



# SUSTAINABILITY STRATEGY SUMMARY



**LEPIDICO**



FEBRUARY 2024

## RESPONSIBLY DEVELOPING A LOW CARBON SOURCE OF LITHIUM

Lepidico is an innovative developer of lithium chemicals and other critical minerals, and the global frontrunner in sustainable lithium mica processing.

Our Environmental, Social and Governance (ESG)-led business model is an end-to-end solution, spanning 'from mine to market'.

Beginning with our brownfield open-pit Karibib mines in Namibia, Lepidico will extract lepidolite-rich ore and transport a concentrate to our dedicated Chemical Plant in the UAE, which leverages patented technologies and processes to convert the concentrate to lithium hydroxide, caesium and rubidium compounds, sulphate of potash, amorphous silica and gypsum products.

Via a binding offtake agreement in place, the leading product lithium hydroxide, will be shipped to identified customers globally.

As a low-carbon and responsibly produced source of lithium, Lepidico is ideally positioned to meet the needs of the global green energy shift. This transition is set to drive a huge increase in demand for critical minerals, such as lithium, globally.

## OUR VALUES



### INTEGRITY

We are accountable and own the responsibility to do the right thing, always.



### COLLABORATION

Through leadership and teamwork, we forge partnerships for the greater good.



### RESILIENCE

We are determined to thrive and deliver best results.



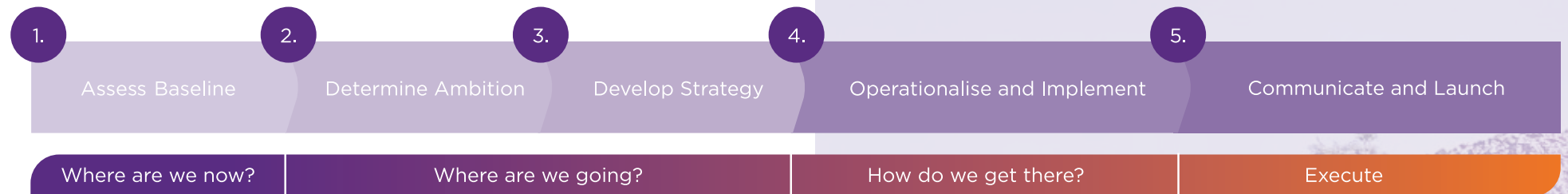
# OUR SUSTAINABILITY ROADMAP

This strategy outlines Lepidico’s sustainability ambitions across environmental, social and governance areas, identifying targets, goals and actions for implementation. The strategy is designed to be bankable, meeting the most stringent lender requirements at the current stage of business development.

To establish our inaugural sustainability strategy, Lepidico undertook a comprehensive process in consultation with leading global impact and ESG advisory firm, IBIS.

## OVERVIEW STRATEGY DEVELOPMENT

Our Strategy and Reporting Aligns with Internationally Recognised Frameworks.



