3B the fibreglass company

UN GLOBAL COMPACT
COMMUNICATION ON PROGRESS

This is our **Communication on Progress** in implementing the principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.

Sustainability Report 2021

www.3B-fibreglass.com

Being an ecologically and socially responsible leader in the glass fibre market is a **pre-condition** for 3B to be successful on the long term

Statement from CEO 1

" We know that sustainable development is a multi-faceted objective. There is no single solution. We have to work on all aspects of our business to achieve solid results. It is both a mindset and a way of working, and our teams are committed to putting it into practice."

After a year 2020 that was off the charts by any measure, 2021 has been a very important year for our industry in terms of sustainability. Supporting our customers who have been facing considerable difficulties due to the COVID crisis, returning to high levels of production, adapting to disruptions of the supply chain, taking care of our workers, organising daily work to limit global warming... It is fair to say that we are now well beyond times of awareness-raising and we have long moved into concrete actions.

In 2021, our teams have continued and intensified their initiatives to significantly reduce CO_2 emissions from our manufacturing sites. A task force is dedicated to this at corporate level and action plans are being rolled out at each site. We know that sustainable development is a multi-faceted objective. There is no single solution. We have to work on all aspects of our business to achieve solid results. It is both a mindset and a way of working, and our teams are committed to putting it into practice. It's an exciting adventure we're on, incredibly challenging, a lot of work, a vital necessity for all of us.

This year 2021 we have formally joined Business Ambition 1.5°C and we are currently defining the Science-Based Targets (SBT) for 3B. By signing up to this initiative and aligning with the net-zero standard, we make our commitment clear and set the bar high.

We are proud about a number of developments, such as the successful recycling of our glass fibre waste into another industry. We are also very enthusiastic about the various renewable energy projects that are now under review and implementation.

Environment is far from the only topic on which we are making progress: the upcoming Corporate Sustainability Reporting Directive and the alignment with the Global Reporting Initiative also drives our work with regard to sustainability governance and human rights.

Making our industry sustainable in the long term is a technical and human challenge. It is also a wonderful and exciting journey that sparks creativity, ingenuity and synergies. I am very proud of the work done so far and look forward to reporting important new developments next year. Well done and thank you!

Sincerely yours,

Ludovic Piraux,
CEO


OPPSTILLINGSPLASS FOR
FERDIGLAGTE VOGNER
KUN ADVANTEX

TABLE OF CONTENTS

Company 2

2.1 3B in a nutshell

[GRI 2-6]

Innovation and entrepreneurial spirit in essence

3B-the fibreglass company is a leading developer and manufacturer of glass fibre products for the reinforcement of thermoplastic and thermoset polymers. They are produced from mineral raw materials, such as silica, which are melted to make glass. Glass is then fiberised. The material consists of extremely fine fibres of glass, or glass filaments, coated with a chemical formulation providing it with specific properties, such as resistance to shocks, high temperatures, fatigue, contact with fluids, etc. Our products are designed in our dedidated research centre in Belgium, and optimised to serve the automotive industry, the wind industry and to be incorporated in performance composites. We operate 3 state-of-the art manufacturing facilities located in Battice (Belgium), Birkeland (Norway) and Goa (India).

Unique knowhow and assets to support our customers

1,000 people work at 3B. Every day we deliver innovative, value creating solutions to our customers around the world. 3B is a human-scale company: through genuine proximity we develop strong partnerships with our customers and offer our people the opportunity to learn and grow within the company. Thanks to a rich heritage in fibreglass development and production that goes back more than 50 years, we can boast an excellent knowhow and innovation capacity, that we place at the service of our customers' growth and development.

Sustainability, a pre-condition of success

Glass fibre is a material of choice to produce sustainable composites, as a long-term solution for material substitution. The growing need for composites is driven by megatrends: the increase of world's population, its urbanisation and connectivity needs, as well as climate change and resource scarcity. 3B operates in an industry that is at the forefront of the sustainability challenges. Among our key customers are some of the world leaders that set the pace for CO2 emission reduction and green energy. By supporting them and by developing a responsible company strategy, we take an active part in the global sustainability endeavour. 3B is a member of the United Nations Global Compact (UNGC) since 20 and adheres to the Business Ambition 1.5 C.

2.2 Company values

At 3B, we consider our people to be the source of our success. We promote a safe workplace, where passion, entrepreneurial and team spirit, trust, respect and integrity are shared amongst all.

Our corporate values are a critical part of who we are as a Company. They are our fundamental beliefs. They guide our actions. They influence the way we work and the way we engage with our customers.

Strength

As the strength of our products reinforces composites applications, the strength of our people makes 3B-the fibreglass company a solid partner thanks to both competence and integrity. We offer dynamic strength to identify potential, leverage opportunities and act with flexibility in a solution-oriented manner.

Reliability

We are fully committed and dedicated to our customers. They can count on us and on our products. With efficiency and discipline, we give our best to deliver consistent top-quality products and services, and meet customer demands. We do what we say. We fulfil expectations and keep promises.

Proximity

With the objective to best meet and exceed our customers' needs, we maintain close relationships with them and build real long-term partnerships. We listen carefully to our partners and endeavour to understand their needs. This human proximity is completed with a geographical proximity with our European customers. And, as our customers expand globally, 3B has developed its international presence to support them with the same service level around the globe. Such a comprehensive proximity allows us to develop value added solutions beyond the product itself and to react quickly to changing needs and challenges.

2.3 Membership associations

[GRI 2-28]

3B is a member of the following industry associations:

At local level, we are member of representative industry associations.

2.4 Stakeholders

[GRI 2-29]

Stakeholders	Issues	Engagement process
Employees & workers	Workplace health and safety Employee Engagement and wellbeing	Employee engagement survey Employee-manager (performance) reviews Union representatives Works Council
Customers	Greenhouse Gas (GHG) emissions Product stewardship Sustainable innovation GDPR	(Pre-)Qualification discussions Customer supplier evaluations Fairs and conferences Customer satisfaction survey
Suppliers	Business ethics	Supplier discussions, negotiations and evaluations
Neighbours	Emissions and pollution	Regular discussions with local communities
Authorities	Compliance Emissions and pollution	Ad-hoc discussions
Financial institutions	Risk management and value creation Business ethics	Ad-hoc discussions
Shareholders	Risk management and value creation Business ethics	Board meetings

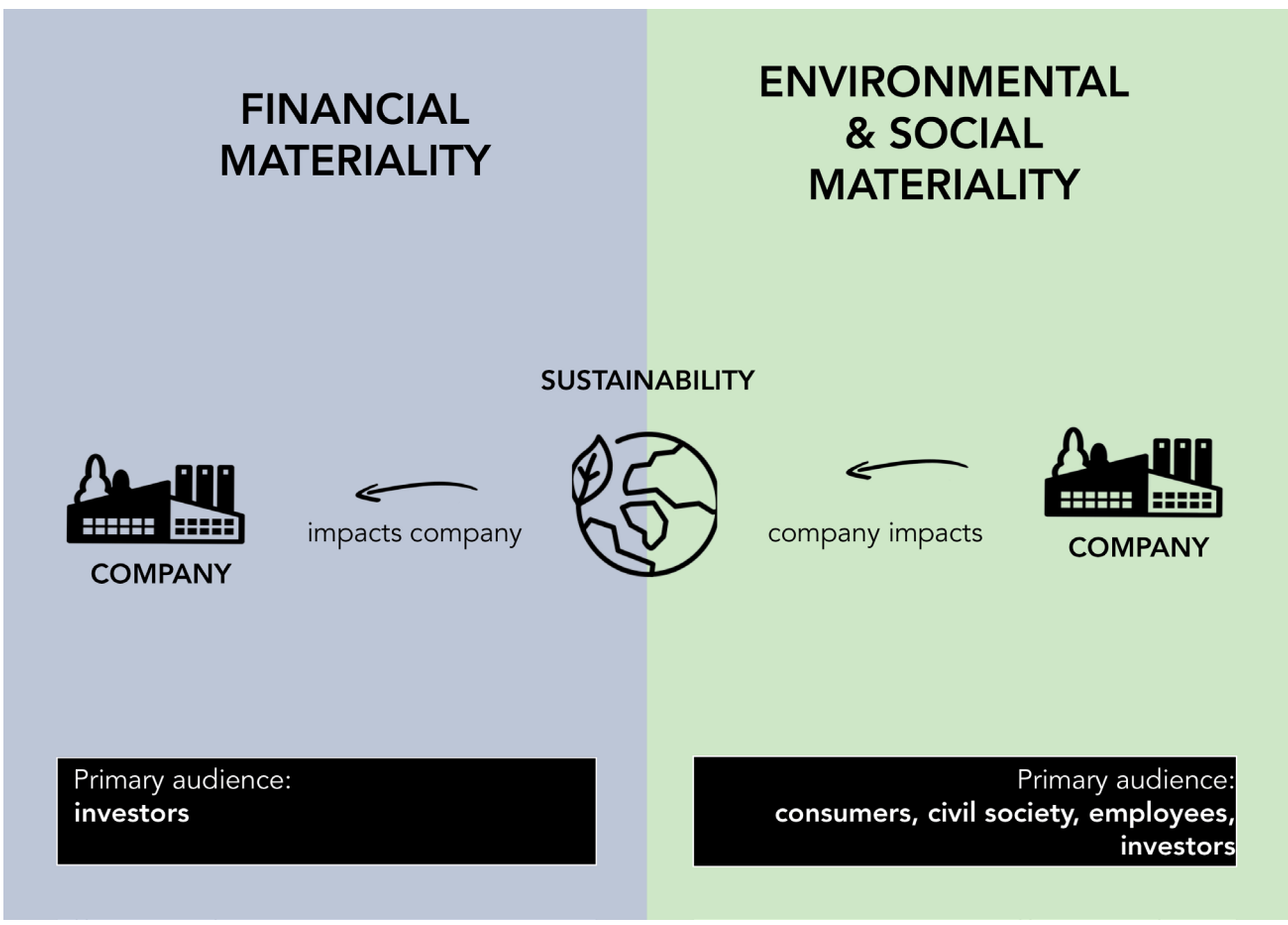
Stakeholders	Issues	Engagement process
Industry associations	Greenhouse Gas (GHG) emissions Business ethics	Regular association meetings
New generations	Greenhouse Gas (GHG) emissions Emissions and pollution	Media

2.3 Materiality

[GRI 3-1]

Material topics are topics that represent the organisation's most significant impacts on the economy, environment, and people, including impacts on their human rights.

When performing the materiality analysis, the double materiality approach has been considered: How is the sustainability impacting me (shared value), What is the impact of my company on my stakeholders?



Markets evolve and value drivers shift. Things that definitely did not count yesterday may make or break an organisation today; while what might be important today may turn out to be irrelevant tomorrow. Therefore 3B aims to review its materiality analysis regularly to ensure that the sustainability strategy is in line with stakeholder expectations.

