

JUPITER BACH

DEVOTED TO WIND

SUSTAINABILITY REPORT

2021

Content



1.	Statement by Executive Management Team	10
2.	Company highlights	08
2.1	Devoted to wind	10
2.2	Values	12
2.3	Code of conduct	14
3.	Our approach to sustainability	18
4.	Valuing people	20
4.1	Health and safety	22
4.2	Occupational injuries	28
4.3	Covid-19	32
4.4	Human and labor rights	34
5.	Minimizing carbon footprint	36
5.1	Greenhouse gas (GHG) emissions	38
5.2	Science-based targets	44
5.3	Renewable electricity	44
5.4	Managing resources, minimizing waste	46
6.	Promoting clean energy	50
6.1	Innovation	52
6.2	Electronic Inspection and Auditing tool	58
7.	Advancing business ethics	60
8.	Data	66

Statement by Executive Management Team

2020-2022 will undoubtedly be years to remember: Covid-19 continued to disrupt the lives of billions of people worldwide. Governments as well as businesses have had to adapt.

Global supply chains have been vulnerable, and will continue to be so, and this will have an impact on both costs as well as shipping/transportation means, and thereby also a potential impact on the CO2 emissions.

Climate change has gained increasing momentum and relevance in recent years. Renewable energy and wind play a significant role in moving away from fossil fuels and towards a more sustainable future.

We at Jupiter Bach are devoted to wind and we are both proud of and dedicated to work in an industry that helps combat climate change, eventually making the world a greener and better place.

We believe being close to the markets will reduce the CO2 footprint of our supplies to the market.

Continue >

Photo: Executive Management Team members



CEO
Frank Virenfeldt Nielsen



CTO
Ulrik Raimund



Group Finance Manager
Kristian Erik Johansen



General Manager, USA
Sean Guidry



General Manager, China
Gary Xu



General Manager, Poland
Remigiusz Podcaba



General Manager, Lithuania
Irmantas Arlauskis



At Jupiter Bach, our core values are

- WE DELIVER
- WE INNOVATE
- WE CARE

Continued commitment to the UN Global Compact and SDGs

Jupiter Bach has been a signatory to the United Nations Global Compact since 2019. The compact's 10 principles, along with 5 of the UN's Sustainable Development Goals (SDGs), are fundamental to our company's sustainability strategy.

With this report, we in the Executive Management Team reconfirm these commitments. Based on the UN's 10 principles and 5 SDGs, we've crafted our own sustainability strategy. It consists of our 4 pillars:

- Valuing people
- Minimizing carbon footprint
- Promoting clean energy
- Advancing business ethics

Minimizing our carbon footprint

Both the products we make and our core values reflect our determination to minimize our carbon footprint worldwide. Through specific actions, and changes in corporate behavior, we are on a journey to continuously support the UN Sustainable Development Goals and their related initiatives.

To mention one, our sustainability commitment since 2020 includes a switch to use of renewable electricity across all our manufacturing plants, resulting in a more than 60% reduction in CO₂ emissions in our indirect GHG emissions. Going forward, we will gradually continue to raise the bar. In 2021, Jupiter Bach officially committed to setting ambitious, science-based targets for long-term CO₂ reduction. Another key initiative

includes projects dedicated to new sustainable solutions, such as increasing our use of recycled rather than virgin materials.

Our success is built by our people

Our global employees are the foundation supporting these values. Everyone here plays a crucial role in achieving our sustainability road map. As an employer, we recognize the paramount importance of attracting and retaining talent in today's competitive work environment. Achieving this requires the full focus of our entire global group.

In Executive Management, we're dedicated to continuously improving Jupiter Bach as a place to work, actively investing in the development of

every single employee and each one of our job sites worldwide.

A big thanks

At Jupiter Bach, we will continue making an active and lasting contribution to society, improving the global environment for all future generations. We constantly engage with our employees, owners, customers, suppliers and partners to ensure the necessary focus and effort to achieve these important goals. A big thank you to everyone involved in making this happen.

Sincerely

– The Jupiter Bach Executive Management Team

2. Company highlights

2.1 Devoted to wind

2.2 Values

2.3 Code of conduct



At Jupiter Bach, we are committed to taking action and fighting for a better world.

2.1 We are devoted to wind

Jupiter Bach is devoted to wind: 100% of our business is focused on the wind industry.

We are global no.1 in the field of designing and manufacturing nacelle and spinner covers. Within our field, we are best-in-class, and our track record includes more than 70,000 wind turbines around the world, contributing to the global energy sector’s transition to clean power.

Best-in-class technology
Our core business is to design and supply nacelle and spinner covers with maximum customer benefit at minimum cost.

For both off- and onshore wind turbines, we design and manufacture vacuum-infused composite solutions.

Setting new standards
As the market leader within our field, we help drive the industry by challenging the status quo and lowering wind power’s levelized cost of energy (LCOE).

Close collaboration with customers and constant innovation enable us to drive continuous improvement, setting new standards and achieving the most competitive total cost in our field.

