









# Titan Group Climate Change Policy



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# **Purpose**

TITAN Group is at the forefront of the cement industry's efforts to combat climate change. We are committed to achieving the goals set out in the COP21 Paris Agreement to limit the global average temperature increase to 1.5°C above pre-industrial levels, and to the European Green Deal's vision of carbon neutrality by 2050. Our goal is to achieve net-zero greenhouse gas emissions across our value chain by 2050, through the pursuit of science-based targets aligned with the 1.5°C scenario, both in the near and long term.

TITAN Group Climate Change Policy (hereinafter referred to as the "Policy") aims to:

- Define governance and responsibilities.
- Enhance awareness for our employees, business partners and suppliers.
- Provide the due diligence framework.
- Build confidence with all stakeholders by communicating with transparency and collaborative actions.

# **Scope and Application**

This Policy applies to all TITAN Group employees in all operations, subsidiaries, and covers any activity under our operational control. While business units within the Group may implement their individual environmental policies, adapted to local legislation requirements, these policies must adhere to the Group Policy, which should be clearly embedded in their environmental management systems.

# **Assessing the Climate Change Risks and Opportunities**

TITAN Group is incorporating the principles of double materiality assessment, in an integrated, ongoing process which involves mapping and assessing the impact of the Group's operations on the environment, as well as assessing the financial impacts of climate change on the Group.

To effectively identify and mitigate such exposures, the Group manages its risks in accordance with established international practices, embedding key dimensions of Enterprise Risk Management (ERM) into its processes, systems, and governance. Climate change represents for TITAN Group a principal strategic risk, which affects its whole value chain. Accordingly, climate change is assessed and managed centrally.

Physical impacts and transitional risks stemming from climate change, as well as the opportunities from the transition to a low-carbon economy are assessed according to the Taskforce on Climate related Financial Disclosures (TCFD) recommendations with the use of climate change scenarios analysis based on the International Panel on Climate Change (IPCC).



# **Climate Change Mitigation and Adaptation Strategy**

A comprehensive strategy on responding to climate change involves a two-fold approach: reducing greenhouse gases (GHG) emitted from our production and value chain into the atmosphere ("mitigation") and/or adapting to the physical impacts of climate change ("adaptation").

## **Climate Change Mitigation**

We are transforming our processes and product range to address environmental challenges and help build safe, resilient, and more sustainable cities. Through our transition to more sustainable, low-carbon, and circular construction solutions, we assist our customers in achieving sustainable building practices and fulfilling their environmental pledges.

We set near-term (5-10 years) science-based targets (SBTs) to reduce emissions within the company value chain in line with 1.5°C pathways but also long-term SBTs to reduce emissions within the company value chain by no later than 2050. We establish clear KPIs by endorsing the "5C approach" along the clinker-cement-concrete-construction-carbonation value chain, while we investigate Beyond our Value Chain Mitigation (BVCM) actions to support global efforts.

#### Clinker

#### i. Alternative decarbonated raw materials

As the largest source of  $CO_2$  in cement production is the calcining of raw materials in the kiln, the use of alternative sources of decarbonated materials is a key option for significantly reducing  $CO_2$  emissions and promoting circularity. By replacing limestone with decarbonated materials, process emissions are reduced. TITAN Group promotes the use of alternative decarbonated raw materials – waste from other industries- such as fly ash, slag, and concrete and demolition waste.

## ii. Co-processing

The increased use of alternative fuels in place of non-renewable fossil fuels is a key lever towards the achievement of TITAN Group's decarbonization targets. The utilization of alternative fuels in cement production (Co-processing) contributes to, respectively, the conservation of natural resources, the overall reduction of GHG emissions, the diversion of waste from landfill and the long-term competitiveness of the Group.

TITAN Group intends to secure supply by also investing in the Public Private Partnerships (PPPs), fully aligned with its sustainability ambitions and commitment to participate actively in the circular economy. Titan Group further supports the national plans to provide a solution to the critical environmental issue of waste management.

## iii. New types of cement clinkers and the use of mineralizers



We are studying new clinkers even though there are limits in application and market acceptance. We scale up to industrial level e.g. CSA (Calcium Sulfoaluminate) and we utilize mineralizers to reduce energy consumption where feasible.