3B's materiality analysis is thus updated every year based on several stakeholder discussion platforms:

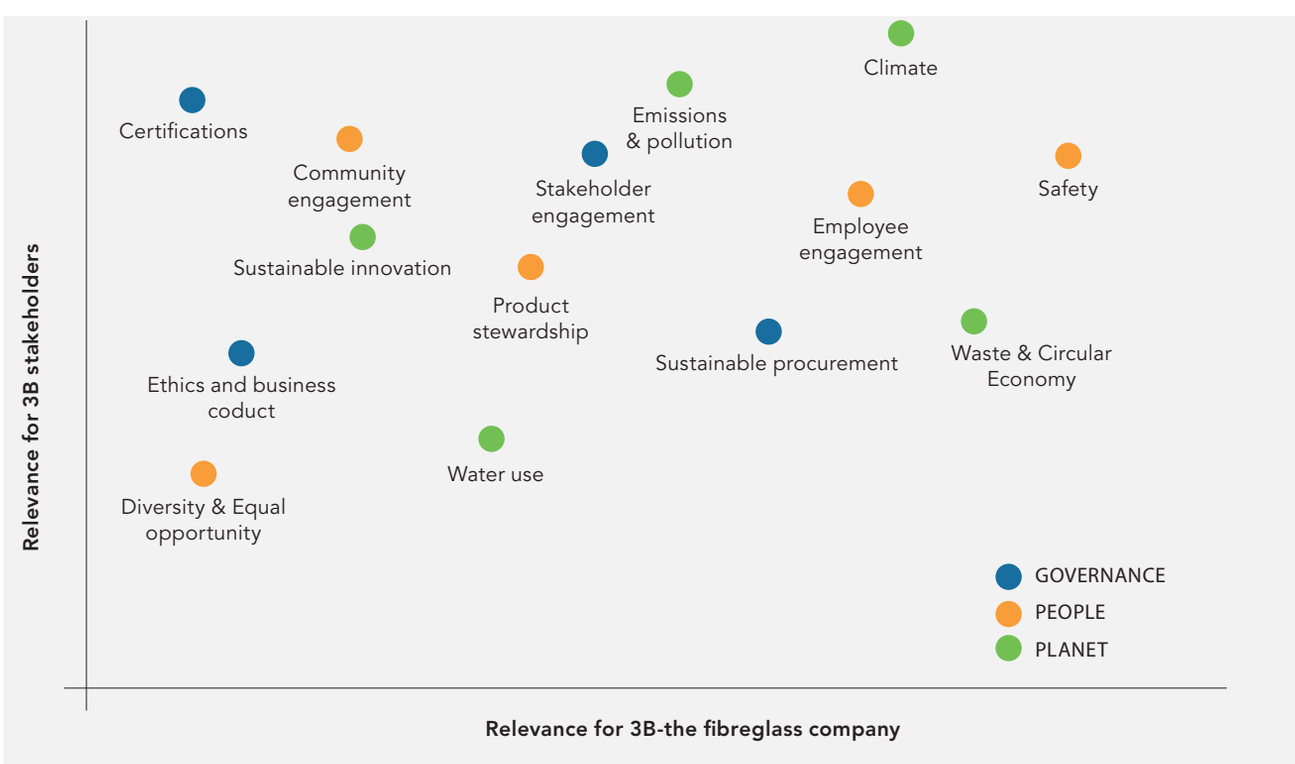
Identification and pre-selection of issues 〉 Evaluation of the significance 〉 Approval of material topics

The evaluation of significance has been realised with the relevant internal stakeholder representatives.

The review of the following standards and guidelines have been used in order to determine the relevant sustainability context:

- United Nations (UN) Sustainable Development Goals (SDG)
- Sustainability Accounting Standards Board (SASB)
- United Nations Sustainable Development Goals (UNSDG)
- United Nations Global Compact principles (UNGC)
- Business Social Compliance Initiative (BSCI)
- SA8000 – Social certification programme
- ISO 26000 – Social Responsibility
- Task Force on Climate-related Financial Disclosure (TCFD)
- Organisation for Economic Co-operation and Development (OECD) guidelines for multinational enterprises
- Global Reporting Initiative (GRI)
- Science-Based Targets initiative (SBTi)
- SBTi net-zero standard

Materiality analysis is given in figure below.



2.4 United Nations Sustainable Development Goals (SDG)

At 3B we contribute to the following Sustainable Development Goals:

UN SDG	SDG indicator	Chapter in Sustainability report
 Ensure healthy lives and promote wellbeing for all et all ages	**3.9** By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination	**4.1** Health and safety **4.3** Product stewardship **5.6** Emissions and pollution
 Achieve gender equality and empower all women and girls	**5.1** End all forms of discrimination against all women and girls everywhere **5.5** Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life	**4.5** Diversity, equal opportunity and inclusion
 Ensure availability and sustainable management of water and sanitation for all	**6.3** By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally **6.4** By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity	**5.4** Water use **5.5** Emissions and pollution

UN SDG	SDG indicator	Chapter in Sustainability report
 Ensure access to affordable, reliable, sustainable and modern energy for all	**7.2** By 2030, increase substantially the share of renewable energy in the global energy mix **7.3** By 2030, double the global rate of improvement in energy efficiency	**5.2** Energy efficiency
 Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	**8.5** By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value **8.7** Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms **8.8** Protect labour rights and promote safe and secure working environments for all workers	**3.2** Sustainable procurement **4.1** Health and safety **4.5** Diversity, equal opportunity and inclusion
 Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation	**9.4** By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities	**5.1** Climate **5.5** Sustainable innovation

UN SDG	SDG indicator	Chapter in Sustainability report
 Reduce inequality within and among countries	**10.2** By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status **10.3** Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard	**4.5** Diversity, equal opportunity and inclusion
 Ensure sustainable consumption and production patterns	**12.5** By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse	**3.2** Waste and circular economy (GRI 306-1, 306-2)
 Take urgent action to combat climate change and its impacts	**13.2** Integrate climate change measures into strategies and planning **13.3** Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning	**5.1** Climate
 Conserve and sustainably use oceans, seas and marine resources for sustainable development	**14.1** By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution **14.3** Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels	**5.6** Emissions and pollution

UN SDG	SDG indicator	Chapter in Sustainability report
 Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss	**15.5** Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent extinction of threatened species	**5.3** Waste and circular economy (GRI 306-1, 306-2) **5.6** Emissions and pollution
 Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels.	**16.5** Sustainably reduce corruption and bribery in all their forms	**3.1** Ethics and business conduct

2.5 United Nations Global Compact principles

Area	Principle	Chapter in Sustainability report
Human rights	**Principle 1:** Businesses should support and respect the protection of internationally proclaimed human rights; and **Principle 2**: Make sure that they are not complicit in human rights abuses.	**3.1** Ethics and business conduct **3.2** Sustainable procurement
Labour rights	**Principle 3**: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining; **Principle 4**: The elimination of all forms of forced and compulsory labour; **Principle 5**: The effective abolition of child labour; and **Principle 6**: The elimination of discrimination in respect of employment and occupation.	**3.1** Ethics and business conduct **3.2** Sustainable procurement **4.5** Diversity, equal opportunity and inclusion
Environment	**Principle 7**: Businesses should support a precautionary approach to environmental challenges; **Principle 8**: undertake initiatives to promote greater environmental responsibility; and **Principle 9**: encourage the development and diffusion of environmentally friendly technologies.	**5** Environment
Anti-corruption	**Principle 10**: Businesses should work against corruption in all its forms, including extortion and bribery.	**3.1** Ethics and business conduct

Governance 3

"We are a transparent and accountable company, integrating ethics and social responsibility in our organisation and reporting to the UN Global Compact."

3.1 Ethics and business conduct

Context, Policy and Goals

3B is committed to conducting its business in accordance with applicable laws, rules and regulations and the highest standards of business ethics and ethical conduct, in full respect of people's right to privacy. The way we engage in business relationships must also reflect the company's core values.

Integrity comes from action, not words. Unyielding personal integrity is the foundation of corporate integrity. At the same time, 3B aims to create an environment that allows individuals to excel, be creative, take initiatives, seek new ways to solve problems, generate opportunities, be accountable for their actions and be recognised for their contribution and teamwork.

3B's commitment to ethical and lawful business conduct is a fundamental, shared value of the Board of Directors, management and employees and it is critical for the success of the company. These standards for business conduct provide that senior management and employees will uphold ethical and legal standards vigorously as the company pursues its financial goals, and that honesty and integrity will not be compromised anywhere at any time. These standards are not voluntary but mandatory.

To support this commitment, 3B has a Business Code of Conduct in place.

It reflects the business practices and principles of behaviour expected from each 3B staff member. The Board of Directors is responsible for setting the standards of conduct contained in the Code and for updating these standards as appropriate, to reflect legal, regulatory and societal developments. The Code is intended to provide guidance and help in recognising and dealing with ethical issues and to foster a culture of honesty and accountability. Every employee must read and understand this Code as well as its application to the performance of his or her duties, functions and responsibilities.

Implementation

At 3B a demanding Code of Conduct is the common foundation of people's practices. This reference document has evolved over time to always reflect current practices and issues. An explicit reference to the Code of Conduct is included in each new employee's employment contract. When joining the company, employees thus commit to the Code.

For those already employed, the Code is circulated and discussed when significant amendments are made. We have also put a routine in place, so that all our staff is invited to review the document every 3 years. This process ensures that all have an up-to-date and in-depth knowledge of its principles.

The last major update of the Code introduced the principles of the General Data Protection Regulation (GDPR), applying to all 3B staff members in all 3B locations. This dimension was also integrated in the 3B Supplier Code of Conduct, so that we can support a wider compliance with the principles of the GDPR as well. This formal expression is supported by an action plan to ensure compliance and help our staff to integrate the appropriate working habits when dealing with personal data.

3B's Business code of conduct is thus a living document that develops over time and takes new practices and tools into account and addresses the sensitivities of all stakeholders. As a matter of fact, the current version of the Code clarifies the accepted use of digital communication tools within the company, as well as the expectations of the company vis-à-vis its staff members when it comes to access to data. In 2021 no addition was made to the Code.

3B engages with its stakeholders to identify and address concerns related to human rights. Special attention is given to certain stakeholder groups such as employees, business relations (and their employees) and the local communities in which 3B operates. More information on how we engage with our suppliers on these matters is provided in the chapter below. Community engagement activities can be found in chapter 4.2 below.

Performance measurements - Objectives

3B will continue improving awareness of the Code of Conduct and its principles through regular communications.

Adherence rate

2018	2019	2020	2021
76%	86%	90%	91%

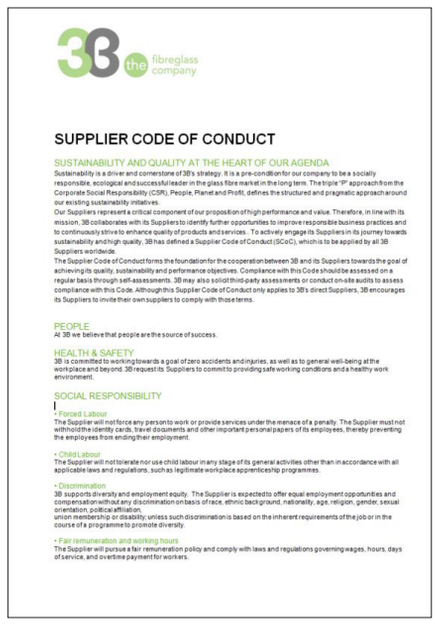
3.2 Sustainable procurement

Context, Policy and Goals

Our suppliers represent a critical component of our proposition of high performance and value. Therefore, in line with its mission, 3B collaborates with its suppliers to identify further opportunities to improve responsible business practices. To actively engage its suppliers in the journey towards sustainability, 3B has developed a Supplier Code of Conduct, which is to be applied by all 3B suppliers worldwide. The Supplier Code of Conduct forms the foundation for the cooperation between 3B and its suppliers in order to achieve its quality, sustainability and performance objectives.

