



ESG strategy

for 2025-2030 with an outlook to 2035

Sustainable transformation: Safely into the future

Analysis - methodology of work

The process of updating the ESG Strategy was divided into two parts:

- **Data analysis:** identifying changes occurring from 2022 onwards in relation to: regulatory requirements (primarily the introduction of the ESRS), sustainable funding trends, benchmarking, changes as a result of double materiality analysis, organisational changes at LW Bogdanka, stakeholders' activities and needs and topics relevant to them, internal analyses, e.g. ESG SWOT Analysis;
- **Strategy workshop:** development of strategic objectives and initiatives;

Within each part:

- Data were analysed for all ESRS areas;
- The analysis covered both the organisation's operations and the value chain of LW Bogdanka;

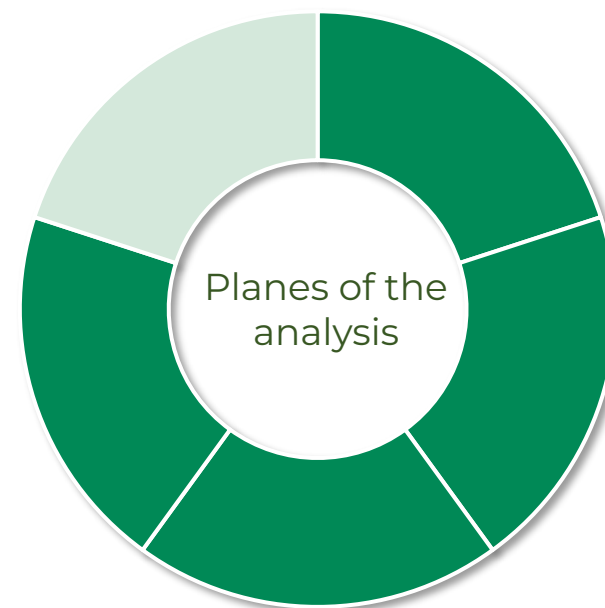
ORGANISATION

Identification and assessment of key areas of influence as well as strengths and weaknesses of LW Bogdanka in terms of ESG; business strategy analysis; double materiality analysis and sustainability reporting

STAKEHOLDERS

Identification and update of relevant ESG topics identified by stakeholders

- Analysis of the external environment
- Analysis of the internal environment



REGULATIONS

Analysis of key ESG regulations and their importance for LW Bogdanka

FINANCING

Analysis of trends in sustainable financing and the associated opportunities and risks

MARKET

Benchmark - analysis of relevant topics and competitors' performance in regard to ESG

The necessity to reduce industrial emissions and facilitate a just transition significantly affects the Polish mining industry, necessitating change



Focus on decarbonisation and climate resilience

- Increasing pressure to reduce CO₂ emissions, achieving net-zero and implementation of climate change adaptation solutions.
- Technological innovations (e.g. green hydrogen, energy transformation) are becoming crucial and more accessible.
- Among other things, the US president's policies may influence the trend to halt.



Integration of ESG with finance and investments

- Sustainability as an integral part of investment risk analyses, credit scoring and investor decisions - among other things, compliance with the EU Taxonomy is analysed. Building portfolios of entities with a low environmental impact by financial institutions.
- ESG risk management as part of avoiding potential financial (including reputational) losses and as a factor influencing share prices.



Standardisation and regulation of ESG reporting

- Large companies are required to report ESG data according to unified standards (e.g. CSRD in the EU, ISSB global standards or SEC in the US). This forces greater transparency, comparability and reliability of non-financial data.
- The introduction of the "Stop-the-clock" Directive postpones reporting deadlines, but does not mean abandoning sustainability goals.

Europe and the world

Trends shaping the future of ESG globally and in Poland



Energy transformation and emphasis on environmental efficiency

- Investment in RES, energy efficiency and the closed loop economy is increasingly important - both due to EU requirements, real energy costs and stakeholders' pressure.
- Environmental performance has become increasingly integrated with cost efficiency.
- Large organisations are required to disclose activities related to carbon emissions into the atmosphere and their reduction.



Obligations arising from the CSRD and the CSDD directive

- From 2025 onwards, hundreds of companies in Poland report according to the ESRS, which means a change in thinking about ESG and the introduction of clearly defined and measurable goals (strategies, policies), actions, risks or opportunities related to ESG.
- Although the legislation is not fully modified for ESG requirements, businesses need to put in place market-based due diligence mechanisms in the context of supplier chain and "upstream" and "downstream" carbon performance.



