

NEOM LIQ

ENVIRONMENTAL PROCEDURES

ENVIRONMENTAL AND SOCIAL ASSESSMENT AND APPROVALS

NEOM-NEV-PRC-601, Rev 01.00, June 2021

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Document History

Revision Code	Description of changes	Purpose of issue	Date
Rev A	First Draft	Issued for Review	26.04.2021
Rev 01.00	First Issue	Issued for Implementation	14.06.2021

Document Approval

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1 Background

The NEOM Environmental Vision has set ambitious goals for Net Positive Outcomes for the Climate, Biodiversity and Environmental Quality. The Vision also sets out to ensure sustainable use of resources, the establishment of a truly circular economy and the engenderment of the most environmentally conscious citizenry on the planet. In combination, these goals aim to not just maintain the current environmental and social capital of NEOM, but to also build capacity into the future. The idea of building environmental and social capital through development is a new and emerging concept worldwide, and is often referred to as Regenerative Development.

NEOM has developed a series of documents that comprise the NEOM Regenerative Development Management System (RDMS), to guide NEOM **Proponents** to plan, design, assess, construct and operate developments in NEOM to achieve economic growth and improve NEOM's environmental and social capital. Central to the RDMS is an Environmental, Social and Sustainability Integrated Assessment Process (IAP) which will help ensure developments meet NEOM's high demands. It is the Environmental and Social Impact Assessment (ESIA) component of the IAP that is the subject of this Procedure for Regenerative Development (the Procedure).

2 Purpose

The purpose of the Procedure is to outline the requirements and key steps for all NEOM Developments to:

- Assess and manage environmental and social risks in line with International Best Practice, including but not limited to the International Finance Corporation Environmental & Social Performance Standards; and,
- Obtain Environmental Permits and Licenses from the Ministry of Environment, Water and Agriculture (MEWA) and – for coastal developments – the Permanent Committee for Coastal Zone Environmental Protection (PCCEP) as required under Kingdom of Saudi Arabia Environmental Law.

The Procedure is aligned with *NEOM Plan of Work* (NEOM-NEN-PRC-029), *NEOM Regenerative Development Procedure* (NEOM-NEV-PRC-016) and Employer Requirements for Regenerative Development (NEOM-NEV-EMR-401).

3 Scope

The Procedure is intended to be applied to all NEOM Developments, regardless of scale or level of environmental and social risks.

This Procedure is for use by NEOM Proponents and relevant Planning, Design, Construction and Operations Teams.

Specifically, this Procedure shall be used to obtain Internal Development Approvals from the NEOM Environment Department as well as Environmental Permits and Licenses from the National Centre for Environmental Compliance (NCEC), which is a part of the Saudi Ministry for Environment, Water and Agriculture (MEWA) and, where applicable from the Permanent Committee for Coastal Zone Environmental Protection.

Exemptions and wavers are not permitted for this Procedure.

All users of this Procedure are encouraged to engage NEOM Environment Department (NEV) at the earliest opportunity to enable smooth and efficient implementation.

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4 Definitions and Abbreviations

Table 1 : Table of Abbreviations

Abbreviation	Explanation
Aol	Area of Influence
BIM	Building Information Model
CESMP	Construction Environment & Social Management Plan
ENVID	Environmental [& Social] Hazard Identification
ESIA	Environmental & Social Impact Assessment
ESMP	Environmental and Social Management Plan
GRC	Gate Review & Approval Committee
IAP	Integrated Assessment Process
IDP	Integrated Development Plan
IFC	International Finance Corporation
NCEC	National Centre for Environmental Compliance
NEV	NEOM Environment Department
O&M	Operation & Maintenance
PCCEP	Permanent Committee for Coastal Zone Environmental Protection
PER	Preliminary Environmental Review
POE	Post Occupancy Evaluation
RDMS	Regenerative Development Management System
SEA	Strategic Environmental [& Social] Assessment
SITES	Sustainable Sites Initiative

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Table 2 : Table of Definitions

