



ESIA for Project Anma

Human Rights Impact Assessment

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Human Rights Impact Assessment



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ACRONYMS AND ABBREVIATIONS

AHRC	Australian Human Rights Commission
Aol	Areas of Influence
AWC	Anma Offshore Wind Energy
BHRRC	Business & Human Rights Resource Centre
CAST	Conflict Assessment Framework
CAT	Convention Against Torture
CCPR	Covenant on Civil and Political Rights
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CERD	International Convention on the Elimination of All Forms of Racial Discrimination
CESCR	International Covenant on Economic, Social and Cultural Rights
CoC	Code of Conduct
COVID	Coronavirus Disease
CRC	Convention on the Rights of the Child
DSME	Daewoo Shipbuilding & Marine Engineering
EIA	Environmental Impact Assessment
EP4	Equator Principle
EPC	Engineering, Procurement and Construction
ERM	ERM Korea Ltd.
ESDD	Environmental and Social Due Diligence
ESG	Environmental Social Governance
ESHS	Environmental, Social, Health, and Safety
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social management Plan
FDI	Fishery Damage Investigation
FDIA	Fishery Damage Impact Assessment
FPIC	Free, Prior and Informed Consent
FPRH	Fisheries and Prior Rights Holders
FSI	Fragile State Index
GE	General Electric
GRI	Global Rights Index
HDI	Human Development Index
HRIA	Human Rights Impact Assessment
HRW	Human Rights Watch
HSC	High Speed Craft
HSE	Health, Safety, and Environment
HSSE	Health, Safety, Security, and Environment
ICCPR	International Covenant on Civil and Political Rights
ICESCR	International Covenant on Economic, Social and Cultural Rights
IFC	International Finance Corporation
ILO	International Labour Organization
IMO	International Maritime Organisation
ISM	International Safety Management

ITUC	International Trade Union Confederation
LCAL	Local Communities and Adjoining Landowners
LGBT	Lesbian, Gay, Bisexual, and Transgender
LRP	Livelihood Restoration Plan
MARPOL	International Convention for the Prevention of Pollution
MLC	Maritime Labour Convention
MODU	Mobile Offshore Drilling Units
MW	Mega Watts
NGOs	Non-Governmental Organisations
ODI	Overseas Development Institute
OECD	Organisation for Economic Co-operation and Development
OHCHR	Office of the United Nations High Commissioner for Human Rights
OP	Optional Protocol
OPPW	Occupancy/Usage Permit of Public Waters
OWFs	Offshore Wind Farms
PRIndex	Global Property Rights Index
SCW	Supply Chain Workforce
SEP	Stakeholder Engagement Plan
SOLAS	Safety of Life at Sea
SOMO	Centre for Research on Multinational Corporations
STCW	International Convention on Standards of Training, Certification and Watchkeeping for Seafarers
UDHR	Universal Declaration of Human Rights
UN	United Nations
UNDRIP	UN Declaration on the Rights of Indigenous Peoples
UNGPs	United Nations Guiding Principles on Business and Human Rights
UPR	Universal Periodic Review

1. INTRODUCTION

ERM Korea Ltd. (ERM) has been appointed by Anma Offshore Wind Energy Co. Ltd (“AWC” or the “Client”) to undertake a Human Rights Impact Assessment (HRIA) for the fixed bottom offshore wind farm comprised of Phase 1 with permitted capacity of 224 MW, and Phase 2 with permitted capacity of 308 MW (collectively referred as “Anma Project” or “the Project”). The Project is managed by the special purpose company AWC, which is owned by Equis Wind (Korea) Holdings Pte. Ltd. (“Equis”).

AWC aims to complete an Equator Principles (EP4) aligned HRIA with the support from ERM, as this was identified as a gap following a Voluntary Environmental and Social Due Diligence (ESDD) process performed in May 2023. As part of the ESDD, the Project was determined to be a Category A project, which, according to EP4, requires an assessment of the potential adverse impacts to human rights that may arise because of the Project.

This HRIA focuses on understanding the potential salient human rights risks and impacts¹ associated with the planned construction, operation and decommissioning of the Project. Salient human rights issues are those considered to be most significant.

The outcomes of the HRIA will help in understanding what, if any, additional management measures or safeguards are required to mitigate potential human rights impacts associated with the construction, operation and decommissioning of the Project.

1.1 Document structure

The remainder of the HRIA report is structured as follows:

- **Section 1:** Introduction;
- **Section 2:** Approach
- **Section 3:** Human Rights Framework
- **Section 4:** Korean Human Rights Context
- **Section 5:** Project Location
- **Section 6:** Human Rights Impact Assessment
- **Section 7:** Management of Potential Human Rights Impacts;
- **Section 8:** References

Appended to support this HRIA are the following:

- **Appendix A:** Project Description
- **Appendix B:** Brief Description of EPC Activities
- **Appendix C:** List of Reviewed Documents
- **Appendix D:** Potential impact, relevant rightsholders and connection to human rights articles
- **Appendix E:** Universal Declaration of Human rights
- **Appendix F:** ESDD Report

¹ Note on usage of ‘risks’ and ‘impacts’ throughout this document: In line with UNGPs, human rights risks are understood to be the business enterprise’s potential adverse human rights impacts, and potential impacts should be addressed through prevention or mitigation. As this document focuses on existing and additional recommended management strategies and measurements to help prevent and/or reduce the potential risks and impacts arising, it focuses on and refers to potential *impacts* mainly.

1.2 Limitations

Preparation of this HRIA relied upon secondary data, including publicly available information and information provided by AWC, as reflected in the reference list. Neither a site visit, nor engagement with rights holders was undertaken by ERM in preparing this HRIA.

It is highlighted that the HRIA seeks to identify human rights risks and impacts only, and should not be taken as a comprehensive legal review.

It is also noted that ERM's findings are accurate and complete only to the extent that information provided to ERM was itself accurate and complete.

Finally, ERM's findings reflect the current Project status. A number of key decisions have not yet been made, such as the selection of contractors and suppliers. Once such decisions have been made the predicted impacts should be reviewed and updated accordingly.

2. APPROACH

This HRIA seeks to assess the potential salient human rights impacts associated with the Project.

To identify the salient human rights issues, a four-step process has been employed, which is further detailed below. The process has been informed by the guidance set out in the United Nations Guiding Principles on Business and Human Rights (UNGPs), which is the globally recognised framework that defines the responsibilities for business as they relate to human rights (refer to **Box 4**).

In assessing the Project's salient human rights potential impacts², the HRIA focusses on the rights set out in, and protected by, the:

- International Bill of Rights, which comprises:
 - The Universal Declaration of Human Rights (UDHR) (refer to **Box 1**);
 - The International Covenant on Civil and Political Rights (ICCPR); and
 - The International Covenant on Economic, Social and Cultural Rights (ICESCR) (refer to **Box 2**).
- The International Labour Organization's (ILO) eight fundamental conventions, which comprises:
 - The Forced Labour Convention, 1930 (No. 29);
 - The Abolition of Forced Labour Convention, 1957 (No. 105);
 - The Freedom of Association and Protection of the Right to Organise Convention, 1948 (No. 87)
 - The Right to Organise and Collective Bargaining Convention, 1949 (No. 98);
 - The Equal Remuneration Convention, 1951 (No. 100);
 - The Discrimination (Employment and Occupation) Convention, 1958 (No. 111);
 - The Minimum Age Convention, 1973 (No. 138); and
 - The Worst Forms of Child Labour Convention.
- UN Declaration on the Rights of Indigenous Peoples (UNDRIP) (refer to **Box 3**).

Box 1. 30 Articles of the UDHR

Human rights are the basic freedoms and protections that all people are entitled to simply because they are human beings. They are inherent, whatever the nationality, place of residence, sex, national or ethnic origin, colour, religion, language, or any other status. The adoption of the UDHR by the UN General Assembly on 10 December 1948 provides a common standard for all. The 30 articles under the UDHR are considered the basis of modern day human rights. The condensed list of the 30 Articles of the UDHR (OCHR, 2018) are as follows:

² See: <https://www.ungpreporting.org/resources/salient-human-rights-issues/>

Article 1: We are all born free and equal	Article 16: Right to Marry and to Found a Family
Article 2: Freedom from Discrimination	Article 17: Right to Own Property
Article 3: Right to Life	Article 18: Freedom of Religion or Belief
Article 4: Freedom from Slavery	Article 19: Freedom of Opinion and Expression
Article 5: Freedom from Torture	Article 20: Freedom of Assembly and Association
Article 6: Right to Recognition Before the Law	Article 21: A Short Course in Democracy
Article 7: Right to Equality Before the Law	Article 22: Right to Social Security
Article 8: Right to Remedy	Article 23: Right to Work
Article 9: Freedom from Arbitrary Detention	Article 24: Right to Rest and Leisure
Article 10: Right to a Fair Trial	Article 25: Right to Adequate Standard of Living
Article 11: Presumption of Innocence and International Crimes	Article 26: Right to Education
Article 12: Right to Privacy	Article 27: Right to Cultural, Artistic and Scientific Life
Article 13: Freedom of Movement	Article 28: Right to a Free and Fair World
Article 14: Right to Asylum	Article 29: Duty to Your Community
Article 15: Right to Nationality	Article 30: Rights are Inalienable

Source: OHCHR, 2018

Box 2. International Covenant on Economic, Social and Cultural Rights

The ICESCR was adopted as part of the International Bill of Rights. The ICESCR guarantees a range of rights including:

Article 1: The right to self-determination	Article 11: The right to an adequate standard of living which includes adequate food, clothing, and housing, respectively
Article 3: Equal rights for men and women	Article 12: The right to the highest attainable standard of physical and mental health, including the right to health care
Article 6: The right to work	Article 13: The right to education
Article 7: The right to just and favourable conditions of work	Article 15: The right to culture and to benefit from scientific progress
Article 8: The rights of workers to organize and bargain collectively	Article 25: The right to enjoy and utilise fully and freely their natural wealth and resources
Articles 9 & 10: The right to social security and social insurance and protection and assistance for the family	

Source: OHCHR, 1966; Ontario Human Rights Commission, n.d.

Box 3. UN Declaration of the Rights of Indigenous Peoples

UNDRIP was adopted by the General Assembly in 2007. UNDRIP builds upon the human rights set out in the UDHR, and establishes a universal framework of minimum standards for the survival, dignity and wellbeing of Indigenous peoples.

There are 46 Articles within the UNDRIP. Unlike the UDHR, the rights set out within the UNDRIP are not wholly separate rights, with a number of Articles containing overlapping themes. A summary of the Articles is as follows:

- Right to self-determination
- Right to participation in decision-making
- Respect for, and protection of, culture
- Right to equality and non-discrimination

Source: AHRC, 2021; UN, n.d.

Box 4. UN Guiding Principles for Business and Human Rights

In 2011, the United Nations Human Rights Council endorsed the Guiding Principles for Business and Human Rights (the Guiding Principles), to better define the role of the State and businesses in relation to human rights. This has established a global standard for preventing and addressing the risk of adverse impacts to human rights linked to business activity.

Three pillars were developed as part of the Guiding Principles, being:

- **Protect:** State duty to protect against human rights abuses.
- **Respect:** Business responsibility to respect human rights. This means, as defined by Principle 11, avoiding infringing upon human rights of others, and addressing adverse human rights impacts with which a company is involved.
- **Remedy:** State to provide access to remedy for victims of business-related abuses.

The key principles, relating to business expectations, include:

- **Principle 12:** Human rights includes, at a minimum the International Bill of Human Rights and ILO Declaration on Fundamental Principles and Rights at Work.
- **Principle 13:** Businesses should avoid causing or contributing to adverse human rights impacts through their own activities, and seeking to prevent or mitigate impacts that are directly linked to their operations even if they have not contributed to those impacts.
- **Principle 15/17:** Business should have in place a policy commitment, a human rights due diligence process, and a process for remediation of any impacts.
- **Principle 18:** Business should identify and assess any actual or potential adverse human rights impacts with which they may be involved either through their own activities or as a result of their business relationships.
- **Principle 19:** Business should integrate the findings from their impact assessments across relevant internal functions and processes, and take appropriate action.
- **Principle 20/21:** Business should track the effectiveness of their responses with the use of qualitative and quantitative indicators, and be prepared to report on their performance, particularly where concerns are raised by or on behalf of affected stakeholders.

Source: OHCHR, n.d.a

2.1 Step 1: Scoping Process

Scoping involved a review of documents provided by AWC, and information readily available in the public domain relating to the Project.

In reviewing the relevant documentation an understanding of the Project description was established, and the area of influence (AoI) was defined (refer to **Box 5**). The full Project Description is provided in **Appendix A**.

This information was then used to undertake a preliminary assessment of potential human rights impacts. It also helped to identify the rightsholders (refer to **Box 6**) located within the AoI who may be impacted by the Project were also identified.

The results of scoping have been used to inform the human rights baseline (Step 2) as well as the assessment of potential impacts (Step 3). The outcomes of the scoping process are captured in **Section 7**.

Box 5. Area of Influence

The AoI is the area within which potential impacts are likely to occur. In defining the AoI, consideration was given to the following:

- Scale and nature of potential social and community health impacts;
- Rightsholders who may be impacted by the potential human rights impacts (refer to **Box 6**);

- Built or natural features, and other geographic aspects, which may influence the Human Rights AoI boundaries, particularly those features that act as natural buffer;
- Relevant social, cultural, demographic trends and/or other change processes; and
- History of the Project, including stakeholder insights gathered through a review of historical Project information.
- Local communities who live in or in near proximity of the AoI, and have the potential to experience social impacts that may have an implication on human rights.

Box 6. Definition of Rightsholders

Rightsholders are those people whose rights may be negatively impacted by a project's activities. For example, right to life, liberty and personal security, right to freedom of assembly and association, etc.

2.2 Step 2: Human Rights Baseline

A human rights baseline provides an understanding of the local context, including the rights holders within the AoI. It is the starting point from which potential human rights impacts are assessed (Step 3).

In developing the baseline, a desktop review of relevant information was undertaken. This included relevant corporate policies and procedures provided by AWC as well as publications from relevant government agencies and departments and non-governmental organisations (NGOs). It is understood that AWC policies will be cascaded down to the Project. The full list of references can be found at the end of this document.

The UNGPs suggest conducting consultation with potentially affected groups and other relevant stakeholders. At the time of writing of this HRIA, a range of stakeholder engagement activities had already been undertaken (refer to **Box 3**).

Box 7. Stakeholder Engagement

At the time of writing this HRIA, the Stakeholder Engagement Plan (SEP) is finalized and includes details on surrounding communities, the formal identification, mapping, and planning of engagement processes, roles, responsibilities, consultation, and grievance handling.

The Project proponent has carried out engagement with stakeholders since 2017. At first, rightsholders expressed concerns regarding the Project. Key to this was a concern about compensation, as a compensation plan had yet to be developed. Following discussions regarding the value of the Project appeared to be a change in opinions of rightsholders. As a result of ongoing engagement, and specifically seeking ways to promote coexistence of the Project and businesses in the local community, rightsholders have agreed to start the implementation of regulatory studies as suggested through the EIA, and the acquisition of EBL.

Yeonggwang-gun Offshore Wind Power Public-Private Council was established by the Yeonggwang-gun in December 2021 and was disbanded in the first half of 2023. This Council was a Public-Private organization composed with representatives of 3 Government members and 17 Citizen members to promote the collaboration among various stakeholders in advancing offshore wind power initiatives in the region.

As part of the initial stakeholder identification, local communities at least included the local residents in the Yeonggwang-gun, including residents of Anma-do community, Songam-ri and Anma-do Offshore Wind Committee. These were identified as key stakeholders, together with Fishing associations and committees.

Additionally, it should be noted that, at the time of writing the HRIA, residents on Anma Archipelago closest to the Project site (be referred to **Section 5.2**) have been engaged, and will continue to be engaged as part of the implementation of the SEP.

To support the HRIA, a targeted consultation with rightsholders is recommended to be undertaken, in line with recommendations on mapping and management as explained in the SEP. Consultation should seek to understand the concerns of all rightsholders in the Human Rights Aol.

2.3 Step 3: Impact Assessment

The human rights baseline (Step 2) was used as a starting point to analyse the potential human rights impacts (or changes) that may result from current operations and planned expansion of the Project. The focus was on those impacts that are salient.

In assessing the impacts, the significance of the predicted impacts was determined by assessing the likelihood of the impact against the severity of the affect to rightsholders:

- **Likelihood** is a reflection of the probability of a human rights impact occurring. This takes into account factors such as the local operating context, extent to which human rights are protected, past human rights issues or violations, and existing management measures.
- **Severity** is determined by understanding the ‘size’ or degree of change caused by the impact. It is a function of one or more characteristics including the extent, duration, scale, and scope of the impact. Consideration of severity also factors in the vulnerability of rightsholders, including their ability to cope or adapt to a change, or the remendability of the impact. This captures the definition reflected in the UNGPs, which indicates that the severity of human rights impacts should be determined by considering the scale, scope and remendability of the impact.

The matrix depicted in was used to assign an impact significance for each potential impact identified.

Table 2-1 Human Rights Impact Classification

		Likelihood		
		Unlikely	Likely	Highly Likely
Severity	Low	Low	Low	Medium
	Medium	Low	Medium	High
	High	Medium	High	High

It should be noted that when assessing the human rights impacts the precautionary principle has been applied. As such, where there is uncertainty this has been reflected to ensure sufficient management measures are put in place. As the Project evolves, this uncertainty may change, and thus when this occurs the impacts should be reviewed and amended accordingly. The impact assessment is outlined in **Section 6**.

2.4 Step 4: Management Measures

The final step involved identifying management measures or additional work required to assist in mitigating potential human rights impacts identified and evaluated in the impact assessment (Step 3).

The level of management required was determined for salient human rights impacts based on the significance of the impact. For instance, impacts with a higher severity or more likely to occur require a greater level of management. These are outlined in **Section 7**.

3. HUMAN RIGHTS FRAMEWORK

This section provides an overview of the human rights regulatory framework in South Korea. The framework is important, as often, the extent to which human rights are protected within the broader society, influences the practices that are seen within a project context.

3.1 Summary of Human Rights Conventions Ratified by South Korea

The table below shows a summary of the UN Human Rights Conventions ratified by South Korea, and how these respective conventions inform the national approach to human rights, including the rights that are protected by the existing regulatory framework.