Counteracting the adverse social effects of transformation

- There is a need to adopt a strategy to mitigate the effects of socio-economic transformation.
- Moving away from coal, changing the energy mix, etc. in Poland are not socially neutral changes - they carry risks: loss of jobs, exclusion of regions (e.g. Silesia, Lublin), economic inequality.

Poland

The environment affecting LW Bogdanka in terms of ESG has changed since 2022, which has influenced the need to revise the ESG Strategy



Growing public and image pressure on the coal sector

- Increased expectations of businesses having decarbonisation plans and the amount of actual adoption - including by LW Bogdanka stakeholders.
- Public pressure may influence the suspension of economically important projects.
- The range of requirements and expectations of the level of environmental and community safeguards for those applying for a mining licence has changed.
- The scale of stakeholder engagement and agency has increased.



EU and state pressure to decarbonise the energy sector

- Financial institutions are limiting funding for carbon-based projects by promoting “green” investments. Access to capital increasingly depends on ESG indicators and compliance with EU climate policy.
- As a result, transformational projects have to be financed from coal production and sales activities.



The dynamic development of AI - opportunities and risks associated with it

- The availability and widespread use of artificial intelligence has increased significantly.
- The development of AI can support production and management processes, among others, related to ESG aspects such as safety and asset management.
- A number of risks are identified that need to be managed in the context of use of AI by employees - these include the issue of cybersecurity and the management of the organisation's data.

Key factors influencing the need for a revised ESG strategy



New vision for business strategy and change of Enea Group's strategic objectives

- Adoption of a revised development strategy for LW Bogdanka for 2025-30 with an outlook to 2035.
- Significant pressure from the majority shareholder regarding the Group's sustainable development.
- New projects and branches of operation can raise objections from the local community, so transparency, accountability and good stakeholder relations become crucial.



Employees' concerns about the transition

- Employees and social groups are intensifying their actions against the EU's climate policy.
- Local and national protests by miners and other professional groups were organized to highlight the need for action to protect employees in light of changes stemming from the introduction of the Green Deal.
- The Parliamentary Group for the Defence of Lubelski Węgiel "Bogdanka" is in place.



Materiality resulting from double materiality analysis and organisational changes as a consequence of ESG reporting

- The need for better management of non-financial data became apparent during the attestation process for the 2024 report.
- Not all the data required to prepare disclosures from suppliers, among others, are currently collected and aggregated in the Group.
- LW Bogdanka has adopted an ESG Management Procedure introducing, among other things, the ESG Committee.
- Organisational changes are needed to implement ESRS-compliant reporting.

Three key ESG trends in Poland according to the Polish ESG Association



Cybersecurity as a new pillar of ESG

- ESG today is also about digital resilience.
- Companies need to protect data, systems and people in a digital environment.
- Cyber threats are recognised as non-financial risks.



Artificial intelligence and responsibility

- AI supports ESG reporting, but raises ethical challenges. Transparency of algorithms and respect for human rights is an important new standard. Responsible implementation of AI is becoming a priority.



Mental health and the pressure for change

- According to research, 51% of employees feel emotionally overloaded.
- ESG in practice also means transparency and honesty in relations with employees, informing them about plans, strategy and the opportunity to participate in the decision-making process.
- Well-being and mental support leading to well-being is also important - employers need to respond to staff stress and uncertainty.
- The mining profession can be particularly stressful - related to both the work involved and an uncertain future.

Results of the Double Materiality Assessment (DMA)

ESG topics relevant to stakeholders of LW Bogdanka

Methodology for assessing materiality

The assessment was carried out according to ESRS and EFRAG guidelines (IG 1, IG 2). Included: competitive analysis, analysis of ESG ratings and standards, surveys and dialogue sessions with external stakeholders, interviews with internal stakeholders, expert impact assessment. Themes that exceeded a threshold of >55-60% of the mean relevance score were considered relevant.