Term	Definition
Area of Influence (Aol)	The area where potential environmental or social sustainability risks may occur in relation to a proposed development. At a minimum this includes the defined project boundary, but dependent on the scale, nature and complexity of the development, the AoI may extend for hundreds of meters or even kilometers beyond the project area boundary.
Construction Team	NEOM Directors, Project Managers, Construction managers, Construction Contractors and Suppliers responsible for mobilization, preparatory works, construction, commissioning and post-construction site rectification of the Development.
Delivery Team	Organizational elements that form part of the NEOM organization and target narrow aspects in the development process. For example, Design Team, Planning Team, Construction Team and Operations Team.
Design Team	Project Designers (including architects, interior designers and landscape designers), Engineering Consultants, Environmental Consultants , Sustainability Consultants, Specialist Consultants, and Sub consultants responsible for the Design Deliverables during Stage 3 for the Development.
Districts or Neighborhoods	Large scale urban development irrespective of their land use, consisting of a cluster of buildings and their associated infrastructure and public realm networks.
Early Works	Early Works includes technical site studies to support asset design, as well as establishment of support facilities and initial preparatory ground-works for proposed developments. Under the MEWA MOU, NEOM is able to seek fast- track approvals to facilitate project schedules to allow for Early Works to commence in advance of a full development environmental approval being issued by MEWA.
Environmental Consultant	Specialized Environmental Consultant selected from NEOM's Environmental Services Framework and engaged by the Proponent to independently review and advise the development process and develop and implement environmental and social risk management documentation and programs through to the end of Construction
Environment	NEOM regulatory agency tasked with the delivery of environmental protection
Department Iconic (Campus) Assets	and sustainable land use and development. Large scale complex development projects which are critical to broad social or community needs. Iconic Assets may include masterplans for stadia, hospitals, universities, airports and train stations.
Infrastructure and Public Realm	Infrastructure and public realm networks that may serve and be part of a master plan development or connecting multiple developments. Infrastructure projects may include infrastructure networks, power plants, desalination plants and other infrastructure facilities. Public Realm projects may include large scale landscaping and hardscaping projects (e.g. parks, public squares, pathways, and roadside landscaping)
Operations Team	NEOM Directors, Project Managers, Facility Operations managers, Facility Operations Contractors and Suppliers responsible for the start-up, operations, maintenance, ongoing commissioning, shut-down and upgrade of the Development.
Planning Team	Project master-planners, Project Designers (including architects, urban designers and landscape designers), Engineering Consultants, Environmental Consultants , Sustainability Consultants, Specialist Consultants, and Sub consultants responsible for the Planning Deliverables during Stages 1 & 2 of the Development
Proponent	The Proponent is a NEOM entity or a Developer designated by NEOM to accept custody for the planning, designing, constructing or managing and operating a particular asset or a group of assets.

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Term	Definition
Regenerative Development	A development that regenerates its natural, physical, social and economic capitals to a state beyond sustainability. The terminology implies a state of net positive impact at a future state and requires a holistic approach to nature, implementing systems thinking and true cost accounting i.e. ecosystems services accounting.
Regional Infrastructure Networks	Networks of standard and non-standard assets that serves the region such as regional storage facilities and tanks, regional power stations, material supply depots (e.g. quarries or waste transfer stations) connected by extensive linear infrastructure elements such as regional power transmission, water supply pipelines and roads.
Region-wide Programs	Region wide programs contain a collection of individual sites or clusters dedicated to the implementation or activation of economic sector strategies such as sports, strategic events and nature-based tourism, typically involving the installation of a combination of temporary buildings or non-standard assets and the presence of large numbers of visitors, guest or spectators
Signature Assets	High-profile developments that will be indicative of what NEOM represents on the international stage. These Assets will fall within an SEA or masterplan area.
Standard Assets	All building types otherwise not considered Iconic; including but not limited to residential, commercial, hospitality, retail, healthcare, civic, and warehouse buildings

5 Related NEOM System Documents

The requirements contained in the following documents apply to the extent specified in this procedure.

Table 3 : Table of Engineering Procedures

Document Code	Document Name
NEOM-EN-PRC-001	Procedure for Geotechnical Investigation
NEOM-EN-PRC-002	Procedure for Topographic Survey
NEOM-EN-PRC-004	Initial Asset Brief Procedure
NEOM-EN-PRC-005	Procedure for Design Stages Deliverables
NEOM-EN-PRC-007	Procedure for Value Engineering
NEOM-EN-PRC-008	Procedure for Document Numbering and Revision
NEOM-EN-PRC-009	Procedure for BIM & GIS
NEOM-EN-PRC-010	Procedure for Drawing and Drafting
NEOM-EN-PRC-011	Procedure for Site Specific Seismic Hazard Study
NEOM-EN-PRC-012	Procedure for Hydrological Study
NEOM-EN-PRC-013	Procedure for Traffic Study
NEOM-EN-PRC-017	Procedure for Innovative Ideas
NEOM-EN-PRC-021	Procedure for Gate Review and Approval
NEOM-EN-PRC-022	Procedure for Handing Over

Table 4 : Table of Cost Estimation Manual and Procedures

Document Code	Document Name
NEOM-CE-MNL-001	Cost Estimation Policies and Guidelines
NEOM-CE-PRC-001	Cost Estimating Procedure

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Document Code	Document Name
NEOM-EN-MNL-001	Program, Planning and Control Manual
NEOM-EN-PRC-023	Program Management Procedure
NEOM-EN-PRC-024	Design and Procurement Schedule Management Procedure
NEOM-EN-PRC-025	Construction Planning Management Procedure
NEOM-EN-PRC-026	Key Performance Indicator Procedure
NEOM-EN-PRC-027	Earned Value Management Procedure
NEOM-EN-PRC-028	Risk Management Procedure
NEOM-EN-PRC-029	NEOM Plan of Work

Table 5 : Program,	Planning	& Control	Manual	and Proce	dures
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Document Code	Document Name		
NEOM-NEV-PRC-016	Procedures for Regenerative Development		
NEOM-NEV-FRM-401	Regenerative Development Initiation Form		
NEOM-NEV-EMR-401	Employer Requirements for Regenerative Development		
NEOM-NEV-FRM-402	Environmental Accord Form		
NEOM-NEV-PRC-501	Sustainability Procedure for the Built Environment		
NEOM-NEV-TMP-601	Environmental Risk Identification Report Template		
NEOM-NEV-GGD- 601	Scoping Workshop Guideline		
NEOM-NEV-TGD-601	Environmental & Social Impact Assessment (ESIA) Report Template and Guidance		
NEOM-NEV-TGD-602	Environmental and Social Management Plan – Template and Guidelines		
NEOM-NEV-PRC-602	Environmental & Social Risk & Opportunities Assessment for Development Projects		
NEOM-NEV-FRM-603	Preliminary Environmental Review Form		
NEOM-NEV-PRC-711	Environmental and Social Compliance Assurance Procedures		
NEOM-NEV-PRC-712	Environmental and Social Protection Procedures (for construction)		
NEOM-NEV-TRP-801	Environmental & Social Training Plan		
NEOM-NEV-PRC-801	Environmental & Social Reporting Procedure		