Table 3-1 UN Human Rights Convention in Connection to Korean Legal Legislation

UN Human Rights Treaty Conventions	Ratification date	Associated Implementation Laws and Rules
CAT - Convention against Torture and Other Cruel Inhuman or Degrading Treatment or Punishment	09 Jan 1995 (a)	Labor Standards Act of South Korea states equal treatment and no discrimination of the workers and no forced labor and respecting the physical freedom of the workers (Article 6,7)
CCPR - International Covenant on Civil and Political Rights	10 Apr 1990 (a)	Constitution of South Korea states no discrimination and restrictions of citizens of their political rights (Article 11, 13) All citizens have the right to pursuit of happiness (Article 10)
Convention for the Protection of All Persons from Enforced Disappearance	04 Jan 2023 (a)	Constitution of South Korea states all citizens have the freedom of movement and occupation (Article 14, 15) Constitution of South Korea states the freedoms and rights of citizens shall not be neglected on the grounds that they are not enumerated in the Constitution, but freedoms and rights of citizens may be restricted by Act only when necessary for national security, the maintenance of law and order or for public welfare. Even when such restriction is imposed, no essential aspect of the freedom or right shall be violated. (Article 37)
CEDAW - Convention on the Elimination of All Forms of Discrimination against Women	27 Dec 1984	Constitution of South Korea states special protection to working woman (Article 32, (4)). Marriage and family life shall be entered into and sustained on the basis of individual dignity and equality of the sexes, and the State shall do everything in its power to achieve that goal (Article 36) Constitution of South Korea states all citizen to be treated equally, no discrimination based on sex (Article 11) Labor Standards Act of South Korea states protections of pregnant women (Article 6)

UN Human Rights Treaty Conventions	Ratification date	Associated Implementation Laws and Rules
CERD - International Convention on the Elimination of All Forms of Racial Discrimination	05 Dec 1978	Labor Standards Act of South Korea states equal treatment so that an employer shall neither discriminate against employees on the basis of gender, nor take discriminatory treatment in relation to terms and conditions of employment on the ground of nationality, religion, or social status. (Article 6)
CESCR - International Covenant on Economic, Social and Cultural Rights	10 Apr 1990 (a)	Constitution of South Korea states that all citizens shall be equal to the law, and there shall be no discrimination in political, economic, social or cultural life on account of sex, religion or social status (Article 11)
CRC - Convention on the Rights of the Child	20 Nov 1991	Constitution of South Korea states that all citizens who have children to support shall be responsible at least for their elementary education and other education as provided by Act (Article 31)
Optional Protocol to the Convention on the Rights of the Child on the involvement of children in armed conflict	24 Sep 2004	No law regarding children in armed conflict found
CRC-OP-SC - Optional Protocol to the Convention on the Rights of the Child on the sale of children child prostitution and child pornography	24 Sep 2004	South Korea's Act On The Protection Of Children And Youth Against Sex Offenses, to protect children from involvement to sex works and the protection of them being sexually offended or targeted
CRPD - Convention on the Rights of Persons with Disabilities	11 Dec 2008	Labor Standards Act of South Korea provides compensation to workers with serious disability and exceptions (Article 80, 81) The South Korea Act On The Employment Promotion And Vocational Rehabilitation Of Persons With Disabilities facilitates the employment promotion and vocational rehabilitation of persons with disabilities

Table 3-2 ILO Conventions in Connection to Korean Legislation

Convention	Brief Summary	Time of Signature / Ratification	Associated Implementation Laws and Rules
C029 - Forced Labour Convention, 1930	<ul style="list-style-type: none"> - This convention undertakes to suppress the use of forced or compulsory labour in all its forms within the shortest possible period. - For the purposes of this Convention the term forced or compulsory labour shall mean all work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily. 	20 Apr 2021	Labour Standards Act of South Korea, the Article 7 states the prohibition of forced Labour
C087 - Freedom of Association and Protection of the Right to Organise Convention, 1948	<ul style="list-style-type: none"> - Workers and employers, without distinction whatsoever, shall have the right to establish and, subject only to the rules of the organisation concerned, to join organisations of their own choosing without previous authorization - Workers' and employers' organisations shall have the right to draw up their constitutions and rules, to elect their representatives in full freedom, to organise their administration and activities and to formulate their programmes. - The public authorities shall refrain from any interference which would restrict this right or impede the lawful exercise thereof. 	20 Apr 2021	Trade Union and Labour Relations Adjustment Act in South Korea Article 5 states the workers' freedom in formulating and joining the unions.
C098 - Right to Organise and Collective Bargaining Convention, 1949	<ul style="list-style-type: none"> - Workers shall enjoy adequate protection against acts of anti-union discrimination in respect of their employment. - Protection from the employment of a worker subject to the condition that he shall not join a union or shall relinquish trade union membership and cause the dismissal of or otherwise prejudice a worker by reason of union membership or because of participation in union activities outside working hours or, with the consent of the employer, within working hours. 	20 Apr 2021	Trade Union and Labour Relations Adjustment Act in South Korea to secure workers' freedom of trade union activity
C100 - Equal Remuneration Convention, 1951	<ul style="list-style-type: none"> - Ensure the application to all workers of the principle of equal remuneration for men and women workers for work of equal value. 	08 Dec 1997	Article 32 of the Constitution of South Korea states no discrimination against women in terms of employment, wages and working condition
C111 - Discrimination (Employment and Occupation) Convention, 1958	<ul style="list-style-type: none"> - Any distinction, exclusion or preference made on the basis of race, colour, sex, religion, political opinion, national extraction or social origin, which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation - Such other distinction, exclusion or preference which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation as may be determined by the Member concerned after consultation with representative employers' and workers' organisations, where such exist, and with other appropriate bodies. 	04 Dec 1998	Labour Standards Act of South Korea Article 6 states prohibition of employer's discrimination against workers

Convention	Brief Summary	Time of Signature / Ratification	Associated Implementation Laws and Rules
C138 - Minimum Age Convention, 1973	<p>- Each Member for which this Convention is in force undertakes to pursue a national policy designed to ensure the effective abolition of child labour and to raise progressively the minimum age for admission to employment or work to a level consistent with the fullest physical and mental development of young persons.</p>	28 Jan 1999	Labour Standards Act of South Korea, the Article 64 states of Minimum Age and Employment Permit Certificate
C155 - Occupational Safety and Health Convention	<p>- Each Member shall, in the light of national conditions and practice, and in consultation with the most representative organisations of employers and workers, formulate, implement and periodically review a coherent national policy on occupational safety, occupational health and the working environment.</p> <p>- The aim of the policy shall be to prevent accidents and injury to health arising out of, linked with, or occurring in the course of work, by minimising, so far as is reasonably practicable, the causes of hazards inherent in the working environment.</p>	20 Feb 2008	Labour Standards Act of South Korea Article 76 states the health and safety of workers
C182 - Worst Forms of Child Labour Convention, 1999	<p>- Each Member which ratifies this Convention shall take immediate and effective measures to secure the prohibition and elimination of the worst forms of child labour as a matter of urgency.</p>	29 Mar 2001	Labour Standards Act of South Korea Article 64 states Minimum Age and Employment Permit Certificate
C187 - Promotional Framework for Occupational Safety and Health Convention, 2006	<p>- Promote continuous improvement of occupational safety and health to prevent occupational injuries, diseases and deaths, by the development, in consultation with the most representative organizations of employers and workers, of a national policy, national system and national programme.</p>	20 Feb 2008	Occupational Safety and Health Act in South Korea to maintain and promote the safety and health of employees
C081 - Labour Inspection Convention, 1947	<p>- The system of labour inspection in industrial workplaces shall apply to all workplaces in respect of which legal provisions relating to conditions of work and the protection of workers while engaged in their work are enforceable by labour inspectors.</p> <p>- National laws or regulations may exempt mining and transport undertakings or parts of such undertakings from the application of this Convention.</p>	09 Dec 1992	Occupational Safety and Health Act in South Korea incorporates the duty of workplace inspection
C122 - Employment Policy Convention, 1964	<p>- With a view to stimulating economic growth and development, raising levels of living, meeting manpower requirements and overcoming unemployment and underemployment, each Member shall declare and pursue, as a major goal, an active policy designed to promote full, productive and freely chosen employment.</p>	09 Dec 1992	Article 32 of the Constitution of South Korea requires State to guarantee the employment of people

Convention	Brief Summary	Time of Signature / Ratification	Associated Implementation Laws and Rules
C144 - Tripartite Consultation (International Labour Standards) Convention	- To operate procedures which ensure effective consultations, with respect to the matters concerning the activities of the International Labour Organisation set out in Article 5, paragraph 1, below, between representatives of the government, of employers and of workers.	15 Nov 1999	Framework Act On National Standards of South Korea states the country to refer to International Standards Article 94 of the Labor Standards Act requires employers to hear workers' opinions (refers to tripartite communication of government-employer-worker) Article 14 of Framework Act On Employment Policy of South Korea states international cooperation in terms of development of employment policies
C002 - Unemployment Convention, 1919	- Establish a system of free public employment agencies under the control of a central authority. Committees, which shall include representatives of employers and of workers, shall be appointed to advise on matters concerning the carrying on of these agencies. - Where both public and private free employment agencies exist, steps shall be taken to co-ordinate the operations of such agencies on a national scale.	07 Nov 2011	Framework Act On Employment Policy of South Korea Article 32 of the Constitution of South Korea states the State to endeavour people's employment
C019 - Equality of Treatment (Accident Compensation) Convention, 1925	- Undertakes to grant to the nationals of any other Member which shall have ratified the Convention, who suffer personal injury due to industrial accidents happening in its territory, or to their dependents, the same treatment in respect of workmen's compensation as it grants to its own nationals. -This equality of treatment shall be guaranteed to foreign workers and their dependents without any condition as to residence.	29 Mar 2001	Industrial Accident Compensation Insurance Act of South Korea provides framework for workers who got injured by industrial accidents (applicable to foreigners)
C026 - Minimum Wage-Fixing Machinery Convention	- Each member which ratifies this Convention shall take the necessary measures, by way of a system of supervision and sanctions, to ensure that the employers and workers concerned are informed of the minimum rates of wages in force and that wages are not paid at less than these rates in cases where they are applicable.	27 Dec 2001	Article 32 of the Constitution of South Korea states the State to enforce minimum wage system
C047 - Forty-Hour Week Convention	- The principle of a forty-hour week applied in such a manner that the standard of living is not reduced in consequence and the taking or facilitating of such measures as may be judged appropriate to secure this end	07 Nov 2011	Labor Standards Act of South Korea Article 50 refers to 40 hours a week workweek

Convention	Brief Summary	Time of Signature / Ratification	Associated Implementation Laws and Rules
C088 - Employment Service Convention, 1948	<p>- Shall maintain or ensure the maintenance of a free public employment service.</p> <p>- The essential duty of the employment service shall be to ensure, in co-operation where necessary with other public and private bodies concerned, the best possible organisation of the employment market as an integral part of the national programme for the achievement and maintenance of full employment and the development and use of productive resources.</p>	27 Dec 2001	<p>Article 32 of the Constitution of South Korea states the State to endeavour people's employment</p> <p>Employment Insurance Act of South Korea covers unemployed population</p>
C131 - Minimum Wage Fixing Convention, 1970	<p>- Each member of the International Labour Organisation which ratifies this Convention undertakes to establish a system of minimum wages which covers all groups of wage earners whose terms of employment are such that coverage would be appropriate.</p>	27 Dec 2001	<p>Article 32 of the Constitution of South Korea states the State to enforce minimum wage system</p>
C135 - Workers' Representatives Convention, 1971	<p>- Workers' representatives in the undertaking shall enjoy effective protection against any act prejudicial to them, including dismissal, based on their status or activities as a workers' representative or on union membership or participation in union activities, in so far as they act in conformity with existing laws or collective agreements or other jointly agreed arrangements.</p>	27 Dec 2001	<p>Trade Union and Labor Relations Adjustment Act to secure workers' trade union activity</p>
C142 - Human Resources Development Convention, 1975	<p>- Each Member shall adopt and develop comprehensive and co-ordinated policies and programmes of vocational guidance and vocational training, closely linked with employment, in particular through public employment services.</p>	21 Jan 1994	<p>Vocational Education And Training Promotion Act of South Korea promotes vocational education and training of all citizens</p>
C150 - Labour Administration Convention	<p>- For the purpose of this Convention</p> <p>(a) the term labour administration means public administration activities in the field of national labour policy;</p> <p>(b) the term system of labour administration covers all public administration bodies responsible for and/or engaged in labour administration, whether they are ministerial departments or public agencies, including parastatal and regional or local agencies or any other form of decentralised administration, and any institutional framework for the co-ordination of the activities of such bodies and for consultation with and participation by employers and workers and their organisations.</p>	08 Dec 1997	<p>Labor Standards Act of South Korea states the surveillance duty; a government designated personnel is in charge of surveillance of the workplace</p>
C156 - Workers with Family Responsibilities Convention	<p>- This Convention applies to men and women workers with responsibilities in relation to their dependent children, where such responsibilities restrict their possibilities of preparing for, entering,</p>	29 Mar 2001	<p>Equal employment Opportunity and Work-Family Balance Assistance Act Article 22 states the support of the employer</p>

Convention	Brief Summary	Time of Signature / Ratification	Associated Implementation Laws and Rules
	<p>participating in or advancing in economic activity.</p> <p>- The provisions of this Convention shall also be applied to men and women workers with responsibilities in relation to other members of their immediate family who clearly need their care or support, where such responsibilities restrict their possibilities of preparing for, entering, participating in or advancing in economic activity.</p> <p>- For the purposes of this Convention, the terms dependent child and other member of the immediate family who clearly needs care or support mean persons defined as such in each country by one of the means referred to in Article 9 of this Convention.</p>		when request leave for caring of family member.
C159 - Vocational Rehabilitation and Employment (Disabled Persons) Convention	- Member shall consider the purpose of vocational rehabilitation as being to enable a disabled person to secure, retain and advance in suitable employment and thereby to further such person's integration or reintegration into society.	15 Nov 1999	Act on the Promotion and Vocational Rehabilitation of Persons with Disabilities in South Korea provides support to people with disabilities
C160 - Labour Statistics Convention, 1985	<p>Each member that ratifies this Convention undertakes that it will regularly collect, compile and publish basic labour statistics, which shall be progressively expanded in accordance with its resources to cover the following subjects:</p> <p>(a) economically active population, employment, where relevant unemployment, and where possible visible underemployment;</p> <p>(b) structure and distribution of the economically active population, for detailed analysis and to serve as benchmark data;</p> <p>(c) average earnings and hours of work (hours actually worked or hours paid for) and, where appropriate, time rates of wages and normal hours of work;</p> <p>(d) wage structure and distribution;</p> <p>(e) labour cost;</p> <p>(f) consumer price indices;</p> <p>(g) household expenditure or, where appropriate, family expenditure and, where possible, household income or, where appropriate, family income;</p> <p>(h) occupational injuries and, as far as possible, occupational diseases; and</p> <p>(i) industrial disputes.</p>	08 Dec 1997	Labor Standards Act of South Korea is going through reforms and revisions. In 2021, the maximum working hours per week, including overtime, changed to 52 hours.
C185 - Seafarers' Identity Documents Convention (Revised), 2003, as amended	-Each member in this convention shall issue a seafarers' identity document conforming to the provisions of Article 3 of this Convention to each of its seafaring nationals who make an application to that effect.	04 Apr 2007	South Korea has safety regulations for seafarers but does not have specific law requiring specific information of vessel workers. The regulations include

Convention	Brief Summary	Time of Signature / Ratification	Associated Implementation Laws and Rules
	<p>- Unless otherwise provided for in this Convention, the issuance of seafarers' identity documents may be subject to the same conditions as those prescribed by national laws and regulations for the issuance of travel documents.</p> <p>- Each member may also issue seafarers' identity documents referred to in paragraph 1 to seafarers who have been granted the status of permanent resident in its territory. Permanent residents shall in all cases travel in conformity with the provisions of Article 6, paragraph 7.</p>		protection measures for people in risk of drowning and that they should wear safety equipment and locate rescue boats nearby.
Maritime Labour Convention, 2006, as amended	<p>- This Convention applies to all ships, whether publicly or privately owned, ordinarily engaged in commercial activities, other than ships engaged in fishing or in similar pursuits and ships of traditional build such as dhows and junks. This Convention does not apply to warships or naval auxiliaries.</p> <p>- In the event of doubt as to whether this Convention applies to a ship or particular category of ships, the question shall be determined by the competent authority in each Member after consultation with the shipowners' and seafarers' organizations concerned.</p>	09 Jan 2014	

The Maritime Labour Convention 2006 (MLC) is particularly relevant to the Project in relation to the labour rights for workers offshore and as it brings together a range of mostly existing provisions relating to the employment, welfare and living conditions of seafarers. Whilst South Korea has safety regulations for seafarers including protection measures for people in risk of drowning and safety equipment and local rescue boats requirements, it does not have specific law requiring specific information on vessel workers.

3.2 Korean legislation

Table 3-3 Korean Legal Requirement

Legislation	Description	Applicability to the Project
Article 32 of the Constitution	<ul style="list-style-type: none"> ▪ Declaring that all citizens have the right to work ▪ Contemplating legislation providing for minimum wages and working conditions to ensure human dignity ▪ Prohibiting gender discrimination in employment and work conditions ▪ Allowing for special protection for working minors ▪ Allowing for preferential work opportunities for military personnel and policemen or their family members following injury or death in the line of duty 	Applicable to the social context of the Project

Legislation	Description	Applicability to the Project
Labour Standards Act (Law No. 5309)	<p>The main law regulating minimum standards for a wide range of work conditions, covering the following topics:</p> <ul style="list-style-type: none"> ▪ Discrimination and the use of force or violence against workers ▪ Labour contracts, including part-time contracts ▪ Unjustified dismissal and dismissal due to medical reasons or maternity ▪ Interference with employment (blacklisting) ▪ Wages ▪ Working hours and rest periods ▪ Women and minors (young persons under the age of 15 are prohibited from working; those between 15 and 18 shall be certified as to age and consent of legal guardian) ▪ Safety and health ▪ Apprenticeship ▪ Accident compensation ▪ Employment and dormitories ▪ Labour inspectors, and penal provisions 	Defines the labour standards applicable to Project workers
Industrial Safety and Health Act	<p>The law which establishes the standards for occupational safety and health, and the responsibility of authorities and employers to prevent industrial accidents and create a pleasant working environment, through the enforcement of rules such as the following:</p> <ul style="list-style-type: none"> ▪ Providing workers with information on safety and health of the work site ▪ Industrial health care should be placed in the workplace to supervise the health care of workers and other health managers ▪ Business owners must create health and safety management regulations at the workplace to maintain health and safety standards ▪ Business owners must provide health and safety education and training to their workers ▪ Business owners to take necessary measures to prevent damage to workers' health in the execution of the jobs ▪ If a business owner subcontracts its works, it must (i) provide information regarding health and safety to the subcontractor's employees and (ii) implement health and safety measures to prevent industrial accidents of the subcontractor's employees. ▪ If construction works are contracted, the entity placing order for works must take the following measures: <ul style="list-style-type: none"> ▪ prepare safety and health ledger ▪ must not reduce construction period or change construction methods ▪ in case of delay due to force majeure event or cause attributable to entity placing order for works, must extend construction period ▪ must reflect expenses for industrial safety and health management in the project expenses 	Defines the scope of employers and executives to establish and implement adequate Industrial Health and Safety System to prevent serious accidents.

Legislation	Description	Applicability to the Project
Serious Accident Punishment Act	<ul style="list-style-type: none"> ▪ The Serious Accident Punishment Act imposes criminal liability on individuals and entities responsible for “serious accidents” ▪ “Serious accidents” encompass accidents at industrial sites as well as public disasters caused by defects in design, manufacture, installation and management of products and public facilities. (An accident at an industrial site is defined as an accident that results in one or more deaths and two or more persons with serious injuries or three or more persons within one year with occupational diseases such as acute poisoning. Public disaster is defined as an accident that results in one or more deaths and 10 or more persons with serious injuries or serious diseases. ▪ Business owners and responsible managing officers must (i) establish and implement a health and safety management system and measures to prevent reoccurrence of accidents (ii) comply with administrative authorities’ orders for improvement or correction and (iii) comply with other health and safety obligations under relevant laws and regulations (“Health and Safety Management System”). ▪ Criminal liability is imposed against the manager, or the individuals who are in charge ▪ Business owners or executives who fail to ensure the safety of their business operations ▪ Businesses or institutions who fail their supervisory duties 	<p>Defines the scope of accountability of employers and executives who fail to put in place reasonable safety and health mitigation measures to prevent serious accidents at the workplace.</p> <p>Defines the responsibility of employers and executives to establish and implement adequate Health and Safety Management System to prevent serious accidents.</p>
Employment Security Act (Law No. 4733)	<ul style="list-style-type: none"> ▪ Provides comprehensive regulations for employment services, including: prohibiting discrimination in job placement and vocational guidance on the basis of sex, religion, social or marital status, and setting forth penal provisions for persons recruiting workers through violence and other violations of the Act 	Defines the applicable rules of the protection of employment security for the Project workers.
National Lifelong Vocational Skills Development Act (Act No. 5474)	<ul style="list-style-type: none"> ▪ Prescribe including: development training; types, instructors of vocational competency development training; promotion of vocational competency development training by the State etc. 	Defines the applicable rules of vocational skills development for the Project workers.
Equal Employment Opportunity and Work-Family Balance Assistance Act (Act No. 13932)	<ul style="list-style-type: none"> ▪ Realise equal employment for both genders by guaranteeing equal opportunities and treatment in employment between men and women in accordance with the principle of equality proclaimed in the Constitution of South Korea, by protecting motherhood, and by promoting the employment of women, but also to contribute to the improvement of the quality of all the people's life by assisting work-family balance of workers. 	Defines the applicable rules of providing equal employment opportunity and work-family balance for the Project workers
Act on the Employment Promotion and Vocational	<ul style="list-style-type: none"> ▪ Facilitate the employment promotion and vocational rehabilitation of disabled persons so that they may be able to enjoy their lives 	Defines the applicable rules of promoting employment and vocational rehabilitation for persons with disabilities

Legislation	Description	Applicability to the Project
Rehabilitation of Persons with Disabilities (Presidential Decree No. 20308)	with human dignity through vocational lives fit for their abilities.	
Employment Insurance Act (Law No. 4644)	<ul style="list-style-type: none"> Establish employment insurance to provide an allowance and possible retraining and job placement for persons who become unemployed. Workers are automatically insured (with certain exceptions). Funds shall be raised through premiums on insured workers and employers, and shall be administered through an employment insurance fund. Sets penalties for violation of the Act. 	Defines the applicable rules of employment insurance for the Project workers.
Industrial Accident Compensation Insurance Act (Act No. 13323)	<ul style="list-style-type: none"> Contribute to the protection of workers by compensating them promptly and fairly for any occupational accident through the industrial accident compensation insurance business, by establishing and operating insurance facilities necessary to facilitate the rehabilitation of workers suffering from occupational accidents and their return to society, and by carrying out accident prevention projects and workers' welfare projects, etc. 	Defines the applicable rules of industrial accident compensation insurance for the Project workers.
Wage Claim Guarantee Act (Act No. 5513)	<ul style="list-style-type: none"> Establish a Wage Claim Guarantee Fund which shall pay wages of workers who were not paid due to an employer bankruptcy 	Defines the applicable rules wage claim for the Project workers.
Trade Union and Labour Relations Adjustment Act (Act No. 5310)	<ul style="list-style-type: none"> Maintain and improve the working conditions of workers and enhance their economic and social status by guaranteeing the rights of association, collective bargaining, and collective action as prescribed in the Constitution, and to contribute to the maintenance of industrial peace and the development of national economy by preventing and resolving industrial disputes through the fair adjustment of the labour relations 	Defines the applicable rules of trade union and labour relations adjustment for the Project workers.
Act on the Promotion of Employees' Participation and Cooperation (Act No. 5312)	<ul style="list-style-type: none"> Each business or workplace shall establish a Labour-Management Council, which shall decide on matters related to working conditions. The Council shall be composed of an equal number of members representing labour and management. Specifically, the Council shall decide on matters related to, inter alia, improvement of productivity, recruitment, training and placement of workers, occupational safety and health, wage and payment of wages, hours of work and rest periods, employee's stock ownership and profit sharing, and welfare of workers. Businesses and workplaces shall also designate Grievance Handling Members who shall deal with workers' grievances and report to the Council. A Central Consultative Body among Workers, Employers and the Government shall be established to consult on 	Defines the applicable rules of employee's participation and cooperation for the Project workers.

