, Policy Delivery Process, para. 21) stipulates that, among other disclosures specified by UNDP’s policies and procedures, UNDP will ensure that the following information be made available:

* Stakeholder engagement plans and summary reports of stakeholder consultations
* Social and environmental screening reports with project documentation
* Draft social and environmental assessments, including any draft management plans.
* Final social and environmental assessments and associated management plans
* Any required social and environmental monitoring reports.

As outlined in the SES and UNDP’s Social and Environmental Screening Procedure (SESP), the type and timing of assessments and management plans vary depending of the level of social and environmental risk associated with the project as well as timing of the social and environmental assessment.

This ESMF (and project SESP) will be disclosed via the UNDP China website in accordance with UNDP SES policy. The subsequent project ESMPs or stand-alone management plan will also be publicly disclosed via the UNDP China website once drafted and finalized and adopted only after the required time for disclosure has elapsed.

These requirements for stakeholder engagement and disclosure will be adhered to during the implementation of this ESMF, and the subsequent implementation of the resulting ESMPs and any stand-alone management plans.

# Accountability and Grievance Redress Mechanisms

## UNDP’s Accountability Mechanisms

UNDP’s SES recognize that even with strong planning and stakeholder engagement, unanticipated issues can still arise. Therefore, the SES are underpinned by an Accountability Mechanism with two key components:

1. A Social and Environmental Compliance Review Unit (SECU) to respond to claims that UNDP is not in compliance with applicable environmental and social policies; and
2. A Stakeholder Response Mechanism (SRM) that ensures individuals, peoples, and communities affected by projects have access to appropriate grievance resolution procedures for hearing and addressing project-related complaints and disputes.

UNDP’s Accountability Mechanism is available to all of UNDP’s project stakeholders.

The Social and Environmental Compliance Unit (SECU) investigates concerns about non-compliance with UNDP’s Social and Environmental Standards and Screening Procedure raised by project-affected stakeholders and recommends measures to address findings of non-compliance.

The Stakeholder Response Mechanism helps project-affected stakeholders, UNDP’s partners (governments, NGOs, businesses) and others jointly address grievances or disputes related to the social and/or environmental impacts of UNDP-supported projects.

Further information, including how to submit a request to SECU or SRM, is found on the UNDP website at: http://www.undp.org/content/undp/en/home/operations/accountability/secu-srm/.

## Project-level Grievance Redress Mechanisms

The Project Management Office (PMO) shall establish a project-level Grievance Redress Mechanism (GRM) during project inception. The full details of the GRM will be agreed upon during the project’s inception phase. Interested stakeholders may raise a grievance at any time to the PMO, the Executing Agency, Implementing Agency (UNDP), or the GEF.

Main features of the GRM are detailed in **Table 3** below. Three models of GRM are required:

1. for the redress of grievances submitted by communities in and surrounding the demo sites.
2. for the redress of grievances submitted by workers/labour unions in the demo companies; and
3. from the wider public.

The full details of the GRM will be agreed upon during project inception.

**Table 3. Grievance Redress Mechanism (Outline)**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Engagement methods and actions** | **Objectives** | | **Key Stakeholders being engaged** | **Main responsible agencies** | **Location** | **Time** | **Resources** |
| **(1) Mechanism for redress of grievances from communities in and surrounding the demo sites** | | | | | | | |
| Step 1: Providing demo company’ contact details to the project affected communities and community-activities management committees | Make project information accessible to affected communities and resolve any complaints as soon as possible | | The project affected communities, women and men farmers, ethnic minority farmers | PMO | The relevant communities  PMOs | Immediately after inception workshop | Project budget for M&E |
| Step 2: Affected stakeholders submit complaint to their committees or the demos |  | |  |  |  | Any time during the project implementation | Project budget for M&E |
| Step 3: Community management committees communicate and explain/clarify /solve complaint first, and submit to the PMOs whenever needed |  | |  |  |  | Two weeks after received the complaint | Project budget for M&E |
| Step 4: The demos explain/clarify/resolve complaints |  | |  |  |  | Two weeks after received the complaint | Project budget for M&E |
| **(2) Mechanism for redress of grievances from workers/labour unions in the demo companies** | | | | | | | |
| Step 1: Providing demo company’ contact details to the workers/labour unions | Make project information accessible to workers/labour unions and resolve any complaints as soon as possible | | The project affected workers, women and men farmers, ethnic minority farmers | PMO | The relevant communities  PMOs | Immediately after inception workshop | Project budget for M&E |
| Step 2: Affected workers/labour unions submit complaint to their committees or the demos |  | |  |  |  | Any time during the project implementation | Project budget for M&E |
| Step 3: Worker management committees communicate and explain/clarify /solve complaint first, and submit to the PMOs whenever needed |  | |  |  |  | Two weeks after received the complaint | Project budget for M&E |
| Step 4: The demos explain/clarify/resolve complaints |  | |  |  |  | Two weeks after received the complaint | Project budget for M&E |
| **(3) Mechanism for redress of public complaints** | | | | | | | |
| Step 1: provide demo’s hotline for public | | Make project information accessible to affected communities and resolve any complaints as soon as possible | Project affected people, male or female, Han, or Ethnic minorities | PMOs | N/A | Immediately after inception workshop | Project budget for M&E |
| Step 2: present complaint if any to the demos’ management committee | | Any time during the project implementation | Project budget for M&E |
| Step 3: Figure out resolution | | Two weeks after received the complaint | Project budget for M&E |
| Step 4: communicate with the complainants and resolve problems | | Two weeks after received the complaint | Project budget for M&E |