# SUSTAINABILITY STRATEGY

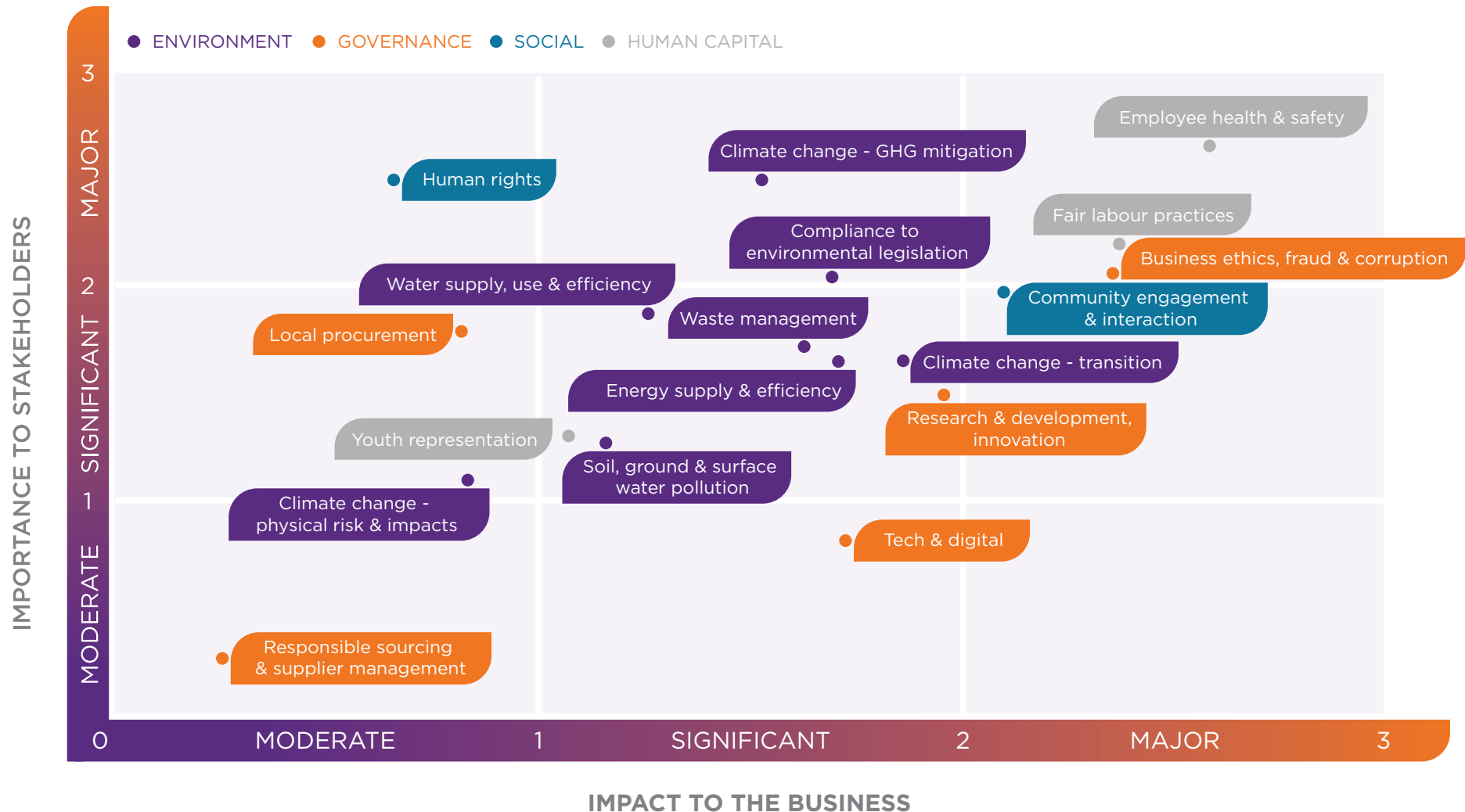


# STARTING THE JOURNEY

## MATERIALITY MATRIX

To kickstart Lepidico's process of sustainability strategy development, a materiality assessment was undertaken. From the outset, this enabled identification and prioritisation of sustainability topics that

hold greatest impact to the business, as well as greatest importance to Lepidico's stakeholders. The material issues that emerged from this matrix have formed the foundations for this sustainability strategy.



# ENVIRONMENT

## ENERGY AND CLIMATE CHANGE

Prior to the development of our Sustainability Strategy, extensive groundwork in the realm of energy and climate change had already taken place, via an emissions projection study with GHD. Highlights from the resulting Intergovernmental Panel on Climate Change (IPCC) Report included GHD identifying “low” chemical plant emissions intensity at Lepidico’s planned operations, compared to other LiOH plants.

Calculations predicted Lepidico’s integrated project Scope 1 & 2 emissions to be 8.8tCO<sub>2</sub>-e/t LiOH. H<sub>2</sub>O: 90% in the chemical plant and the outstanding 10% at the mine/concentrator.

To mitigate this, it was observed that the implementation of renewable power and green hydrogen solutions onsite could reduce emissions to as little as 3.0tCO<sub>2</sub>-e/t LCE.