Legislation	Description	Applicability to the Project
	general labour issues such as industrial relations, employment, and national industry.	
Employment of Foreign Workers Act (Act No. 18041)	<ul style="list-style-type: none"> ▪ To manage the supply of and demand for foreign manpower/human resources, and to establish the systematic introduction and management of foreign manpower/human resources. 	Defines the foreign worker, and provide guidance on work permit and contract etc.
Personal Information Protection Act (Act No. 16930)	<ul style="list-style-type: none"> ▪ Protection on the freedom and rights of individuals, and further, to realize the dignity and value of the individuals, by prescribing the processing and protection of personal information. 	Provide provision on collecting, handling/managing of private/personal information.

3.3 Further offshore H&S conventions and instruments

The International Maritime Organisation (IMO) is a UN agency which aims to develop and maintain the international regulatory framework for shipping and seafarers. One of the ways in which this is achieved is through Conventions, which include technical requirements and other details. Key Conventions include:

- The International Convention for the Safety of Life at Sea 1974 (SOLAS):
 - Defines requirements for lifesaving, safe operation, and security, including International Safety Management (ISM) Code to ensure a safe working environment on board.
- International Convention on Standards of Training, Certification and Watchkeeping for Seafarers, Manila 2010 (STCW) sets international minimum standards for each of those areas, with respect to various aspects of responsibility in vessel operation.

3.3.1 Human rights in the context of the wind energy industry

In addition to the general human rights situation in South Korea, consideration is also required to be given to the human rights issues that may be apparent within the supply chain for the Project.

Primarily, offshore wind farm projects have the potential to pose a risk to human rights through:

- Mineral supply chains (i.e. sourcing of raw materials) – the minerals (e.g. iron ore, copper, manganese, nickel, zinc, etc.) used in various products/components may be associated with decreased access to water for local communities, increased instances of mining-related illnesses, lack of meaningful free, prior and informed consent (FPIC).
- Production and manufacturing processes – products/components may be produced in countries that have a high instance and/or risk of child labour, abuses of indigenous people’s rights, and corruption. Further, the manufacturing sector typically has a higher risk of human rights violations, particularly as it pertains to worker rights and freedoms.
- Construction/installation activities – activities may adversely impact worker and/or community health and safety, can contribute to the spread of communicable diseases via use of non-localized labour, and may contribute to environmental pollution through improper construction/installation practices. The use of foreign labour in construction increases the risk of impacts on workers’ rights and freedoms. Furthermore, foreign labour are often involved due to the resource shortage outside of metropolitan area which can be considered as vulnerable group.
- Onshore components - The onshore components (e.g. Onshore Substation, Onshore Export Cable) during the operation phase as well as during construction phase involve potential adverse health and safety impacts to the community (e.g. potential accidents, health impacts from noise and dust). Typically, onshore construction activities will involve site preparation, heavy equipment

transportation, construction vehicular movement, and/or influx of construction workers. Furthermore, installation of e.g. Onshore Export Cable may involve economic displacement for the affected communities.

Wind energy, including offshore wind farms, is playing a key role in the global transition to a lower carbon economy. According to Bloomberg New Energy Finance, wind and solar energy together are expected to make up close to 50% of our global energy mix by 2050. Increased competition in the renewable energy industry combined with advanced technologies has led to a decrease in wind power costs in recent years. The growth in production and demand, however, is coupled in some cases with negative human rights impacts, in particular where wind project land (and sea) requirements clash with the needs of existing communities. The paragraphs below summarise the outcomes of research performed by the Business & Human Rights Resource Centre (BHRRC), emphasising potential reputational issues for wind energy companies in relation to human rights risks in their supply chains.

The BHRRC approached 22 companies regarding 26 allegations related to wind projects since 2010 (BHRRC, 2021). Based on the 22 company allegations recorded by BHRRC, companies involved in wind energy projects are particularly at risk for abuses of: indigenous peoples' rights, including lacking free, prior, and informed consent (FPIC), and causing or contributing to displacement and loss of livelihoods; causing or contributing to violence, intimidation, and threats up to and including death threats. Additional research raised concerns related to labour rights, including red flags on lack of clear commitment to indigenous peoples' rights, lack of clear process for ongoing community consultations and FPIC independently of land permits, reports of community protests or concerns, and reports of intimidation or threats faced by community members or other human rights defenders.

According to BHRRC, wind energy companies are also at risk of contributing to human rights abuses through their mineral supply chains. Wind turbines rely on a number of critical minerals, including cobalt, copper, manganese and nickel. The World Bank estimates a 250% rise in demand for key minerals used in wind turbines under a 2-degree climate scenario, including aluminium, chromium, copper, iron, lead, manganese, molybdenum, neodymium, nickel, and zinc. (World Bank, 2017) As many of these minerals currently have limited recycling possibilities, new mining projects will be needed to meet the demand of wind power developers worldwide. The mining of these minerals has, in some locations, been associated with decreased access to water for local communities, increased instances of mining-related illnesses, and environmental pollution. Furthermore, energy storage technologies frequently built in tandem with wind projects are also at risk of contributing to child labour, abuses of indigenous people's rights and corruption through their cobalt and lithium supply chains.

BHRRC surveyed 19 wind power companies and found that 13 had a human rights commitment in place (68%), two of these 13 had a commitment to free, prior, and informed consent if FPIC is triggered (11% of all companies surveyed). Ten companies had a commitment to ongoing consultation with affected communities (53%).

Although none of the examples provided by BHRRC were from Projects in South Korea, they do represent a global trend towards greater demand for further transparency on supply chain human rights risks in the renewables sector. At the time of writing the HRIA, AWC shared that it will commit to the Code of Conduct for suppliers and third-party intermediaries of its supplier (Siemens Gamesa, 2023), which is based, amongst others, on the UN Global Compact and the principles of the International Labor Organization, the principles of the Rio Declaration on Environment and Development, the EICC Code of Conduct and ISO standards. In light of this, continuous pro-active approach in relation to mitigation measures matching international standards is recommended.

4. KOREAN HUMAN RIGHTS CONTEXT

This section provides an overview of the human rights context within South Korea, which provides an understanding of how the regulatory framework operates in practice. It is against this background that the salient human rights issues associated with the Project were assessed.

4.1 Human rights in practice

4.1.1 Human rights context in South Korea

Globally recognised indices can be used to understand the state of a country's governance and human rights risks. These indices provide an indication of the human rights context in South Korea, and are summarised as follows:

- **Corruption Perceptions Index³:** In 2022, South Korea was ranked 31 out of 180 countries, scoring 63 on a scale of 0 (highly corrupt) to 100 (very clean). (Transparency International, 2022). The Corruption Perceptions Index is based on how corrupt a country's public sector is perceived to be, by experts and business executives.
- **Trafficking in Persons Report:** The 2022 Trafficking in Persons Report, categorised South Korea as a Tier 2 country (U.S. Department of State, 2022). The Trafficking in Persons Report assess a government's efforts to eliminate trafficking in persons and demonstrates that the Government of South Korea does not fully meet the minimum standards for the elimination of trafficking but is making significant efforts to do so.
- **Global Rights Index:** Published by the International Trade Union Council (2022) annually, the Global Rights Index depicts the world's worst countries for workers by rating countries on a scale from 1 (sporadic violations of rights) to 5+ (no guarantee of rights due to breakdown of the rule of law). In 2023, South Korea received a score of 5-, described as "no guarantee of rights", and emphasises concerns related to right to free speech and assembly, and violations in relation to union members.
- **Human Development Index (HDI):** South Korea scores an HDI value of 0.925, which is regarded as having "very high human development", ranking 19 out of 191 countries included in the measure (UNDP, 2021). The HDI is a summary measure of average achievement in key dimensions of human development, which are all key human rights.
- **Freedom House Ranking:** Freedom House, a non-government organisation, has assessed and rated the political rights and civil liberties in 210 countries and territories. In 2023, South Korea scored 83 out of 100 (where 100 represents the optimal political rights and civil liberties), and is classified as "Free" (Freedom House, 2023), with a scoring of 33 out of 40 for political rights, and 50 out of 60 for civil liberties. Political expression, corruption and misogyny are mentioned as some persistent problems.
- **Universal Periodic Review:** Established in 2006, the Universal Periodic Review (UPR) is a UN Human Rights Council peer-review process. The UPR considers the human rights record of each UN Member State every five years. The review is unique because it is led by Member States and covers a broad range of international human rights obligations. The UPR differs from the UN human rights treaty body reviews that are led by committees of experts and focus on specific treaties. As part of each UPR cycle, Member States submit a national report and appear at the UN in Geneva for an interactive dialogue with other Member States. South Korea's fourth cycle UPR took place in January 2023, where Korea received 263 recommendations and adopted 159 recommendations related to legal and general framework of implementation, International

³ The Corruption Perceptions Index is an indicator showing the relative degree of corruption when compared with other countries or regions in the world, with 0 as highly corrupted and 100 means very clean. It is developed from an NGO, Transparency International, to monitor the extent of corruption of a place.

humanitarian law, civil and political rights, economic, social, and cultural rights, women's rights, children's rights and rights of other specific groups and persons.

- **Fragile State Index (FSI):** Developed by Fund for Peace, the FSI is based on a conflict assessment framework (CAST) to assess the vulnerability of states to collapse. South Korea scores 31.5 out of maximum score of 120, which indicates a low risk.
- **World Governance Indicators:** The Worldwide Governance Indicators project reports aggregate and individual governance indicators for over 200 countries and territories over the period 1996–2019, for six dimensions of governance. South Korea shows high scores, which indicate low risks.
- **PRIndex:** PRIndex, the Global Property Rights Index, is a collaborative initiative between Global Land Alliance and the Overseas Development Institute (ODI) that aims to develop and roll out the first global measurement of peoples' perceptions of their property rights. Tenure insecurity is expressed in percentages with 1 as highest and 100 as the lowest. South Korea scores 19%.
- **Human rights defenders:** South Korea maintains a democratic system of governance in which most civil, political, economic, social, and cultural rights are generally respected and upheld. Persistent abuse against more vulnerable parts of the population is common, including widespread discrimination and sexual harassment of women, as well as discrimination against lesbian, gay, bisexual, and transgender (LGBT) people, racial and ethnic minorities, and foreigners and refugees. The government also retains strict criminal defamation laws and sweeping intelligence and national security laws have been used to suppress speech critical of the government and business interests. (HRW, 2023)

4.2 Labour Rights

4.2.1 Working Hours

Korean working hours are governed by the Labor Standards Act. The weekly working hours cannot exceed 40 hours, excluding rest time, and the daily working hours cannot exceed eight hours, excluding rest time. For hazardous or dangerous tasks, workers cannot work more than 34 hours per week and six hours per day.

Ordinary workers are required to adhere to 40 hours per week and eight hours per day. However, with mutual agreement between parties, extended working hours up to 12 hours per week are allowed. Moreover, certain industries can extend working hours beyond 12 hours per week with written agreements between employers and employees. These industries include:

- Land transport and pipeline transportation
- Water transportation
- Air transportation
- Other transportation-related services
- Health care industry

Additionally, according to Article 71 of the Labor Standards Act, female workers within one year after childbirth are limited to working two extra hours per day, six extra hours per week, and 150 extra hours per year for extended work hours. Pregnant workers are allowed to reduce their daily working hours by two hours. Parents with children under 8 years old can reduce their weekly working hours to 15-35 hours.

4.2.2 Paid Annual Leave

Employers must provide 15 days of paid annual leave to employees who have worked for more than 80% of the year. For employees who have worked less than a year or less than 80% of the year, one day of paid annual leave must be given for every month of work. Moreover, for employees who have worked continuously for three years, an additional one day of paid leave must be given for every two years of continuous service, up to a maximum of 25 days of total leave, including the additional days.

The following periods are considered as workdays when calculating paid annual leave:

- Periods of absence due to work-related injuries or illnesses
- Periods of leave taken by pregnant female workers under Article 74 of the Labor Standards Act (pre and postnatal leave)
- Periods of childcare leave taken under the Act on the Promotion of Work-Life Balance for Workers.

For Maternity Leave, Miscarriage or Stillbirth Leave, and Spouse's Childbirth Leave, the following applies: Pregnant female employees are entitled to 90 days (120 days for multiple pregnancies) of maternity leave. Maternity leave cannot be refused even if the employee voluntarily gives up the leave. Employers must provide 10 days of paid leave for spouses on childbirth, and pregnant employees who experience miscarriage or stillbirth are entitled to a maximum of 90 days of leave proportional to their pregnancy period.

4.2.3 Notice of Termination

Employers must give at least 30 days' notice before terminating an employee (including termination due to managerial reasons). If the employer fails to give this notice, they must pay the employee at least 30 days' worth of their regular wages as compensation (termination notice pay). However, there are cases where employers can terminate an employee without prior notice, which include:

- Employees with less than three months of continuous service
- Unavoidable circumstances such as natural disasters that make it impossible to continue business operations
- Employees who intentionally cause significant disruptions to the business or inflict financial losses.
- The notice of termination system doesn't prohibit terminations but rather requires employers to provide a certain grace period or compensation in cases of termination.

4.2.4 Prohibition of Gender Discrimination in Employment

Employers must not discriminate against male or female workers in all aspects of employment, including recruitment, wages, benefits, education, assignments, promotions, retirement, and termination.

4.2.5 Prohibition of Discrimination against Non-Regular Workers

Employers must not discriminate against fixed-term or part-time workers and dispatched workers concerning wages, regular bonuses, performance-based bonuses, working conditions, and welfare benefits.

4.2.6 Offshore H&S concerns for Construction workers

Offshore windfarm project accidents are not common in the AoI, but below are some examples of reports found by ERM on offshore construction workers accidents in South Korea. Through proper implementation of H&S policies and procedures, these accidents can be mitigated, as is further explained in the section on impact assessment:

- A fire accident on an anchored tanker, resulting in injuries to crew members and missing crew members. No details were available regarding location or recovery of the missing crew. Experts are emphasizing the importance of the issue of ships' integrity (structural and mechanical stability, etc.), and qualified and skilled crew members must be onboard to operate the vessels (The Korea Maritimes, 2021).
- Safety issues in relation to Daewoo Shipbuilding & Marine Engineering (DSME) site, where a worker fell to their death while working on a scaffold suspended from a structure during a heavy lifting operation. Lifting equipment hit the worker, which caused the worker to fall from the vessel (Safety1st.news, 2023).
- A temporary structure installed on the ship's exterior collapsed, causing three workers to fall into the sea. It was claimed that the accident was caused by lack of basic safety equipment during the operation (IUSM, 2023).

5. PROJECT LOCATION

5.1 Location of the Project

The Project's WTGs area is visible in **Figure 5-1**. The coordinates of the WTGs, as well as the Project location and its surrounding areas are presented in the Project Description, which is attached in **Appendix A**.

The Project landfall (see also **Figure 5-2**) will be situated in Yeomsan-myeon, Yeonggwang-gun, Jeollanam-do. Yeomsan-myeon is located on the west side of Yeonggwang-gun, and the use of Yeonggwang-gun land is classified as Production Control Areas and Agricultural and Forest Areas. The designation is based on the high-level area identification by the government. Area designation is determined for urban planning to achieve economic and efficient land use, promote public welfare, and regulate land use, building usage, land coverage, floor area ratio, and building height, without overlapping with each other.⁴ According to the Seoul Metropolitan City government website, the Seoul urban planning portal states that:

Production Control Areas are regions where it is challenging to designate them as Agricultural and Forest Areas due to their surrounding environmental conditions. Special management is required to carry out agriculture, forestry, and fisheries in these areas.

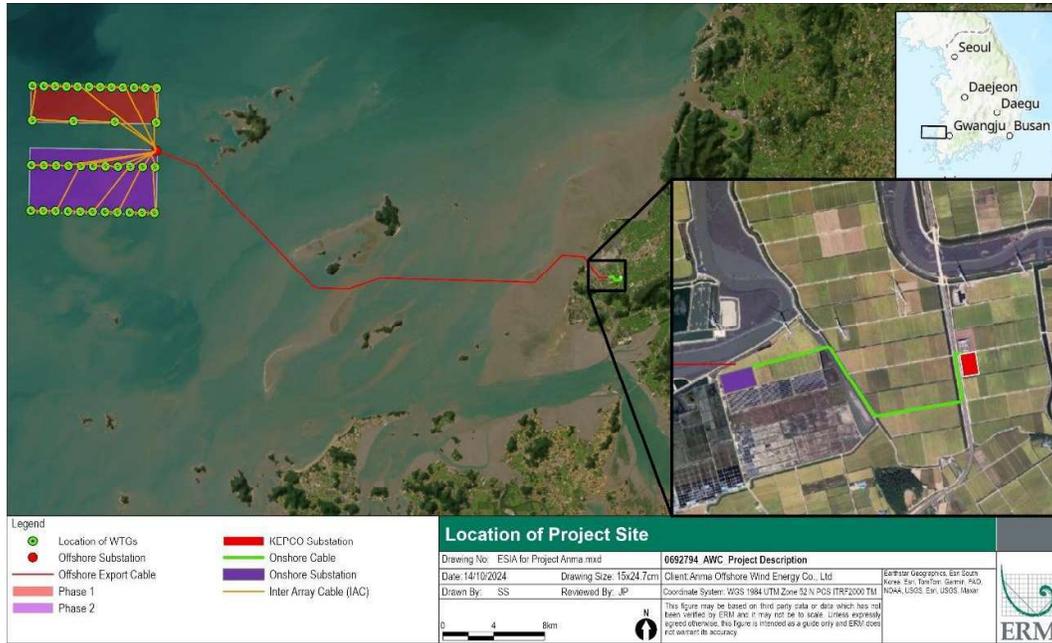
Agricultural and Forest Areas are areas necessary to promote the agricultural and forest industry and to conserve forests, such as agricultural promotion areas under the Farmland Act, or preserved mountainous districts under the Mountainous Districts Management Act that do not belong to urban areas.

According to the Enforcement Decree of the National Land Planning and Utilization Act, Article 71 (18) and Article 71 (20) allow the construction of the power generation facility. The Enforcement Decree of the Building Act Annex 1 defines the above facility as the "a facility used as a power plant (including facilities for collective energy supply)."

The **Table 5-1** used the area designation to explain in which area the onshore export cable route may pass to indicate the high-level land usage.