Map of importance of ESG topics - LW Bogdanka (2025)



Key themes relevant to stakeholders (identified in the survey):



The developments on the European coal market and the changes taking place in the energy sector force LW Bogdanka to update its strategy and focus on local initiatives to secure the future of the mine and its employees

OVERARCHING OBJECTIVE

Maintaining a high market position through efficiency in the scope of thermal coal production to achieve transformation ambitions

VISION



Bogdanka as a diversified enterprise using the potential of mining to build a sustainable industrial and energy business, based on innovation, diversity of activity and care for the natural environment and the local community

MISSION

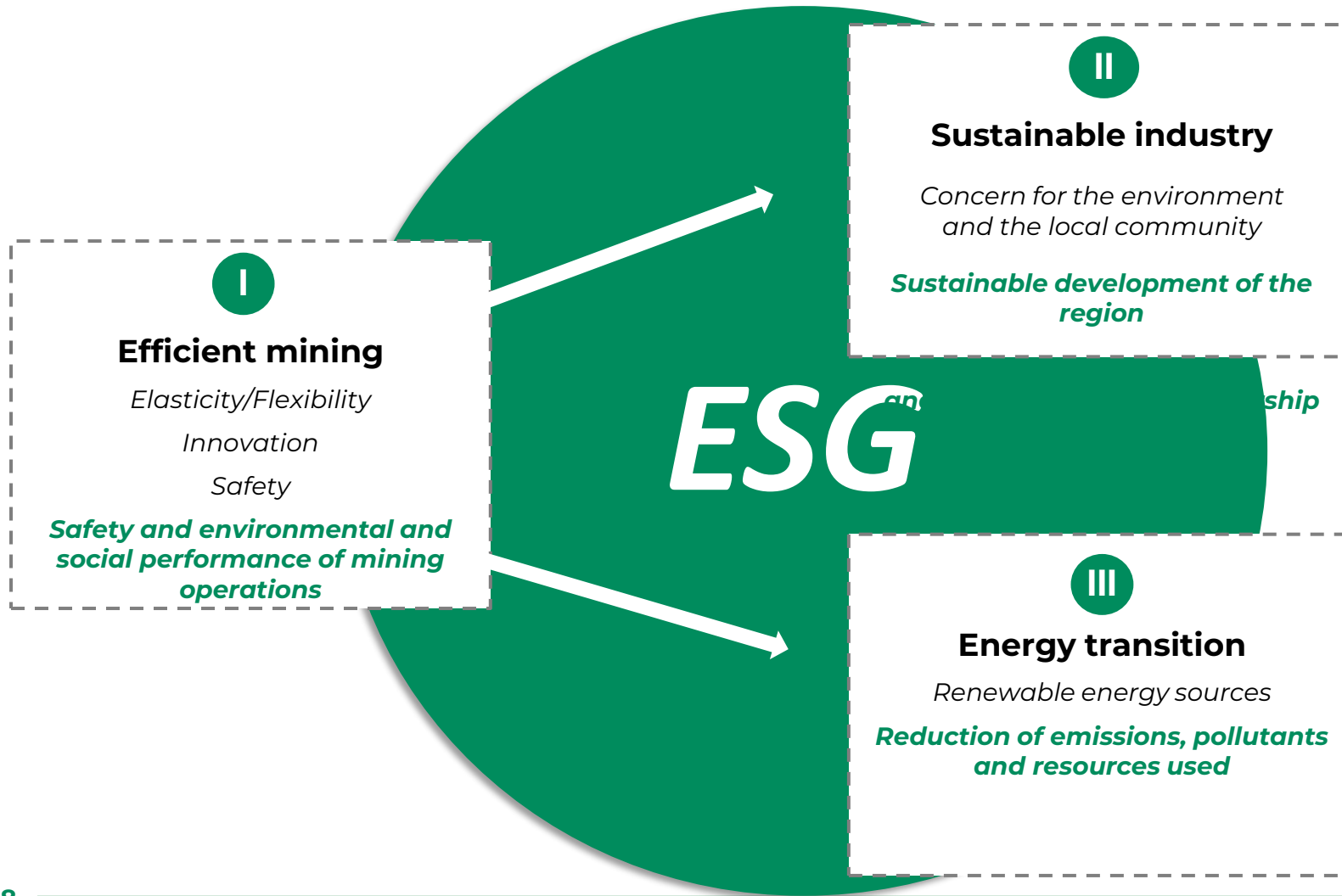


Efficient production of thermal coal to secure the needs of existing customers, ensure sales growth on the domestic and foreign markets and build the potential to diversify the business

MAIN OBJECTIVE OF THE ESG STRATEGY

Transforming LW Bogdanka into a modern industrial entity, combining efficient thermal coal production with innovative actions for sustainable development, social responsibility and environmental protection, in order to ensure long-term value for stakeholders and the Region