Table 6 : NEOM Regenerative Development Management System Documents

6 Roles & Responsibilities

There are a number of key user groups of this Procedure. They are noted below along with a high-level description of their respective roles and responsibilities:

- **Proponent** is ultimately accountable for the achievement of Regenerative Development objectives through the full Development cycle and for ensuring the Delivery Teams execute in line with the NEOM Regenerative Development Management System.
- Delivery Teams include, and are responsible for the following:
 - Design Team is responsible for all planning and design and engineering deliverables required during Stages 2 and 3, including design drawings, schedules, material levels and layouts and engaging with the Environment Department and/or the Environmental Consultant to ensure all inputs
 - Construction Team is responsible for providing Construction Execution Plans, Work Method Statements and other information required by the Environmental Consultant (refer below) to prepare assessment reports and management plans. The Construction team is also responsible for ensuring compliance with all commitments and requirements set out in approved assessment documents and management plans during Stage 4.
 - Operations Team is responsible for providing Operations Plans, Standard Operating Procedures and other information required by the Environmental Consultant (refer below) to prepare assessment reports and management plans need to obtain Environmental Licenses from MEWA. The Operations team is also responsible for ensuring compliance with all commitments and requirements set out in approved assessment documents and management plans during Stage 5.

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- Environment Department is responsible for:
 - Contracting Environmental Consultants responsible for providing technical advice, risk assessment and management relating to all environmental and social values of the Development, unless otherwise agreed with the Proponent.
 - reviewing all assessment documentation to ensure it meets or exceed KSA National regulations as well as applicable international standards including but not limited to the International Finance Corporations Environmental & Social Performance Standards.
 - obtaining environmental approvals from the Ministry of Environment, Water and Agriculture. This will include reviewing all relevant documentation required to obtain environmental approvals and submitting these to MEWA via NEOM Government Affairs.
- **Government Affairs** is responsible for translating documents into Arabic and submitting all necessary documents to MEWA. Government Affairs are also responsible for liaising with MEWA during the approval process to ensure on schedule decision making.

7 **Development Categorization**

7.1 Environmental & Social Risk Categorization

All NEOM Developments are assigned to one of four (4) Categories based on a combination of spatial scale, complexity, and apparent environmental and social risks.

Developments are defined using the IFC Performance Standards definition which applies to...

"... a defined set of business activities, including those where specific physical elements, aspects, and facilities likely to generate risks and impacts, have yet to be identified. Where applicable, this could include aspects from the early developmental stages through the entire life cycle (design, construction, commissioning, operation, decommissioning, closure or, where applicable, post-closure) of a physical asset."

NEOM Development Categories have been benchmarked against:

- KSA Ministry of Municipal and Rural Affairs (MoMRA) Planning Levels •
- KSA General Environmental Regulations¹ (GERs) Project Categories
- IFC Performance Standards² Development Categories. •

Where differences were identified between KSA and IFC approaches in the assignment of project typologies, NEOM has assigned the project typology to the higher of the two categories to ensure best practice outcomes can be demonstrated. In addition, where quantitative thresholds have been used to categorize different scale developments from a single project typology, NEOM has applied a precautionary approach and lowered the corresponding values. This ensures that the treatment of NEOM projects in relation to sustainable planning and design, and environmental assessment and compliance, will always meet or exceed the standard practices under Base Economy regulations.

High level descriptions of the general project typologies under each NEOM Development Category and the corresponding external categories for KSA and IFC are shown in Table 7.

Category	Туроlоду		
		KSA	IFC
I	Upgrades & Renovations to existing Standard Assets, Temporary Structures, Minor Infrastructure components, occurring within an approved category IV or III Development	I	С
II	Standard Assets occurring within an approved Category IV or III Development	II	В
III	Major Infrastructure Assets, High-risk projects wherever they occur as well as Iconic and Signature Assets occurring within an approved category IV Development	111	A

Table 7 : NEOM Regenerative Development Categories by project typology and related KSA and IFC Categories

² FIRST for Sustainability, an Innovation of the International Finance Corporation – Risk Categorization Table. Website viewed 07/01/2020 - https://firstforsustainability.org/risk-management/risk-categorization-table/

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¹ Kingdom of Saudi Arabia Presidency of Meteorology and Environment KSA General Environmental Regulations and Rules for Implementation (15th October 2001) - Appendix 2.1 Guidelines for Classification of Industrial and Development Projects

IV	District & Regional Structural Plans, Regional Activation Programs, Construction Support Network	N/A	
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The level of compliance applied by **NEOM Environment Department** to the four Development Categories varies according to their scale, complexity and potential environmental and social risks. The levels of Assessment broadly speaking are detailed in Table 8:

Table 8 : NEOM Regenerative	Development Cat	egories and comp	liance approach
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Category	Approach	Level of review and approvals
IV	Strategic	Require a high level of integration of NEOM Environment Department into the planning stages with a corresponding strategic level (SEA) of sustainability planning, environmental and social assessment and monitoring. Integration to Design Stages and level of oversight on Performance management in Construction and Operation are deferred to the related Category III, II and I Developments
IIIComprehensiveDepartment in planning and design committees only with a correspondi detailed supporting studies and acti		Require a high level of integration of NEOM Environment Department in planning and design stages gateway review committees only with a corresponding comprehensive (ESIA), detailed supporting studies and action plans and close oversight of environmental and social performance management during construction and operations
II Focused and a h and a h assess approa		Require oversight of design stages through compliance submittals, and a highly focused assessment or detailed review of related assessments prior to construction. Attracts a standard audit-based approach to assurance of environmental and social performance management
I	Preliminary	Requires limited oversight of design stages, a preliminary assessment of environmental risks, restricted oversight during construction to site mobilization and demobilization activities, and routine reporting.

The following Sections describe how the Procedure should be implemented for each of the four Development Categories, including providing an overview, project definition, key tasks and milestones and required Deliverables. The Categories are presented in descending order, starting with the largest and most complex developments with high levels of environmental and social risk, down toward the simplest with lowest levels of risk.

7.1.1 Category I

NEOM

Overview

Category I Developments are those projects whose planning and design present negligible opportunities to achieve NEOM's Regenerative Development goals and/or whose construction and operation pose potentially low risks to people and the environment.

The general approach to Category I developments is for a simple compliance reporting process involving the submittal of design compliance, management plans, site Acceptance and Handover

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Inspection and ongoing performance reports by the Proponents Team. Environmental compliance also relies on the monitoring and surveillance work undertaken as part of the related strategic program.

Category I Developments typically comprise elements or activities of an existing Category IV development which has already undergone extensive integrated planning, design, assessment, management and monitoring and can therefore be assessed in a streamlined approach.

Category I Developments are closely aligned to KSA Category I and IFC Performance Standard Category C.

A Preliminary Environmental Review (PER) is a simplified environmental and social assessment that is completed in conjunction with NEV for Category I Developments using the PER Form.

Project Typologies

Project typologies occurring in Category I, include but are not limited to:

- Commercial and service industry activities occurring within approved Standard Assets
- Manufacturing and production facilities, such as fashion manufacturing including clothing, shoes, luggage and jewelry, leather, textile, rubber and plastic, which do not generate hazardous emissions or liquid wastes
- Minor expansion of irrigation and drainage installations that do not otherwise terminate in a discharge point to the natural environment.
- Minor expansions of linear infrastructure including pipelines, power lines, local and temporary roads, not exceeding 20 km in length or 10 hectares in area.
- Temporary buildings and structures used for Events or short-term periods (less than 2-years)
- Temporary construction support areas, such as access roads or laydown areas not exceeding 10 km in length or 10 hectares in area.
- Where any of the above listed project typologies are proposed for an area outside of an existing approved Category IV development, **NEOM Environment Department** may determine that is managed and assessed as Category III Development, requiring an ESIA of limited or focused scope.

7.1.2 Category II

Overview

Category II Developments are those projects whose planning and design present some opportunities to achieve NEOM's Regenerative Development goals and objectives and/or whose construction and operation pose potentially moderate risks to people and the environment, but which are otherwise well known and readily managed and mitigated using standard controls.

The general approach to Category II developments is for a sustainable planning and design processes to be integrated on the Proponent side only, with **NEOM Environment Department** acting as a reviewer and approver of design compliance reports submitted by the Design Team. Environmental assessment and compliance for Category II is either by a very targeted risk review and reporting process that relies on the information from the strategic assessment as well as the monitoring and surveillance work undertaken as part of the related Category IV Development.

Category II Developments are closely aligned with IFC Performance Standard Project Category B and Category II Projects as described under the KSA's GERs (Appendix 2.1 *Guidelines for Classification of Industrial and Development Projects*).



Consistent with IFC Performance Standard 1 relating to the risk assessment and management of "greenfield sites"³, Category II developments occurring outside an approved Category IV Development will be treated as a Category III Development, and subject to assessment via ESIA, with a limited or focused scope.

Category II Developments typically occur within a Category IV development, which has already undergone extensive integrated planning, design. All NEOM Standard Assets are classified as Category II and are required to comply with Interim Sustainability Requirements for the Built Environment (NEOM-NEV-PRC-501)

Sustainable Design should follow a standard design guideline developed as part of the approved Category IV Development. Asset design review and approval is by submission of a set of design compliance reports at each sub-stage of Design.

Category II Developments are assessed using an Environmental Hazard Identification (ENVID) workshop process and report, which is intended to review the project in the context of a related Detailed SEA and associated CESMP.

This approach enables rapid approval and implementation of Category II Developments as the low to moderate nature of the risks associated with these developments can be readily managed by a set of over-arching documents approved as part of the related Category IV development.

The Procedure is applicable to Category II Developments during Plan of Work Stages 1, 3, 4 and 5.