Our Supplier Code of Conduct is available from our website[4].

We have also developed a structured monitoring of our suppliers' activities.



3B the fibreglass company

SUPPLIER CODE OF CONDUCT

SUSTAINABILITY AND QUALITY AT THE HEART OF OUR AGENDA

Sustainability is a driver and cornerstone of 3B's strategy. It is a pre-condition for our company to be a socially responsible, ecological and successful leader in the glass fibre market in the long term. The triple "P" approach from the Corporate Social Responsibility (CSR), People, Planet and Profit, defines the structured and pragmatic approach around our existing sustainability initiatives.

Our Suppliers represent a critical component of our proposition of high performance and value. Therefore, in line with its mission, 3B collaborates with its Suppliers to identify further opportunities to improve responsible business practices and to continuously strive to enhance quality of products and services . To actively engage its Suppliers in its journey towards sustainability and high quality, 3B has defined a Supplier Code of Conduct (SCoC), which is to be applied by all 3B Suppliers worldwide.

The Supplier Code of Conduct forms the foundation for the cooperation between 3B and its Suppliers towards the goal of achieving its quality, sustainability and performance objectives. Compliance with this Code should be assessed on a regular basis through self-assessments. 3B may also solicit third-party assessments or conduct on-site audits to assess compliance with this Code. Although this Supplier Code of Conduct only applies to 3B's direct Suppliers, 3B encourages its Suppliers to invite their own suppliers to comply with those terms.

PEOPLE

At 3B we believe that people are the source of success.

HEALTH & SAFETY

3B is committed to working towards a goal of zero accidents and injuries, as well as to general well-being at the workplace and beyond. 3B request its Suppliers to commit to providing safe working conditions and a healthy work environment.

SOCIAL RESPONSIBILITY

• Forced Labour

The Supplier will not force any person to work or provide services under the menace of a penalty. The Supplier must not withhold the identity cards, travel documents and other important personal papers of its employees, thereby preventing the employees from ending their employment.

• Child Labour

The Supplier will not tolerate nor use child labour in any stage of its general activities other than in accordance with all applicable laws and regulations, such as legitimate workplace apprenticeship programmes.

• Discrimination

3B supports diversity and employment equity. The Supplier is expected to offer equal employment opportunities and compensation without any discrimination on basis of race, ethnic background, nationality, age, religion, gender, sexual orientation, political affiliation, union membership or disability; unless such discrimination is based on the inherent requirements of the job or in the course of a programme to promote diversity.

• Fair remuneration and working hours

The Supplier will pursue a fair remuneration policy and comply with laws and regulations governing wages, hours, days of service, and overtime payment for workers.

Implementation

Sustainability and social responsibility are important elements in our supplier selection process (supplier pre-qualification and evaluation forms, supplier audit questionnaire).

Supplier performance on the supplier CSR survey is reflected in the overall yearly supplier evaluation performance and allows us to track suppliers that need to be followed up more closely to improve their CSR performance.

As part of our carbon neutrality programme initiated in 2020, we plan to work hand in hand with our mineral raw material suppliers to track and reduce their carbon footprint which constitutes an important part of our carbon footprint.

The corona crisis and the resulting global material scarcity crisis has caused important delays in the sustainable procurement programme.

For the coming years 3B has foreseen the following sustainable procurement action plan:

- Regular trainings on CSR to sourcing teams
- Improvement of the OH&S screening of (sub-) contractors
- Improve CSR supplier survey response rate
- CSR supplier risk assessment and due diligence process
- Training for specific at-risk suppliers

[4] https://www.3b-fibreglass.com/sites/default/files/documents-files/210630_3b_supplier_code_of_conduct_website.pdf

Performance measurements - Objectives

A detailed supplier Corporate Social Responsibility (CSR) survey was realised in 2019. The survey covered topics about labour and human rights, environment, sustainable procurement, business ethics. The results of the survey provided us with a good landscape of the CSR maturity of the different suppliers.

Results of the survey are given below. Suppliers with poor CSR performance are contacted for improvement request. Suppliers that did not respond to the survey will see an impact in their supplier evaluation from 3B. Our team will ensure a closer monitoring for them. Among 3B's motivations in conducting such an in-depth survey and related actions is our aim to improve visibility of the carbon footprint of our suppliers and encourage them to reduce it.

Sustainable procurement	2016	2019
Signature of Code of Conduct or compliance with its principles	31%	78%
CSR survey response rate - Battice - Birkeland - Goa	-	 38% 39% 17%
OHSAS 18001 - ISO 45001 certification of suppliers	-	17.5%
ISO 14001 certification of suppliers	-	32%
Suppliers having specific programmes to reduce energy consumption and GHG emissions	-	31.5%
% of suppliers providing carbon footprint	-	24%

3.3 Certifications

Context, Policy and Goals

Through external certifications we want to assure our customers that our products, systems and organisation are safe, reliable and respect the environment.

Implementation

All our plants are certified ISO 9001, ISO 14001 and ISO 45001.

The CSR performance of our plants is evaluated regularly through the EcoVadis platform. The EcoVadis methodology covers 21 criteria across four themes of environment, fair labour practices, ethics/fair business practices and supply chain. The methodology is built on international CSR standards including the Global Reporting Initiative, the United Nations Global Compact and the ISO 26000.

Performance measurements - Objectives

Our plant in Battice (Belgium) has been assessed regularly and has recently obtained a score of 70 (Gold category) - see table below.

In addition, our plant in Goa (India) achieved a score of 81.52% during a 5S Surveillance audit from Quality Circle forum of India.

Our plant in Birkeland has been assessed by the EcoVadis platform for the first time early 2021. The results are provided below.

Plant	2013	2016	2018	2019	2020
Battice plant	52	67	68	70	70
Goa plant	-	-	57	-	-
Birkeland plant	-	-	-	-	58

People 4

4.1 Health and Safety

Context, Policy and Goals

Our objective regarding health and safety is very clear:

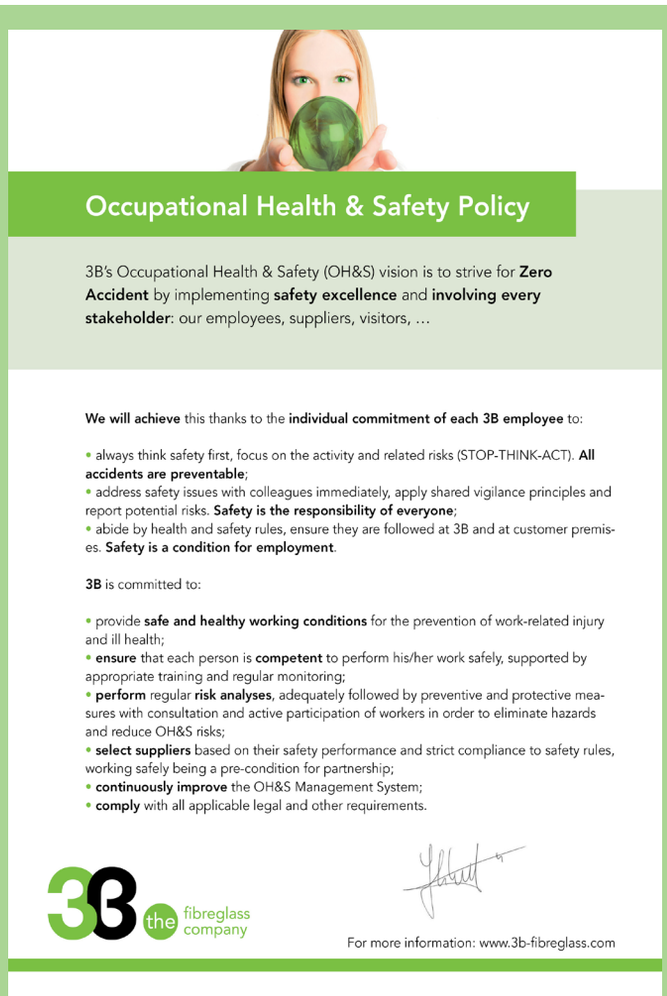
OBJECTIVE = ZERO ACCIDENT

Health and Safety principles are promoted, recognising that all accidents are preventable, that safety is the responsibility of everyone and that working safely is a condition for employment at 3B.

At 3B we make sure the health and safety of our people is at the very heart of our priorities. This principle is translated in actions every day, at all sites, emphasising our commitment to safety.

We have seen it over the last years: safety requires a constant and strong focus from all within the company. But this is only possible if we have clear guidelines, alignment on standards to be followed and if we are able to support each other by learning from the colleagues we are working with every day as well as from what happens at other sites.

Our Occupational Health and Safety Policy offers a synthetic view of our approach and provides a reference framework for each 3B staff member. Local charters focus on site specificities. In 2020 the global charter was reviewed and completed by a reference guide of Safe Work Practices, which are valid for all sites and positions. The guide brings together the operating experience from all our colleagues and highlights long-standing, proven practices. This is a living document by design, so as to incorporate learnings over time.



Occupational Health & Safety Policy

3B's Occupational Health & Safety (OH&S) vision is to strive for **Zero Accident** by implementing **safety excellence** and **involving every stakeholder**: our employees, suppliers, visitors, …

We will achieve this thanks to the **individual commitment of each 3B employee** to:

- always think safety first, focus on the activity and related risks (STOP-THINK-ACT). **All accidents are preventable**;
- address safety issues with colleagues immediately, apply shared vigilance principles and report potential risks. **Safety is the responsibility of everyone**;
- abide by health and safety rules, ensure they are followed at 3B and at customer premises. **Safety is a condition for employment**.

3B is committed to:

- provide **safe and healthy working conditions** for the prevention of work-related injury and ill health;
- **ensure** that each person is **competent** to perform his/her work safely, supported by appropriate training and regular monitoring;
- **perform** regular **risk analyses**, adequately followed by preventive and protective measures with consultation and active participation of workers in order to eliminate hazards and reduce OH&S risks;
- **select suppliers** based on their safety performance and strict compliance to safety rules, working safely being a pre-condition for partnership;
- **continuously improve** the OH&S Management System;
- **comply** with all applicable legal and other requirements.

3B the fibreglass company

For more information: www.3b-fibreglass.com

The OH&S Policy explains clearly what is expected from everyone within the company.