Strategy of LW Bogdanka is based on its core business, i.e. thermal coal production and two transformation directions based on sustainability, innovation and responsibility towards the environment and local communities



Strategic objectives:

- Continuing the Group's **efficient** and profitable operations based **on the production and sales of hard coal** will provide the resources necessary for the transformation in the desired directions in line with sustainable development goals
- **Diversification of activity** towards the Sustainable Industry and Energy Transition
- **Optimising mining operations to provide for its maximum consistence with the ESG objectives in a sustainable manner to provide the means and resources to achieve the transition objectives set for the Group**

Programmes of GK LW Bogdanka ESG Strategy

GK ESG strategy of LW Bogdanka consists of **8** strategic programmes described in **26** strategic initiatives:

Programme number	Name of the programme	Programme objectives	Key initiatives	Link to Business Strategy
PROGRAMME 1	OPTIMISING THE IMPACT OF INFRASTRUCTURE	Minimising the environmental and social impact of infrastructure	1.1. Sustainable design 1.2. Eco-modernisation and rehabilitation 1.3. Integration with local tourism and social infrastructure	✓
PROGRAMME 2	CLIMATE-EFFICIENT	Reducing negative climate and environmental impacts by increasing energy efficiency and reducing greenhouse gases in mine operations	2.1. "Bogdanka 2050" - a way to reduce the Capital Group's carbon footprint 2.2. Development of own renewable energy sources with a capacity of no less than 30 MW 2.3. Branch Environmental Performance Plans 2.4. Peat land offset programmes 2.5. Bogdanka close to nature	✓
PROGRAMME 3	RESOURCES USED	Reducing resource consumption by implementing modern resource management and treatment solutions	3.1. Closed loop and less waste 3.2. Environmental revitalisation	✓
PROGRAMME 4	BEST STAFF	Attracting and retaining the best employees	4.1. Bogdanka Development Academy 4.2. Top Experts 4.3. Competence for sustainable transition	✓
PROGRAMME 5	INNOVATION AND DEVELOPMENT	Launching new tools and resources to enhance innovation and process optimization, reduce failures, improve employee qualifications in the use of modern technologies, and minimize associated risks	5.1. R&D for transformation 5.2. Digital Bogdanka 5.3. Safety technology	✓
PROGRAMME 6	SAFE WORKPLACE	Enhancing the safety culture and fostering a sense of shared responsibility for personal and colleagues' work safety	6.1. Safety education and awareness 6.2. Safety culture and commitment 6.3. Intelligent security systems	✓
PROGRAMME 7	WELL-BEING OF THE EMPLOYEES	Support for health initiatives, including mental, physical, emotional and economic health in the workplace and beyond	7.1. Prevention and health promotion at LW Bogdanka 7.2. Development of the Solidarity Miners Foundation 7.3. Anti-addiction practice 7.4. Work-life balance at LW Bogdanka	—
PROGRAMME 8	CHANGE LEADER	Building a responsible value chain based on defined ESG criteria	8.1. Responsibility in the value chain 8.2. ESG-compliant communication and sponsorship 8.3. ESG innovations	—

The definition of these programmes is based on the **objectives of the business strategy**

Programme 1. OPTIMISING THE IMPACT OF INFRASTRUCTURE

1.1

INITIATIVE
Sustainable design

TASKS

- Training on ESG, EU Taxonomy, green certificates
- ESG standards for construction investments

IMPLEMENTATION PERIOD
2025–2035

1.2

INITIATIVE
Eco-modernisation and
reclamation

TASKS

- Thermo-modernisation of buildings and replacement of appliances with non-energy-intensive ones
- Energy efficiency audit
- Mining damage repair and prevention
- Expansion of the Mining Waste Disposal Facility
- Environmental audit of infrastructure

IMPLEMENTATION PERIOD
2025–2030

1.3

INITIATIVE
Integration with local tourism
social infrastructure

TASKS

- Making selected areas available for recreational or educational functions
- Walking and cycling paths around the industrial zone
- Education in C Zone
- Promotional campaigns of the Region

IMPLEMENTATION PERIOD
2025–2035



PROGRAMME 2. CLIMATE- EFFICIENT

2.1

INITIATIVE

"Bogdanka 2050" - a way to reduce the Capital Group's carbon footprint

TASKS

- Climate Policy of LW Bogdanka
- CF management system for GK LW Bogdanka
- Automation of CF data management