Project Typologies

Category II Project Typologies include, but are not limited to:

- Bulk and wholesale food production such as grain mills, food preparation, processing, refining, beverage processing and canning factories and abattoirs.
- Construction material production including glass factories, block, brick, ceramic, china and porcelain factories.
- Expansion and modification of existing linear infrastructure including roads, linear infrastructure, irrigation and drainage projects and systems, exceeding 20 km in length or 10 hectares in total area.
- Individual Construction Support Facilities such as quarries, crushing, asphalt and batching and mixing and prefab and concrete plants, not occurring in a complex of three or more separate operations.
- Local, mobile small-scale power generation including hydrocarbon and thermal power stations, less than 30 megawatts capacity and associated power transmission lines or transformer stations.
- Medical and pharmaceutical production facilities including hospitals, drug and medical chemical production.
- New permanent roads more than 20 km but less than 50 km in length, excluding highways, tunnels, causeways, bridges and railroads.
- Steel manufacturing and fabrication including engine shops, machine, pipe and boiler works. Auto and vehicle fabrication and assembly works.

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<u>3 IFC Guidance Note 1: Assessment and Management of Environmental and Social Risks and Impacts. Policy</u> <u>GN, page 7). International Finance Corporation.</u>

7.1.3 Category III

Overview

Category III Developments provide significant opportunities for ensuring net positive outcomes through integrated sustainable design and environmental protection considerations. Category III Developments also present potentially significant environmental and social risks which typically require specific sets of management controls relevant to the nature and scale of the project.

The general approach to Category III developments is for a highly integrated planning and design process, involving **NEOM Environment Department** as a key decision maker as part of Gateway Review committees (GRCs) and a comprehensive approach to environmental and social impact assessment, management, compliance assurance and emergency response planning.

Category III Developments are closely aligned with IFC Performance Standard Project Category A and Category III Projects as described under the KSA's GERs (Appendix 2.1 Guidelines for Classification of Industrial and Development Projects).

In line with IFC Performance Standards Category A, all developments involving the resettlement of local communities or families, or potential risks to areas of high biodiversity (including for example: wetlands, mangroves, corals) or to cultural heritage are automatically considered a Category III NEOM Development.

Additionally, all NEOM Iconic and Signature assets are also classified as Category III to ensure these developments demonstrate the highest level of environmental and social sustainability, providing a series of showcases for NEOM's environmental vision.

Category III Developments require careful and integrated planning, design, assessment, management and monitoring through the full development cycle, and it is NEOM's intent to take an open and engaged approach to assessment and approval at each development stage.

Category III Developments shall be designed to meet or exceed international best practice and as a minimum meet NEOM's Regenerative Development Technical Standards. This is particularly important for Iconic and Signature Assets but is also relevant for other typologies.

Due to the high-risk nature of Category III Developments the assessment of environmental and social risks is undertaken using an ESIA process, consistent with IFC Performance Standard 1. These are presented in an ESIA report, which is the principal, but not only, assessment document.

While ESIA's require detailed design information, baseline data and clear consideration of execution tasks, the scope of the ESIA will be highly focused on those aspects which are not adequately addressed in the SEA for the related Category IV Development.

This nested approach, enables simplified and rapid assessment of individual assets, as well known and readily managed risks can be addressed through management documentation submitted as part of the SEA.

Where **NEOM Environment Department** considers that the SEA for a Category IV Development has sufficient information and detail to manage the risks for a related Category III Development, **NEOM Environment Department** may consider that the development can be treated under this Procedure as a Category II development, further reducing the requirements for individual assets.

The Procedure for Category III Developments is to be applied to Plan of Work Stages 1 through 5, inclusive.

Project Typologies

Project Typologies for Category III Developments include, but are not limited to, the following typologies:

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- Agricultural, Aquaculture, excluding domestic, artisanal and subsistence production systems, as well as vegetable and animal oil and fat refining processes.
- Construction Material Production facilities including cement plants, consolidated complexes of crushers, cement and asphalt batching facilities.
- Major chemical and petrochemical industry facilities, such as fertilizers, ammonia, paint, solvent and detergent industries which produce in excess of 50 tonnes per day. Pesticide and insecticide plants.
- Major Linear Infrastructure Assets such as pipelines and transmission cables with marine or trans-boundary crossings.
- Major mobility systems such as bridges, causeways, underground transport tunnels, above ground railways, express ways and roads in excess of 50 km in length.
- Major Power Generation Facilities including thermal, wind, solar and nuclear power stations.
- Major transport and logistics hubs, such as airports, ports, expansions in berths, yards, marinas, railway stations, highways and railway lines
- Major Water Infrastructure Assets including desalination plants, wastewater treatment plants, dams and all intake/outfall into natural marine or land areas.
- Manufacturing facilities and complexes including but not limited to textile dyeing works producing in excess of 10 tonnes per day. Major paper production plants.
- Metal production and refinery facilities including Steel and cast iron plants with a production capacity in excess of 150 tonnes per day. Metal electroplating plants with a capacity in excess of 25 tonnes per day.
- Mineral exploration and extraction operations including greenfield quarries.
- Tourist Resorts and projects in the vicinity of sensitive ecosystems, significant archeological sites, sanctuaries, residential developments and the coastline.
- Waste Management Facilities including municipal public waste liquid waste disposal and storage facilities (in the absence of processing plants in the area). Medical waste disposal projects (transportation, collection, treatment and disposal). Domestic waste treatment and municipal disposal facilities. Toxic and hazardous waste storage, treatment and disposal facilities.
- Metal refineries, Lead smelting plants.
- Oil and gas separation and treatment facilities. Petroleum and petroleum product storage facilities in. Oil refining installations. Petrochemical industries.