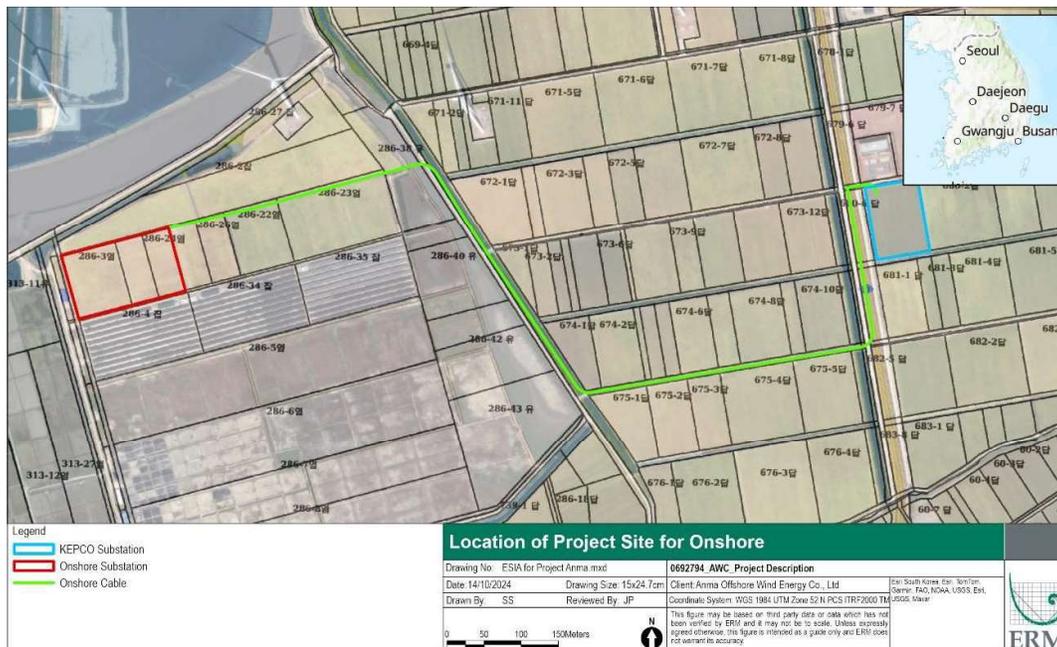
The onshore substation will be located in the Production Control Areas and the onshore export cable will cross both the Production Control Areas and the Agricultural and Forest Areas. The details of the construction area and the location usage of the surrounding communities are provided in the **Table 5-1** and the **Figure 5-1** also shows the location of the onshore substation and the onshore export cable lines.

⁴ [서울도시계획포털 : 용도지역·지구·구역 \(seoul.go.kr\)](http://seoul.go.kr)



Note: The detailed outline of the onshore export cable may be subject to minor changes upon finalization of the design.
(Source: AWC dated August 2024)

Figure 5-1 Project Location (Onshore/Offshore)



Note: The detailed outline of the onshore export cable may be subject to minor change upon finalization of the design.
(Source: AWC dated August 2024)

Figure 5-2 Land plots map and location of Onshore components

Table 5-1 Characteristics of the Land Plots

Division	Location	Location Num	Area Designation
Onshore Substation	Song-am-ri, Yeomsan-myeon, Yeonggwang-gun, Jeollanam-do, Korea	286-2, 286-3, 286-21, 286-24, 286-25, 286-26	Production Control Areas
Onshore Export Cable	Song-am-ri, Yeomsan-myeon, Yeonggwang-gun, Jeollanam-do, Korea	286-2, 286-23, 286-25, 286-22, 286-26, 286-38, 286-39, 286-40, 286-41, 286-42, 286-43, 286-51	Production Control Areas
		671-1, 671-2, 672-1, 673-1, 74-1, 674-1, 674-2, 674-3, 674-4, 674-5, 674-6, 674-7, 674-8, 674-9, 674-10, 673-12, 680-1	Agricultural and Forest Areas

Further information about the Project’s onshore and offshore locations is available in the Project description (**Appendix A**).

5.2 Identification of Rightsholders

Based on baseline conditions and the Project location, the following key rightsholders have been identified and considered in the assessment:

- Fisheries and Prior Rights Holders (FPRH):** These are stakeholders whose livelihoods may be impacted by the Project’s activities in accordance with the Fisheries Act and the Act on the Acquisition of Compensation for Land and Public Works Projects. This group of rightsholders must first grant their consent for the project developer to occupy or use the area. It should be noted that the South Korean fishery compensation mechanism focuses on compensation for displacement, which typically leaves gaps in terms of livelihood restoration consideration. It is also noted that types of fisheries including the permitted fishery business, licensed fishery Business, are expected to be considered within the project site and may be entitled to compensation for loss of livelihood as well.

More information on the FDIA is provided in the Box 8 on Potential Impacts and its extent to Livelihoods.

It is recommended that these and further details will be included in an updated version of this HRIA, once compensation plans are at a further stage;

- Local Communities and Adjoining Landowners (LCAL):** These are stakeholders who have the potential to experience social impacts that may have an implication on human rights. It is noted that no negative impacts to landowners in relation to land acquisition were found as the Project purchased or leased the necessary land on a willing buyer-willing seller basis at the time of writing this HRIA. The section on potential impacts on livelihoods provides further information on the land acquisition process. However, these landowners remain recognised stakeholders whose rights and interests will continue to be monitored throughout the Project lifecycle.

If, at a later stage it is found that landowners experience different impacts from local communities, it is recommended to divide this group into two different groups;

- Project Workers:** These stakeholders are primarily the Project workforce, including employees, contractors and subcontractors, employed to construct and operate the Project; and
- Supply Chain Workforce (SCW):** These stakeholders are workers in the Project’s supply chain, including those working in the sourcing of raw materials, production and manufacturing processes, and the Project’s construction and installation activities.

- Vulnerable Populations:** These stakeholders include elderly, women, foreigners and physically challenged individuals who may be disproportionately impacted by the Project activities. It should be noted that the magnitude of impacts for the vulnerable groups can be higher compared with the typical community members.
 - More information is provided in the section 7.6 of the Social Impact Assessment (SIA).

It should be noted that, at the time of writing the HRIA, it is understood that the residents of five islands (i.e. Juk-do, Anma-do, O-do, Hoeng-do and Seokman-do, area collectively referred as “Anma Archipelago”, 안마군도), are rightsholders in close proximity to the WTG area, (approximately 6.5 km west of Anma-do).

It was determined through the HRIA that residents on the Anma Archipelago are unlikely to experience impacts. The expectation being those residents who fish in and around the Project area or transverse the area for other purposes. Those who fish and/ or transverse the Project area have been considered as rightsholders in the HRIA.

Additionally, for the residents of Anma Archipelago whose income is sourced via fishing, AWC will assess the Project’s impact to their livelihood via process define under the law (i.e. Fishery Damage Investigation) followed by Appraisal as per the Fishery Act), and compensate them.



Figure 5-3 Satellite Image Showing Anma Archipelago

5.3 Scope of Human Rights Impact Assessment: Justification for Inclusion and Exclusion

This section assesses the relevance of the various rightsholders identified in Section 5.2, providing clear justification for their inclusion or exclusion in this Human Rights Impact Assessment (HRIA). Consistent with the methodology used in the Social Impact Assessment (SIA, Chapter 5.3), the groups identified below have been carefully evaluated based on the nature and scale of the Project’s potential impacts on their rights and livelihoods. Nevertheless, any groups or individuals not considered to be relevant in this HRIA but who believe they have been adversely affected by the Project, will have access to and are encouraged to come forward via the Project’s Grievance Mechanism.

- **Indigenous people:** It is widely acknowledged that South Korea has no officially recognized indigenous populations, either domestically or by international organisations (e.g., Minority Rights Group). Consultations with local government officials from Yeonggwang-gun confirmed the absence of indigenous groups within the Area of Influence (Aoi). Consequently, no indigenous populations meet the criteria outlined by IFC Performance Standard 7. Thus, the potential for impacts to indigenous peoples has therefore not been considered relevant to this HRIA.
- **Offshore Passenger/Cruise Ship Operators:** The Maritime Traffic Safety Assessment conducted by Mokpo National Maritime University in August 2023 identified 25 sea routes in the broader Mokpo region, with the "Gyema-Anma" route being relevant to the Project. The detailed assessment, involving GICOMS data analysis and site surveys, concluded the Project would have no significant impact on existing passenger ship or cruise operations. Given this robust analysis, the potential for human right impacts to passenger or cruise ship operators has not been considered relevant to this HRIA.
- **Illegal fishers:** The fisheries regulatory framework in South Korea is highly stringent, involving licenses, permits, quotas, and closely monitored fishing zones enforced by port authorities and coastal guards. Additionally, local fishing ports are closely managed by the National Federation of Fisheries Cooperatives. Consequently, the occurrence of illegal fishing activities within or around the Wind Turbine Generator (WTG) Area is considered highly improbable. As such, the potential for human rights to illegal fishers has not been considered relevant to this HRIA due to the lack of anticipated impacts.
- **Business Owners (Onshore Area):** The onshore Project area, encompassing the landfall, substation, and cable routes, is designated as Agricultural Production Control Area (APCA) and Agricultural and Forestry Area (AFA) under South Korea's National Land Planning and Utilisation Act. Annex 19 of this Act explicitly prohibits commercial structures or businesses within these zones, a fact confirmed through site visits and consultations with local authorities. Given this regulatory context, the potential for impacts to business owners has not been considered relevant to this HRIA.
- **Cultural Heritage:** Comprehensive cultural heritage surveys, including initial and multiple amendment surveys, found no cultural heritage sites or intangible heritage of relevance within or around the Project area. These findings were reviewed and approved by national authorities. Consequently, impacts on cultural heritage have not been considered relevant to this HRIA given the absence of cultural heritage site or values in the Project area.
- **Fishing boat crews:** Fishing boat crews, while indirectly affected, could experience livelihood impacts due to Project-induced access restrictions or altered fishing patterns in the WTG Area. Regulatory compensation under Korean law is typically limited to license holders, which may not fully address indirect livelihood disruptions to crew members—often family members or migrant workers. Following IFC Performance Standard 5, the Project will assess indirect impacts on these groups and exploring targeted livelihood restoration measures such as vocational support or alternative employment opportunities. Consequently, fishing boat crews have been scoped into the HRIA.
- **Landowners:** The Project has successfully secured all necessary land parcels for the onshore components through voluntary transactions on a willing buyer-willing seller basis, with compensation significantly exceeding market rates and reflecting international standards. Despite these voluntary agreements, IFC Performance Standard 5 identifies landowners as affected due to economic displacement resulting from the transaction process. To ensure robust management of potential residual impacts and grievances, landowners are therefore scoped in for continued monitoring and evaluation within the HRIA framework.
- **Informal or Illegal Settlers:** South Korea's strict land-use regulations (including the Farmland Act and National Land Planning and Utilisation Act) make informal or illegal occupation of land uncommon. While no informal or illegal settlers were identified through field surveys and

consultations with local community representatives, IFC Performance Standard 1 recommends a precautionary approach, acknowledging potential sensitivities. Hence, informal or illegal settlers, although unlikely to exist, are scoped in for precautionary reasons, and a comprehensive grievance mechanism is maintained for them should they experience any adverse impacts .

- **Involuntary Resettlement:** Although the Project did not involve any physical displacement or involuntary resettlement, economic displacement risks have been recognized and addressed in accordance with IFC Performance Standard 5. All land transactions for onshore Project components were voluntary; nevertheless, precautionary monitoring is required to identify and manage potential grievances or unexpected economic displacement outcomes. Therefore, the HRIA includes involuntary resettlement issues within its scope to ensure thorough assessment, even in the absence of actual relocation activities.

The rationale presented above ensures alignment and consistency across all Project assessments, particularly with the Social Impact Assessment (SIA) and Livelihood Restoration Plan (LRP), in compliance with international standards including IFC Performance Standards.

6. HUMAN RIGHTS IMPACT ASSESSMENT

This section presents the outcomes of the assessment of the potential salient human rights. In summary, the following potential impacts are considered most salient and would need priority attention:

- Labour and working conditions
- Livelihoods
- Supply chain

Other key areas outlined in the UNGPs and covered within this assessment include:

- Health and safety (of workers and communities)
- Participation (for workers and communities)
- Access to remedy (for workers and communities)
- Security

Section 6.2 presents further details regarding potential impact. An accompanying overview of the Project's potential impact, relevant rightsholders, and connection to human rights Articles is provided in **Appendix D**.

6.1 Scoping outcomes

The scoping process identified the range of potential impacts. Of the nine potential human rights impacts considered in the scoping process, six were not currently considered to be salient. These include potential health and safety impacts to workers, health and safety impacts to communities, participation, access to remedy, security, and impacts on services and infrastructure and impacts, which are expected to be mitigated through appropriate management measures cascaded to the Project level from the relevant corporate policies and procedures. Additional information is provided in the ESDD, included herein as **Appendix F**. The remaining gaps were identified particularly in relation to labour conditions, livelihoods, and supply chain impacts. This HRIA considers the impacts in further detail below.

6.2 Potential human rights impacts

This section presents the outcomes of the impact screening process, that considers industry-wide human rights issues (specifically wind farm and construction industries), and the Project's approach to managing human rights, based on a review of documentation provided. The assessment covers key areas as outlined in the UNGPs (refer to Approach Section) and has been informed by the management strategies already in place or in development. More detailed assessment on existing and recommended management strategies is provided in each of the following subsections. Table 7-1 provides a full overview of proposed human rights strategies.

6.2.1 *Potential impacts to labour and working conditions, including in the supply chain*

There is potential, without appropriate safeguards, for a project to contribute, knowingly or unknowingly, to a violation of workers' rights, in particular the rights outlined by the ILO. This may be through excessive overtime, restricted movement, different job terms and conditions on arrival than initially discussed. If safeguards are not in place a range of potential impacts can arise, including:

- Potential employment of children, forced or bonded labour. This risk is often higher for vulnerable groups, particularly within an organisation's supply chain (e.g. foreign labour).

- Accidents, injuries or other health and safety risks, which can arise from inappropriate working conditions, such as excessive working hours and insufficient breaks.
- Potential for discriminatory practices to occur in the hiring process.
- Potential for discrimination against workers that join unions (or other similar organisations) or take part in collective bargaining.
- Inappropriate or delayed payments to workers.
- Risk of contractors (e.g. service contracts) or third parties (e.g. recruitment agents) not adhering to relevant laws and international standards and guidance.
- Inadequate or inappropriate accommodation arrangements.

Increasingly there is an expectation by stakeholders that a company not only has oversight of its workers, but also its contractors and those involved in its supply chain. Within this context, consideration has been given to the Project’s supply chain.

There are a range of safeguards in place within South Korea to protect the rights of workers, as described in Table 3-1, Table 3-2 and Table 3-3. In addition, ERM’s understanding is that AWC is currently in the process of formalizing and putting in place of several procedures, which will be cascaded from its corporate offices, to mitigate the potential for this impact to occur. For this reason, existing policies and processes held by AWC have been reviewed in developing this HRIA.

6.2.1.1 Impacts Classification

An assessment of the potential impacts to labour and working conditions affecting key internal stakeholders and supply chain workers, is provided in **Table 6-1**.

Table 6-1 Labour and Working Conditions Impacts Classification

Phase	Construction	Operation	Decommissioning
Rating/Designation	Medium	Low	Low

The severity of the impacts was scored as medium based on the above-mentioned potential impacts that may be experienced by workers, including potential for child or forced labour, health and safety risks, discriminatory practices, including those against workers linked to associations, inappropriate or delayed payments, association with contractors not adhering to the law, and inappropriate accommodation requirements.

A medium designation is largely linked to the likelihood of the impact occurring, which scored higher at the construction phase, considering that some rightsholders (both construction workers and workers in the supply chain) may face risks which could at this stage be either unknown by the Project proponent or not fully mitigated due to the complexity of the supply chain and the existence of vulnerable populations within the workforce and supply chain.

The vulnerability of construction workers, foreign labour, and workers in the supply chain should be recognised as their ability to cope or adapt to a change may be less than the general workforce. In addition, the workforce is expected to be larger during construction, when compared to operation. Having a larger, more complex workforce (with multiple layers of subcontractors, further enhances the risk that an impact may occur.

A key consideration in assessing the potential impacts was the extent of management strategies that exist or will be in place by the time construction commences, as a range of relevant policies and processes are currently being established to reduce the potential that the impact will be realised. South Korea’s robust regulation also provide a solid starting point for rights to be protected.

It was found that a Client code of Conduct and a Human Resources Policy are used at corporate level and that a range of requirements will be cascaded to contractors and suppliers, which is reflected in

the documentation that is guiding the tendering process. This includes but is not limited to an expectation that contractors and suppliers commit to respecting human rights, eliminate forced and compulsory labour, avoid child labour, respect the freedom to join unions and engage in collective bargaining, and eliminate discriminatory practices.

As part of the tendering process, Contractors and Subcontractors are expected to agree to work with AWC to undertake compliance in which the Client Code of Conduct (Environmental, Social Governance and clause) (Anti-Bribery & Corruption Requirements) confirms that both Contractors and Subcontractors are not on the World Bank's sanction list and are not on the sanction list in the country.

In addition, workers will have access to remedy via the grievance mechanism that will be developed, and the whistleblower policy that exists. Should issues or concerns arise, workers, including contractors and those located within the Project's supply chain will have access to the Whistleblower Policy and grievance mechanism.

It is understood that there will be no construction worker accommodation operated by AWC but accommodation provided by EPC will comply with the standards of Public Health Control Act, in which it aligns with international standards. Decisions on accommodation will be in line with international standards, as those of ILO and the International Finance Corporation. Furthermore, these facilities will be maintained and inspected in accordance with Workers' accommodation: processes and standards as referenced in the relevant IFC/EBRD. It is advised that guidance be developed at this early stage to inform accommodation decisions, including decisions that will be made by contractors.

6.2.2 Potential impacts to workers' health and safety

In general, construction and operation of wind farm projects can present occupational health and safety risks, which can result in impacts to workers' rights, specifically their right to life, right to liberty and security, and right to health.

Examples of activities that could contribute to occupational health and safety risks include (World Bank Group, 2015):

- Working at height, with the main focus being the prevention of a fall and additional hazards that may also need to be considered including falling objects and adverse weather conditions (wind speed, extreme temperatures, humidity, and wetness);
- Working over water, which requires specific personal protective equipment (PPE) and buoyancy equipment;
- Working in remote locations, with additional challenges in relation to, for example, communication equipment and training and competence of personnel working remotely, including first-aid training, and understanding of local emergency plan;
- Lifting operations, with lifts in an offshore environment being complex operations, potentially involving multiple vessels and cranes. This can create a number of hazards, which can be further exacerbated by sea states that can affect the stability of the lifting platforms, a marine environment that can accelerate the degradation of lifting points on components, and communication problems between multinational crews on separate vessels carrying out the lift;
- Vessel collisions at sea, and traffic accidents on land; and
- Spread of communicable diseases, such as COVID-19, particularly if common areas are not managed appropriately.

Impacts could occur during construction or operation, although the activities associated with occupational health and safety impacts and the likelihood of an incident occurring will be different between the Project phases, with the risks being higher during construction. The potential outcome of a health and safety incident may be a serious injury or fatality.

The Project proponent has a range of policies and plans in place / in development to manage health and safety risks and impacts as they relate to workers, including contractors and suppliers. These include:

- Health, Safety, Security and Environment Standards and Requirements, which refers to contractors, subcontractors, and suppliers. These standards outline a range of measures and principles, including relation to: zero incident, avoidance of accidents at work, and avoidance of environmental damage.
- ESHS Subplan, which, amongst other things, covers:
 - HSE Requirements for Contractors and Subcontractors which outlines HSE commitment, policies and expectations for Contractors and Subcontractors to meet the Project’s HSE principles outlined above. The document outlines requirements for contractors to identify and manage risks, develop HSE plans, and provide training for their workers. It also requires reporting on a contractor’s HSE performance, and an audit and monitoring program where the employer can participate.
 - Emergency Response Plan which provides a framework for Contractors and Subcontractors to align with in terms of response during an emergency situation. Among other things the Plan requires regular emergency drills to be carried out to ensure the effectiveness of the interfaces.
 - Additional measures to reduce the likelihood of health and safety risks and impacts are outlined in the EIA.

6.2.2.1 Impacts Classification

An assessment of the potential impacts to workers’ health and safety affecting key internal stakeholders and supply chain workers is provided in **Table 6-2**.

Table 6-2 Workers’ Health and Safety Impact Classification

Phase	Construction	Operation	Decommissioning
Rating/Designation	Medium	Low	Low

Similar to the assessment on labour conditions, the severity of impacts was scored as medium. South Korea has a relatively strong legal framework in relation to workers’ health and safety as outlined in section 3.2, with obligations for business owners to ensure employee health and safety being subject to administrative fines or criminal punishment if in breach (Yoon and Yang, 2021).

The likelihood scored higher at construction phase, considering that some rightsholder (again, particularly construction workers and workers in the supply chain) may face risks which could be either unknown by the company or not fully mitigated.

The following strategies and policies are either currently in place or under preparation to help reduce potential impacts: HSSE Management Plan, Project Wide Emergency Response Plan and ESMP.