IBIS and Lepidico leveraged the IPCC report in its entirety to devise strategic, forward-looking energy and climate change commitments, goals, targets and KPIs. These are detailed via the table below.



| ENERGY AND CLIMATE CHANGE | COMMITMENTS   | GOALS   | TARGETS   | KPIs   |
|---------------------------|---|---|---|--|
|                           | <ul style="list-style-type: none"> <li>Follow a Paris Agreement aligned decarbonisation pathway, which is compatible with a 1.5-degree temperature scenario in our own operations.</li> </ul>   | <ul style="list-style-type: none"> <li>Net zero by 2050.</li> </ul> | <ul style="list-style-type: none"> <li><b>2035</b> - 30% renewable electricity use at Karibib and UAE operations.</li> </ul>                                    | <ul style="list-style-type: none"> <li>Scope 1, 2 and 3 greenhouse gas (GHG) emissions (tonnes CO<sub>2</sub>e).</li> </ul>      |
|                           | <ul style="list-style-type: none"> <li>Support decarbonisation of other value chains by providing innovative, low carbon lithium solutions, which promote increased electrification.</li> </ul> |   | <ul style="list-style-type: none"> <li><b>2035</b> - 6% scope 1 GHG emissions reduction.</li> </ul>   | <ul style="list-style-type: none"> <li>GHG emissions intensity (tonnes CO<sub>2</sub>e per unit of lithium produced).</li> </ul> |
|                           | <ul style="list-style-type: none"> <li>Implement operational level adaptation solutions and support host communities to adapt to the physical impacts of climate change.</li> </ul>             |   | <ul style="list-style-type: none"> <li><b>2035</b> - Set scope 3 GHG emissions reduction targets.</li> </ul>  | <ul style="list-style-type: none"> <li>GHG emissions abated (tonnes CO<sub>2</sub>e).</li> </ul>                                 |
|                           |   |   | <ul style="list-style-type: none"> <li><b>2035</b> - Review and update all targets 1 year after operation startup.</li> </ul>                                   | <ul style="list-style-type: none"> <li>Energy usage (broken down by fuel type – GJ).</li> </ul>                                  |
|                           |   |   | <ul style="list-style-type: none"> <li><b>2040</b> - 60% renewable electricity at UAE operations</li> </ul>   | <ul style="list-style-type: none"> <li>Renewable energy generated and purchased (kWh).</li> </ul>                                |
|                           |   |   | <ul style="list-style-type: none"> <li><b>2040</b> - Renewable power at the Karibib up to the max allowed by the Electricity Control Board (or 60%).</li> </ul> | <ul style="list-style-type: none"> <li>Energy efficiency (GJ per unit of lithium produced).</li> </ul>                           |
|                           |   |   | <ul style="list-style-type: none"> <li><b>2040</b> - 40% Scope 1 GHG emissions reduction.</li> </ul>  | <ul style="list-style-type: none"> <li>Adaptation guideline and plans.</li> </ul>  |
|                           |   |   | <ul style="list-style-type: none"> <li><b>2050</b> - 95% GHG emissions reduction.</li> </ul>  |  |
|                           |   |   | <ul style="list-style-type: none"> <li><b>2050</b> - 5% offsets for net zero.</li> </ul>  |  |

## ENVIRONMENT

### WATER, WASTE AND REHABILITATION & CLOSURE

Important environmental considerations for mining operators extends beyond energy and climate change to water consumption, waste generation, land use/impacts and the state in which a mining site is left behind once production ceases.

As a company encompassing a tech-focussed, ESG-led business model, Lepidico is seeking to achieve commercial lithium production via far more sustainable means than conventional chemical conversion methods, by 2026.

Our methodologies are pilot-proven, with the following outcomes achieved and/or confirmed for the mine and plant development, production and closure phases.

#### MINIMISED WATER INTENSITY:

- 33m<sup>3</sup>/t LCE, 44% allocation to LiOH.
- 20% Namibia/80% UAE for first 5 years.
- 85% of concentrator water recycled.

#### CONSIDERED LAND USE, BEFORE, DURING AND POST-PRODUCTION:

- 962Ha, integrated project will be developed on predominantly industrial land.
- Mine closure plan will ensure that land will be restored for agricultural use.
- No TSF required, a traditionally waste-intensive element of mining operations.
- Lepidico's activities will not produce sodium sulphate, unlike many other lithium operations.
- Comprehensive material allocations (markets) and plant capabilities in the UAE will ensure zero solid process waste to come from operations.

#### MAINTAINED BIODIVERSITY:

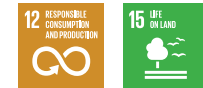
- ESAs conducted to date have identified no material impacts to biodiversity.