7.1.4 Category IV

Overview

Category IV Developments are planning projects occurring at the local to regional scale (e.g. City Developments, regional infrastructure networks) and incorporate a combination of multiple Assets that are individually classified under Categories III, II or I.

The general approach to Category IV developments is for a fully integrated planning and design process with a strategic approach to environmental and social risk assessment and performance management. The risk assessment approach is also used to determine where potential opportunities exist for positive effects. **NEOM Environment Department** will be a key technical reviewer and decision maker.

Category IV Developments correspond to IFC Performance Standard Project Category A, which includes "master economic development plans, country or regional plans, feasibility studies, alternatives

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analyses, and cumulative, regional, sectoral, or strategic environmental"⁴. For such developments, IFC recommends a Strategic, Regional or Sector Assessment, and the Procedure has been tailored accordingly to include this level of assessment.

There is no corresponding KSA Project Category identified in the GER. However, as subcomponents of the NEOM Regional Plan, these developments align with local and regional level planning projects managed by MoMRA, and are similar in nature and scale to most Special Economic Zone developments in KSA, such as the King Salman Energy Park (SPARK).

Category IV Developments present significant opportunities to achieve NEOM's Regenerative Development goals and objectives at the city to regional scale. To achieve this, the subsequent design, assessment, management and monitoring of the related Assets will require careful and integrated planning to ensure they also contribute to NEOM's Vision and goals.

Category IV Developments must also meet or exceed international best practice in sustainability planning standards through the same careful, integrated planning. As a minimum, standards achieved in each associated masterplan should meet NEOM's Regenerative Development Technical Standards. This is particularly important for urban / city developments but is also relevant for other typologies.

Due to the high-level details and long, staged implementation associated with Category IV Developments, the assessment of environmental and social risks is undertaken using a SEA, consistent with IFC Performance Standard 1.

Construction and Operations cannot occur under an approved Category IV approval, without separate and additional approvals for related individual assets. However, the IAP uses a nested approach, so that the subsequent assessment of Category III, II and I developments focuses only on those aspects that were not fully described or understood in the SEA. This nested approach, enables simplified and rapid assessment of individual assets, as well known and readily managed risks can be addressed through management documentation submitted as part of the SEA.

Due to the planning nature of Category IV developments, the Procedure only applies during Work Plan Stages 1 and 2.

Project Typologies

Project typologies associated with Category IV Developments include:

- City Urban development projects identified in the NEOM Regional Spatial Framework.
- Regional infrastructure Networks identified in the NEOM Regional Technical Framework
- Nature/Cultural-based Tourism, Sport and Conservation Activation Programs identified in the NEOM Regional Conservation Framework and Sector Strategies
- Logistics Networks as required to support regional construction activities.

7.2 Coastal Developments

The PCCEP – sometimes known as the Coastal Committee, or Committee of Eight – was established to assess application for coastal development (including development in the marine environment). The PCCEP considers approval for coastal developments and comprises the following government entities:

• National Centre for Environmental Compliance

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⁴ <u>IFC Guidance Note 1: Assessment and Management of Environmental and Social Risks and Impacts</u>. Policy Item 11, page 7). International Finance Corporation.



- Ministry of Finance
- MEWA
- Ministry of Industry and Mineral Resources
- Heritage Commission
- National Centre for Development of Wildlife
- Coast Guard
- Ministry of Municipal and Rural Affairs

PCCEP Resolutions to date imply approval is required for developments up to 400m of the mean high tide mark. In agreeing to the proposal, the Committee may prescribe specific conditions it feels are necessary to minimize impacts, including protection of public access to the shoreline and coral reefs.

The following provides the full set of activities and tasks required under this Procedure.

8.1 Stage 1: Strategic Definition

Stage 1 is used to define the key project requirements and relevant environmental baseline conditions for a proposed Development.

During Stage 1, the Proponent (Regional CEO or Sector Head), shall inform the NEOM Environment Department of the development using the Regenerative Development Initiation Form (NEOM-NEV-FRM-401)), as described in the NEOM Regenerative Development Process (NEOM-EN-PRC-016). The Project shall be introduced at a Project Initiation Workshop attended by the Proponent and NEV.

8.1.1 Baseline Surveys

NEOM Environment Department will undertake a baseline survey of the Area of Influence (AoI) for the proposed development site. An Environmental Baseline Report is prepared for issue during Stage 2 to inform environmental scoping and assessment. The Environmental Baseline Report is also used by the Proponent and Delivery Teams in planning and design for the proposed Development.

8.2 Stage 2: Masterplanning and Asset Brief

Stage 2 establishes the scope, strategic (or high level) risks and technical studies required to support the environmental assessment, approval and management of development projects.

Documentation prepared during this stage may also support a staged development approach by facilitating the environmental permitting and commencement of Early Works while Asset Design is being completed (refer Stage 3).

8.2.1 Scoping Workshop & Report

During Stage 2A, the Environment Consultant will prepare and facilitate a scoping workshop that shall be attended by relevant members of the Proponent's Organization and Delivery Teams.

The Scoping Workshop will be conducted in line with the NEOM Scoping Workshop Guidelines (NEOM-NEV-GGD-601). Participants in the workshop will agree:

- Planning, design and construction elements to be included in the assessment, including identification of any development stages to be addressed in subsequent revisions.
- The adequacy of available information and requirement for further baseline surveys or studies
- Regenerative Development Strategies relevant to the assessment
- Any necessary Secondary Assessment reports.