IMPLEMENTATION PERIOD

2025–2035

2.2

INITIATIVE

Development of own RES sources with a capacity of no less than 30 MW

TASKS

- Construction of a 27MW photovoltaic farm

IMPLEMENTATION PERIOD

2025–2030

2.3

INITIATIVE

Branch Plans Environmental Performance

TASKS

- Planning and reporting system for pro-environmental projects

IMPLEMENTATION PERIOD

2025–2027

2.4

INITIATIVE

Peatland offset programmes

TASKS

- Study of research and analysis
- Programme objectives

IMPLEMENTATION PERIOD

2026–2030

2.5

INITIATIVE

Bogdanka close to nature

TASKS

- Fund for researchers
- Partnerships for nature conservation within the influence area of LW Bogdanka
- Cooperation with the Polesie National Park

IMPLEMENTATION PERIOD

2025–2035



PROGRAMME 3. Resources used

3.1

INITIATIVE

Closed loop and less waste

TASKS

- Recovery of extractive waste generated
- Maintaining a minimum recovery rate of 40% for mining waste
- Investigating the possibilities of heat recovery from mine water

IMPLEMENTATION PERIOD

2025–2035

3.2

INITIATIVE

Environmental revitalisation

TASKS

- Reclamation of the heap
- Projects oriented towards heap reclamation and dust reduction

IMPLEMENTATION PERIOD

2025–2035



PROGRAMME 4. BEST STAFF



4.1

INITIATIVE
Bogdanka Development
Programme

TASKS

- Academy of Mining Leaders
- “My Development” Programme
- Cooperation with partner schools and universities

IMPLEMENTATION PERIOD
2025–2026

4.2

INITIATIVE
Top Experts

TASKS

- Consultations
- Employer Branding campaign
- Organisation of training and specialised courses in line with diversification directions

IMPLEMENTATION PERIOD
2025–2030

4.3

INITIATIVE
Competence for sustainable
transition

TASKS

- ESG training for all professional and managerial groups
- Implementation of ESG and green competence modules in internal training systems
- Educational campaign

IMPLEMENTATION PERIOD
2025–2035



PROGRAMME 5. INNOVATION AND DEVELOPMENT



5.1

INITIATIVE
R&D for transformation

TASKS

- Map of innovation areas
- R&D - climate and environmental projects

IMPLEMENTATION PERIOD
2025–2030

5.2

INITIATIVE
Digital Bogdanka

TASKS

- Use of AI
- Digital tools for ESG management
- Metering technologies

IMPLEMENTATION PERIOD
2025–2026

5.3

INITIATIVE
Safety technology

TASKS

- Implementation of road transport
- Innovative production optimisation and safety assurance programmes

IMPLEMENTATION PERIOD
2025–2030



PROGRAMME 6. SAFE WORKPLACE



6.1

INITIATIVE

Safety education and awareness

TASKS

- Modern OHS education
- OHS films
- OHS competition
- Safety Days

IMPLEMENTATION PERIOD

2025–2030

6.2

INITIATIVE

Safety culture and commitment

TASKS

- New methods of engaging in building a safety culture
- Review of knowledge on hazards
- On-line training on selected OHS topics
- Evaluation of the initiative

IMPLEMENTATION PERIOD

2025–2035

6.3

INITIATIVE

Intelligent security systems

TASKS

- Tests, hazard simulations and real-time demonstration of health and safety systems

IMPLEMENTATION PERIOD

2025–2028



PROGRAMME 7. WELL-BEING OF THE EMPLOYEES

7.1

INITIATIVE

Prevention and health promotion at LW Bogdanka

TASKS

- Miner's prevention
- Prevention and health promotion actions in the workplace
- Mental health and psycho-physical resilience

IMPLEMENTATION PERIOD

2025–2030

7.2

INITIATIVE

Development of the activities of the Solidarni Górnicy Foundation

TASKS

- Employee volunteering at LW Bogdanka
- Support activities
- Promotion of acts of altruism
- Collaboration with local organizations to address addiction and promote a healthy lifestyle

IMPLEMENTATION PERIOD

2025–2035

7.3

INITIATIVE

Addiction prevention

TASKS

- Educational and preventive campaign
- Employee support system
- Diagnosis and action planning