## iv. Thermal efficiency & renewable energy

Efficient use of thermal energy is required in all activities supported by energy efficiency management systems and/or energy audits. To achieve this, TITAN Group:

- Thoroughly monitors energy consumption and efficiency.
- Invests in energy-efficient equipment and management systems.
- Explores opportunities through the implementation of best available technologies.
- Invests in process digitalization such as real-time optimization.
- Explores sustainable options, such as green hydrogen to enhance combustion.
- Focuses on alternative fuels with high biomass content

## v. Carbon capture utilization and storage (CCUS)

CCUS can help to reduce our carbon footprint, meet sustainability goals, and thus contribute to our efforts to combat climate change. In line with EU climate policy, together with our technology partners, TITAN Group is a pioneer in carbon capture storage and utilization, investing in projects that will capture CO<sub>2</sub> emissions and permanently store them in geological storage sites or use them in concrete production or for the manufacturing of new products.

#### 2. Cement

### i. Low clinker cements & cementitious products

Titan Group is accelerating market entry of new green products and cementitious solutions, striving for a leading role in innovative materials through investments in low-carbon cement and cementitious products, which support sustainable construction.

- A significant part of our cement product portfolio includes products manufactured with a clinker content significantly lower than that of OPC (Ordinary Portland Cement), using materials such as fly ash, slag, limestone, pozzolan, calcined clay, and other Supplementary Cementitious Materials (SCMs).
- Through its subsidiary Separation Technologies LLC (ST), TITAN Group offers valorized fly ash for use in concrete, a product with exceptionally low associated carbon emissions, enabling enhanced emission reduction in the value chain.



TITAN Group is gaining direct access to key decarbonated raw materials, both natural and alternative,
 which will allow the enlargement of the Group's offering of low-carbon cementitious products.

# ii. Electrical efficiency & renewable energy

Efficient use of electrical energy is required in all activities supported by energy efficiency management systems and/or energy audits. To achieve this, TITAN Group:

- Thoroughly monitors energy consumption and efficiency.
- Invests in energy efficient equipment and management systems.
- Explores the opportunities from the implementation of best available technologies.
- Invests in process digitalization, such as real-time optimization.

Moreover, TITAN Group is committed to reducing its dependance on non-renewable energy sources for its total energy needs. Investing in renewable assets, such as photovoltaics to generate electricity and securing green power purchase agreements (PPAs) is part of our strategy.

#### 3. Concrete

# Digitalization, improved mix design and new admixtures

Using digital tools and innovative technologies, we are pursuing decarbonization across the upstream and downstream value chain by:

- Manufacturing process digitalization, such as real-time optimization.
- Optimizing routing and real-time monitoring of concrete transportation.
- Introducing innovative materials, including nanotechnology and novel admixtures.

We embrace the opportunity to share our knowledge and expertise and promote green concrete in construction.

#### 4. Construction

Substantial reductions in CO<sub>2</sub> emissions are achievable by implementing policies that address the entire life cycle of cement and concrete, changing the way we design and build structures. We can use less materials to build and make buildings more energy efficient with concrete's special properties.

TITAN Group works throughout the construction value chain to encourage architectural best practices and reduce the carbon footprint of construction through novel methods, such as 3D printing and modular components.



#### 5. Carbonation

Concrete carbonation refers to the chemical reaction between carbon dioxide from the atmosphere and the calcium hydroxide present in the cement paste of concrete. This reaction forms calcium carbonate and water, and releases heat. The process occurs over the lifetime of the concrete and turns concrete structures into carbon sinks, absorbing and sequestering part of the CO<sub>2</sub> released during the production of the cement.

## Supply Chain emissions and Beyond the Value Chain Mitigation (BVCM)

Indirect greenhouse gas emissions occurring throughout the company's value chain, beyond our direct operational control, (referred to as Scope 3 emissions) encompass various sources, including the extraction and production of purchased materials, transportation, use of sold products, and end-of-life treatment. To address this, TITAN Group engages with suppliers to identify opportunities for emissions reduction.

Furthermore, TITAN Group is embracing the recommendations made by SBTi on the need for actions and investments outside the boundaries of our value chain and will collaborate with stakeholders to design and implement strategies that will help accelerate the reduction of GHG emissions working towards a net-zero at global level. Titan Group affirms that BVCM will not replace or delay efforts to reduce its scope 1, 2 and 3 emissions in line with a 1.5°C pathway.