The commitment of each staff member **as an individual**:

- Put safety first with stop-think-act approach to each situation
- Be vigilant for oneself and for collea gues
- Apply rules in all circumstances

The commitment of the company **as an organisation**:

- Provide ad hoc working conditions
- Organise ad hoc training
- Perform risk analyses
- Conduct supplier evaluation
- Engage in continuous improvement
- Ensure legal and technical compliance

The **Safe work practices guide** translates the principles from the policy into common practices. Having the same activities, we are facing the same challenges, we have the same guidelines AT ALL 3B SITES. Relying on a set of common rules, we capitalise on shared knowledge and boost internal collaboration. Each 3B staff member must know, understand and apply the Safe work practices. Each 3B site then provides more detail in their specific implementation in the local context. The Safe work practices guide is a living document reflecting 3B's preventive actions and covering risks encountered at 3B. It tackles 12 transversal themes and provides practical rules for each:

#1 General safety principles
#2 Contact with glass
#3 Traffic
#4 Slips, trips & falls
#5 Risk-based thinking
#6 Protective equipment
#7 Work on powered systems
#8 Confined spaces
#9 Body mechanics & ergonomics
#10 Work at height
#11 Simultaneous operations & co-actvities
#12 Change management

The global OH&S policy and the Safe work practices provide **a shared framework for all 3B people**. They are key elements for further building our safety culture. Moreover, these standards are directly reflected in our relationships with our customers and suppliers.

Awareness-raising, training, coaching and communication actions are carried out every day. Each month we communicate OH&S results to all 3B staff members and comment specific incidents, challenges or achievements.

Implementation

Every year safety programmes are organised in all 3B plants to increase safety awareness and reinforce safety engagement throughout the company, based on shared objectives and principles. In 2021, the preventive measures releted to COVID still had a strong impact on our freedom of action, but we were keen to return to a more normal rhythm for our health and safety promotion activities. We organised face-to-face formulas whenever possible from a sanitary point of view.

The strict measures and the respect of the distances allowed us to work safely, both on a daily basis and during the safety days. As a matter of fact, we did not record any major outbreaks of contamination within the company. The measures were effective, proportionate and well followed by staff and visitors.

In Battice, the plant teams carried out a safety culture analysis in the course of 2021. This in particular was based on an internal survey on the level of knowledge of the principles and actions taken to improve safety and the associated behaviours, as well as on the level of commitment of individuals. The results of this survey and the analyses formed the basis of a new safety strategy for the site, which will be implemented over the next five years. This covers not only rules and practices for all staff members active on the site, but also specific action plans for each department to take into account their specific health and safety needs. Safety trainings and safety days organised in 2021 already reflected this approach.

Next to the Battice plant is 3B's Science & Technology that houses the company's R&D centre and head office. It is home to both technical and scientific teams who handle equipment and products that require special expertise and safety measures, as well as office staff. All of them must apply the same safety standards. Safety promotion activities in this building take into account these varied profiles. Each year, a safety week is held to provide a wide range of training and awareness-raising activities. In 2021, the safety week focused on the management of risks specific to laboratories on the one hand, and on the other hand, on the lessons that professional safety practices can bring to safety in everyday life, especially at home, with the family, thus reinforcing the safety commitment at work…

In Goa, the plant safety week coincides with the Indian national safety celebrations, always scheduled in March. In 2021, the red thread of the Safety week in Goa was: "Learn from disaster and prepare for a safer future". Among the key concepts which were extensively illustrated and worked on by the Goa teams was the "LOTOTO": we go one step farther than the classic LOTO, by associating it with a specific person. The traditional rangoni programme brought out a lot of creativity as usual. The creations presented reflected the concerns of the staff: of course COVID and the need to apply good measures, personal protection, threats to the climate....


Maintain 3-Points
contact when getting
on and off a Forklift
1
2
3


Save Water
Save Earth

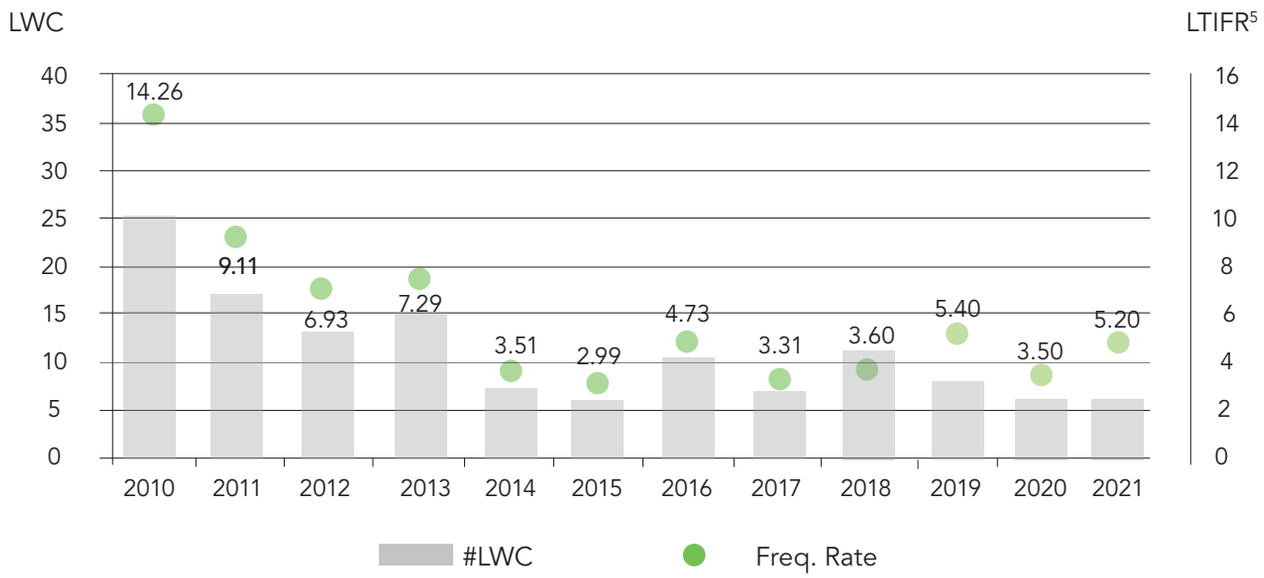

DONT MAKE US ASK
WEAR A MASK

Performance measurements - Objectives

We strongly believe in a safe work environment and we need to relentlessly focus with 100% concentration on the task.

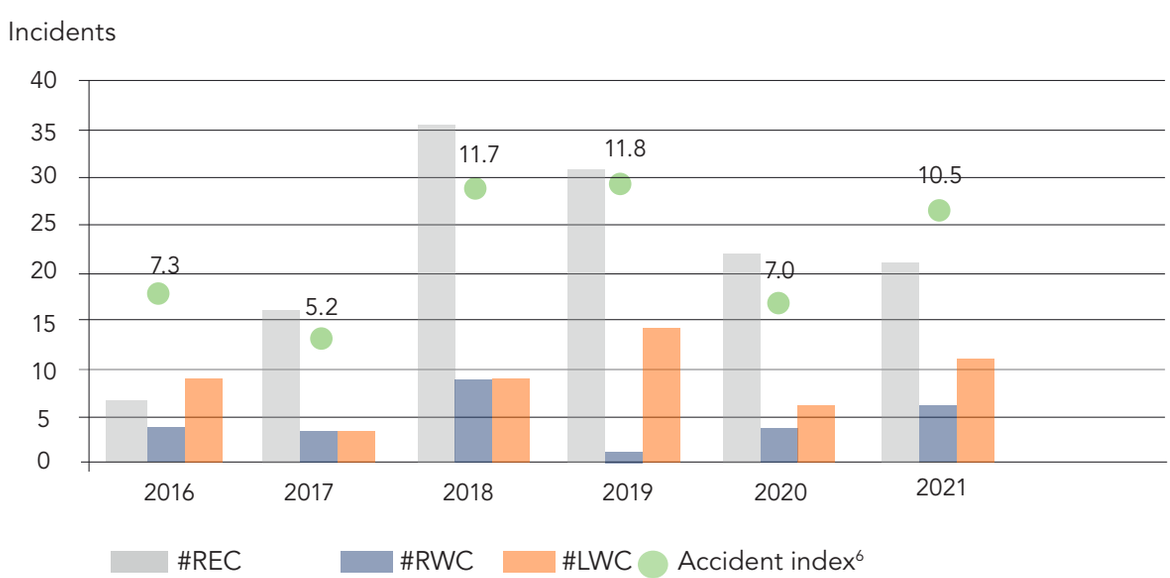
However, safety results had been plateauing and even slightly deteriorating the last years.

Evolution LWC and LTFR



In order to reflect the importance of all severe injuries, we are using a compounded indicator (Accident Index) including all accidents with injuries requiring medical treatment (Recordable injuries - REC).

Evolution Accident Index



[5] LTIFR = Lost Time Injury Frequency Rate = #LWC*1000000/Manhours worked. TRIFR = (REC + RWC + LWC) * 200000/Manhours worked

[6] Accident index = 60%*Lost Workday Case (LWC) + 30%*Restricted Work Case (RWC) + 10%* RECordable injury (REC)

3B Safety indicators	2015	2016	2017	2018	2019	2020	2021
Accident index	9.2	10.7	8.8	11.7	11.8	7.0	10.5
Engagement survey - % of our people that believe all necessary measures are undertaken to ensure their safety	82%	82%	87%	82%	94%	-	90%
Lost Workday Cases (LWC)	6	11	7	9	14	6	11
Lost Time Injury Frequency (LTIFR)[5]	-	4.73	3.31	3.6	5.4	3.5	5.2
Total Recordable Injury Frequency Rate (TRIFR)[5]	-	1.9	2.3	4.8	4.0	3.7	3.6

Every year, the company conducts an engagement survey: people are asked if they believe that all necessary measures are undertaken to ensure their safety. Actions are organised considering the comments from those who answered "No" to this question. These actions come in addition to the ongoing initiatives to reinforce our safety culture everywhere within the company.

[5] TRR = (REC + RWC + LWC) * 200000/Manhours worked

4.2 Community engagement

Context, Policy and Goals

Our plants are important economic players in the regions where they operate. Strong links exist with the local population and authorities. In Battice (Belgium) the plant began operations in 1966, more than 50 years ago. The Birkeland plant started in 1971 and that of Goa in 1996. Throughout these years, the plants have developed and hundreds of people have been working there. 3B therefore believes that the company has a strong responsibility towards local communities. The company's approach focuses on safety and health issues as these are areas where we believe our experience and contribution are most relevant and legitimate.

Implementation

At all 3B sites, relationships with the community have been patiently built over the years, both to inform people about our activities, environmental footprint, projects, and to share our expertise and carry out preventive activities on safety and health related topics.

At all 3B sites, relationships with the community have been patiently built over the years, both to inform people about our activities, environmental footprint, projects, and to share our expertise and carry out preventive activities on safety and health related topics.

This year again, the COVID pandemic forced us to limit our community activities and direct interactions. However, several initiatives have been implemented and in all our 3 countries, collaboration with local authorities and emergency services has proven very important.