IMPLEMENTATION PERIOD

2025–2030

7.4

INITIATIVE

Work-life balance at LW Bogdanka

TASKS

- Regenerative and family-friendly solutions
- Cyclical satisfaction surveys
- Bogdanka Socially Involved, Active in Bogdanka, Active and Fulfilled
- Integration for employees' families

IMPLEMENTATION PERIOD

2025-2030



PROGRAMME 8. CHANGE LEADER

8.1

INITIATIVE
Responsibility in the
value chain

TASKS

- Implementation of a system for assessing and monitoring contractors in relation to ESG criteria
- ESG audits
- Education for suppliers

IMPLEMENTATION PERIOD
2025–2030

8.3

INITIATIVE
ESG innovations

TASKS

- Mechanism for identifying innovation needs and potential in the ESG area
- ESG development in subsidiaries
- Update of the anti-corruption policy
- ESG training scheme for managers
- Training and e-learning on compliance and corporate culture
- Secure on-line system for reporting violations
- Contractor and supplier verification programme
- ESG communication

IMPLEMENTATION PERIOD 2025-2030

8.2

INITIATIVE
ESG-compliant communication and management

TASKS

- ESG Committee
- Stakeholder education
- Social campaigns with local partners
- Scientific Council for Environmental Protection at LW Bogdanka S.A.
- Internal ESG communication standards
- ESG-compliant promotional materials
- Good sponsorship practices

IMPLEMENTATION PERIOD 2025-2030



Operational plan

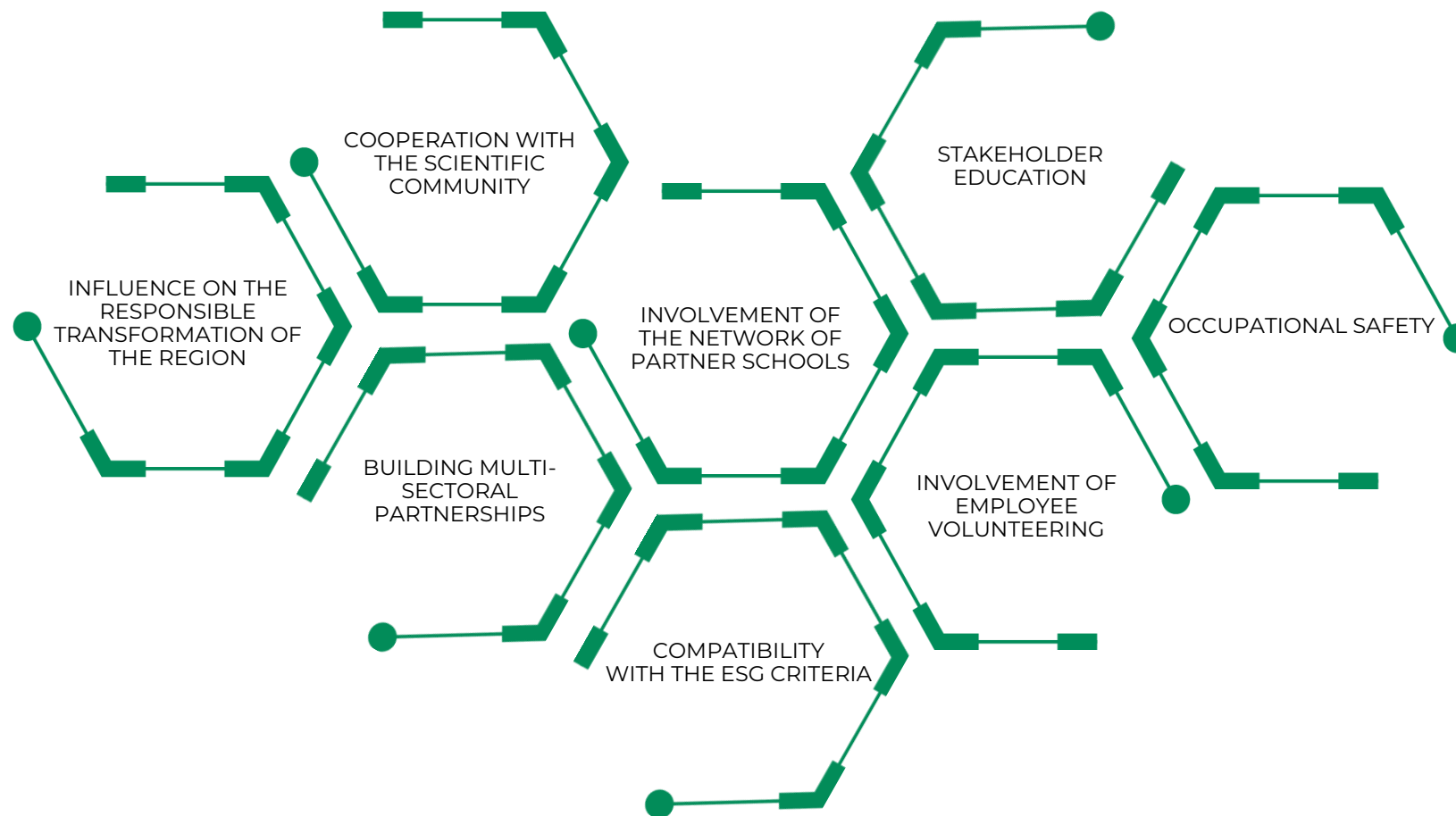
- The ESG strategy will be implemented through strategic programmes and initiatives
- The operational plan is the basis for the implementation of the strategy
- As part of the implementation of the operational plan, a system for evaluating and monitoring the level of implementation of the strategy will be defined