Looking ahead, Lepidico aims to further optimise its water, waste and mine rehabilitation efforts. To do so, definitive commitments, goals, targets and KPIs have been established in consultation with IBIS and are detailed in the following table.



# ENVIRONMENT

## WATER, WASTE AND REHABILITATION & CLOSURE



|                            | COMMITMENTS  | GOALS  | TARGETS  | KPIs  |
|----------------------------|--|--|--|---|
| WATER                      | <ul style="list-style-type: none"> <li>Implement water stewardship practices to reduce freshwater withdrawals and ensure adverse water quality impacts on local and regional water resources are avoided.</li> <li>Implement strong and transparent water governance and collaborate with stakeholders at a catchment level.</li> </ul>            | <ul style="list-style-type: none"> <li>Minimise freshwater withdrawals.</li> <li>Zero discharges to the environment.</li> </ul>                                | <ul style="list-style-type: none"> <li>Align water reporting with the ICM water reporting guidance.</li> <li>Achieve zero uncontrolled water discharges.</li> </ul>  | <ul style="list-style-type: none"> <li>Water withdrawals by source (split by surface, ground and third-party water) (ML).</li> <li>Water discharges by source (split by surface, ground, and third-party water) (ML).</li> <li>Water discharges by quality (split by quality type) (ML).</li> <li>Water recycled/reused ((ML)) and %.</li> <li>Water intensity (ML/ tonne milled and ML/ lithium produced).</li> </ul>  |
| WASTE                      | <ul style="list-style-type: none"> <li>Actively manage mineral and non-mineral waste by applying the mitigation hierarchy and actively pursue partnerships to increase recycling and minimise environmental impacts.</li> </ul>  | <ul style="list-style-type: none"> <li>Zero mineral waste to landfill.</li> <li>Responsibly manage waste facilities and waste rock dumps.</li> </ul>           | <ul style="list-style-type: none"> <li>Develop a baseline to enable a target to be set by 2030 for reduction in waste to landfill.</li> <li>Group waste management standard and plans aligned to the GISTM.</li> </ul> | <ul style="list-style-type: none"> <li>Non-mineral/non-hazardous waste (reused, recycled, recovered, treated, disposed and stored on-site) (t).</li> <li>Non-mineral/hazardous waste (reused, recycled, recovered, treated, disposed and stored on-site) (t).</li> <li>% of waste reused, recycled or recovered.</li> <li>Waste rock deposited on land (t).</li> <li>Group waste management standard and plans.</li> <li>% compliance against GISTM / group tailings standard.</li> </ul> |
| REHABILITATION AND CLOSURE | <ul style="list-style-type: none"> <li>Integrate closure objectives into the planning and design of our operations.</li> <li>Implement measures at closure to address stakeholder needs and promote socio-economic development.</li> <li>Make financial provision to enable agreed closure and post-closure commitments to be realised.</li> </ul> | <ul style="list-style-type: none"> <li>Restore the land to a more productive state than it was found in consultation with all relevant stakeholders</li> </ul> | <ul style="list-style-type: none"> <li>Review and update group closure and rehabilitation standards and guidelines.</li> </ul>   | <ul style="list-style-type: none"> <li>Total company managed land (ha).</li> <li>Total land under company charge for current mining activities (ha).</li> <li>Land fully rehabilitated (ha).</li> <li>Group closure and rehabilitation policy and guidelines.</li> <li>% compliant with group closure and rehabilitation policy and guidelines.</li> </ul>  |





## SOCIAL

### HEALTH & SAFETY, DIVERSITY, EQUITY & INCLUSION AND COMMUNITIES

There is nothing more important to Lepidico than the health and wellbeing of its people internally, as well as those who live and operate in communities surrounding our operations.

To date, the Company has maintained an impeccable zero harm track record, a testament to our stringent health and safety protocols.

At a community level, Lepidico capitalises on opportunities to improve standards in major sectors, including agriculture and healthcare. Some of the initiatives we have been able to implement in recent months include providing water supply to local farmers, and the build and commissioning of a maternity clinic which contributes greatly to babies being safely birthed.

#### WATER SUPPLY TO LOCAL FARMERS:

- Increasing availability of water supply to farmers ensures better yielding crops, as well as improved stock and cattle health.
- In turn, better agricultural outcomes provides better income stability for farmers, as well as stability of resource supply for the local population.