In Battice, as part of our action plan to reduce our CO_2 emissions and to reach carbon neutrality by 2050, we have requested a permit to install a wind turbine near our facilities to partially power our plant. This project has been the subject of numerous exchanges with the local authorities and the local population. 3B organised prior information for the local population before submitting its permit application and mobilised the press to ensure that the information was widely disseminated. During the period of legal consultation of the population, when the pandemic did not allow the safe organisation of gatherings of people for public information sessions for example, we opened a web page dedicated to the project as well as a hotline. A lot of communication went through these channels. A question-and-answer session via teleconferencing was also brought together the various interested parties, who were able to ask their questions and express their opinions. Although the project did not receive authorisation and could not be implemented, the exchanges with the community enabled us to identify new information needs among the local community.

Performance measurements - Objectives

3B will continue its involvement and engagement towards the communities around the plants.

4.3 Product stewardship

SDG 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

Context, Policy and Goals

For 3B product stewardship means:

- having the responsibility to make health, safety and environmental protection an integral part of all daily work;
- ensuring that adequate EH&S information is available to assess the health and safety hazards of each product for its intended uses;
- having a product stewardship policy based on risk prioritisation;
- ensuring that product stewardship is engaged in product/process design and improvement processes;
- ensuring that customers receive appropriate product stewardship information.

Implementation

The following product stewardship strategy is in place:

- presence of a dedicated regulatory and product steward;
- development of a regulatory policy defining the rules that we want to follow when we develop a new product and/or when regulation changes modify the safety aspect of our current product portfolio;
- continuous and proactive monitoring of the regulatory status of all our sizing ingredients and substitution project launch when appropriate;
- clear and complete regulatory support provided to our customers as well as Sales & Marketing team concerning chemical risks related to our products;
- implementation of a regulatory management system (Safety Datasheet management, regulatory watch and reviews, …);
- in-depth chemical risk and industrial hygiene review for all sizings (for lab development and industrial purposes);
- active partnership with Business, Sales & Marketing, Supply Chain and R&D teams to ensure global regulatory compliance for all products (REACH, food contact, water contact);
- advice to R&D and Business teams on regulatory requirements and regulatory impact during New Product Development Processes;
- monitoring, interpretation and communication of regulatory issues that will impact products and business strategies;

- development and maintenance of effective relationships with various regulatory authorities and certification institutes (CARSO, K&H, …);
- management of ongoing regulatory compliance (REACH, FDA, ...);
- active participation in trade association and industry specific meetings and programmes;
- monitoring and management of emerging issues in the areas of product stewardship, quality, and chemical regulation.

Performance measurements - Objectives

Our product stewardship objectives are:

- ensuring that all harmful chemicals are identified and phasing out action plans are defined;
- ensuring proper follow-up of potentially harmful chemicals;
- phasing out of harmful substances in all our production sites;
- following up on suppliers' contractual obligation to communicate any change and modification in hazards mentioned in safety datasheets;
- ensuring that no safety datasheet is older than 3 years.

4.4 Employee engagement

> "Our people are the source of our success"

Context, Policy and Goals

At 3B, we consider the engagement of our staff to be a key factor for success and sustainability. It is regularly measured, but more importantly, our human resources policy aims to provide everyone with the best possible conditions to function harmoniously on a daily basis and to develop. In our view, it is essential for our staff members to:

- know what is expected from them at work and are being provided regular feedback on their performance and contribution,
- have the information they need to do their job and receive the right level of training,
- understand the company strategy and can develop within it.

Implementation

In order to support a strong and sustainable company culture as well as engagement, 3B provides staff members with **regular information** about the life of the company and its results, the opportunities that are open to it, the evolution of our markets, etc. Various channels are available (intranet, quarterly communication session, meetings, posters, etc.) and the company ensures that regular exchanges are held within the teams, particularly for deskless staff who can be more remote from digital communication tools. A network of boards exists within our factories, as a place for privileged exchanges on production performance, quality and safety. Daily meetings are held, bringing together representatives of different groups of people and allowing for continuous dialogue. In parallel to this organisation, any question can be asked openly, either by going to one's direct supervisor, or by contacting site or corporate management, or by using the existing open and anonymised communication channels.

The company culture is also supported by our **Successful Behaviours programme**. It promotes 9 critical behaviours that are part of our DNA to build a positive and sustainable future for our company. 4 main objectives are the foundation of the programme: Build trust, Deliver results, Stimulate innovation and Give recognition.

The Successful Behaviours programme is applied at corporate level, and all employees are involved. The 9 behaviours are now part of our performance management system, as they are useful guides in daily work life as well as in performance reviews. Newcomers are exposed to Successful Behaviours during their induction programme and concrete examples are provided in order help them relate the successful behaviours to daily activities at work.

On the other hand, we run a survey to **assess the level of engagement** of our teams as well as their perception on various topics such as:

- the general feeling of employees vis-à-vis the company,
- the effectiveness of the communication within the company,
- their sense of belonging and what impacts it,
- the level of understanding of the vision, strategy and main objectives of the company,
- the commitment to our values.

This survey is an additional opportunity for all staff members to express themselves. It is anonymous. Based on the outcome of the survey, plans are established to continuously improve at corporate level, site level and within departments and teams. The survey cycle has been extended to 2 years in 2021 to allow for a richer and longer term analysis and implementation of actions.

Performance measurements - Objectives

After the year 2020, heavily impacted by the COVID pandemic, the 2021 Engagement survey delivered positive engagement results, with a global engagement score of 4.08/5. Most aspects measured via this survey are on an upward trend.

Engagement survey	2016	2017	2018	2019	2020	2021
The understanding of the vision, the strategy and the main objectives	4.01/5	3.91/5	3.94/5	4.08/5	-	4.00/5
The way our values are experienced within the company	3.80/5	3.72/5	3.79/5	3.92/5	-	3.98/5
The effectiveness of our communication	3.49/5	3.42/5	3.42/5	3.55/5	-	3.62/5
The overall satisfaction level vis-à-vis 3B as an employer	7.4/10	7.2/10	7.13/10	7.49/10	-	7.75/10
Overall engagement score	3.83/5	3.82/5	3.90/5	4.05/5	-	4.08/5

4.5 Diversity and equal opportunity

SDG 5.5 Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life

SDG 10.2 By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status

SDG 10.3 Ensure equal opportunity and reduce inequalities of outcome, including by eliminating discriminatory laws, policies and practices and promoting appropriate legislation, policies and action in this regard

Context, Policy and Goals

As an international company, we see every day that the teams that bring together people of different profiles, origins or ages are dynamic and innovative. Indeed, each individual brings his/her own experience, his/her own perception and enriches the work of all. Between the different locations of the company, temporary exchanges are frequent and particularly appreciated, both professionally and humanely. Several employees also have the opportunity to go and work in another entity in the longer term, with active support from the company.

3B sees diversity as an advantage and a benefit.

Implementation

At 3B we aim to have a corporate culture where gender equality and diversity are compatible with the prevailing model.

We are committed to diversity and equal opportunities and believe that improvement starts with monitoring this diversity and addressing eventual gaps in corporate culture and mindset. At 3B, understanding and working with people from varied origins is part of this culture.

In the coming years, we are planning to make our commitments related to diversity, equality opportunity and inclusion more explicit by publishing a human rights policy. It will cover non-discrimination related to gender, age, religion, race, caste, social background, disability, ethnic and national origin, nationality, membership in workers organisations including unions, political affiliation, sexual orientation or any other personal characteristic. This policy will formalise how 3B ensures that no discrimination occurs, especially in all processes related to hiring, remuneration, access to training, promotion, termination or retirement.

The policy will also describe in practice how we commit to and ensure our compliance with the International Bill of Human Rights (the Universal Declaration of Human Rights, the International Covenant on Civil and Political Rights and the International Covenant on Economic, Social and Cultural Rights) and to the International Labour Organization's (ILO) Declaration on Fundamental Principles and Rights at Work.

Performance measurements - Objectives

Diversity facts and figures at 3B are given in the table below.

3B diversity indicators	2016	2017	2018	2019	2020	2021
Number of nationalities	25	25	25	25	25	25
Engagement survey: "I recognize that the company respects diversity".	3.93/5	3.84/5	3.92/5	4.11/5	-	4.00/5
% of women	14.8%	14.8%	10%	18%	18%	9%
% of women in management teams	10%	10%	12%	12%	13%	14%

“3B is the eco-responsible glass producer”

Environment 5

5.1 Climate

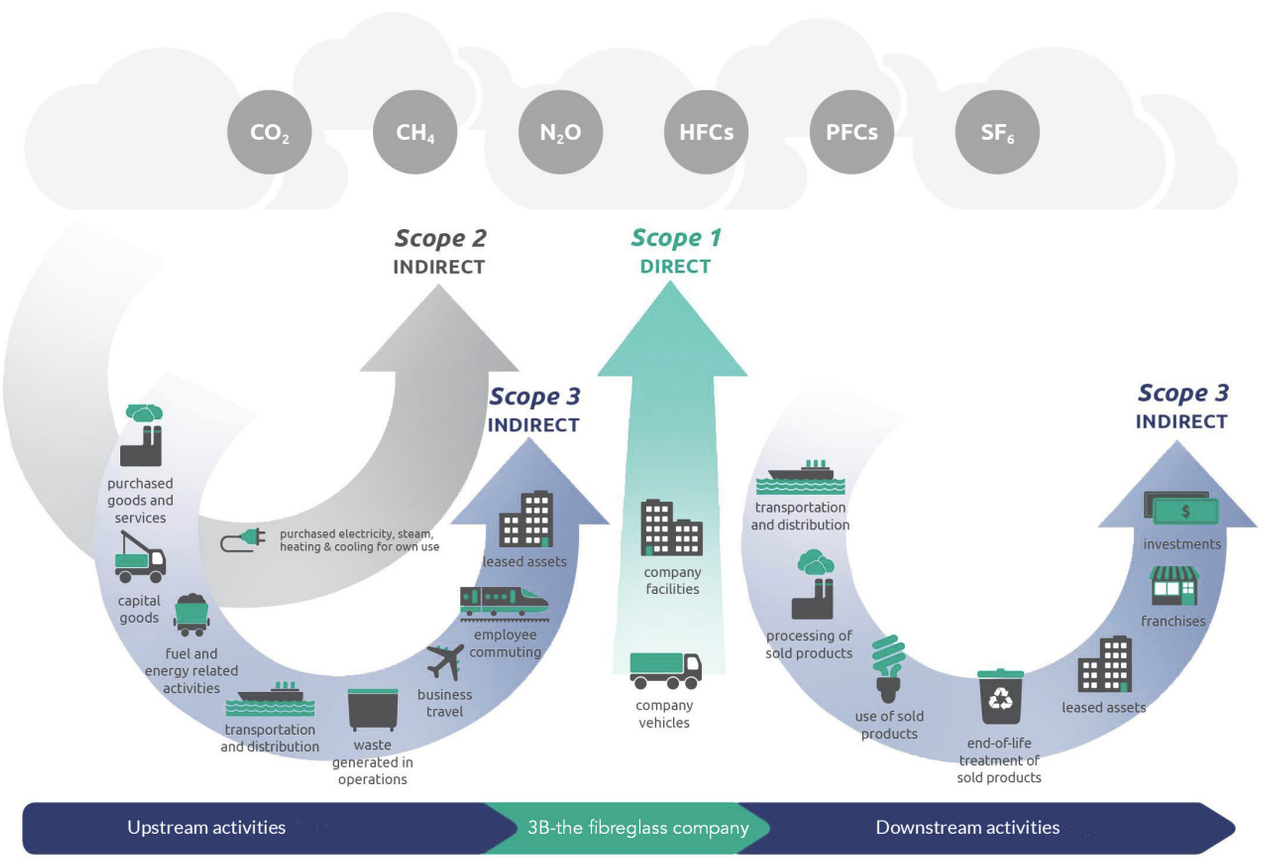
[GRI 305]

Context, Policy and Goals

CO_2 emissions are the major environmental impact of glass fibre manufacturing due to the glass melting process which requires a lot of energy.