Steps in the implementation of the ESG Strategy



Projects implemented within the framework of the sustainable development strategy will be analysed and selected taking into account the cross-cutting criteria

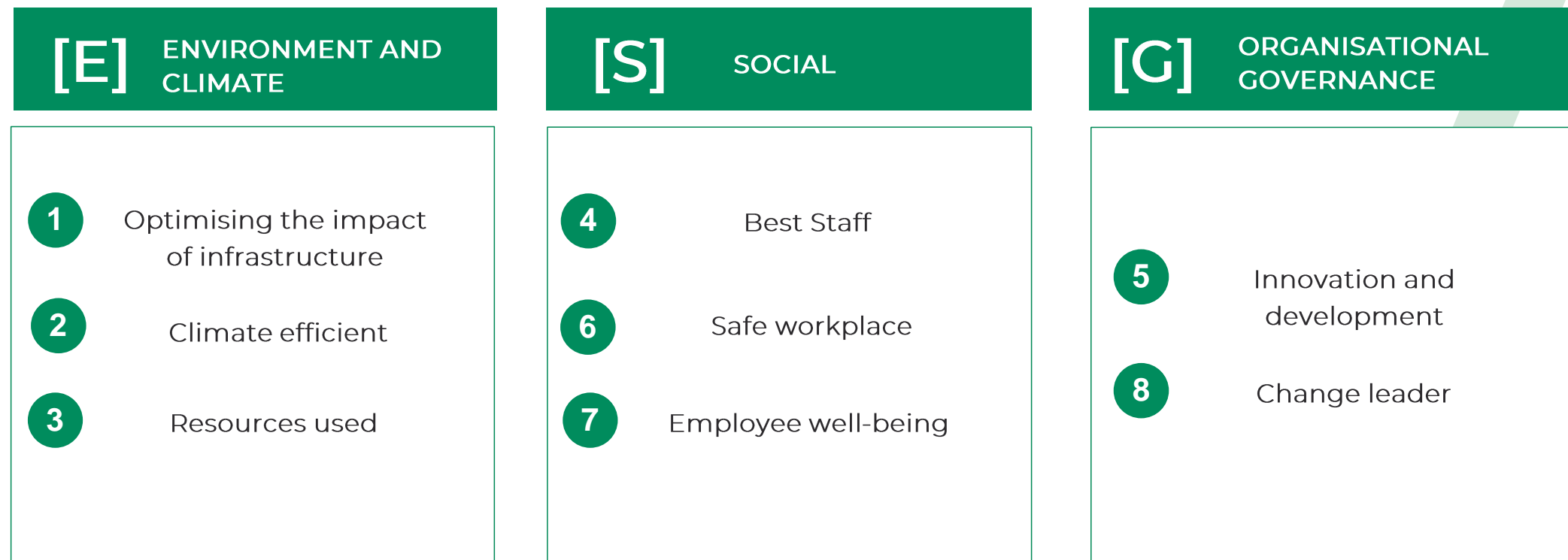
Each project, within the strategy, must address a minimum of 3 of the indicated criteria.



Sustainable transformation: Safely into the future

ESG strategy 2025-2030 with an outlook to 2035

Transformation based on 8 ESG programmes



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