# Budget for ESMF Implementation

Funding for implementation of the ESMF is included in the budget of the PhosChemEE Project. The estimated costs are indicated in **Table 4** below. Costs associated with the time of Project Management Unit Staff coordinating the implementation of this ESMF or UNDP support are not shown. Further detail is found in the budgets of the respective Project Documents.

**Table 4: Breakdown of Project-level Costs for ESMF Implementation**

| **Item** | **Budget Cost (USD)** |
| --- | --- |
| **The PhosChemEE Project (High Risk)** | |
| International consultant, safeguards, and gender specialist (QA and oversight of project-related safeguards documentation)  25 Days @ 750 USD | $18,750 |
| National consultant/consultancy firm, safeguards specialist  (To develop site-specific ESIAs and SESA) | $ 90,000 |
| Local consultant, community development specialist (for continued engagement and consultation with local communities) | $5,000 |
| Travel expenses for consultations | $ 10,000 |
| Audio-visual & print production expenses | $ 3,000 |
| **Total:** | **$121,755** |

# Monitoring and Evaluation Arrangements

Reporting on progress and issues in the implementation of this ESMF will be documented in the project quarterly reports and annual project implementation reports (PIRs). Until the ESMPs and stand-alone management plans are put in place, UNDP CO will be responsible for compiling reports on the implementation of this ESMF, for reporting to the Project Steering Committee. Key issues will be presented to the Project Steering Committee during each committee meeting.

Implementation of the subsequent ESMPs and stand-alone management plans (all projects, as required) will be the responsibility for the individual project management teams, and other partners as agreed upon and described in those future plans.

The ESMF monitoring and evaluation plan is outlined below in **Table 5**.