Due to the number of workers on site, and the increased number of vessels and vehicles required, particularly during the construction phase of the Project, there is potential for incidents.

6.2.3 Potential impacts on community health and safety

In general, in wind farm projects, impacts to the health and safety of individual community members can occur – such as traffic accidents or vessel collisions, or if there are infrastructure design or construction faults. This can result in potential impacts to community members, specifically their right to life, right to liberty and security, and right to health.

6.2.3.1 Impacts Classification

An assessment of the potential impacts of community health and safety affecting local communities is provided in **Table 6-3**.

Table 6-3 Community Health and Safety Impacts Classification

Phase	Construction	Operation	Decommissioning
Rating/Designation	Medium	Low	Low

The rating on community health and safety impacts is higher during construction phase, mainly because of increased potential for risks related to vessel and vehicle movements and noise. These aspects were covered in the Project’s EIA, including a Marine Traffic Safety Assessment, and other potential risks such as air quality, noise emissions, electric fields and vibrations. There are also a range of regulatory safeguards in South Korea to prevent communities being impacted by construction sites, as presented above.

It is understood that there will be fishing activities nearby the Project site, as well as other wind farm developments. Hence, the increased traffic (outside of the exclusion zones) may impact marine traffic safety, largely due to the potential for a vessel collision between a Project vessel and other vessels operating in the area (e.g. fishing vessels) when travelling in between the Project Sites and the Port.

On land, there may be impacts on local traffic during the construction phase. The transportation of machinery or materials via heavy truck may lead to traffic disturbances due to slower traffic. People including vulnerable populations, the elderly, women, foreign labour and physically challenged individuals may be disproportionately impacted by the Project with traffic impacts and community health. It should be monitored those who are residing at and/or near the landfall or onshore export cable.

It is understood that AWC will cascade its HSE plans and requirements to contractors and subcontractors, as well as introduce additional measures to prevent, reduce and mitigate these impacts. A range of these measures are captured in the EIA. These management measures will need to be implemented and monitored to safeguard the communities’ right to life and health. Ongoing monitoring and evaluation will be important to ensuring the implementation and effectiveness of these measures.

Likelihood of risks is expected to decrease during later stages of the Project due to reduced number of activities, as well as based on the internal and external inspection.

It should be noted that at the time of writing this HRIA, the level of onshore traffic and offshore transport requirements were not available. Once there is further clarity on the likely required vessel and vehicle movements, these impacts will be revisited and policies and procedures related to road health and safety should be considered (be referred to Table 7-1, section on policies and procedures in relation to road H&S).

6.2.4 Potential impacts to livelihoods

According to UNGPs, countries must provide access to basic needs - i.e. water and sanitation, housing, food, health and education, which need to be available, accessible, acceptable and of sufficient quality. Businesses must not infringe on these rights or on the State’s provision of them. According to the BHRRC, the wind farm industry (as an industry) has been caused or contributed to displacement and loss of livelihoods.

6.2.4.1 Physical and economic displacement

The Project’s onshore components are to be located on privately owned land and as such land acquisition will be required to enable construction and operation of the onshore Project components. As of August 2024, all of the parcels have been secured (all on willing seller/willing buyer basis).

It is also understood that the location of the Project components and Project activities may result in economic displacement, particularly of fishers operating in the offshore area in and around the Project site and farmers working on the site of the agricultural land upon which the Project’s onshore substation will be located.

The farmers acknowledged the inconvenience and restrictions that would arise due to the construction and agreed to them and entered into an agreement contingent upon compensation.

AWC is following FDI procedures as required by national law, to identify, analyse and mitigate potential economic displacement impacts on fisheries. Considering the fact that this process is still ongoing, and the potential magnitude and severity of impact is not yet fully identified, it is recommended that AWC continues to align handling of these processes with international standards (in particular IFC Performance Standard 1 and 5, refer also to Table 7-1), and provides an update on potential risks and impacts in an updated version of this HRIA.

6.2.4.2 Impacts Classification

An assessment of the potential impacts of livelihoods is provided in **Table 6-4**.

Table 6-4 Livelihoods Impacts Classification

Phase	Construction	Operation	Decommissioning
Rating/Designation	Medium	Medium	Medium

As noted in the Project’s EIA, a safety distance will be set between the Project vessels and the fishing area. As a result, access to fishing will be restricted during the construction phase. In addition, local vessels will have to divert from the Project areas, which will increase owners’ travelling distances and costs. During operation, a no-fishing zone is expected to be established around the OWFs, as well as safety distance established in all directions from the Project vessels. Further, noise, light and turbidity generated by construction and installation activities will likely lead to temporary fright and disaffection of fish from the area. This too can impact the fishing around the Project area, and therefore fishers livelihoods, for the duration of the disturbance.

Whilst the likelihood for the Project to cause economic displacement and further impacts on livelihood is high, the Project proponent is developing a range of management measures to prevent, reduce and mitigate these impacts (through the Livelihood Restoration Plan (LRP) and other measures). Ongoing monitoring and evaluation will be vital in ensuring the implementation and effectiveness of these measures. The Project’s impacts on livelihoods should be re-assessed upon the completion of the Fishery Damage Investigation (FDI, refer to Box 8 for full details). However, it should be noted that the FDI may only cover certain types of fishers as defined by Korean legislation, potentially excluding other fisher groups who may still be adversely impacted (e.g., unlicensed or smaller-scale fishers). In line with IFC Performance Standard 5, the LRP has already considered these limitations and includes measures to assess and address the full range of impacted fishers—whether temporary or permanent, licensed or unlicensed—to ensure that all affected stakeholders receive appropriate support.

The FDI will be critical in determining compensation measures for legally recognized fishers, but it may not itself identify or evaluate the broader livelihood support needs for all impacted groups. These potential gaps have been examined through the LRP, which, where necessary, includes additional livelihood assistance measures.

Given that nearly half of the working population in Yeonggwang-gun relies on fisheries, the Project’s LRP has comprehensively addressed livelihood impacts through mechanisms already integrated within the Fishery Damage Investigation (FDI) and the corresponding Entitlement Matrix. The Project ensures all affected stakeholders are effectively supported in accordance with international standards.

It should be noted that at the time of writing this HRIA, the FDI is yet to be undertaken, and therefore, the fisheries population is still subject to change and experiences a lot of fluctuations. Moreover, documentation regarding compensation for the fisheries is still in the initial stages of the process.

The LRP has been developed for the Project to ensure that the livelihood of the fisheries are restored as per the outcome of FDIA and Appraisal. The aim of the LRP and its further planning and implementation is to improve, and at minimum, restore livelihoods of the affected fishers. Additionally,

the LRP identifies vulnerable groups and provide additional measures to assist in livelihood restoration. The current LRP reveals gaps that were identified between Korean law and IFC Performance Standard 5, and establishes measures to close these gaps.

Livelihood impacts in relation to noise, light and turbidity generated by construction and installation activities which may lead to temporary dispersal of fish from the area and may cause impact to fishing activities in and around the Project area, are taken along in the assessment of 'livelihood' impacts of this document, the FDI that is yet to be undertaken.

Box 8. Regulatory Fishery Compensation Process

Fishery Damage Impact Assessment

One of the key permits required by offshore wind farm developers is the Occupancy/Usage Permit of Public Waters (OPPW) under the Public Waters Management and Reclamation Act. Offshore wind farm developers are required to attach a series of regulatory studies/assessments when submitting an application for the permit (refer to Enforcement Regulation Article 4 of the Act), one of which is to acquire consent from the prior right holders. As per Article 12 of the Public Waters Management and Reclamation Act, where there is a prior right holder in the concerned area of public water, who is expected to suffer damage as a result of the project developer obtaining an occupation and use permit for the relevant area of public water, the permit application will not be approved unless the consent of the prior right holder has been granted. This group of rightsholders must first grant their consent for the project developer to occupy or use the area which to be identified through the Fishery Damage Impact Assessment (FDIA), as stated in Article 12 of the Public Waters Management and Reclamation Act.

Business entities, such as offshore wind farm developers, that are not planning to acquire a Reclamation License are not required to undertake an FDIA, however, this is valuable as they are required to identify and acquire consent from the prior right holders of public water (i.e. as per the Public Waters Management and Reclamation Act Article 12) during their application for OPPW. The typical FDIA report covers marine chemistry (marine water quality and marine sediments), marine physics, marine ecology and the range of impact for damage. The report will identify potentially impacted fisheries within the Aol from whom the developers may require to acquire consent.

Fishery Damage Investigation

As per Article 69 and 81 of the Fisheries Act and its Annex 4, the FDI is a procedure that is carried out in order to identify parties who are entitled to receive compensation for fishery damage, as well as to ascertain their amount of fish captured (via series of investigations and record review etc., which becomes the basis for appraisal). The FDI process can be commenced upon the agreement with the fisheries and the Project. It is expected the FDI process will be performed within 3 to 4 months since the baseline data is already captured in the FDIA. The research institution will be selected based on the consultation with the fisheries. Entire FDI process typically takes between 1 ~ 1.5 years to complete, as investigations will be conducted throughout each of the seasons to account for any seasonal factors and variations.

If the offshore wind farm developer has not undertaken FDIA as a voluntary basis during OPPW process, then the developer is required to undertake studies/assessments that would have been included in FDIA (e.g. marine chemistry, marine physics, marine ecology and the range of impact for damage) during their undertaking of FDI.

Appraisal

The Act on the Acquisition and Compensation of Land, etc. for Public Works (ACLPWPA) is the regulation that provides the provisions necessary to compensate for damages incurred based on the outcome of FDI. This process is called Appraisal.

The calculation method for determining the compensation to be paid out to the identified fisheries follows the method stipulated under the ACLPWPA. When the range and extent of damage have been calculated according to the results of the FDI, the compensation plan shall be announced and a notice shall be published by mail in accordance with Article 15 of the ACLPWPA. The compensation sum will be calculated by a licensed appraiser according to Article 68 of the ACLPWPA.

As per Article 16 and 17 of the ACLPWPA, a notice of the contents of the compensation agreement shall be sent to the claimant, and if the claimant agrees to the compensation agreement, the agreement is formally established and compensation is paid to the claimant.

If the claimant is dissatisfied with the contents of the compensation agreement, they may apply to adjudicate an objection to the compensation agreement to the project developer, following which the developer must file an application for adjudication with the competent Land Commission in accordance with Articles 28 to 34, 83 and 84 of the ACLPWPA. If the decision of the commission is appealed once more by the claimant, the parties may then litigate to finalise the compensation agreement.

6.2.5 Potential impacts on existing services and infrastructure

Changes in existing services and infrastructure due to the arrival of a project may impact local communities' 'right to life', 'right to rest and leisure', and 'right to an adequate standard of living'. For instance, when a large proportion of workers is to be sourced from outside the local area, this may place additional pressure on existing services and infrastructure, reducing the capacity of services and infrastructure to meet the needs of existing residents. The table in **Appendix B** provides the number of workers at peak, ratio of foreigner workers, manpower at peak, expected peak weeks, worker management accommodation and the main activities in chronological order.

6.2.5.1 Impact Classification

An assessment of the potential impact of services and infrastructure is provided in Table 6-5.

Table 6-5 Existing Services and Infrastructure Impact Classification

Phase	Construction	Operation	Decommissioning
Rating/Designation	Low	Low	Low

There is potential for a small increase in population during construction, which may place some pressure on local services and infrastructure, and may impact the rights of local communities. However, ERM considers this impact relatively low in likelihood as well as severity because of various aspects, including i) no major tourism and/or recreational activities are located in the AoI, ii) the Project's workforce is expected to be of manageable size that is small in relation to the nearby community, with limited influx of foreign labour and workers accommodation to be mainly offshore. It is also ERM's understanding that AWC is working with local stakeholders to determine the best option for accommodating the workforce.

It should be noted that at the time of writing this HRIA, the level of onshore traffic and offshore transport risks could not yet be confirmed, as it was not yet determined whether facilities would be constructed in the port or not, and where exactly the port would be located.

6.2.6 Potential for stakeholders not to be able to participate

These impacts often arise in instances where stakeholders are unable (or find it difficult) to participate in the engagement process. A lack of engagement could constrain rightsholders' 'freedom of opinion and expression', and 'freedom of assembly and association'.

6.2.6.1 Impacts Classification

An assessment of the potential impacts of stakeholders not being able to participate is provided in **Table 6-6**.

Table 6-6 Stakeholders Not Able to Participate Impacts Classification

Phase	Construction	Operation	Decommissioning
Rating/Designation	Low	Low	Low

It is noted that AWC has finalized its SEP, which outlines the various avenues and a range of strategies through which stakeholders are engaged, including local communities. The implementation of these measures will assist in the management of these potential impacts to achieve the low impacts rating/designation. AWC is providing accessible office location for local stakeholders. AWC is engaging with local groups whereby seniors and women is incorporated, to create a communication channel for communicate about the Project and strengthen ties with the local people.

6.2.7 Potential lack of effective grievance management and access to remedy

Related to stakeholder participation, impacts may arise in instances where projects have underdeveloped stakeholder engagement processes, which lack a grievance mechanism and embedded grievance redress process. Instances where there is no effective grievance mechanism can constrain a stakeholder's right to raise concerns and access effective remedies, restricting their 'freedom of opinion and expression'.

6.2.7.1 Impacts Classification

The assessment of the potential lack of effective grievance management is therefore scored as 'low', as provided in **Table 6-7**.

Table 6-7 Lack of Effective Grievance Management Impacts Classification

Phase	Construction	Operation	Decommissioning
Rating/Designation	Low	Low	Low

The significance was assessed as low, as potential impacts as described above should be mitigated through implementation of the Project's grievance mechanisms. This should include full realization and continuous evaluation of the mechanism.

AWC has a Stakeholder Engagement Plan, including Grievance Mechanism. Planned mechanisms should include various ways of raising grievances, which should be easily accessible to (and actively utilised by) rightsholders, including employees, contractors, suppliers and community members. It will be important to continue to find ways to inform stakeholders about the various methods available to raise grievances.

Given the Project's risks related to workers in the supply chain, it is recommended to consider their engagement too, particularly in relation to the functioning and accessibility of the Project's grievance mechanism.

6.2.8 Potential impacts to amenity associated with dust, noise, lighting and visual amenity impacts

This refers to impacts to amenities, which can result from the generation of e.g. dust, noise, and light, causing a change to the amenity for local community members. Wind farms may involve activities that generate amenity impacts to the surrounding area, although generally at low risk. Where these impacts to amenity disrupt a communities' way of life, the Project may impact on community members' 'right to rest and leisure' and 'right to adequate standard of living'.

6.2.8.1 Impacts Classification

An assessment of the potential impacts to amenities is provided in **Table 6-8**.

Table 6-8 Amenity Impacts Classification

Phase	Construction	Operation	Decommissioning
Rating/Designation	Low	Low	Low

As described in the EIA, expected disturbances are projected to be minimal. It should be noted that these impacts may differ, depending on decisions in relation to the location of the port (which is currently not confirmed).

However, considering that the wind turbines will be located approximately 35-36 km from shore, major impacts are not expected from the offshore equipment.

It should also be noted that the residents on the "Anma Archipelago" are not expected to experience impacts in relation to amenities disrupting the communities' way of life (refer to **Section 5.2**).

6.2.9 Potential impacts associated with the employment of security personnel

There is the potential for the employment of security personnel to put certain human rights at risk, including 'right to life', and 'freedom from torture'.

In general, the provision of private or public security for projects presents risks, including to those who may inadvertently trespass on project facilities, or who may wish to protest against the project. There is the potential, as has been seen in other developments in the Asia-Pacific region, for issues to occur. This includes abuse of power and use of inappropriate, disproportionate, or excessive force by security personnel, which can lead to infringements on the right to liberty and security and the right not to be subjected to torture, cruel, inhuman and/or degrading treatment or punishment.

6.2.9.1 Impact Classification

An assessment of the employment of security personnel is provided in Table 6-9.

Table 6-9 Employment of Security Personnel Impact Classification

Phase	Construction	Operation	Decommissioning
Rating/Designation	n/a	n/a	n/a

At the time of writing this HRIA, it was not yet determined whether or how many security personnel the Project will require. As a result, scoring is currently placed as 'not applicable'. However, should it be decided to employ security personnel, these ratings need to be adjusted. It is recommended to proactively design good practice standards relating to security management, including the appropriate policies and procedures (aligned with the Voluntary Principles on Security and Human Rights) to guide security personnel's actions and behaviours at the Project site.

Future rating of this impact will be dependent on implementation and evaluation of security management. It is understood that AWC makes use of its Client Code of Conduct. Additionally, the security companies in the Republic of Korea are regulated by the Security Services Industry Act, which includes stringent regulatory mechanisms such as background checks for employees, mandatory periodic training, and equipment restrictions. Under the same act, the security guards hold the same legal status as civilians, and the display of force or use of physical violence is strictly prohibited. Under such regulation, it will help to mitigate any potential negative impacts from a security perspective.

7. MANAGEMENT OF HUMAN RIGHTS IMPACTS

The impact assessment (**Section 6**) has identified a range of potential human rights risks and impacts.

Table 7-1 summarises the potential risks, as well as existing management strategies and additional recommended management strategies. Implementation of the identified management measures can help prevent and/ or reduce the potential risks and impacts arising.

- As the HRIA provides an assessment of potential impacts at a point in time, it is important that the HRIA is updated, under the following conditions:
- If there are changes to the Project activities;
- In accordance with changed regulatory requirements; and/or
- Annually, to confirm that identified human rights impacts remain relevant.

Table 7-1 Proposed Human Rights Strategy for the Project

Topic	Risk	Project's Existing/planned Management Plans and Measures	Additional Mitigation/Management Measures
Labour and working conditions	Potential risk of violating workers' rights, including those of vulnerable groups such as foreign labour, due to their vulnerability in the construction sector	<ul style="list-style-type: none"> ▪ Client Code of Conduct (Refer to SCMP) ▪ Human Resources Policy ▪ Supply Chain Management Plan 	<p>Develop and implement:</p> <ul style="list-style-type: none"> ▪ Human Rights Commitment/ Policy, which reflects AWC's commitment to respect human rights. This policy is stated in AWC Client Code of Conduct. A guide on how to develop a human rights policy is provided by UN Human Rights (Appendix E). <p>Seek to ensure no infringement on human rights, particularly:</p> <ul style="list-style-type: none"> ▪ Forced labour ▪ Child labour ▪ Discrimination ▪ Harassment and inhumane treatment ▪ Freedom of association and right to collective bargaining ▪ Working hours and wages ▪ Occupational health and safety ▪ Community impact ▪ Gender equality and empowerment
Health and Safety	Potential risks of violating workers and community's health and safety, as a result of Project construction activities	<ul style="list-style-type: none"> ▪ HSSE Management Plan ▪ Project Wide Emergency Response Plan ▪ ESMP ▪ Supply Chain Management Plan ▪ MTSA ▪ Traffic Management Plan Framework 	<p>Develop and implement:</p> <ul style="list-style-type: none"> • Ensure the Project HSSE Management Plan apply to Contractors and Subcontractors. • Consider policies and procedures related to road H&S (e.g. Traffic Management Plan), as currently the only traffic-related information available is about the onshore speed limit to mitigate noise/vibration levels and not specifically targeted for traffic issues, as is not needed. • Compliance with the above policies and plans should be confirmed through an inspection and audit program. When the program identifies non-conformances, appropriate actions should be taken.