## **Climate Change Adaptation**

The possible increase in climate change-related physical risks such as coastal flooding, drought, water stress, wildfires, extreme temperatures etc. could disrupt our asset base, and impair the continuity of our operations (production and/or distribution). This type of risks is assessed and mitigated through a risk assessment process, conducted at a Group and local level, with an elevated level of preparedness, following strict design standards, emergency, and insurance coverage plans, and by incorporating input from climate risk studies based on scenario analysis.

TITAN Group invests systematically in equipment and systems to prevent or mitigate the physical risks of climate change and ensures adequate insurance coverage against damages or temporary business disruption, as well as availability of sufficient financial resources to absorb any potential impacts.

# **Climate Change Governance and Responsibilities**

The Group **Board of Directors** (BoD) has the overall responsibility to set the company's sustainability strategic directions and make policy decisions, having placed climate change at the forefront of its sustainability agenda. The BoD reviews climate-related performance at least every year, as part of the risk assessment and for the strategic planning process. The responsibility of monitoring the implementation of the Group's Sustainability strategy is appointed to the **Group Executive Committee** comprised of Executive Directors, the Regional Directors, and other Senior Managers of the Group.



The Chief Sustainability & Innovation Officer has a leading role in the Group's efforts to adapt its products, processes, and business model to the aspirations of carbon neutrality, being responsible for overseeing the implementation of the sustainability strategy. The Group ESG Performance Department is responsible for the consolidation and monitoring of the Group's climate change performance while the Group Decarbonization and Group Engineering & Technology Departments are responsible for conducting and regularly update the decarbonization roadmap as well as oversight of the Group's actions, ensuring accomplishment of the targets.

**All TITAN Group employees** as well as those of TITAN's affiliate companies should be aware of the pledges of this policy and should actively participate in their implementation.

**TITAN's contractors and suppliers,** as well as business partners along the value chain, are expected to be aware of and fully respect the principles of this policy. Their commitment to climate change mitigation is considered as a key consideration and is part of the evaluation criteria in alignment with the Group Procurement Policy.

TITAN Group is utilizing internal carbon pricing in its long-term strategic planning. This approach allows the company to assess the risks and opportunities arising from the GHG regulatory environment and the transition to net zero. A shadow carbon pricing tests the feasibility of capital expenditure and R&D investment decisions and support business cases to shift investments to low-carbon options.

Accountability for delivering results on the Group's ESG targets is enhanced linking CO<sub>2</sub> performance to executive pay. Furthermore, CO<sub>2</sub> reduction targets are linked also to the business unit managers' annual performance appraisal and reward system (salary/bonus).

# **Stakeholder Engagement and Transparency**

TITAN Group endorses the Global Cement and Concrete Association (GCCA) 2050 Climate Ambition, the cement industry's joint effort towards carbon neutrality. Actively participating in global campaigns, like "Business Ambition for 1.5°C" and "Race to Zero" and Industrial Transition Accelerator (ITA), TITAN Group embraces its responsibility to create a planet with zero carbon emissions. TITAN Group collaborates with leading global players across sectors to collectively reshape the industrial landscape, foster climate-related innovation, and accelerate progress towards achieving net-zero emissions.

As a publicly listed company, TITAN Cement International (TCI) is required to comply with strict governance and reporting obligations of the Belgian Corporate Governance Code, the Corporate Sustainability Reporting Directive (EU), the EU Taxonomy Regulation specifically for climate change and the most modern reporting standards. The Group ESG performance statements are audited by independent verifiers.

Together with all our stakeholders, we are committed to finding better ways to build and to enhance the quality of life. We act every day with integrity, empathy, and environmental accountability to shape a brighter future for all. On the



local community level, TITAN Group promotes open dialogue with stakeholders by implementing sustainability initiatives in all countries, as regards climate change mitigation techniques and adaptation measures.

# **Policy Administration**

The Group ESG Performance Department, jointly with the Group Decarbonization Department and the Group Engineering and Technology Department are responsible for the administration and periodical update of this policy. Any revisions that are submitted require approval from the Group Executive Committee.