#### COMMUNITY MATERNITY CLINIC BUILT:

- Lepidico founded the new maternity unit at Otjimbingwe, delivered in collaboration with the Government and local community.
- The unit includes a delivery room equipped with a special delivery birthing bed, as well as a wheelchair, examination lamp, a recovery room with two beds and other essential medical equipment.
- The facility is also equipped with a sluice room and bathroom and has reverse cycle air conditioning.

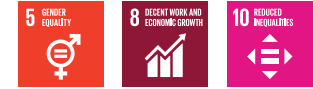
#### LOCAL EMPLOYMENT:

Bolstering the communities that we operate in is also being realised through Lepidico's employment capacity. Lepidico's mine will create 115 direct and 800+ indirect jobs, whilst operations in the UAE will create 119 jobs.

As developments advance Company-wide, Lepidico seeks to ensure practicable actions that protect the interests of people both internally and externally to the business, continue to be taken. The subsequent commitments, goals, targets and KPIs stated below have been formulated to consider social aspects up until, and beyond first production targeted for 2026.

# SOCIAL

## HEALTH & SAFETY, DIVERSITY, EQUITY & INCLUSION AND COMMUNITIES



|                                 | COMMITMENTS  | GOALS  | TARGETS   | KPIs   |
|---------------------------------|--|--|---|--|
| HEALTH AND SAFETY               | <ul style="list-style-type: none"> <li>Pursue continual improvement in physical and psychological health and safety performance with the aim of zero harm.</li> </ul>  | <ul style="list-style-type: none"> <li>Zero harm.</li> </ul>   | <ul style="list-style-type: none"> <li>Year on year reduction in recordable injury frequency.</li> </ul>  | <ul style="list-style-type: none"> <li>Recordable incidents (number and/or frequency rate).</li> <li>Lost time injuries (number and/or frequency rate).</li> <li>Injury severity (rate i.e., lost days per injury).</li> <li>Near Miss incidents (number).</li> <li>High Potential Incidents (number).</li> <li>New cases of occupational disease (number).</li> <li>Number of HSE actions closed vs open.</li> <li>Number of HSE leadership engagements /conversations.</li> </ul>  |
| DIVERSITY, EQUITY AND INCLUSION | <ul style="list-style-type: none"> <li>Respect human rights, create an inclusive workplace where all voices are heard and all cultures, customs and values respected.</li> <li>Work together to improve the experiences of all workers, and eradicate discrimination, harassment, and assault of any kind in our workplace.</li> </ul> | <ul style="list-style-type: none"> <li>Implement policies and practices to respect the rights and interests of all workers and improve workforce representation in the workplace so it is more inclusive.</li> </ul> | <ul style="list-style-type: none"> <li>40% of women in senior leadership.</li> </ul>  | <ul style="list-style-type: none"> <li>Total direct workforce split by region, % of employees per employee category, by age group and gender.</li> <li>Employee grievances raised / reports to the Whistleblowing Hotline (number) and resolved (%).</li> <li>Ratios of standard entry level wage by gender compared to local living wage.</li> <li>Ratio of basic salary and remuneration of women to men.</li> <li>Average hours of training per person that the organisation's employees have undertaken during the reporting period, by gender and employee category.</li> <li>Average training expenditure per full time employee.</li> <li>% of employees that received training.</li> </ul> |
| COMMUNITIES                     | <ul style="list-style-type: none"> <li>Implement inclusive approaches with local communities to identify their development priorities.</li> <li>Support in developing resilience and prosperity to our host communities, beyond the life of our mines.</li> </ul>  | <ul style="list-style-type: none"> <li>Engage host communities and support local employment, procurement, education and skills.</li> </ul>   | <ul style="list-style-type: none"> <li>% CSI spend (TBD once operations commence).</li> <li>20% of host community procurement of total procurement.</li> <li>10% of host community employment.</li> </ul> | <ul style="list-style-type: none"> <li>Community grievances raised (number) and resolved (%).</li> <li>Corporate social investment (CSI) spend (financial value).</li> <li>Permanent employees from local communities (%).</li> <li>Beneficiaries/households benefitting from employment opportunities (number).</li> <li>Proportion of spending on local suppliers (where possible disaggregated by gender).</li> <li>Investment in Health Programs; Entrepreneurship programs; Agriculture Programs.</li> <li>Total investment on education and skills programme(s) (outside of workforce).</li> </ul>   |

# GOVERNANCE

Headed by an experienced Board of Directors, possessing complementary skills, Lepidico has been well-governed throughout its early development years.