Topic	Risk	Project's Existing/planned Management Plans and Measures	Additional Mitigation/Management Measures
Livelihoods	Potential impacts on fishers livelihoods (economic displacement) during Project construction and operation	<ul style="list-style-type: none"> ▪ Livelihood Restoration Plan ▪ Stakeholder Engagement Plan ▪ Fishery Damage Investigation ▪ Other measures recommended in the EIA 	Develop and implement: <ul style="list-style-type: none"> • Final version of LRP, including additional management measures required after FDI. • Project's impacts on livelihoods should be re-assessed upon the LRP completion. • Compliance with the above management strategies should be confirmed through an internal audit program. When the program identifies non-conformances, appropriate actions should be taken.
Security	Currently not applicable (refer to section 6.2.9) but should it be decided to engage private security the potential exists of violating the human rights of local communities	<ul style="list-style-type: none"> ▪ Client Code of Conduct ▪ Stakeholder Engagement Plan ▪ Grievance Mechanism 	In the event that private security are engaged, include a requirement for the contractors to develop a security workers' code of conduct (CoC) in the Employer's HSE Requirements for Contractors. This may also include: <ul style="list-style-type: none"> ▪ Requirements for contractors to provide training and on boarding for security personnel in line with the requirements aligned with the Voluntary Principles on Security and Human Rights ▪ Implement a process for investigating allegations of misconduct by security personnel ▪ Ensure compliance with the CoC, take appropriate disciplinary actions in the event of misconduct and local community accessible to report any security concerns through grievance mechanism.
Participation and access to remedy	Potential gaps in workers' and communities' rights awareness raising and engagement, as well as grievance management	<ul style="list-style-type: none"> ▪ Stakeholder Engagement Plan, including Community Grievance Mechanism and Worker Grievance Mechanism ▪ Whistleblower Policy ▪ Other measures to support community engagement and remedy include establishing a focused communication channel and prioritizing local employment. 	Implement Grievance Mechanism as captured in SEP: <ul style="list-style-type: none"> • Implementation and effectiveness (refer to section 6.2.7 for details) of the grievance mechanism for external rightsholders proposed in the SEP should be monitored and evaluated according to the Monitoring and Reporting outlined in SEP. • Grievance mechanism for workers and communities (including contractors and

Topic	Risk	Project's Existing/planned Management Plans and Measures	Additional Mitigation/Management Measures
			<p>suppliers). The objective of this system is to ensure there is a robust and transparent process available for addressing complaints.</p> <ul style="list-style-type: none"> ▪ Information of the grievance process and assurance of confidentiality be made available and communicated through below platforms: <ul style="list-style-type: none"> ▪ Anma Project Website available both in Korean and English. ▪ Grievance mechanism explained/communicated to any community members, workers and stakeholders visiting the AWC office and brochures placed to facilitate the communication. ▪ Information on the grievance mechanism has been included in the NTS that will be disclosed.
<p>Supply Chain</p>	<p>Potential human rights impacts in the supply chain affecting workers and communities</p>	<ul style="list-style-type: none"> ▪ Client Code of Conduct including HSSE content ▪ ESG and anti-bribery clauses captured in tendering of suppliers ▪ Supply Chain Monitoring ▪ Supply Chain Self Assessment and Mapping Questionnaire 	<p>Develop and implement:</p> <ul style="list-style-type: none"> • Supply Chain Management Plan: This includes but is not limited to a commitment to respecting human rights, eliminating forced and compulsory labour, avoiding child labour, respecting the freedom to join unions and engage in collective bargaining, and eliminating discriminatory practices. • Ensure that CoC applies to all suppliers on the Project, which provides principles for the selection and retention of qualified suppliers, regarding: <ul style="list-style-type: none"> - Forced labour - Child labour - Worker's remuneration and working hours - Worker's restrictions - Discrimination and rights - Industrial relations - Environmental responsibility - Health and safety

Topic	Risk	Project's Existing/planned Management Plans and Measures	Additional Mitigation/Management Measures
			<ul style="list-style-type: none">- Bribery and corruption• To require suppliers to provide evidence to demonstrate compliance with the CoC.• Compliance with the Project's Client CoC should be confirmed through a monitoring, evaluation and reporting. When non-conformances are identified, appropriate actions should be taken.• Identification of foreign labour via questionnaire and reporting.

7.1 Reporting

Access to information is both a human right and a principle that underpins a human rights-based approach.

Any human rights abuse or violation must be reported immediately to AWC management and to Lenders, as such events are considered serious incidents. These may also be reported through the Project's Whistleblower Mechanism (WBM), where appropriate and with survivor protection in place.

As part of the Project's internal reporting systems, an annual report (refer to ESMS) will include a summary of all human rights related grievances, abuses, and violations - including any reports of gender-based violence and harassment (GBVH) – while ensuring confidentiality and the protection of survivors' rights. Responses and remedies implemented to address such issues will also be described.

Reporting should record details of the incident or issue, a description of the non-compliance, engagement activities, any corrective actions taken, and the outcomes for the rightsholders. Rightsholders should be consulted and advised of proposed corrective actions.

Further reporting may be required by external parties, including government agencies and lenders. This should be monitored to ensure the Project remains compliant with applicable reporting requirements.

8. REFERENCES

- AHRC (n.d.). Submission to Court as Intervener and Amicus Curiae, viewed 26 July 2023, available online: <https://humanrights.gov.au/our-work/legal/submissions/submission-court-intervener-and-amicus-curiae>.
- BHRRC (2021). Investor Snapshot: Wind Energy and Human Rights, viewed 20 July 2023, available online: [Wind - Investor Snapshot_0.pdf \(business-humanrights.org\)](#)
- BHRRC (2021). Human Rights in the Mineral Supply Chains of Wind Turbines, viewed 20 July 2023, available online: [Human Rights in the Mineral Supply Chains of Wind Turbines \(business-humanrights.org\)](#)
- ERM (2023) AWC Project Description.
- ERM (2023) AWC ESMP.
- ERM (2023) AWC Livelihood Restoration Plan.
- ERM (2023) AWC Stakeholder Engagement Plan (SEP).
- ERM (2023) AWC Voluntary ESDD.
- Data.go.kr, 공공데이터포털 viewed 13 September 2023, available online: <https://www.data.go.kr/data/15017259/fileData.do>.
- Fund for Peace (2023). Fragile State Index, viewed 20 July 2023, available online: [Fragile States Index | The Fund for Peace](#)
- Freedom House (2022). Freedom House Ranking, viewed 20 July 2023, available online: [South Korea: Freedom in the World 2022 Country Report | Freedom House](#)
- The Korea Maritime News (7 February 2021). Viewed 20 July 2023, available online: [기코/해양사고의 원인과 선원의 근로환경 - 해사신문 \(haesanews.com\)](#)
- Human Rights Watch (2023). country overview South Korea, viewed 20 July 2023, available online: [South Korea | Country Page | World | Human Rights Watch \(hrw.org\)](#)
- International Trade Union Council (2023). Global Rights Index 2023, viewed 20 July 2023, available online: [ITUC GRI - Korea \(Republic of\) \(globalrightsindex.org\)](#)
- IUSM (26 March 2014). Viewed 20 July 2023, available online: [선박 건조 근로자 셋 추락...1명 사망 < 사건사고 < 사회 < 뉴스 < 기사본문 - 울산매일 - 울산최초, 최고의 조간신문 \(iusm.co.kr\)](#)
- OHCHR (1966). International Covenant on Economic, Social and Cultural Rights, viewed 26 July 2023, available online: <https://www.ohchr.org/en/instruments-mechanisms/instruments/international-covenant-economic-social-and-cultural-rights#:~:text=1.-,The%20States%20Parties%20to%20the%20present%20Covenant%20recognize%20the%20right,continuous%20improvement%20of%20living%20conditions>.
- OHCHR (2023). Universal Periodic Review Korea, viewed 20 July 2023, available online: [Universal Periodic Review - South Korea | OHCHR](#)
- OHCHR (2018). 30 Articles on the 30 Articles of the Universal Declaration of Human Rights, viewed 26 July 2023, available online: <https://www.ohchr.org/en/press-releases/2018/11/30-articles-30-articles-universal-declaration-human-rights>
- OHCHR (n.d.a.). The UN Guiding Principles on Business and Human Rights: An Introduction, viewed 26 July 2023, available online: https://www.ohchr.org/Documents/Issues/Business/Intro_Guiding_PrinciplesBusinessHR.pdf
- Property Rights Alliance (2022). Global Property Rights Index, viewed 20 July 2023, available online: [Korea, Rep \(internationalpropertyrightsindex.org\)](#)

Safety 1st news (29 March 2023). Viewed 20 July 2023, available online: [대우조선해양 4 번째 중대재해 발생,,, '자주식 고소작업대' 작업중 근로자 추락사 < 중대재해처벌법 & 중대재해 예방 < 기획특집 < 기사본문 - 세이프티퍼스트닷뉴스 \(safety1st.news\)](#)

Siemens Gamesa (2023). Booklet for Code of Conduct for Suppliers and Third Party Intermediaries, viewed 13 September 2023, available online: [sgre-conduct-suppliers-and-party-intermediaries.pdf \(siemensgamesa.com\)](#)

Transparency International (2023). Corruption Prediction Index, viewed 20 July 2023, available online: [South Korea - Transparency.org](#)

UNDP (2023). Human Development Index, viewed 20 July 2023, available online: [UNDP launches 2021/22 Human Development Report in Korea, emphasizing opportunities in times of uncertainty | United Nations Development Programme](#)

United Nations. (n.d.). *Universal Declaration of Human Rights*. United Nations. <https://www.un.org/en/about-us/universal-declaration-of-human-rights>

U.S. Department of State (2022). Trafficking in Persons Report 2022, viewed 20 July 2023, available online: [2022 Trafficking in Persons Report - United States Department of State](#)

World Bank Group (2015). Environmental, Health, and Safety Guidelines for Wind Energy, viewed 16 August 2023, available online: [World Bank Document](#)

World Bank (2017). The Growing Role of Minerals and Metals for a Low Carbon Future, viewed 15 August 2023, available online: [World Bank Document](#)

World Bank (2022). World Governance Indicators, viewed 20 July 2023, available online: [Worldwide Governance Indicators | DataBank \(worldbank.org\)](#)

Yoon and Yang LLC (2021). At a glance: employers' health and safety responsibilities in South Korea, viewed 23 October 2023, available online: [At a glance: employers' health and safety responsibilities in South Korea - Lexology](#)

APPENDIX A PROJECT DESCRIPTION



ESIA for Project Anma



Project Description

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ESIA for Project Anma

Project Description

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Acronyms and Abbreviations

AWC	Anma Offshore Wind Energy
AZE	Alliance for Zero Extinction
BAP	Biodiversity Action Plan
bgs	below ground surface
CCRA	Climate Change Risk Assessment
CHA	Critical Habitat Assessment
CPS	Cable Protection System
CRM	Collision Risk Modelling
EBL	Electric Business License
E&S	Environmental and Social
EAAF	East Asian–Australasian Flyway
EHS	Environmental, Health and Safety
EIA	Environmental Impact Assessment
EMS	Environmental Management System
EP	Equator Principles
EPAP	Equator Principles Action Plan
EPC	Engineering, Procurement and Construction
EPFI	Equator Principles Financial Institutions
ERM	ERM Korea Ltd.
EN	Endangered
ESAP	Environmental and Social Action Plan
ESDD	Environmental and Social Due Diligence
ESG	Environmental Social Governance
ESIA	Environmental and Social Impact Assessment
ESMP	Environmental and Social Management Plan
ESMS	Environmental and Social Management System
ESS	Environmental and Social Standards
EXC	Export Cable
FA	Fisheries Act
FDA	Fishery Damage Assessment
FDIA	Fishery Damage Impact Assessment
FOU	Foundation
FTEs	Full Time Employees

GHG	Greenhouse Gas
GIPS	Geotechnical Information Portal System
GIS	Gas Insulated Switchgear
HDD	Horizontal Directional Drilling
H&S	Health and Safety
HR	Human Resources
IAC	Inter Array Cable
IBA	Important Bird Areas
IBAT	Integrated Biodiversity Assessment Tool
ID	Identity
IESC	Independent E&S Consultant
IFC	International Finance Corporation
IPA	Important Plant Areas
ISO	International Organisation for Standardisation
IUCN	International Union for Conservation of Nature
KBA	Key Biodiversity Area
KEPCO	Korea Electric Power Corporation
kV	kilovolt
LC	Least Concern
LIDAR	Laser Imaging, Detection And Ranging
LRP	Livelihood Restoration Plan
LURIS	Land Use Regulation Information Service
MEMA	Marine Environment Management Act
MoE	Ministry of Environment
NGIC	National Groundwater Information Center
NGO	Non-Governmental Organisation
OHS	Occupational, Health and Safety
ONS	Onshore Substation
OSS	Offshore Substation
OPPW	Occupancy Permit of Public Waters
PDCA	Plan-Do-Check-Act
PFDIA	Preliminary Fishery Damage Impact Assessment
PS	Performance Standard
PWMRA	Public Waters Management and Reclamation Act

Q	Quarter
RAP	Resettlement Action Plan
SEP	Stakeholder Engagement Plan
SGRE	Siemens Gamesa Renewable Energy
SOP	Standard Operating Procedure
TJB	Transition Joint Bay
TMS	Tele-Monitoring System
VU	Vulnerable
WBG	World Bank Group
WGS	World Geodetic System
WTG	Wind Turbine Generator
XLPE	Cross-linked polyethylene

1. OVERVIEW

The Project consists of two (2) phases - Phase 1 and Phase 2 - corresponding to Electricity Business Licences (EBL 1 and EBL 2). The Project will utilise Siemens Gamesa Renewable Energy's (SGRE) SG DD-236 14.0 MW wind turbine generators (hereinafter as "WTGs"). Phase 1 consists of 16 WTG units with a permitted total capacity of 224 MW and Phase 2 consists of 22 WTG units with a permitted total capacity of 308 MW. The Project's wind turbines area will take up a total area of 80 km² of public waters.

The WTGs will be connected via 66kV Inter-Array submarine cables (hereinafter as "IACs" - Phase 1: circa 51 km and Phase 2: circa 69 km) to the Offshore Substation (hereinafter as "OSS") (125°56'32.86"E, 35°19'44.00" N¹).

230kV export submarine cables (hereinafter as "EXCs") will then be routed to the Onshore Substation (hereinafter as "ONS"). And then, using 154kV onshore cables, electricity will be connected to the West Yeonggwang (or Seoyeonggwang) KEPCO onshore substation operated by KEPCO.

¹ WGS 84

2. PROJECT LOCATION

The area proposed for installation of the Project WTGs (the Site) is situated in the Yellow Sea (or West Sea) West of Anma Island, Yeonggwang-gun, Jeollanam-do, South Korea. The coordinates of the WTGs, as well as the Project location and its surrounding areas are presented in Table 2.1 and Figure 3.1 respectively.

Table 2.1 Coordinate for the WTGs

WTG ID for Phase 1	Coordinate (WGS 84)		WTG ID for Phase 2	Coordinate (WGS 84)	
	Longitude ±ddmmss.ss	Latitude ±ddmmss.ss		Longitude ±ddmmss.ss	Latitude ±ddmmss.ss
A01	125°50'4.5"	35°22'24.1"	C01	125°50'5.1"	35°19'2.58"
A02	125°50'39.6"	35°22'24.1"	C02	125°50'43.46"	35°19'2.59"
A03	125°51'14.7"	35°22'24.1"	C03	125°51'21.86"	35°19'2.63"
A04	125°51'49.7"	35°22'24.0"	C04	125°52'0.23"	35°19'2.63"
A05	125°52'24.8"	35°22'24.0"	C05	125°52'38.63"	35°19'2.65"
A06	125°52'59.9"	35°22'24.0"	C06	125°53'17.03"	35°19'2.68"
A07	125°53'34.9"	35°22'24.0"	C07	125°53'55.39"	35°19'2.7"
A08	125°54'10.0"	35°22'23.9"	C08	125°54'33.79"	35°19'2.72"
A09	125°54'45.1"	35°22'23.9"	C09	125°55'12.15"	35°19'2.73"
A10	125°55'20.1"	35°22'23.8"	C10	125°55'50.55"	35°19'2.75"
A11	125°55'55.2"	35°22'23.8"	C11	125°56'28.91"	35°19'2.79"
A12	125°56'30.3"	35°22'23.8"	D01	125°50'5.56"	35°17'8.65"
B01	125°50'5.4"	35°20'55.2"	D02	125°50'43.94"	35°17'8.59"
B02	125°52'13.8"	35°20'55.2"	D03	125°51'22.33"	35°17'8.56"
B03	125°54'22.3"	35°20'55.0"	D04	125°52'0.67"	35°17'8.53"
B04	125°56'30.7"	35°20'54.9"	D05	125°52'39.05"	35°17'8.49"
			D06	125°53'17.4"	35°17'8.46"
			D07	125°53'55.78"	35°17'8.41"
			D08	125°54'34.17"	35°17'8.4"
			D09	125°55'12.51"	35°17'8.35"
			D10	125°55'50.9"	35°17'8.33"
			D11	125°56'29.24"	35°17'8.27"
Offshore Substation	125°56'32.86"	35°19'44.00"			

Source: AWC dated 18 July 2023

3. PROJECT HISTORY

3.1 Key Milestones

The achieved milestones of the Project have been summarized below:

- October 2017: Installation of a wind condition measuring instrument (Hoeng-do onshore LiDAR) for preparation of electric business license (EBL) for Phase 1;
- April 2019: Acquired EBL for Phase 1;
- May 2019: Installation of wind condition gauge (offshore LiDAR) for preparation of EBL for Phase 2;
- July 2020: Acquired EBL Alteration for Phase 1, and acquired EBL for Phase 2;
- April 2022: Submission of draft Environmental Impact Assessment for Anma Project (hereinafter Draft Regulatory EIA);
- December 2022: Submission of Final Regulatory EIA (updated January 2023);
- June 2023: Submission of Supplementary Regulatory EIA;
- July 2023: Obtained EIA agreement;
- August 2023: Marine Traffic Safety Assessment approved.

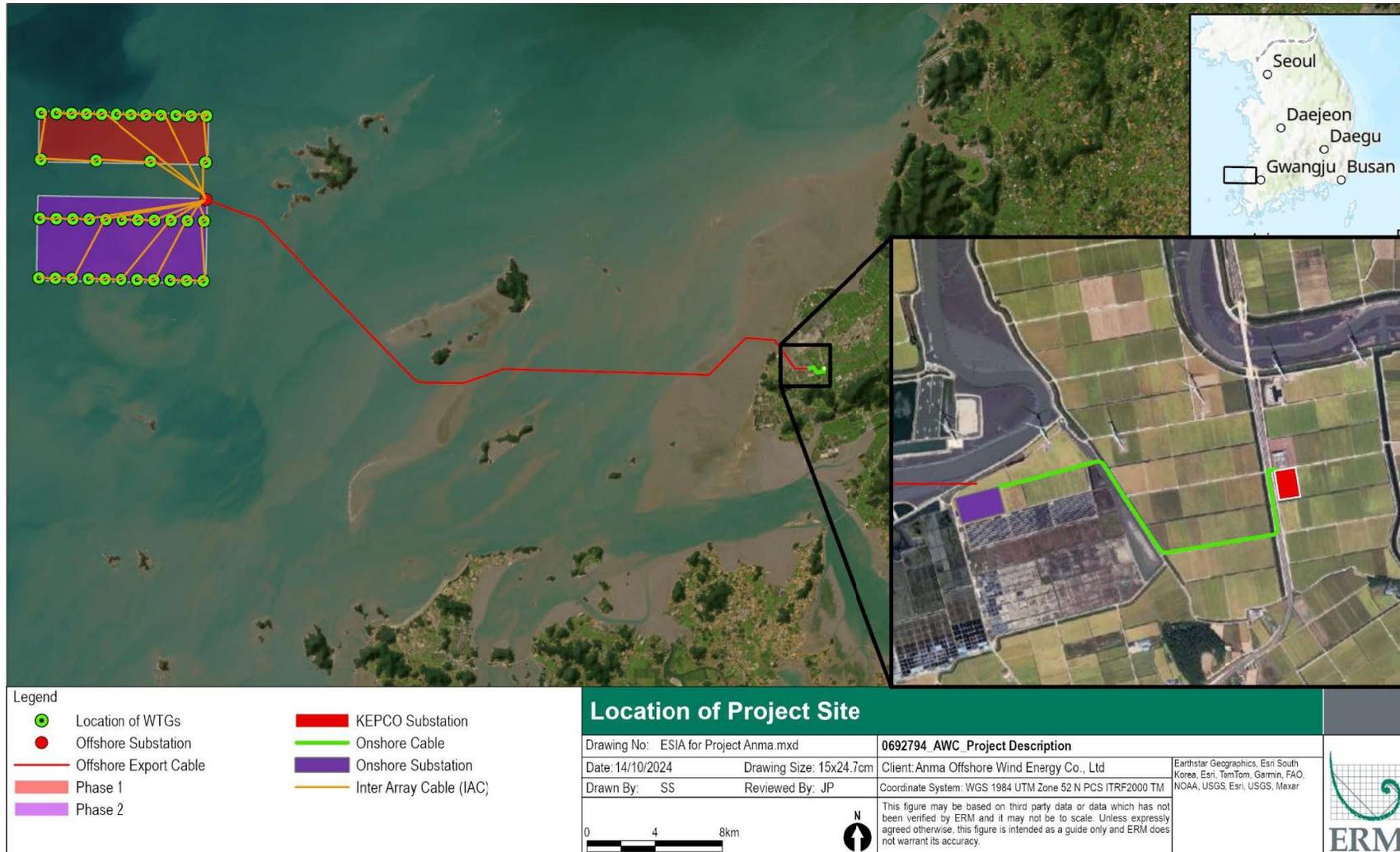
3.2 Versions and Alterations

- Version 1: Draft Regulatory EIA, dated April 2022;
- Version 2: Final Regulatory EIA, dated December 2022 and Supplementary Regulatory EIA, dated June 2023; and
- Version 3: As of August 2023, it is anticipated that the preferred components, layouts and selected construction methods that are incorporated into this ESIA will result in an update process in the EIA and all necessary permits (hereinafter Version 3 AWF).