As per the Green House Gas (GHG) protocol[7] GHG emissions can be divided in 3 scopes:

- Scope 1: Direct emissions corresponding to emissions related to fossil fuel consumption and de-carbonation of raw material
- Scope 2: Indirect emissions related to purchased electricity
- Scope 3: Indirect emissions related to purchased goods, transport, services



[7] http://ghgprotocol.org

The major hot spots related to GHG emissions for Continuous Filament Glass Fibre (CFGF) are:

- fossil fuel combustion and production,
- decarbonation of mineral raw materials (on-site during melting and upstream in the value chain),
- use of electricity.

These hot spots constitute almost 80% of the carbon footprint[8] .

Other elements of our carbon footprint are:

- transport of raw materials,
- downstream transport,
- mobility.

Implementation, Performance measurements and Objectives

In the continuity of the launch of our company-wide CO_2 carbon neutrality programme in 2020, the following activities have taken place in 2021:

- improved follow-up of energy efficiency in Battice;
- improved CO_2 reduction governance: intra and inter company working groups around CO_2 reduction;
- joined CO_2 Value Europe to build knowledge around Carbon Capture Utilisation & Storage (CCUS) and drive industrial symbiosis in order to optimise the integration of energy systems and promote circular economy;
- joined Business Ambition for 1.5°C and set Science Based Targets;
- participation in multiple conferences to build knowledge about decarbonisation or defossilisation for energy-intensive industries;
- participation in workshops with other European glass fibre producers to join forces for the development of specific breakthrough technologies.

Capitalising on our strong sustainability approach, 3B has a company-wide programme in place to deliver on its ambition to further significantly reduce its carbon footprint in the future.

2020
Start of 3B's carbon neutrality programme

2021
Joining *Business Ambition 1.5°C*

2023
Approved *Science Based Targets*

2030
Achievement *Science Based Targets*

2050
CARBON NEUTRALITY

BUSINESS AMBITION FOR 1.5°C OUR ONLY FUTURE

[8] Cradle-to-Gate: LCA analysis Continuous Filamentous Glass Fibre 5CFGF) Glass Fibre Europe (https://www.glassfibreeurope.eu/sustainability/life-cycle-inventory-impact-assessment/ .

we go for carbon

Direct CO_2 emissions – GHG protocol Scope 1 [GRI 305-1]

Major efforts have been made over the last decades to implement state-of-the-art melting technologies which have resulted in a decrease of direct CO_2 emissions of 43% in 2021 vs 2000.

Corporate GHG emissions index (Scope 1)

Driven by our commitment to join the Business Ambition for 1.5°C, 3B will set ambitious 2030 reduction targets for Scope 1 and 2 by 2023 at the latest.

3B is currently actively studying a whole range of breakthrough technologies in order to be able to achieve considerable Scope 1 CO_2 reduction by 2030 and achieve carbon neutrality by 2050.

Indirect CO_2 emissions (electricity) – GHG protocol Scope 2 [GRI 305-2]

SDG 7.2 By 2030, increase substantially the share of renewable energy in the global energy mix

We strongly believe that switching to greener electricity is the right move to make, not only because it is a key step towards the company's carbon neutrality, but also because we think it is our responsibility towards a cleaner environment.

Reducing CO_2 emissions related to the electricity we consume is a three-track journey:

- improvement of our energy efficiency and reduction of electricity consumption;
- generation of renewable electricity on-site;
- sourcing of renewable electricity off-site preferably through additional Power Purchase Agreements (PPA) or through the purchase of Renewable Energy Certificates (REC).

Power efficiency (on site)	Green power generation (on or near site)	Green power purchase (off site)
Relighting Optimisation of electrical consumption of plant assets Waste heat valorisation	PV farm Windmill Biogas cogeneration	PPA REC

The quantity of renewable electricity use at each 3B site is dependent on its local integration and specific grid.

In Norway, 98% of the produced electricity is of renewable origin. However, according to the Norwegian Water Resources and Energy Directorate (NVE), in 2020 76% of the electricity was purchased in Norway without Guarantee of Origin (GOs)[9]. This results in a much higher market-based emission factor compared to the location-based emission factor[10] , as for our Birkeland site the market-based emission factor is calculated according to the residual European mix[11].

As mentioned above and considering the cost and volatility of the purchase of Renewable Energy Certificates (REC), Guarantee of Origin (GO) in Europe, the purchase of REC will only be done in certain specific cases (customer request) in combination with on-site power generation and Power Purchase Agreements (PPA).

Our Norwegian plant is also a member of the Birkenes Wind Cluster and Wind Innovation Centre, which is supporting the development of a local 85 MW wind farm.

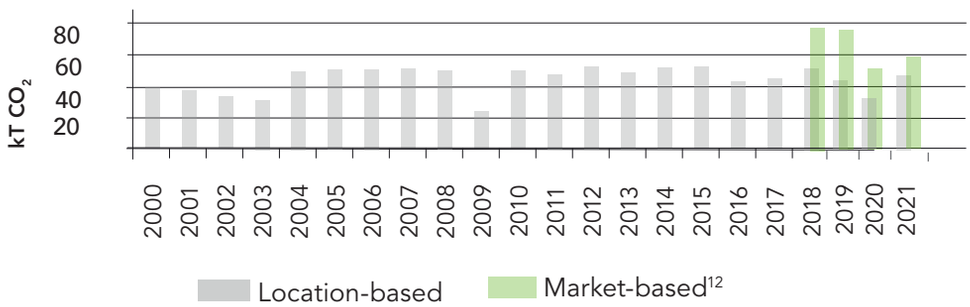
In Belgium, various projects have been launched in order to diversify our energy sources and to increase the renewable energy portion for electricity. The projects that are being considered are:

- the installation of photovoltaic panels on our buildings, parking lots and adjacent fields,
- the installation of co-generation units,
- the relighting of the plant.

As part of 3B's strategy towards carbon neutrality, 3B commits to 100% renewables by 2050 with an interim objective of 60% by 2030.

[9] https://www.nve.no/energy-supply/electricity-disclosure/?ref=mainmenu
[10] https://ghgprotocol.org/scope_2_guidance
[11] https://www.aib-net.org

Corporate GHG emissions index (Scope 2)



Indirect CO_2 emissions – GHG protocol Scope 3 [GRI 305-3]

Scope 3 emissions account for approximately 47 % of the carbon footprint of our products[13].

Important contributors are:

- production of raw materials (batch raw materials, chemicals, fuels, ...),
- transport of raw materials,
- downstream transport.

3B aims to intensify collaboration with suppliers and logistics partners to improve the visibility and accuracy of the carbon footprint of the purchased products and further decrease their CO_2 footprint.

3B also strives to reduce the logistics footprint:

- permanent search for technologies and solutions for new sustainable logistics alternatives around our plants,
- footprint optimisation of road logistics (screening of suppliers based on sustainability criteria, green vehicles, …)
- optimisation of packaging solutions (bulk, higher loading, …)
- optimisation of logistics options (rail, water, heavy liner).

Some indicators related to Scope 3 are given below. We plan to improve the reporting of Scope 3 emissions in line with the SBTi and the GHG protocol in the coming years.

3B mobility indicators	2016	2017	2018	2019	2020	2021
Travel carbon footprint (ton CO_2)	331	206	260	113	14	16
% of electric cars in fleet	-	-	-	-	2%	2%

[12] Market-based emission factor for Birkeland is an estimate.
[13] CO_2 mapping Battice plant

5.2 Energy efficiency

[GRI 302-3, GRI 303-4]

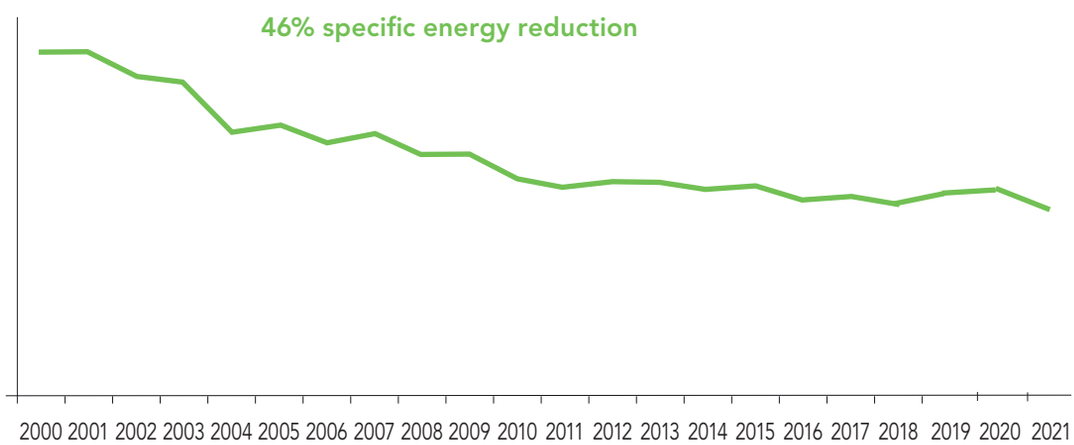
SDG 7.3 7.3 By 2030, double the global rate of improvement in energy efficiency

Context, Policy and Goals

Energy efficiency is critical for environmental as well as financial sustainability of glass fibre producers.

Implementation, Performance measurements and Objectives

All plants have been implementing energy management system principles and our Goa plant is certified ISO 50001. Great energy intensity reductions have been achieved over the last decade. 46% reduction in 2021 compared to 2000.



These improvements were achieved thanks to various ongoing projects:

- improvement of the visualisation of energy losses and mapping of energy flows,
- introduction of new measurement equipment and tools supporting a fact-based analysis related to energy usage,
- creation of an energy team in our plants in Birkeland and Battice, responsible for the systematic follow-up of the energy usage and the identification of the most efficient energy reduction projects,
- improved governance around energy management in our Battice plant, with tracking of losses and higher focus around energy efficiency,
- reduction of power consumption in oxygen plant (plant in Goa)
- introduction of innovative melting technologies (Best Available Techniques)
- reduction of consumption in lighting
- reduction in cooling towers, HVAC, compressors, …

We aim to further reduce our energy consumption by:

- further engaging productivity initiatives,
- making a step change with furnace rebuilds,
- improving monitoring of energy losses and implementing energy consumption reduction programmes,
- implementing energy management systems.