**Table 5: ESMF Monitoring and Evaluation Plan**

| **Monitoring Activity** | **Description** | **Frequency / Timeframe** | **Expected Action** | **Roles and Responsibilities** |
| --- | --- | --- | --- | --- |
| Track progress of ESMF implementation | Implementation of this ESMF, and with results reported to Project Steering Committee on an annual basis | Quarterly (until management plans are in place) | Required ESMF steps are completed in a timely manner. | Project Managers, with support from and Project M&E/Safeguards Officers |
| Implementation of management measures and monitoring of potential impacts identified in targeted assessment. | Permanent and participatory implementation and monitoring of management measures, in accordance with findings of targeted assessment | Continuous, once assessment is complete and management plan is in place | Implementation of stand-alone management plans; participatory monitoring; integration of management plans into project implementation strategies | Project Manager, Pilot Coordinators, oversight by UNDP CO, PSC |
| Learning | Knowledge, good practices, and lessons learned regarding social and environmental risk management will be captured regularly, as well as actively sourced from other projects and partners and integrated back into the project. | At least annually | Relevant lessons are captured by the project teams and used to inform management decisions. | Project Managers, |
| Annual project quality assurance | The quality of the project will be assessed against UNDP’s quality standards to identify project strengths and weaknesses and to inform management decision making to improve the project | Annually | Areas of strength and weakness will be reviewed and used to inform decisions to improve project performance | UNDP CO, with support from Project Managers and Project M&E/Safeguards Officers |
| Review and make course corrections. | Internal review of data and evidence from all monitoring actions to inform decision making | At least annually | Performance data, risks, lessons, and quality will be discussed by the project steering committee and used to make course corrections | Project Steering Committees (considering stakeholders’ opinions) |
| Annual project implementation reports | As part of progress report to be presented to the Project Steering Committee and key stakeholders, analysis, updating and recommendations for risk management will be included | Annually | Updates on progress of ESMF will be reported in the project’s annual PIRs. A summary of the avoidance and mitigation of potential social and environmental impacts will be included in the program annual report, sharing best practices and lessons learned across the program. | UNDP CO, UNDP-GEF RTA, Project Managers |
| Independent Mid-term Review | The evaluators that will be hired to undertake the assignment will be independent from organizations that were involved in designing, executing, or advising on the project to be evaluated. | At mid-project | The GEF Operational Focal Point and other stakeholders will be actively involved and consulted during the evaluation process | Independent third party |
| Project review | The Project Steering Committee will consider updated analysis of risks and recommended risk mitigation measures at all meetings | At least annually | Any risks and/ or impacts that are not adequately addressed by national mechanisms or project team will be discussed in project steering committee. Recommendations will be made, discussed, and agreed upon. | Project Steering Committees  and Project Managers |
| Terminal Evaluation and final report | Terminal evaluation will take place upon completion of all major project outputs and activities | At the end of project | The final project report package shall be discussed with the Project Board during an end-of-project review meeting to discuss lesson learned and opportunities for scaling up. | Independent third party; Project Steering Committees  and Project Managers |

# Annexes: the PhosChemEE Project SESP Template

# Annex I: Indicative outline for Project Labour Assessment and management Procedure

The Labour Assessment and Management Procedure (LAMP) facilitates planning and assists borrowers/responsible parties to ensure that project implementation adheres to the requirements of SES 7 on Labour and Working Conditions. The LAMP identifies the main labour requirements and risks associated with the project and helps the responsible party to determine the resources necessary to address project labour issues.

The LAMP may be prepared as a stand-alone document, or form part of other environmental and social management documents. The LAMP is a living document, which is initiated early in project preparation, and is reviewed and updated throughout development and implementation of the project.

A concise and up to date LAMP will enable different project-related parties, for example, staff of the project implementing unit, contractors and sub-contractors and project workers, to have a clear understanding of what is required on a specific labour issue. The level of detail contained in the LAMP will depend on the type of project and information available. Where relevant information is not available, this should be noted, and the LAMP should be updated as soon as possible.

Below is an indicative outline of the LAMP.

1. **Overview of Labour Use in the Project:** This section describes the following, based on available information:
   1. *Number of Project Workers*: The total number of workers to be employed on the project, and the different types of workers: direct workers, contracted workers, and community workers. Where numbers are not yet firm, an estimate should be provided.
   2. *Characteristics of Project Workers*: To the extent possible, a broad description and an indication of the likely characteristics of the project workers e.g. local workers, national or international migrants, female workers, workers between the minimum age and 18.
   3. *Timing of Labour Requirements*: The timing and sequencing of labour requirements in terms of numbers, locations, types of jobs and skills required.
   4. *Contracted Workers*: The anticipated or known contracting structure for the project, with numbers and types of contractors/subcontractors and the likely number of project workers to be employed or engaged by each contractor/subcontractor. If it is likely that project workers will be engaged through brokers, intermediaries, or agents, this should be noted together with an estimate of the number of workers that are expected to be recruited in this way.
   5. *Migrant Workers*: If it is likely that migrant workers (either domestic or international) are expected to work on the project, this should be noted, and details provided.
2. **Assessment of Key Potential Labour Risks*:*** This section describes the following, based on available information:
   1. *Project activities*: The type and location of the project, and the different activities the project workers will carry out.
   2. *Key Labour Risks:*The key labour risks which may be associated with the project (see, for example, those identified in Standard 7 and its corresponding SES Guidance Note). These could include, for example:

* the conduct of hazardous work, such as working at heights or in confined spaces, use of heavy machinery, or use of hazardous materials
* likely incidents of child labour or forced labour, with reference to the sector or locality
* restrictions on freedom of association and collective bargaining
* likely presence of migrants or seasonal workers
* risks of labour influx or gender-based violence
* possible accidents or emergencies, with reference to the sector or locality
* general understanding and implementation of occupational health and safety requirements