Table 3.1 History of Project Components

	WTGs numbers & capacity	WTGs type	OSS location & type	IAC location & type	EXC location & type	ONS location & type	Onshore cable location & type	Other
Version 1	528 MW 66 WTGs- 8 MW	WinDS8000 Doosan	Juk-do onshore substation	66 kV Phase 1: 43.3 km (3 strands) Phase2: 57.8km (4 strands)	154kV XLPE 800 mm ² 3-core, (approx. 40.4km)	1508-1 Jisan-ri, Baeksu-eup, Yeonggwang-gun, Jeollanam-do	154kV XLPE 800 mm ² single core, 12 wires (about 7.6km)	Songi-do overhead line: approx. 1.5 km
Version 2	546 MW 39 WTGs- 14 MW	SG DD-236 SIEMENS Gamesa	Offshore substation 125°53'55.2"E 35°19'45.45"N	66 kV Phase 1: approx. 32.0 km Phase2: approx. 36.2 km	154kV XLPE 800 mm ² 3-cores, (approx. 44.9km)	286-3 Songam-ri, Yeomsan- myeon, Yeonggwang-gun, Jeollanam-do	154kV XLPE 2000 mm ² single core, (approx. 1.1km × 6 strands)	No overhead line
Version 3	532 MW 38 WTGs- 14 MW	No change	Offshore substation 125°56'32.86"E 35°19'44.00"N	66 kV Phase 1: approx. 51 km Phase 2: approx. 69 km	230kV XLPE 3-core Approx.41.6 km route length	No change	154kV XLPE single core Approx. 1.5 km route length	No change

Source: Draft Regulatory EIA /Final and Supplementary Regulatory EIA / Version 3 AWF



Note: Some final designs are still under validation process and thus will be updated in relevant documents later.

Source: Version 3 AWF

Figure 3.1 Location of Project Site

4. PROJECT FACILITIES AND COMPONENTS

The main Project components as per the Final Regulatory EIA is summarized below:

- A wind turbines area divided in 2 areas (i.e. Phase 1 and Phase 2), comprised of 38 WTGs with a permitted total capacity of 532 MW;
- 38 SGRE's SG DD-236 14.0 MW WTGs comprised of the tower, foundation, nacelle, hub, rotor, and rotor blades;
- circa 120 km of 66 kV Inter-Array Cables (total for both Phase 1 and Phase 2);
- One (1) Offshore Substation (converting 66 kV to 230 kV);
- Two circuits, each circa 42 km of 230kV offshore export cable (connecting from Offshore Substation to the mainland);
- A Transition Joint Bay at the landing point, receiving the 230kV offshore export cable;
- Two circuits, circa 150m each of 230kV onshore cable (connecting the Transition Joint Bay to the Onshore Substation);
- One (1) Onshore Substation (converting 230 kV to 154kV);
- Two circuits, each circa 1.5 km of 154 kV onshore cable (connecting from the Onshore Substation to the KEPCO substation being the grid connection point); and
- One (1) Korea Electric Power Corporation (KEPCO) substation (owned and operated by KEPCO).

For clarity:

One circuit of offshore export cable refers to one (1) cable, each with three (3) power conductors within the cable.

One circuit of onshore cable refers to three (3) cables, each with one (1) power conductor within the cable.

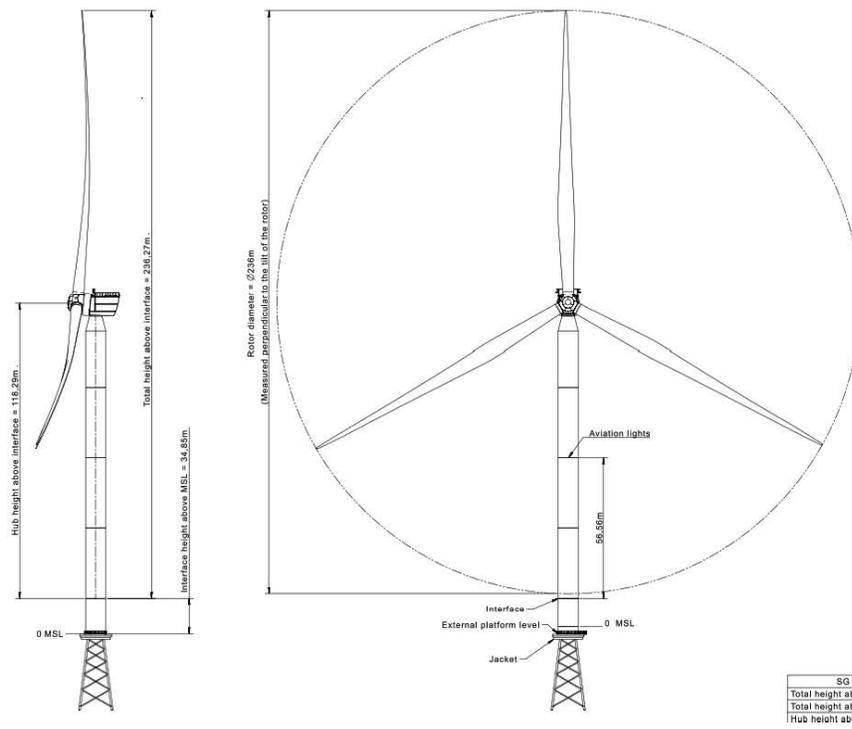
4.1 Wind Turbine Generator

The Version 3 configuration of wind turbines layout has been developed with 38 WTGs of 14 MW nominal capacity. Given the geographical context of the project site within the 'Northeast Asia-Oceania' Migratory Bird Flyway (EAAF) and its proximity to the breeding habitats of various marine bird species (such as Chilsan Island), a decision was made to curtail the number of WTGs and accordingly modify their arrangement. Elaborated information pertaining to the individual WTGs can be found in Table 4.1.

Table 4.1 WTG details

WTG Components	Parameter	Specifications
WTG	Type Class	SG DD-236
ROTOR	Type	3-bladed, horizontal axis
	Position	Upwind
	Diameter (m)	236
	Length of blade (m)	115
	Swept area (m ²)	43,500
TOWER	Type	Cylindrical and tapered tubular
	Hub height (m)	153
	Total height from Mean Sea Level (MSL) (m)	270
OPERATION DATA	Cut in Wind speed (m/s)	3
	Nominal Power (m/s)	at 12
	Cut out wind speed (m/s)	28

Source: Final and Supplementary Regulatory EIA / Version 3



Source: AWC dated 4 August 2023

Figure 4.1 Conceptual Figure of the WTG

4.2 Inter-array Cables (IAC) and Offshore Export Cables (EXC)

The Version 3 design entails all the IAC being concentrated to an Offshore Substation, and then, offshore export cables that directly connects with the mainland. The Version 3 plan is for all the inter array submarine cables to be 66 kV cross linked polyethylene cable (XLPE) submarine cable, the length of which is circa 51 km and 69 km for Phase 1 and Phase 2 respectively, and two (2) circuits of 230kV offshore export cables, each with a length of circa 42 km.

Detailed location of IAC and Offshore EXC are presented above in Figure 3.1.

The IACs will be installed to a target burial depth of between 3.0m to 3.5m, utilising a Jet Trencher for post lay burial operations.

The EXCs will be installed to a target burial depth of between 2.0m to 3.5m, depending on the water depth along the export cable route, where deeper water sections would have a deeper target burial depth. Burial operations for the EXCs will be performed by a Jetting Sled, through simultaneous lay and bury operations.

The EXC will be installed at landfall within a Horizontal Directional Drill (HDD) duct, approximately 120m in length under the sea. Upon exiting the HDD, the EXC will be held in situ via permanent beach clamps which horizontally hang off the cable and permanently secure them in position. The EXC will be terminated externally into a GIS arrangement as fitted to the ONS within a joint bay with land cable connections into the ONS GIS Building alternatively they will be pulled and terminated directly into the ONS GIS.

4.3 Offshore Substation (OSS)

An offshore substation is selected instead of installing it in Juk-do as the final design to avoid civil complaints and to reduce the overall impact to the environmental damage and the fisheries. Compared to the onshore substation, the offshore option will involve fewer external cables, resulting in relatively less environmental and fishing impacts. The opinions on the review of the offshore substation design were collected during the information session for residents as part of Draft Regulatory EIA and are documented therein. Insights and viewpoints concerning the assessment of the offshore substation design were obtained during a resident information session, a pivotal aspect of the Draft Regulatory EIA.

Currently the Offshore Substation is planned to transform the 66kV transmission voltage from the wind turbines into 230kV export transmission voltage. Table 4.2 shows the detail specification and location of OSS.

Detailed location of OSS is presented above in Figure 3.1.

Table 4.2 Offshore Substation Details

Parameter	Specification
Size	Topside: 32 m (Width) x 37 m (Depth) x 30 m (Height) Jacket: 23 m (Bottom Width) x 19 m (Top Width) x 55 m (Height) Pile: 73 m (Depth) x 12 EA
Location	125°56'32.86" E, 35°19'44.00" N

Source: Final Regulatory EIA / Version 3

4.4 Onshore Export Cable

The current landfall is in Yeomsan-myeon, Yeongwang-gun, Jeollanam-do. AWC plans to construct a 154 kV buried onshore cable route from their Onshore Substation to KEPCO onshore substation (West Yeonggwang KEPCO onshore substation). Most of the onshore underground cable route is expected

to be routed along existing roads, or then through rice paddies having been acquired and close other renewable power plants.

4.5 Onshore Substation (ONS)

The power that is generated (690 V) by the WTG will be boosted by the primary boosting transformer (690 V/66 kV) and then transmitted by the IAC (66 kV) to the Offshore Substation. The power will then be directed to the secondary step-up transformer (66 kV/154 kV) at the Offshore Substation, which will be connected to the grid connection point; Seoyeonggwang substation operated by KEPCO.

The AWC Onshore Substation will be in 286-3 Songam-ri, Yeomsan-myeon, Yeonggwang-gun, Jeollanam-do. The area is planned to be 1,550.41 m². The station will consist of three (3) buildings which include a substation, an office, and a warehouse. The office will consist of a three-story building, while the substation and warehouse will consist of one-story building each.

Figure 3.1 above shows the detail location of project site for onshore area.

4.6 Military Radar

The Project will install two radars structures upon request of Ministry of Army to compensate the obstruction generated by the WTGs once installed. The details and the localizations of the two structures shall be kept confidential due to the nature of the facilities. One radar shall be operating offshore and one radar shall be operating onshore.

The offshore radar will comprise a foundation and a top-side structure. The foundation type is yet to be determined and the dimensions of the top-side structure is expected to be no greater than 10m x 10m x 7.5. The construction is expected to start no earlier than Q1 2026. A maximum of 20 staff is estimated at peak time of installation phase and operation shall be unmanned.

The onshore radar will be installed on Imja island in Sinan province. The structure is estimated to comprise a steel tower measuring 5x5x10 meters. The construction is expected to earlier than May 2025 and the duration of the construction shall not exceed 6 months. A maximum of 7 persons shall be estimated during civil works and a maximum of 4 persons during steel tower installation. Operation phase planned to be unmanned.

4.7 Bird Monitoring Radar

As stipulated in the Final Regulatory EIA, a bird monitoring radar is scheduled to be established on Hoeng-do for a duration of one (1) year. The installation of the 2D Terma Scanner-5000 Radar is anticipated. The cabinet housing the monitoring system is approximately 3 meters in height, 3 meters in depth, and 3 meters in width. The antenna's height is estimated to be around 5.5 meters.

The exact placement and specifications of the monitoring equipment are currently pending finalization. Comprehensive details concerning this aspect will be provided at a later stage once they are confirmed.

4.8 Operation and Maintenance (O&M)

The project encompasses two distinct O&M harbour alternatives. One existing facility and one other location are matching the requirements for O&M harbour, however, the location of the O&M harbour is not available before lease contract execution due to high competition risk.

5. SUMMARY ON CONSTRUCTION ACTIVITIES

The purpose of this section is to provide a comprehensive overview of the high-level description of the EPC Package components and the EPC Schedule for the Project.

The EPC Package consists of various components essential for the successful execution of the Project. These components are designed to ensure optimal efficiency and adherence to project requirements. The detailed breakdown of each component, along with its specific role in the Project, is outlined below.

5.1 Foundations (FOU)

5.1.1 Pin-pile

The supplier responsible for the pin-pile has not been determined. The piling process involves several essential steps, including fabrication, transportation, and pile driving. The detailed description of each process involved in the piling work is outlined below:

1. Fabrication of piles;
2. Load out of piles onto vessel or barge;
3. Transport to offshore site; (In parallel prepare noise mitigation measures if required)
4. Upending of piles by installation vessel;
5. Lower piles to ground and wait until self-penetration is reached;
6. Lower hammer on top of pile;
7. Start pile driving activities until target depth is reached; and
8. Once done, lift hammer back to installation vessel, move to next location

Their primary activities are scheduled to commence in the third quarter of 2024, with the peak of their operations anticipated in the second quarter of 2025. At its peak, the estimated number of staff required will be approximately 200, and this period is expected to last for approximately 10 weeks. It is projected that around 10% of the workforce will consist of foreign workers, and the planned worker's accommodation is estimated to accommodate around 100 individuals.

5.1.2 Jacket

Jacket will be installed on the pin-pile after completion of pin-pile installation. The supplier responsible for the fabrication and installation of the windfarm jacket has not been finalized. The installation process of the windfarm jacket can be described as follows:

1. Fabrication of jacket;
2. Load out of Jacket onto vessel or barge;
3. Transport to offshore site lift jacket from barge and insert into pre-installed pin piles;
4. Start grouting to finalize connection between jacket and grout; and
5. Move to next location

The main activities of the Project are scheduled to commence in the fourth quarter of 2024, with the peak of their activities anticipated in the first quarter of 2026. During this peak period, it is estimated that approximately 200 staff members will be involved, and the activity is expected to last for approximately 10 weeks. It is anticipated that around 10% of the workers will be foreign workers.

5.2 Inter Array Cable

Installation of Inter Array Cable (IAC) will commence after completion of jacket installation. The contractor responsible for the installation of IAC has not been finalized. The main activity for the IAC installation is scheduled to begin by mid 2026. The IAC installation will involve the following key activities.

■ Site Preparation

1. Preparation of equipment for pull-in at the WTG foundation / OSS Jacket;
2. Pre-lay grapnel run on the seabed following the cable route; and
3. Pre-lay survey.

■ Installation

1. Mobilization of installation vessels and crew accommodations;
2. Cable loading from factory onto the installation vessel;
3. Removal of J-tube covers;
4. Cable pull-in (1st Cable End) including Cable Protection System (CPS) installation;
5. Cable surface laying;
6. Cable pull-in (2nd Cable end) including CPS installation;
7. Post lay survey;
8. Post lay burial, with jet trencher;
9. Post lay burial survey;
10. Remedial burial (if necessary only) with a jet trencher;
11. Remedial burial survey; and
12. Installation of rock bags on CPS at the WTG/ OSS (if necessary only).

During the peak period of their activities, which is expected to span from March 2026 to January 2027, the IAC installation team will consist of an estimated total of 100 - 160 staff members. These staff members will be further divided into two main groups. The first group, known as the Office Support / Management Teams, will comprise approximately 20 - 60 staff members. They will be responsible for providing support and managing various aspects of the IAC installation project. For their convenience, these team members will be accommodated in either major cities or locations near / around the port area depending on their function and role.

The second group is the Transport and Installation Vessel Crew, which will consist of approximately 80 - 100 staff members. This group will play a direct and hands-on role in the actual installation of the IAC. During their construction activities at sea, they will be accommodated either on the cable laying vessel (CLV) and a Service Operations Vessel (SOV).

Throughout the peak period, AWC expects that 10 - 30% of the workers in both groups may be foreigners. As the Project progresses and specific roles and requirements become clearer, further details regarding staffing and accommodation arrangements will be finalized and communicated accordingly.

5.3 Offshore Export Cable

Export Cable installation will occur almost in parallel to IAC installation. The contractor responsible for the installation of the offshore export cable has not been determined yet. The preparation of the offshore export cable route (such as HDD and TJB construction) is scheduled to begin in October

2024, with the actual cable installation set to commence in February 2026. The process of offshore export cable installation is described below:

■ Site Preparation

1. Construction of HDD;
2. Set up of silt curtains at excavation sites;
3. Excavation of Shore end landing approach;
4. Set up of pre-excavated trench wall stabilisation measures;
5. Set up of cable rollers in the pre-excavated trench;
6. Preparation of equipment for pull-in at the OSS Jacket and at the TJB area at the ONS;
7. Pre-lay grapnel run on the seabed following the cable route; and
8. Pre-lay survey.

■ Installation

1. Mobilization of installation vessels with cable storage and cable handling equipment;
2. Laying of cable section 1 of 2, on Circuit 1
 - a. Cable loading from factory onto the installation vessel;
 - b. Transit of the installation vessel from the factory to the near shore section near the mainland;
 - c. Cable shore end landing / beach pull-in (1st Cable End);
 - d. Backfilling of pre-excavated trenches of Circuit 1
 - e. Simultaneous lay and bury of the cable with a jetting sled towards the OSS;
 - f. Lay down of cable end at the middle of the route (near Gagi Island);
 - g. Return to the submarine cable factory;
3. Laying of cable section 1 of 2, on Circuit 2
 - a. Cable loading from factory onto the installation vessel;
 - b. Transit of the installation vessel from the factory to the near shore section near the mainland;
 - c. Cable shore end landing / beach pull-in (1st Cable End);
 - d. Backfilling of pre-excavated trenches of Circuit 2;
 - e. Simultaneous lay and bury of the cable with a jetting sled towards the OSS;
 - f. Lay down of cable end at the middle of the route (near Gagi Island);
 - g. Return to the submarine cable factory;
4. Laying of cable section 2 of 2, on Circuit 1
 - a. Cable loading from factory onto the installation vessel;
 - b. Transit of the installation vessel from the factory to the OSS;
 - c. Cable pull-in (1st Cable End) at the OSS;
 - d. Simultaneous lay and bury of the cable with a jetting sled towards the middle of the route;
 - e. Lay down of cable end at the middle of the route (near Gagi Island);
5. Laying of cable section 2 of 2, on Circuit 2
 - a. Cable loading from factory onto the installation vessel;

- b. Transit of the installation vessel from the factory to the OSS;
 - c. Cable pull-in (1st Cable End) at the OSS;
 - d. Simultaneous lay and bury of the cable with a jetting sled towards the middle of the route;
 - e. Lay down of cable end at the middle of the route (near Gagi Island);
6. Cable joint assembly, deployment and protection of both Circuits 1 and 2 offshore joints;
 7. Post installation survey;
 8. Remedial burial (if necessary only) with a jet trencher; and
 9. Installation of rock bags on CPS at the OSS (if necessary only).

During the peak of construction activities, expected to span from March to November 2026, approximately 170 to 260 staff will be involved in the installation process. These personnel will be divided into two main groups: the Office Support / Management Teams and the Transport and Installation Vessel Crew.

The Office Support / Management Teams, comprising about 20 to 60 staff, will be accommodated either in major cities or near / around the port depending on their function and role. Their primary responsibilities will be overseeing and managing various aspects of the installation, ensuring efficient coordination, and addressing any operational challenges.

On the other hand, the larger portion of the workforce, consisting of approximately 150 to 200 staff, will be the Transport and Installation Vessel Crew. These workers will be accommodated onboard the vessels (Cable Laying Barge, Support Barges, Jointing Jack Up Barge, etc.) during their activities.

5.4 Offshore Substation

The supplier responsible for the installation of offshore substation has not yet been determined. Installation of pin-pile and jacket will commence by end of 2026, and topside installation will follow. The process of offshore substation installation is described below:

1. Fabrication of substation components from outside of Korea (Singapore, Indonesia, or India);
2. Transportation of the assets (jacket, pin piles and topside) to site; and
3. Jacket installation, piling, topside installation and commissioning.

Estimated number of staff during installation and commissioning of Offshore Substation is approximately 12 – 24, 20% of whom are expected to be South Korean nationals, with the remainder foreign passport holders. Peak of their activities is expected to be December 2025 and January 2026 then September and October 2026. And all staff will be accommodating in vessel during their activities.