Our all-Namibian leadership team on the ground at our Karibib operations have ensured local perspective and expertise is maintained, critical to effective decision making within the Company.

Lepidico’s recognition as a top 5% ASX-Listed Company in the area of employee diversity<sup>1</sup> speaks to how we approach hiring, on the basis of qualification over status.

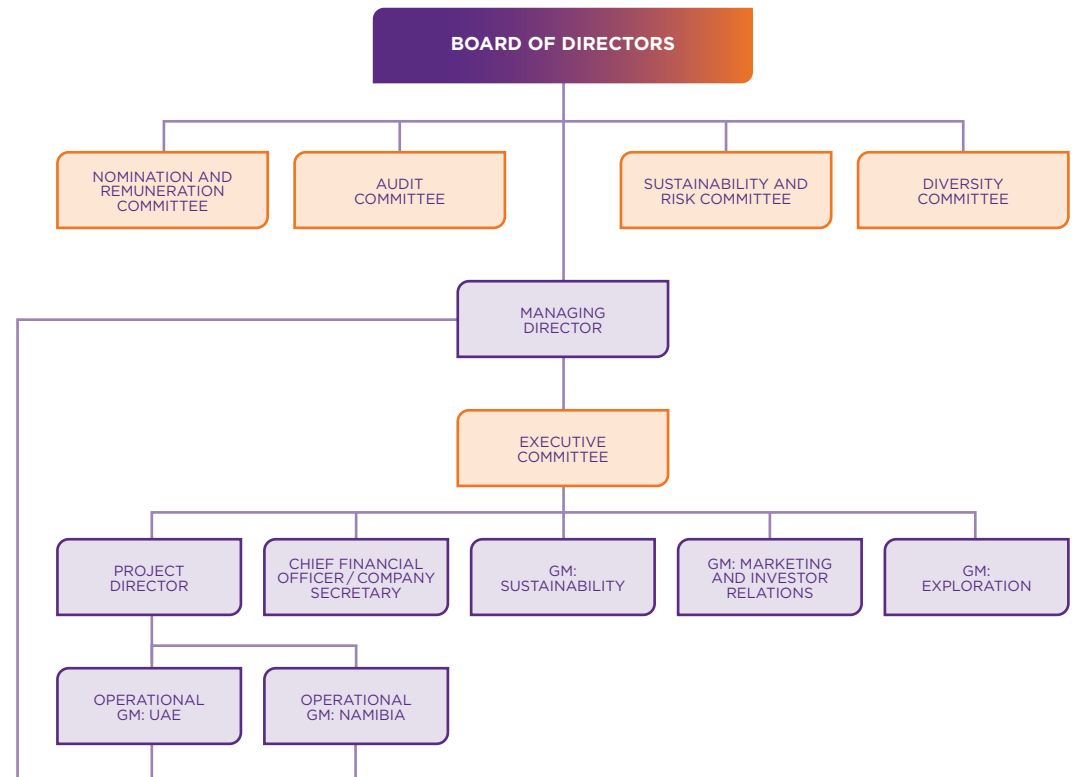
Strategic planning into the future is integrated with considerations around benchmark Environmental, Social and Governance (ESG) practices.

For the benefit of sustained growth and implementation of sustainability actions - a clear governance structure with well-defined roles and responsibilities is integral. In collaboration with IBIS, Lepidico has defined a near-term governance strategy, summarised below.

## PRIORITIES FOR THE NEXT THREE YEARS:

- Set clear roles and responsibilities of the board.
- Develop performance management criteria around sustainability.
- Capacity building and awareness needs identified.
- Ongoing sustainability-related training across all levels.
- Develop and roll out a centralised and automated system for ongoing reporting.

## DEVELOPMENT PHASE STRUCTURE:



<sup>1</sup>Determined by Elected, an Australian not for profit organisation.



**LEPIDICO**

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