1. **Brief Overview of Labour Legislation: Terms and Conditions:** This section sets out the *key aspects* of national labour legislation with regards to term and conditions of work, and how national legislation applies to different categories of workers identified in Section 1.).
2. **Brief Overview of Labour Legislation: Occupational Safety and Safety:** This section sets out the *key aspects* of the national labour legislation with regards to occupational health and safety, and how national legislation applies to the different categories of workers identified in Section 1.
3. **Responsible Staff:** This section identifies the functions and/or individuals within the project responsible for (as relevant):

* engagement and management of project workers
* engagement and management of contractors/subcontractors
* occupational health and safety (OHS)
* training of workers
* addressing worker grievances

In some cases, this section will identify functions and/or individuals from contractors or subcontractors, particularly in projects where project workers are employed by third parties.

1. **Policies and Procedures:** This section sets out information on OSH, reporting and monitoring and other general project policies. Where relevant, it identifies applicable national legislation.

Where significant safety risks have been identified as part of Section 2, this section outlines how these will be addressed. Where the risk of forced labour has been identified, this section outlines how these will be addressed. Where risks of child labour have been identified, these are addressed in Section 7.

1. **Age of Employment:** This section sets out details regarding:

* the minimum age for employment on the project
* the process that will be followed to verify the age of project workers
* the procedure that will be followed if underage workers are found working on the project
* the procedure for conducting risk assessments for workers aged between the minimum age and 18

1. **Terms and Conditions:** This section sets out details regarding:

* specific wages, hours and other provisions that apply to the project
* maximum number of hours that can be worked on the project
* any collective agreements that apply to the project. When relevant, provide a list of agreements and describe key features and provisions
* other specific terms and conditions

1. **Grievance Mechanism:** This section sets out details of the grievance mechanism that will be provided for direct and contracted workers and describes the way in which these workers will be made aware of the mechanism.

Where community workers are engaged in the project, details of the grievance mechanism for these workers is set out in Section 11.

1. **Contractor Management:** This section sets out details regarding:

* the selection process for contractors/third parties
* the contractual provisions that will be put in place relating to contractors for the management of labour issues, including OSH
* the procedure for managing and monitoring the performance of contractors

1. **Community Workers:** Where community workers will be involved in the project, this section sets out details of the terms and conditions of work and identifies measures to check that community labour is provided on a voluntary basis. It also provides details of the type of agreements that are required and how they will be documented. This section sets out details of the grievance mechanism for community workers and the roles and responsibilities for monitoring such workers.
2. **Primary Supply Workers:** Where a significant risk of child or forced labour or serious safety issues in relation to primary suppliers has been identified, this section sets out the procedure for monitoring and reporting on primary supply workers.

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## Annex II: Indicative Outline of Environmental and Social Impact Assessment (ESIA) Report (to inform site-specific ESIA’s at demo site level)

UNDP Social and Environmental Standards:

ESIA Report – Indicative Outline

Please refer to the [UNDP SES Guidance Note on Assessment and Management](https://info.undp.org/sites/bpps/SES_Toolkit/SES%20Document%20Library/Uploaded%20October%202016/Final_UNDP_SES_Assessment_and_Management_GN_-_Dec2016.pdf) for additional information.

An ESIA report should include the following major elements (not necessarily in the following order):

**(1) Executive summary:** Concisely discusses significant findings and recommended actions.

**(2) Legal and institutional framework:** Summarizes the analysis of the legal and institutional framework for the project, within which the social and environmental assessment is carried out, including (a) the country's applicable policy framework, national laws and regulations, and institutional capabilities (including implementation) relating to social and environmental issues; obligations of the country directly applicable to the project under relevant international treaties and agreements; (b) applicable requirements under UNDP’s SES; and (c) and other relevant social and environmental standards and/or requirements, including those of any other donors and development partners. Compares the existing social and environmental framework and applicable requirements of UNDP’s SES (and those of other donors/development partners) and identifies any potential gaps that will need to be addressed.

**(3) Project description:** Concisely describes the proposed project and its geographic, social, environmental, and temporal context, including any offsite activities that may be required (e.g., dedicated pipelines, access roads, power supply, water supply, housing, and raw material and product storage facilities), as well as the project’s primary supply chain. Includes a map of sufficient detail, showing the project site and the area that may be affected by the project’s direct, indirect, and cumulative impacts. (i.e. area of influence).