5.5 Onshore Substation (ONS) & Onshore Cable

The supplier responsible for the installation of onshore substation and Onshore Cable has not yet been determined. Their main construction activities will commence November 2024. The process of Onshore Substation and Export Cable installation are described below:

1. Installation of Onshore Cable between TJB and Onshore Substation;
2. Transmission cable installation between ONS - KEPCO substation;
3. Civil work: piling, foundation etc;
4. Electrical work: mesh grounding;
5. ONS building construction;
6. Electrical system installation;

7. Commissioning; and
8. KEPCO inspection.

The peak of construction activities is expected to be Q1 (construction) and Q3 (installation of electrical system) 2026 with each peak period expected to be 10 weeks respectively. Estimated number of staff during the peak will be approximately 70 - 100 (including vessel crew) who will be accommodated in Yeonggwang or Gwangju during their activities.

5.6 WTG

Siemens Gamesa Renewable Energy has been appointed as the WTG supplier for the Project. Their main construction activities are scheduled to commence around January 2027. The assembly and installation process of WTG are described below:

1. Transport of WTG components to the pre-assembly harbour;
2. Pre-assembly works (e.g. assembly of tower sections final preparation of blades and nacelles);
3. Transport of pre-assembled main components to the offshore windfarm;
4. WTG installation;
5. WTG commissioning and testing; and
6. Hand over to the Operations and Maintenance.

During the peak period of their activities, which is expected to span from Q2 to Q3 2027 (approximately 16 - 25 weeks), Siemens Gamesa Renewable Energy will conduct commissioning and installation processes concurrently. The estimated number of staff during this phase will be around 150 - 170 personnel, which includes the vessel crew. These staff members, predominantly foreigners, will be lodged in general accommodation such as hotels and motels in Mokpo, Gwangju, and the vessels while carrying out their tasks.

5.7 Transition Joint Bay (TJB)

However, it is planned that the transition joint bay installation will be incorporated as part of the Offshore Export Cable installation. The process of transition joint bay installation is described below:

1. Set up access roads, site fencing, site offices, etc;
2. HDD;
3. Excavate TJB Location;
4. Construction of TJB;
5. Install accessories and appliances inside the TJB;
6. Backfill of surrounding location; and
7. Reinstatement of condition (i.e. removal of fencing, site offices, access roads etc.).

During the peak of construction activities, which is expected to last approximately eight (8) weeks, the estimated number of staff will be around 15 to 30 individuals. Most of these staff members are expected to be South Korean nationals. To support their activities, suitable accommodations will be provided in either Yeonggwang or Gwangju.

5.8 Operation and Maintenance (O&M)

For the O&M, there might be modification work to the expected site. The following modification would be anticipated:

Onshore

1. Ground clearing and excavation works;
2. Laying of reinforced concrete (specifically for the warehouse and parking area);
3. Office building and warehouse construction (as per above dimensions);
4. Installation of water, electrical and sewage connectivity, depending on existing infrastructure; and
5. Car parking gravel and road gravel (depending on existing infrastructure).

Offshore

1. Development and re-paving of the existing quayside, including potential excavation and laying of reinforced concrete;
2. Marine dredging and construction of pontoons;
3. Installation of quayside crane;
4. Installation of water, electrical and sewage connectivity, depending on existing infrastructure; and
5. Car parking gravel and road gravel (depending on existing infrastructure).

5.9 Military Radar

The onshore radar tower is expected to have a height of approximately 14 meters and an area of 47.0 m². However, due to the confidentiality of military radar operations, specific details regarding the location and specifications will be updated at a later stage once they are finalized.

5.10 Bird Monitoring Radar

The installation of the 2D Terma Scanter-5000 Radar is anticipated. The cabinet housing the monitoring system is approximately and maximum 3 meters in height, 3 meters in depth, and 3 meters in width. The antenna's height is estimated to be around 5.5 meters.

The exact placement and specifications of the monitoring equipment are currently pending finalization. Comprehensive details concerning this aspect will be provided at a later stage once they are confirmed.

APPENDIX B BRIEF DESCRIPTION OF EPC ACTIVITIES

	Pin-pile	Jacket	Inter Array Cable (IAC)	WTG	Export Cable	Offshore Substation	Onshore Substation and Export Cable	Transition Joint Bay (Offshore Works)
Main activities in Chronological Order	<ol style="list-style-type: none"> 1. Fabrication of Piles 2. Load out of piles onto vessel or Barge 3. Transport to offshore site/ 4. In parallel prepare noise mitigation measures if required 5. Upending of piles by installation vessel 6. Lower piles to ground and wait until self penetration is reached 7. Lower hammer on top of pile 8. Start pile driving activities until targeted depth is reached 9. Once done, lift hammer back to installation vessel, move to next location. 	<ol style="list-style-type: none"> 1. Fabrication of Jacket 2. Load out of Jacket onto vessel or barge 3. Transport to offshore site lift Jacket from barge and insert into pre-installed pin piles 4. Start grouting to finalize connection between Jacket and grout 5. Move to next location 	<p>Site Preparation</p> <ol style="list-style-type: none"> 1. Preparation of Equipment for Pull In at the WTG Foundation/ OSS Jacket 2. Pre-Lay Grapnel Run on the seabed following the cable route 3. Pre-Lay Survey <p>Installation</p> <ol style="list-style-type: none"> 1. Mobilization of Installation Vessels and Crew Accommodations 2. Cable Loading from Factory onto the installation vessel 3. Removal of J-tube covers 4. Cable Pull-In (1st Cable End) including CPS (Cable Protection System) Installation 5. Cable Surface Laying 6. Cable Pull-In (2nd Cable end) including CPS installation 7. Cable termination and pre-commissioning 8. Post Lay Survey 9. Post Lay Burial, with Jet Trencher 10. Post Lay Burial Survey 11. Full system commissioning 12. Remedial Burial (if necessary only) with a Jet Trencher 13. Remedial Burial Survey on CPS at the WTG/OSS (if necessary only) 14. Installation of rock bags on CPS at the WTG/OSS (if necessary only) 	<ol style="list-style-type: none"> 1. Engineering works start for the tower and foundation design. 2. Turbine Supply Agreement and vessel reservation agreement signed 3. WTG design work continue 4. Procurement of components 5. Transport of WTG components to the pre-assembly harbour 6. Pre-assembly works (e.g. erection of towers, final preparations of blades and nacelles) 7. Transport of pre-assembled main components to the offshore windfarm 8. WTG installation 9. WTG Commissioning and testing 10. Hand over to the Operations and Maintenance 	<p>Site Preparation</p> <ol style="list-style-type: none"> 1. Construction of seaward side of HDD 2. Set up of silt curtains at excavation sites 3. Excavation of Shore End Landing Approach 4. Set up of Pre-Excavated Trench wall stabilisation measures 5. Excavation and preparation for cable crossing 6. Set up of pontoons and cable rollers for the cable pull-in 7. Preparation of Equipment for Pull In at the OSS Jacket 8. Pre-Lay Survey <p>Installation</p> <ol style="list-style-type: none"> 1. Mobilization of Installation Vessels 2. Cable Loading from Factory onto the Installation Vessel 3. Removal of J-tube covers 4. Cable Shore End Landing / Beach Pull-In (1st Cable End). 5. Cable crossing 6. Backfilling of excavated trenchers and removal of silt curtains after cable with a Jetting Sled 7. Simultaneous Lay and Bury of the cable joint assembly, deployment, and protection (if used) 8. Simultaneous Lay and Bury of the cable with a Jetting Sled 9. Cable Pull-In (2nd Cable end) including CPS installation at OSS 10. Post Installation Survey 11. Full System Commissioning 12. Remedial Burial (if necessary, only) with a Jet Trencher 13. Remedial Burial Survey 14. Remedial Burial Survey 15. Installation of rock bags on CPS at the OSS (if necessary, only) 	<p>Fabrication outside Korea (Singapore, Indonesia, or India), transportation of the assets (Jacket, pin piles and Topside) to the fields, Jacket installation, piling, Topside installation and commissioning.</p>	<ol style="list-style-type: none"> 1. Land Purchasing/contracting 2. Site investigation (Depth of weak layer and soil resistivity) 3. Land merger due to "the building to land ratio" (20%) 4. Cadastral investigation 5. Permit <ol style="list-style-type: none"> A. Civil engineering for ONS business permit (By Yeonggwang-gun Office) B. Engineering for transmission line for land lease from (By KRC) C. Construction engineering for ONS building construction permit. (By Yeonggwang-gun Office) D. Electrical system engineering for electrical work permit (By KESCO) 6. Transmission cable work between ONS - KEPCO substation 7. Civil work: Piling, foundation etc. 8. Electrical work: Mesh grounding 9. ONS Building construction 10. Electrical system installation 11. Commissioning 12. KESCO inspection 13. COD 14. Change of classification of land 	<ol style="list-style-type: none"> 1. Site Survey 2. Set Up access roads, site fencing, site offices, etc. 3. Construction of HDD 4. Excavate Transition Joint Bay Location 5. Construction of Transition Joint Bay & Winch Pads 6. Install accessories inside the Transition Joint Bay 7. Backfill of surrounding location 8. Reinstatement of Condition, i.e. removal of fencing, site offices, access roads etc
Expected Peak Manpower	200	200	Transport and Installation Vessel Crew: 80 to 100 Office Support/ Management Teams 20 to 60	Over 200	Transport and Installation Vessel Crew: 150 to 200 Office Support/ Management Teams 20 to 60	N/A	70 ~ 100 (est.)	Site Team: 10 to 20 Office Support/ Management Team: 5 to 10
Expected Peak Weeks	10	10	40	30	30	16 Weeks	16 Weeks during construction, 16 Weeks during electrical system installation (est.)	8
Expected Start of the Week in Peak	2Q 2027	2Q 2027	March, 2027	Q1 2028 to Q3 2028	March, 2027	September-December, 2027	2Q and 3Q 2027 (est.)	January, 2027
Expected ratio of Foreign Workers	10-90%	10-90%	70% to 90% Korean	Mostly foreign workers	70% to 90% Korean	80%	All local workers	80% & to 100% Korean
Expected Worker Management and Accommodation	100	N/A	Offshore: On Vessel Onshore/ Office: TBC	Mokpo, offshore, Gwangju area	Offshore: On Vessel Onshore/ Office: TBC	Installation vessel during installation phases, self-provided vessel in commissioning phase	in Yeonggwang-gun or Gwangju area	in Yeonggwang-gun or Gwangju area

APPENDIX C LIST OF REVIEWED DOCUMENTS

- Draft Regulatory Environmental Impact Assessments for Yeonggwang-gun Anma Offshore Wind Farm
- Development Project developed by Anma Offshore Wind Energy Co., Ltd dated April 2022
- Final Regulatory Environmental Impact Assessment for Yeonggwang-gun Anma Offshore Wind Farm Development Project developed by Anma Offshore Wind Energy Co., Ltd dated December 2022
- Supplementary Environmental Impact Assessment June 2023
- Final Environmental Impact Assessment Ministry of Environment consulted feedback 24 July 2023
- Electric Business License Alteration Application Form and its Appendixes for Phase 2 dated 7 February 2022
- Electric Business License Approval Certificate for Phase 1 issued by the Head of the Ministry of Trade, Industry and Energy dated 25 April 2022
- Electric Business License Approval Certificate for Phase 2 issued by the Head of the Ministry of Trade, Industry and Energy dated 25 April 2022
- Electric Business License Permit 25 April 2022
- Radio Impact Assessment for Anma-do Offshore Wind Farm developed by Mokpo National Maritime University dated February 2022
- ANMADO Project Master Schedule (Draft L1 R01)
- Project Anma internal update dated June 2022
- Voluntary Environmental and Social Due Diligence for Anma Project 2023
- Safety Assessment Report (Marine Traffic Safety Assessment)
- ANMA Offshore Wind Farm Project Document : Report for Development Act Permit (Onshore Transmission Route) August, 2024

APPENDIX D POTENTIAL IMPACT, RELEVANT RIGHTSHOLDERS AND CONNECTION TO HUMAN RIGHTS ARTICLES

Potential Impact	Relevant rightsholders	Relevant Human Rights Articles	Existing Impact	Phase			Cumulative Impact
				Construction	Operations	Decommissioning	
Potential impact to labour and working conditions, including in the supply chain. (Section 6.2.1)	<ul style="list-style-type: none"> workers SCW 	<p>UDHR Article 3: Right to Life Article 23: Right to Work Article 24: Right to Rest and Leisure</p>	✓	◆	◆	◆	To be assessed at later stage
Potential impact to workers' health and safety. (Section 6.2.2)	<ul style="list-style-type: none"> workers SCW 	<p>UDHR Article 3: Right to Life Article 23: Right to Work Article 24: Right to Rest and Leisure</p>	✓	◆	◆	◆	To be assessed at later stage
Potential impact on community health and safety. (Section 6.2.3)	<ul style="list-style-type: none"> FPRH LCAL 	<p>UDHR Article 3: Right to Life Article 24: Right to Rest and Leisure Article 25: Right to Adequate Standard of Living</p>	✓	◆	◆	◆	To be assessed at later stage
Potential impact to livelihoods. (Section 6.2.4)	<ul style="list-style-type: none"> FPRH LCAL 	<p>UDHR Article 3: Right to Life Article 25: Right to Adequate Standard of Living</p>	✓	◆	◆	◆	To be assessed at later stage
Potential impact on existing services and infrastructure. (Section 6.2.5)	<ul style="list-style-type: none"> FPRH LCAL 	<p>UDHR Article 3: Right to Life Article 24: Right to Rest and Leisure Article 25: Right to Adequate Standard of Living</p>	✓	◆	◆	◆	To be assessed at later stage

Potential for stakeholders not to be able to participate. (Section 6.2.6)	<ul style="list-style-type: none"> workers SCW FPRH LCAL 	<u>UDHR</u> Article 19: Freedom of Opinion and Expression Article 20: Freedom of Assembly and Association	✓	◆	◆	◆	To be assessed at later stage
Potential lack of effective grievance management and access to remedy. (Section 6.2.7)	<ul style="list-style-type: none"> workers SCW FPRH LCAL 	<u>UDHR</u> Article 19: Freedom of Opinion and Expression	✓	◆	◆	◆	To be assessed at later stage
Potential impact to amenity associated with dust, noise, and visual amenity impacts. (Section 6.2.8)	<ul style="list-style-type: none"> FPRH LCAL 	<u>UDHR</u> Article 3: Right to Life Article 24: Right to Rest and Leisure Article 25: Right to Adequate Standard of Living	✓	◆	◆	◆	To be assessed at later stage
Potential impacts associated with the employment of security personnel. (Section 6.2.9)	<ul style="list-style-type: none"> workers SCW FPRH LCAL 	Article 3: Right to Life Article 5: Freedom from Torture	✓	◆	◆	◆	To be assessed at later stage

APPENDIX E UNIVERSAL DECLARATION OF HUMAN RIGHTS

Article 1

All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood.

Article 2

Everyone is entitled to all the rights and freedoms set forth in this Declaration, without distinction of any kind, such as race, colour, sex, language, religion, political or other opinion, national or social origin, property, birth or other status. Furthermore, no distinction shall be made on the basis of the political, jurisdictional or international status of the country or territory to which a person belongs, whether it be independent, trust, non-self-governing or under any other limitation of sovereignty.

Article 3

Everyone has the right to life, liberty and security of person.

Article 4

No one shall be held in slavery or servitude; slavery and the slave trade shall be prohibited in all their forms.

Article 5

No one shall be subjected to torture or to cruel, inhuman or degrading treatment or punishment.

Article 6

Everyone has the right to recognition everywhere as a person before the law.

Article 7

All are equal before the law and are entitled without any discrimination to equal protection of the law. All are entitled to equal protection against any discrimination in violation of this Declaration and against any incitement to such discrimination.

Article 8

Everyone has the right to an effective remedy by the competent national tribunals for acts violating the fundamental rights granted him by the constitution or by law.

Article 9

No one shall be subjected to arbitrary arrest, detention or exile.

Article 10

Everyone is entitled in full equality to a fair and public hearing by an independent and impartial tribunal, in the determination of his rights and obligations and of any criminal charge against him.

Article 11

1. Everyone charged with a penal offence has the right to be presumed innocent until proved guilty according to law in a public trial at which he has had all the guarantees necessary for his defence.
2. No one shall be held guilty of any penal offence on account of any act or omission which did not constitute a penal offence, under national or international law, at the time when it was committed. Nor shall a heavier penalty be imposed than the one that was applicable at the time the penal offence was committed.

Article 12

No one shall be subjected to arbitrary interference with his privacy, family, home or correspondence, nor to attacks upon his honour and reputation. Everyone has the right to the protection of the law against such interference or attacks.

Article 13

1. Everyone has the right to freedom of movement and residence within the borders of each state.
2. Everyone has the right to leave any country, including his own, and to return to his country.

Article 14

1. Everyone has the right to seek and to enjoy in other countries asylum from persecution.
2. This right may not be invoked in the case of prosecutions genuinely arising from non-political crimes or from acts contrary to the purposes and principles of the United Nations.

Article 15

1. Everyone has the right to a nationality.
2. No one shall be arbitrarily deprived of his nationality nor denied the right to change his nationality.

Article 16

1. Men and women of full age, without any limitation due to race, nationality or religion, have the right to marry and to found a family. They are entitled to equal rights as to marriage, during marriage and at its dissolution.
2. Marriage shall be entered into only with the free and full consent of the intending spouses.
3. The family is the natural and fundamental group unit of society and is entitled to protection by society and the State.

Article 17

1. Everyone has the right to own property alone as well as in association with others.
2. No one shall be arbitrarily deprived of his property.

Article 18

Everyone has the right to freedom of thought, conscience and religion; this right includes freedom to change his religion or belief, and freedom, either alone or in community with others and in public or private, to manifest his religion or belief in teaching, practice, worship and observance.

Article 19

Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive and impart information and ideas through any media and regardless of frontiers.

Article 20

1. Everyone has the right to freedom of peaceful assembly and association.
2. No one may be compelled to belong to an association.

Article 21

1. Everyone has the right to take part in the government of his country, directly or through freely chosen representatives.
2. Everyone has the right of equal access to public service in his country.
3. The will of the people shall be the basis of the authority of government; this will shall be expressed in periodic and genuine elections which shall be by universal and equal suffrage and shall be held by secret vote or by equivalent free voting procedures.

Article 22

Everyone, as a member of society, has the right to social security and is entitled to realization, through national effort and international co-operation and in accordance with the organization and resources of each State, of the economic, social and cultural rights indispensable for his dignity and the free development of his personality.

Article 23

1. Everyone has the right to work, to free choice of employment, to just and favourable conditions of work and to protection against unemployment.
2. Everyone, without any discrimination, has the right to equal pay for equal work.
3. Everyone who works has the right to just and favourable remuneration ensuring for himself and his family an existence worthy of human dignity, and supplemented, if necessary, by other means of social protection.
4. Everyone has the right to form and to join trade unions for the protection of his interests.

Article 24

Everyone has the right to rest and leisure, including reasonable limitation of working hours and periodic holidays with pay.

Article 25

1. Everyone has the right to a standard of living adequate for the health and well-being of himself and of his family, including food, clothing, housing and medical care and necessary social services, and the right to security in the event of unemployment, sickness, disability, widowhood, old age or other lack of livelihood in circumstances beyond his control.
2. Motherhood and childhood are entitled to special care and assistance. All children, whether born in or out of wedlock, shall enjoy the same social protection.

Article 26

1. Everyone has the right to education. Education shall be free, at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical and professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.
2. Education shall be directed to the full development of the human personality and to the strengthening of respect for human rights and fundamental freedoms. It shall promote understanding, tolerance and friendship among all nations, racial or religious groups, and shall further the activities of the United Nations for the maintenance of peace.
3. Parents have a prior right to choose the kind of education that shall be given to their children.

Article 27

1. Everyone has the right freely to participate in the cultural life of the community, to enjoy the arts and to share in scientific advancement and its benefits.
2. Everyone has the right to the protection of the moral and material interests resulting from any scientific, literary or artistic production of which he is the author.

Article 28

Everyone is entitled to a social and international order in which the rights and freedoms set forth in this Declaration can be fully realized.

Article 29

1. Everyone has duties to the community in which alone the free and full development of his personality is possible.
2. In the exercise of his rights and freedoms, everyone shall be subject only to such limitations as are determined by law solely for the purpose of securing due recognition and respect for the rights and freedoms of others and of meeting the just requirements of morality, public order and the general welfare in a democratic society.
3. These rights and freedoms may in no case be exercised contrary to the purposes and principles of the United Nations.

Article 30

Nothing in this Declaration may be interpreted as implying for any State, group or person any right to engage in any activity or to perform any act aimed at the destruction of any of the rights and freedoms set forth herein.

APPENDIX F ESDD REPORT