5.3 Waste and Circular Economy

Context, Policy and Goals

[GRI 302-3, GRI 303-4]

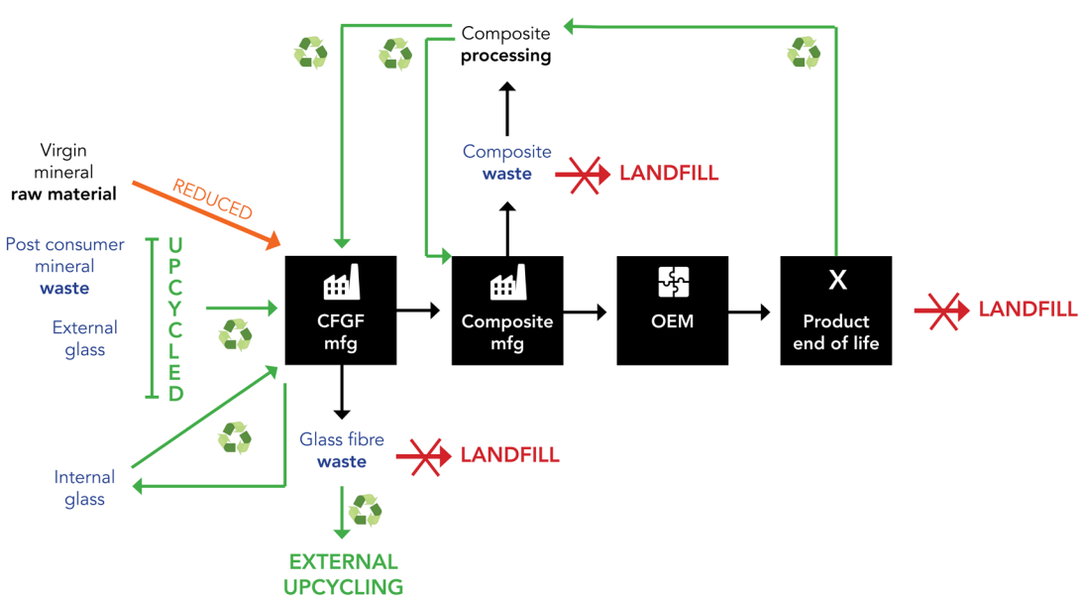
SDG 12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse

The most efficient way of doing circular economy is to avoid using or generating any excess material (waste, by-products, …), energy or water! This is why resource efficiency (energy efficiency, chemical efficiency, water use efficiency…) and productivity are always top priorities at all times (REDUCE).

As per the waste hierarchy pyramid, when the production of waste is unavoidable, recycling should be considered in the first place in order to reduce our environmental footprint related to raw material consumption (impact on resource scarcity) and reduce our glass waste (impact on land use by landfilling). 3B has put a lot of focus on suppressing landfilled glass waste with the objective of reaching ZERO glass landfill.

The internal recycling of glass waste in Continuous Filament Glass Fibre (CFGF) furnaces is very challenging due to the specificities and sensitivity of the process. The very small diameter of the filaments requires raw material of high purity in order to avoid breakages in the filaments, which in turn decrease productivity and generate waste. This is especially the case in our Battice plant, where products with a very small diameter are manufactured. However, investigations are ongoing.

Looking **upstream of our value chain** (see 3B's circular economy material ecosystem in figure below), 3B's long-term vision is to use pre-post-consumer mineral waste and external glass waste to replace virgin raw materials in order to **reduce our material footprint** (SDG 12). Besides, a positive collateral effect of glass recycling and raw material reduction is the overall reduction of CO_2 emissions (Scope 3) over the product life cycle. Note that, as mentioned earlier, using recycled materials in our furnaces is a major challenge as this can potentially cause a decrease in productivity and the generation of additional waste, which we want to avoid by all means.



Implementation, Performance measurements - Objectives

Glass fibre by-products used to be landfilled in the past and still constitute a major environmental impact for our plants.

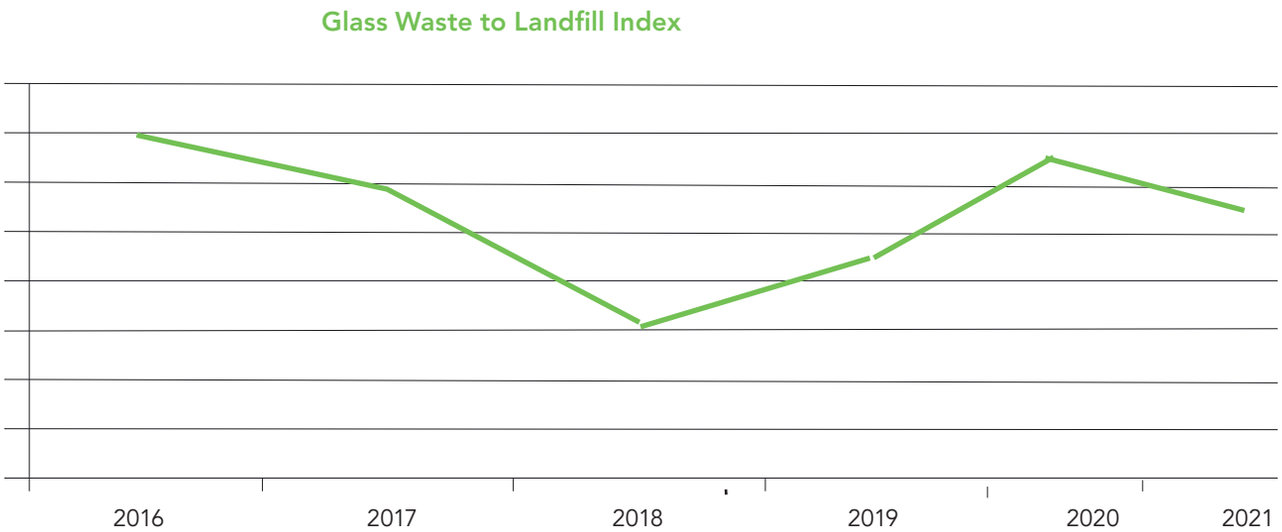
In Goa, 100% of the glass waste is upcycled in other industries and in Battice and Birkeland several projects are going on.

In order to find a sustainable alternative to landfill, 3B has launched a "Zero Glass to Landfill" project in 2017 in order to upcycle its by-products. Value creation through waste recycling and upcycling is the main objective of our "Zero Glass to Landfill" project.

Great efforts have been made earlier in Battice to reduce the amount of glass waste going to landfill. In 2018, these efforts resulted in a reduction of 80% (vs 2016). The last years we struggled to maintain economically sound upcyling solutions. Considering the upcycling costs, it is often more expensive for our off-takers to use secondary materials than using virgin raw materials.

In order to continuously drive down the waste to landfill globally and reduce the material footprint, we cannot emphasise enough that the shift from a supply-driven market to a customer-driven (upcycling) market is crucial as well as the integration of a lifecycle and holistic approach in product and process design. In Goa "Zero-Glass-to-Landfill" has already been achieved since many years thanks to the existence of a market for by-products.

In 2021, we finally concluded a robust waste recycling contract in Battice, covering the vast majority of our glass waste. In Birkeland several projects are on the radar and in the coming years internal recycling will also be started again.



ULTIMATE OBJECTIVE = ZERO GLASS TO LANDFILL

With regard to our circular economy material ecosystem (see figure p46), 3B is currently involved in several projects related composite recycling:

- characterisation of the fibres after treatment of the composite (by pyrolysis or solvolysis) for potential re-use in our furnaces or immediately into composites;
- development of economically realistic processes for recycling carbon and glass fibre thermoset composites into new, highly performant materials:
  - development of 3R (Repairable, Reusable, Recyclable) dynamic resin (vitrimer) and the related process by assessing the interaction between glass fibre and resin before and after recycling;
  - participate to manufacturing trials on low complexity parts for the recycling processes;
  - if necessary, rework sizing chemistry to make it compatible with the 3R resin.

5.4 Water use

[GRI 303-1, GRI 303-3]

SDG 6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity

Context, Policy and Goals

Due to climate change, water scarcity becomes more and more prevalent for our sites.

Water scarcity occurs where there are insufficient water resources to satisfy long-term average requirements. It refers to long-term water imbalances, combining low water availability with a level of water demand exceeding the supply capacity of the natural system. In the future it is likely that predicted climate change will exacerbate this situation. A combination of less precipitation and higher temperatures will further reduce the amount of water available and economic impacts will highly affect several sectors. Low water availability and droughts have severe consequences on most sectors, particularly agriculture, forestry, energy, and drinking water providers[14].

Belgium is the third most water-stressed country among the nine European countries that can be considered water-stressed[14]. India is also considered to be a country with very high water stress, mainly due to the lack of access to safe water.

[14] https://www.eea.europa.eu/themes/water/featured-articles/water-scarcity

Implementation and Performance measurements

50% of the used municipal water is recycled in Battice and Goa (cfr. GRI 303-3). Both plants are permanently striving to optimise their waste water treatment plant in order to improve the recycling rate and decrease the municipal water use.

In Birkeland a high quantity of water is withdrawn from groundwater for cooling purposes. The outcoming hot water is delivered to the municipality afterwards for district heating.

3B water use indicators	2019	2020	2021
Volume of water withdrawn - Municiplaity (m^3) - GRI 303-1	607,843	403,692	555,700
Volume of water withdrawn - Groundwater (m^3) - GRI 303-1	2,190,000	2,102,400	2,190,000
Volume of water recycled (m^3)[15] - GRI 303-3	40%	62%	50%
Specific water use (m^3/ton product)	4.7	4.6	4.9

Objectives

Our objectives relating to water use for the coming years are:

- improvement of the performance of our waste water treatment plants (WWTP) and increase of the recycling rate in all plants,
- improvement of people awareness on water scarcity and water use reduction.

[15] Municipal water only. Withdrawn groundwater is used for cooling purposes and hot water is provided to the municipality afterwards.

5.5 Sustainable innovation

Context, Policy and Goals

3B works towards improving the performance of its products by creating sustainable added value and by supporting them in their growth strategies.

Most of the projects that 3B is supporting fit in one of the following 3 categories : Productivity, New Product for Automotive and Wind and Product Stewardship.

Productivity: innovation projects that improve productivity have an important impact on the sustainability performance by using less resources (raw materials, energy, water) and reducing the amount of air-water emissions and waste to produce the same quantity of finished good.

New Product for Automotive and Wind: Glass fibre products are key contributors for the components in the automotive and Wind market. The need for environment sustainability is calling for lighter vehicle, electrical vehicle, more efficient wind blades, recycling... This means that the whole supply chain always needs to target leading-edge innovation programmes.

Product stewardship: Driven by our product stewardship policy and international regulatory standards (REACH, …), we proactively seek to replace substances that are potentially harmful for customer health, employee health and safety and/or environment.

Implementation

Sustainability is integrated in the programme for new solution development at 3B.

The sustainability performance of new solutions is evaluated against three dimensions:

People

We evaluate the impact of the project on the health and safety of the people. The impacts could be internal when we consider our workers, or external if we consider our customers' workers, and it could also integrate the impact on final consumers.

Planet

We consider the impact of the project on the Planet on a broad sense, focusing on both resource consumption and emissions, internally or externally, from our customers down to the end users. "Emissions" includes air-water emissions and waste; "Consumption" refers to resource efficiency of water, energy and all raw materials.

Profit

In order to be sustainable, we need to develop innovative solutions that bring value not only for our company but also for our customers.