**(4) Baseline data:** Summarizes the baseline data that is relevant to decisions about project location, design, operation, or mitigation measures; identifies and estimates the extent and quality of available data, key data gaps, and uncertainties associated with predictions;assesses the scope of the area to be studied and describes relevant physical, biological, and socioeconomic conditions, including any changes anticipated before the project commences; and takes into account current and proposed development activities within the project area but not directly connected to the project.

**(5) Social and environmental risks and impacts:** Predicts and considers all relevant social and environmental risks and impacts of the project, including those related to UNDP’s SES (Overarching Policy and Principles and Project-level Standards). These will include, but are not limited to, the following:

*(a) Environmental risks and impacts*, including: any material threat to the protection, conservation, maintenance and rehabilitation of natural habitats, biodiversity, and ecosystems; those related to climate change and other transboundary or global impacts; those related to community health and safety; those related to pollution and discharges of waste; those related to the use of living natural resources, such as fisheries and forests; and those related to other applicable standards.[[6]](#footnote-6)

*(b) Social risks and impacts*, including: any project-related threats to human rights of affected communities and individuals; threats to human security through the escalation of personal, communal or inter-state conflict, crime or violence; risks of gender discrimination; risks that adverse project impacts fall disproportionately on disadvantaged or marginalized groups; any prejudice or discrimination toward individuals or groups in providing access to development resources and project benefits, particularly in the case of disadvantaged or marginalized groups; negative economic and social impacts relating to physical displacement (i.e. relocation or loss of shelter) or economic displacement (i.e. loss of assets or access to assets that leads to loss of income sources or means of livelihood) as a result of project-related land or resource acquisition or restrictions on land use or access to resources; impacts on the health, safety and well-being of workers and project-affected communities; and risks to cultural heritage.

**(6) Analysis of alternatives:** systematically compares feasible alternatives to the proposed project site, technology, design, and operation – including the "without project" situation – in terms of their potential social and environmental impacts; assesses the alternatives’ feasibility of mitigating the adverse social and environmental impacts; the capital and recurrent costs of alternative mitigation measures, and their suitability under local conditions; the institutional, training, and monitoring requirements for the alternative mitigation measures; for each of the alternatives, quantifies the social and environmental impacts to the extent possible, and attaches economic values where feasible. Sets out the basis for selecting the project design.

**(7) Mitigation Measures:** Inclusion or summary of (with attachment of full) Environmental and Social Management Plan (ESMP) (see indicative outline of ESMP below.) The ESMP identifies mitigation measures required to address identified social and environmental risks and impacts, as well as measures related to monitoring, capacity development, stakeholder engagement, and implementation action plan.

**(8) Conclusions and Recommendations:** Succinctly describes conclusion drawn from the assessment and provides recommendations.

**(9) Appendices:**  (i) List of the individuals or organisations that prepared or contributed to the social and environmental assessment; (ii) References – setting out the written materials both published and unpublished, that have been used; (iii) Record of meetings, consultations and surveys with stakeholders, including those with affected people and local NGOs. The record specifies the means of such stakeholder engagement that were used to obtain the views of affected groups and local NGOs, summarizes key concerns and how these concerns addressed in project design and mitigation measures; (iv) Tables presenting the relevant data referred to or summarized in the main text; (v) Attachment of any other mitigation plans; (vi) List of associated reports or plans.

## Annex III: Indicative outline of Environmental and Social Management Plan (ESMP)

UNDP Social and Environmental Standards:

ESMP – Indicative Outline

Please refer to the [UNDP SES Guidance Note on Assessment and Management](https://info.undp.org/sites/bpps/SES_Toolkit/SES%20Document%20Library/Uploaded%20October%202016/Final_UNDP_SES_Assessment_and_Management_GN_-_Dec2016.pdf) for additional information.

An ESMP may be prepared as part of the Environmental and Social Impact Assessment (ESIA) or as a stand-alone document.[[7]](#footnote-7) The content of the ESMP should address the following sections:

**(1) Mitigation:** Identifies measures and actions in accordance with the mitigation hierarchy that avoid, or if avoidance not possible, reduce potentially significant adverse social and environmental impacts to acceptable levels. Specifically, the ESMP: (a) identifies and summarizes all anticipated significant adverse social and environmental impacts; (b)describes – with technical details – each mitigation measure, including the type of impact to which it relates and the conditions under which it is required (e.g., continuously or in the event of contingencies), together with designs, equipment descriptions, and operating procedures, as appropriate; (c)estimates any potential social and environmental impacts of these measures and any residual impacts following mitigation; and (d) takes into account, and is consistent with, other required mitigation plans (e.g. for displacement, indigenous peoples).