Within 10 days of completion of the scoping Workshop the Environmental Consultant shall prepare a Scoping Report using the Environmental & Social Impact Assessment (ESIA) Report Template and Guidance (NEOM-NEV-TGD-601)

The Environmental Consultant shall submit the completed Scoping Report to NEV for review. On successful submission (acceptance) Scoping Report, NEV provides the Scoping Report to NEOM Government Affairs to submit to MEWA for their review and approval.

Neither the Proponent, the Environmental Consultant, or other parties are to engage with MEWA unless invited by NEV.

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8.2.2 Strategic Environmental Assessment:

For Category IV or III Developments

During Stage 2B: The **Environmental Consultant** shall prepare a Strategic Environmental [& Social] Assessment (SEA) Report that is based on the Detailed Masterplan and incorporates all available desktop and baseline survey information relevant to the Development.

The SEA shall be prepared using the NEOM Environmental and Social Impact Assessment Report Template and Guidance (NEOM-NEV-TGD-601).

The recommendations of the SEA shall be incorporated in the final submission of the Detailed Masterplan and will comprise the conditions by which the Detailed Masterplan is approved by NEV as a member of the Development GRC.

NEOM Environment Department shall submit the SEA to MEWA for approval and may use the SEA to initiate engagement with the PCCEP for coastal projects.

8.2.3 Early Works Environmental & Social Management Plans

For All Development Categories with critical early works requirements:

Under the MEWA MOU, NEOM is able to seek fast-track approvals to facilitate project schedules to allow for Early Works to commence in advance of a full development environmental approval being issued by MEWA.

During Stage 2B, The **Environmental Consultant** shall prepare an Early Works Environmental & Social Management & Action Plan using the NEOM Environmental and Social Management Template and Guidance (NEOM-NEV-TGD-602). The Early Works ESMP shall include, but not be limited to:

- Site investigations,
- Supporting facilities, including construction worker camps
- Preparatory works, including any Demolition
- Earthworks
- Waste Management Plan consistent with the NEOM Waste Management Procedure (NEOM-NEV-PRC-706).
- Environmental & Social Emergency Response Plan

The Design and/or Construction Teams shall support the Environmental Consultant by providing specific Project information required as inputs to the Early Works ESMP, including, but not limited to, design drawings, equipment schedules, construction methodologies, materials lists, contractor details etc.

8.2.4 Technical Environmental & Social Impact Studies

During Stage 2B and 2C, the Environmental Consultant may be required to undertake one or more technical environmental or social impact studies, to support the preparation and submission of Environmental & Social Impact Assessment Reports (Refer Section 7.3.1).



Potential technical studies may include, but are not limited to, social impact assessments, environmental health risk assessments, numerical or quantitative modelling, hydrology and flood risk studies, dredge plume modelling, air quality or noise modelling, light-spill modelling.

The Design and/or Construction Teams shall support the Environmental Consultant by providing specific Project information required as inputs to relevant Technical Studies, including, but not limited to, design drawings, equipment schedules, construction / dredging methodologies, lighting system specifications etc.

8.2.5 Management of Change

At any time during the Plan of Work, should the Design, Construction and / or Operations Teams require a change to an element of the proposed Development, it shall notify the Environment Department using the NEOM Environmental Management of Change Procedure (NEOM-NEV-PRC-702).

Once notified, **NEOM Environment Department** will undertake a preliminary assessment of the proposed change to identify if further assessment, management or monitoring is required.

NEOM Environment Department will inform the **Proponent** in writing of its assessment within 2 business days of being notified by the **Proponent**.

8.3 Stage 3: Design & Tendering

Stage 3 is a critical stage under this Procedure as the preparation, review and submission of documentation to support Environmental Permitting is required during this stage.

8.3.1 Environmental & Social Impact Assessments Reports

During Stage 3B, the Environmental Consultant will finalise the primary reports required to understand potential environmental and social risks for developments. The documents finalised during this stage will vary based on Development Category. Assessment reporting for the various Project Categories is provided below as follows:

- Category IV & III SEA/Environmental & Social Impact Assessment
- Category II Environmental Risk Identification Report
- Category I Preliminary Environmental Review

The Design and/or Construction Teams shall support the Environmental Consultant by providing specific Project information required as inputs to Assessment Reports, including, but not limited to, design drawings, equipment schedules, construction / dredging methodologies etc.

For Category IV or III Developments

The **Environmental Consultant** shall prepare an SEA or Environmental & Social Impact Assessment (Detailed ESIA) Report using the NEOM Environmental and Social Impact Assessment Report Template and Guideline (NEOM-NEV-TGD-601).

The ESIA should incorporate baseline data, including information from Baseline Survey reports provided by NEV, additional studies where required, and shall ensure that all critical decisions or design elements which have arisen during Stage 2B and which may have a material significance for environmental or social values or sustainability are presented and assessed.

Where a staged approval of a Category IV Development is required, the **Planning Team** will prepare a Design Freeze Report (refer Section 6) and submit to **NEV** and the **Environmental Consultant**, within the timeframe agreed at the Scoping Workshop.