Those three dimensions are rated according to objective criteria. A Sustainability Matrix can then be drawn as shown below. Each project is illustrated by a bubble and position into the matrix. The size of each bubble is related to the financial impact it should have on 3B.

A project is considered to contribute positively to our sustainability objectives when it is positioned in the top right triangle of the matrix.

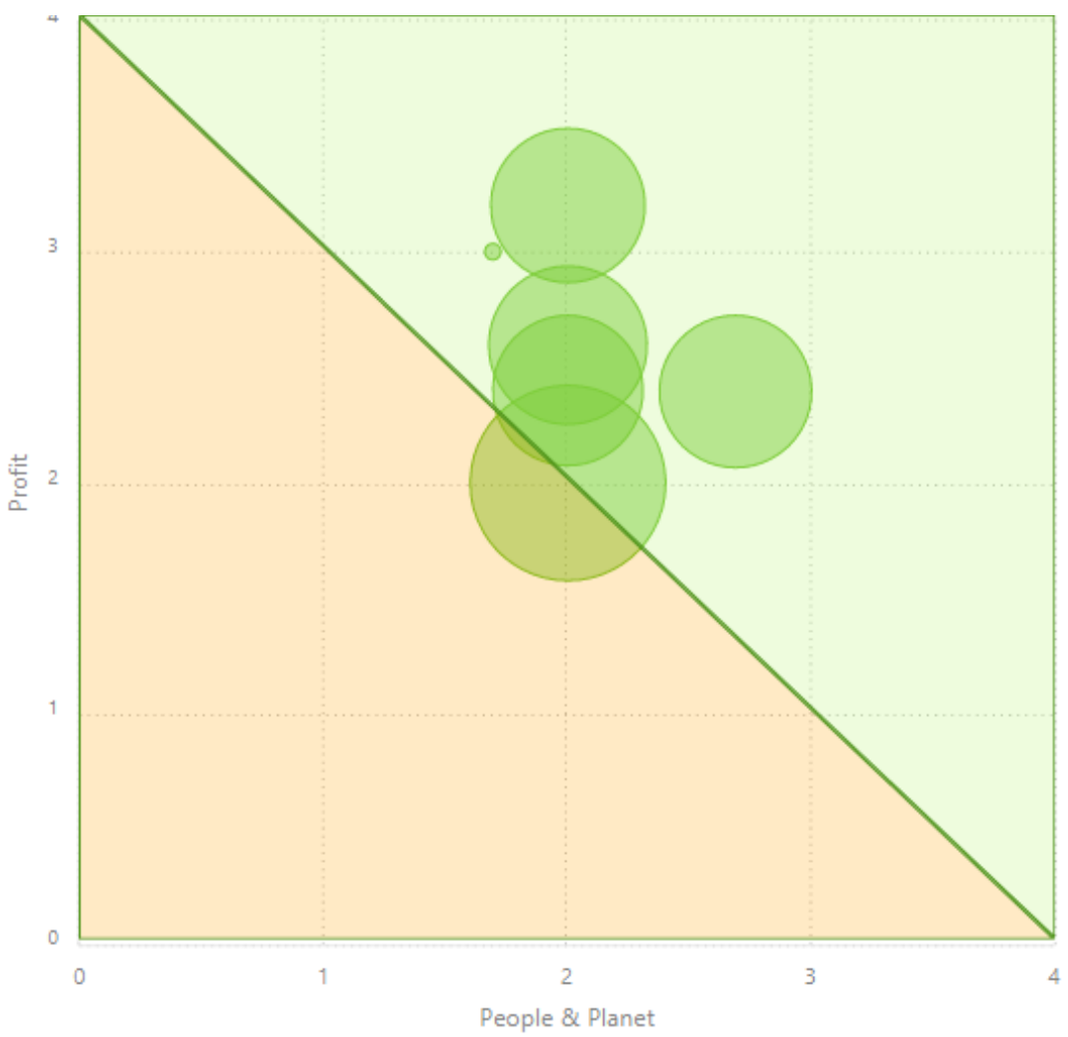
Performance measurements - Objectives

The Sustainability Matrix is an element of the Business Cases that are built, discussed, approved and followed at the 3B Value Added Committee. The threshold that has been defined distinguishes projects having positive impact on the sustainability criteria (People and Planet).

In 2021, looking at our top key projects, 100% of the projects were above the threshold.

Sustainable Innovation metric	2016	2017	2018	2019	2020	2021
% of projects above threshold	71%	75%	100%	93%	92%	100%

3B strives to always have 100% projects above threshold (having positive impact on the People and Planet sustainability criteria).



5.6 Emissions and pollution

SDG 3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination

SDG 6.3 By 2030, improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials, halving the proportion of untreated wastewater and substantially increasing recycling and safe reuse globally

SDG 8.4 Improve progressively, through 2030, global resource efficiency in consumption and production and endeavour to decouple economic growth from environmental degradation, in accordance with the 10-year framework of programmes on sustainable consumption and production, with developed countries taking the lead

SDG 12.2 By 2030, achieve the sustainable management and efficient use of natural resources

SDG 14.1 By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution

SDG 14.3 Minimize and address the impacts of ocean acidification, including through enhanced scientific cooperation at all levels

SDG 15.5 Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species

Context, Policy and Goals

3B commits to apply the precautionary principle[16] and systematically perform environmental impact assessments. Where there are threats of serious or irreversible damage, lack of full scientific certainty will not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

3B is supporting scientific research, including independent and public research, on related issues, and works with the national and international institutions concerned.

3B is joining industry-wide collaborative efforts (Glass Fibre Europe, Glass Alliance Europe, ...) to share knowledge and deal with the issue of precaution, in particular in regard to production processes and products around which high levels of uncertainty, potential harm and sensitivity exist.

[16] The precautionary approach, principle 7 of the United Nations Global Compact initiative, is based on Principle 15 of the 1992 Rio Declaration

Implementation, Performance measurements and Objectives

3B is applying the Best Available Technologies (BAT) as per the Industrial Emission Directive[17] and always strives to minimise its emissions.

In line with the GRI standards and with the transparency reporting principles, air emissions of the major pollutants are given below.

In 2020, emissions to water and air were lower than the previous years, mainly because of lower production due to curtailment (COVID crisis). In 2021, despite the return to high production levels, we continue to see a clear downward trend in air emissions.

Air emissions (GRI 305-7)	2015	2016	2017	2018	2019	2020	2021
NOx emissions (kg)[18]	146,451	198,676	182,001	220,127	224,789	146,854	158,313
Particulate Matter emissions (kg)	13,295	11,503	13,434	15,342	13,803	9,300	8,654

Water discharge quality (GRI 306-1)	2018	2019	2020	2021
Chemical Oxygen Demand (kg)	65,367	48,168	33,758	51,854

All plants are ISO14001 certified and in line with these requirements:

- risks and opportunities are determined related to stakeholder expectations;
- action plans are established to achieve pre-determined environmental goals;
- environmental impact assessments are regularly reviewed;
- monitoring of potential environmental non-conformities and implementation of corrective and preventive actions;
- continuous improvement of the environmental management systems is carried out.

We further aim at:

- improving the data collection and consolidation of air and water emissions;
- improving (internal) communication on environmental requirements and performance;
- ensuring environmental emissions and pollution are always considered priorities during decision-making processes and change management.

[17] http://ec.europa.eu/environment/industry/stationary/ied/legislation
[18] Goa plant not included (not measured)

Acknowledgements 6

This year of 2021 has seen a return to our projects and activities in a more normal context. However, the consequences of the corona crisis and numerous disruptions within our companies, value chains and the society at large continued to impact 3B and its ecosystem.

We would like to thank all stakeholders for their resilience and the energy devoted to relaunching projects, questioning them, and sometimes changing the way we work or even the paradigm!

Thank you all!

Ludovic Piraux, CEO

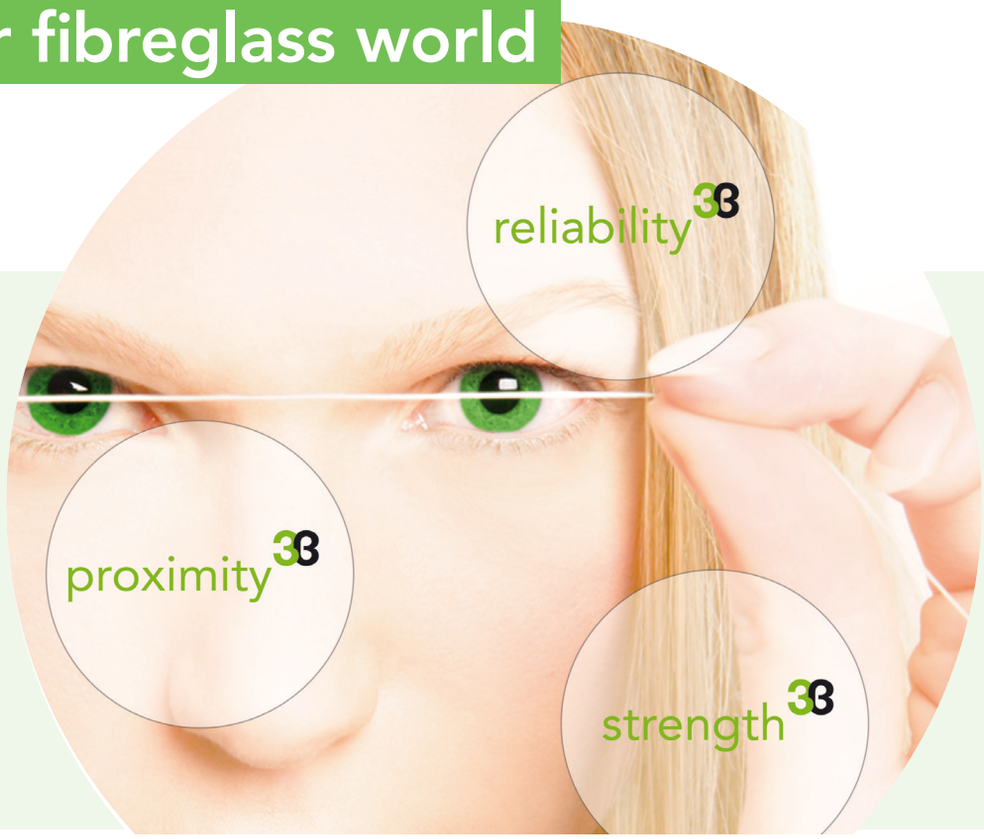
Customer Service India
Survey No 220,Village Colvale
Taluka, Bardez, Goa-403 513, India

P. +91 832-2299147 / +91 832-2299151
F. +91 832-2299 887
E. info@binaniglassfibre.com

Customer Service Europe
Ildefonse Vandammestraat 5-7
B-1560 Hoeilaart, Belgium

P. +32 2 402 2000
F. +32 2 402 2002
E. 3bthefibreglasscompany@3b-fibreglass.com

discover your fibreglass world



Publication date: 30 June 2022
This report covers the period from 1 January 2021 to 31 December 2021. It is published annually.
For any question: communication@3b-fibreglass.com.

www.3B-fibreglass.com