**(2) Monitoring:** Identifies monitoring objectives and specifies the type of monitoring, with linkages to the impacts assessed in the environmental and social assessment and the mitigation measures described in the ESMP. Specifically, the monitoring section of the ESMP provides (a) a specific description, and technical details, of monitoring measures, including the parameters to be measured, methods to be used, sampling locations, frequency of measurements, detection limits (where appropriate), and definition of thresholds that will signal the need for corrective actions; and (b) monitoring and reporting procedures to (i) ensure early detection of conditions that necessitate particular mitigation measures, and (ii) furnish information on the progress and results of mitigation.

**(3) Capacity development and training:** To support timely and effective implementation of social and environmental project components and mitigation measures, the ESMP draws on the environmental and social assessment of the existence, role, and capability of responsible parties on site or at the agency and ministry level. Specifically, the ESMP provides a description of institutional arrangements, identifying which party is responsible for carrying out the mitigation and monitoring measures (e.g. for operation, supervision, enforcement, monitoring of implementation, remedial action, financing, reporting, and staff training). Where support for strengthening social and environmental management capability is identified, ESMP recommends the establishment or expansion of the parties responsible, the training of staff and any additional measures that may be necessary to support implementation of mitigation measures and any other recommendations of the environmental and social assessment.

**(4) Stakeholder Engagement:** Outlines plan to engage in meaningful, effective, and informed consultations with affected stakeholders. Includes information on (a) means used to inform and involve affected people in the assessment process; (b) summary of stakeholder engagement plan for meaningful, effective consultations during project implementation, including identification of milestones for consultations, information disclosure, and periodic reporting on progress on project implementation; and (c) description of effective processes for receiving and addressing stakeholder concerns and grievances regarding the project’s social and environmental performance.

**(5) Implementation action plan (schedule and cost estimates):** For all four above aspects (mitigation, monitoring, capacity development, and stakeholder engagement), ESMP provides (a) an implementation schedule for measures that must be carried out as part of the project, showing phasing and coordination with overall project implementation plans; and (b) the capital and recurrent cost estimates and sources of funds for implementing the ESMP. These figures are also integrated into the total project cost tables. Each of the measures and actions to be implemented will be clearly specified and the costs of so doing will be integrated into the project's overall planning, design, budget, and implementation

1. UNDP SES, page 18. [↑](#footnote-ref-1)
2. T[he State Council:](file:///C:\Users\lisa.farroway\AppData\Local\Microsoft\Windows\INetCache\Content.Outlook\HIJJA4OB\he%20State%20Council:) Regulations on Follow-up Support to People Relocated due to Construction of Large- or Medium-Size Reservoirs, 17 May 2006. http://www.gov.cn/gongbao/content/2006/content\_389912.htm [↑](#footnote-ref-2)
3. Wilmsen, B. 2011. Progress, problems, and prospects of dam-induced displacement and resettlement in China. China Information, Vol. 25(2). [↑](#footnote-ref-3)
4. State Ethnic Affairs Commission of the People’s Republic of China. *Regional Ethnic Autonomy Law (second amendment),* 28 February 2001*).*  http://www.seac.gov.cn/art/2011/6/29/art\_4901\_128701.html [↑](#footnote-ref-4)
5. General Office of the State Council. *Rules of the State Council on the implementation of the Law of the People's Republic of China on Regional National Autonomy*. Issued on 11 May 2005. <http://www.gov.cn/xxgk/pub/govpublic/mrlm/200803/t20080328_31650.html> [↑](#footnote-ref-5)
6. For example, the Environmental, Health, and Safety Guidelines (EHSGs), which are technical reference documents with general and industry-specific statements of Good International Industry Practice. The EHSGs contain information on industry- specific risks and impacts and the performance levels and measures that are generally considered to be achievable in new facilities by existing technology at reasonable cost. Available at [www.ifc.org/ehsguidelines](http://www.ifc.org/ehsguidelines). [↑](#footnote-ref-6)
7. This may be particularly relevant where contractors are being engaged to carry out the project, or parts thereof, and the ESMP sets out the requirements to be followed by contractors. In this case the ESMP should be incorporated as part of the contract with the contractor, together with appropriate monitoring and enforcement provisions. [↑](#footnote-ref-7)