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The Design Freeze Report (DFR) shall be prepared consistent with the requirements of the NEOM Environmental and Social Impact Assessment Report Template and Guidelines (NEOM-NEV-TGD-601) and shall include but not be limited to the following:

- Sustainability Basis of Design (form is appended to the NEOM Sustainability Procedure for the Built Environment NEOM-NEV-PRC-501_FRM01)
- Design drawings, specifications, schedules and calculations

The DFR shall include only those elements or designs that are agreed in the Scoping Report (refer below) and shall be submitted to NEV as well as the Environmental Consultant, within the timeframe agreed during the Scoping Workshop.

The **Environmental Consultant** shall prepare and submit for **NEV** approval all Supporting Technical Studies as required by the approved Scoping Report for the Development.

Supporting Technical Studies may include, but are not limited to:

- Targeted Environment Surveys and monitoring data
- Numerical, Statistical or Predictive Modelling studies
- Stakeholder Engagement Reports

For Category II Developments only

The Environmental Consultant shall prepare an Environmental Risk Report using NEOM-NEV-TMP-601

To prepare the Environmental Risk Report, the **Environmental Consultant** shall facilitate an Environmental, Social, Opportunity and Risk Identification (ENVID) Workshop, attended by Subject Matter Experts from **NEV**, the **Design Team** and the **Construction Team**.

All ENVID workshops shall be recorded using the NEOM *ENVID Workbook Template* and reported using the *Environmental and Social Impact Assessment Report Template and Guidelines* (NEOM-NEV-TGD-601).

For Category I Developments only

The Environmental Consultant shall prepare in coordination with the Proponent, a Preliminary Environmental Review (PER) for approval by MEWA using the PER Form (NEOM-NEV-FRM-603).

8.3.2 Management & Action Plans

For All Development Categories:

The **Environmental Consultant** shall prepare and submit for **NEV** approval a set of Management & Action Plans for the Development including but not limited to the following:

- One or more Environmental & Social Management Plans covering Earth Works, Construction and/or Operations consistent with the NEOM Environmental and Social Management Template and Guidance (NEOM-NEV-TGD-602)
- Waste Management Plan consistent with the NEOM Waste Management Procedure (NEOM-NEV-PRC-706).
- Environmental & Social Emergency Response Plan
- Biodiversity / Offset / Rehabilitation Plan

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Additional Action and Management Plans may be required subject to the nature and scale of the Development and the approved Scoping Report, including but not limited to:

- Dredging Environmental Management Plan
- GHG Emissions Reduction Plan
- Discharge / Emissions Management Plan

The Design and/or Construction Teams shall support the Environmental Consultant by providing specific Project information required as inputs to the Early Works ESMP, including, but not limited to, design drawings, equipment schedules, construction / dredging methodologies, materials lists, contractor details etc.

8.3.3 NEOM Environmental Accord

During Stage 3B: The Proponent shall sign an Environmental Accord with NEV that sets out all of the key deliverables to be prepared and submitted for NEV approval during Stage 4 and 5, as well as the overarching management conditions for subsequent construction and operations activities.

Proponent shall include the ESIA, Secondary Assessment Documentation, ESMPs for Construction as part of the Tender Documents for Construction Contractors engaged for Stage 4.

Construction Team shall issue the NEOM Employer Requirements for Regenerative Development (NEOM-NEV-EMR-401) and all relevant Deliverables approved by NEV under this Procedure to all contractors.

8.3.4 MEWA Environmental Permit

The Environmental Assessment documents are provided to NEOM Government Affairs by **NEV** to submit to MEWA. For coastal developments, **NEV** engage the PCCEP. Where required, **NEV** shall engage with the Proponent and/or the Environmental Consultant to address comments or requirements resulting from the MEWA/PCCEP submission.

Neither the Proponent, the Environmental Consultant, or other parties are to engage with MEWA or the PCCEP, unless invited by **NEV**.

8.3.5 Management of Change

Refer to Section 8.2.5.

8.4 Stage 4: Construction & Commissioning

8.4.1 Construction Commencement Notification

Following issuance of the relevant Environmental Accord, construction can commence in line with the commitments made in the relevant ESMPs and conditions of the Accord. The Proponent shall notify NEV of the intended date for commencement of construction for the Proposal and invite NEV to participate in a mobilization inspection no earlier than seven (7) days prior to the commencement date.

8.4.2 Management of Change

Refer to Section 8.2.5.

8.5 Stage 5: Operations

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8.5.1 Operations Commencement Notification

Following issuance of the relevant Environmental Accord, operations can commence in line with the commitments made in the relevant ESMPs and conditions of the Accord. The Proponent shall notify NEV of the intended date for commencement of operations for the Proposal and invite NEV to participate in a inspection of relevant facilities or assets no earlier than seven (7) days prior to the commencement date.

8.5.2 Management of Change

Refer to Section 8.2.5.

9 Deliverables

This procedure identifies deliverables according to typology. The following documentation are prepared and submitted for review by NEOM Environmental Department Table 9.

Table 9 : Deliverable Submission Schedule

Stages	Deliverable	Responsible
1	Regenerative Development Initiation Form	Proponent
2A	Scoping Report	Design Team Consultant
2B	Environmental Baseline Survey Report Strategic Environmental Assessment (Category IV) Early Works Management Plan	NEOM Env Department Consultant Consultant
2C 3A		
3B	PER (Category I) Environmental Hazard Identification (ENVID) ER Report (Category II) Environmental & Social Impact Assessment (ESIA) (Category III) Management/Action Plans	Consultant