Global presence	6 business units	ISO9001 certified
HQ in Denmark	60,000 m ² production floor	ISO14001 certified
1,000+ global staff	100% focus on wind	ISO45001 certified
	100% renewable electricity	



2.2 Values

WE DELIVER
WE INNOVATE
WE CARE

These are our core values and this is how we do business.

To us, WE DELIVER means:

- We stay focused in order to deliver on our commitments.
- We align expectations.

To us, WE INNOVATE means:

- We approach new ways of thinking with curiosity and open-mindedness.
- We empower our people to act in order to find new solutions.

To us, WE CARE means:

- We operate responsibly with respect for people, planet and profit.
- We strive to continuously develop our people and organization.



2.3 Code of conduct

At Jupiter Bach, our code of conduct sets out the basic values of our company concerning personal and corporate responsibility.

The purpose of this code is to ensure that everyone working on our behalf, including all employees, business partners and suppliers, know exactly where we stand.

Our code sets out clear and transparent commitments and expectations about how we do business at Jupiter Bach. Put simply, we will always choose no business over bad business.

Responsible operation is in our DNA

Our code of conduct was established following the merger between BACH Composite Industry and Jupiter Group in 2017. We renewed these commitments in 2020, developing two new codes of conduct.

These share the same basic content while being specifically tailored to two groups: our employees and suppliers. To read more about how we renewed and implemented the codes, please see section 7. To read our full code of conduct, please visit www.jupiterbach.com.

Our code of conduct includes

- Compliance
- Human Rights and Labor Rights
- Ethical Business Practices
- Environment, Health and Safety

3. Our approach to sustainability

Our corporate spirit is WE CARE

At Jupiter Bach, we believe that being market leader also means leading the way in sustainability.

Following what United Nations defined as sustainable company, we do our part to achieve “peace and prosperity for people and the planet, now and into the future.”

To help achieve this, Jupiter Bach is a strong supporter of the United Nations Global Compact and Sustainable Development Goals. These globally recognized principles and goals inspire the four unique pillars of our sustainability strategy. These are some of the vital ways we live up to our corporate spirit: WE CARE.

5 SDGs and 10 principles

We support the UN Sustainable Development Goals (SDGs). We have selected the 5 goals where our work can have the most impact and create the greatest benefit.

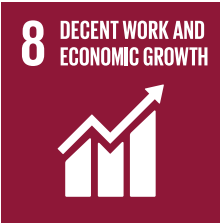
To further demonstrate our commitment, we are a signatory to the UN Global Compact. We work systematically with its 10 universal principles, incorporating them into our business processes, policies and code of conduct.

4 pillars strategy

Based on the UN’s 10 principles and 5 SDGs, we’ve crafted our own sustainability strategy. It consists of our 4 pillars: Valuing people; Minimizing carbon footprint; Promoting clean energy; Advancing business ethics.

Within each of the 4 pillars, we track performance and set targets for improvement.

Valuing people



Principle: 1-6

Minimizing carbon footprint



Principle: 7-9

Promoting clean energy



Principle: 7-9

Advancing business ethics



Principle: 10

4. Valuing people

- 4.1 Health and safety
- 4.2 Occupational injuries
- 4.3 Covid-19
- 4.4 Human and labor rights

4.1 Health and safety

Our people are our greatest asset. Instead of waiting for stricter regulations, we have established our own to surpass them, safeguarding our people, and looking ahead, setting tomorrow's safety and workplace standards today.

We believe that every place we operate worldwide, working conditions at Jupiter Bach must be healthy and safe. A key part of safeguarding the well-being of everyone is our ISO45001-certified global Health and Safety Management System.

By constantly improving this management system, we ensure safe working conditions everywhere we operate, no matter where they choose to work. To ensure this, all our global facilities are certified in compliance with ISO 45001.

To read our health and safety policy, please visit www.jupiterbach.com.

Photo: Meeting during Gemba walk conducted in our factory in Police, Poland where health and safety issues are daily raised.





SAFETY FIRST

To ensure a safe work environment, our safety culture and behaviors are of the outmost importance.

To us, **SAFETY FIRST** means:

THINK TWICE:

Take a moment up front to ensure that your behavior and actions are safe.

TAKE CARE:

Always take care of yourself, your colleagues and others around you.

TAKE AWAY HAZARDS:

Be proactive and remove any hazards you see to avoid unsafe situations.

Safety first – not an act, but a daily habit

At Jupiter Bach, the health and safety of our people is paramount. In addition to the excellence of our safety equipment, we strive for the best safety culture in the industry and our safety culture and behaviors are of the outmost importance. Since 2020 when the three safety behaviors were implemented, our employees have received continuous training at all sites and those safety behaviors are promoted to become part of our daily habit.

Besides, regular safety walks, internal audits, safety inspections and encouragement to employees to report all near misses observed in our workplaces have been demonstrated as good practices to lead our effort to our zero injuries ambition target.

Photo: Production Supervisor Baocai Qiao while supervising lamination process in workshop

Production Supervisor, Baocai Qiao

“Safety first is in our blood now. In our Dezhou plant, there have been no lost time injuries for more than a year and we strive for keeping it so as long as possible. We always keep our three safety behaviors in mind, promoting safety in our Gemba walks by our General Manager and near miss report to reduce potential risk round us”

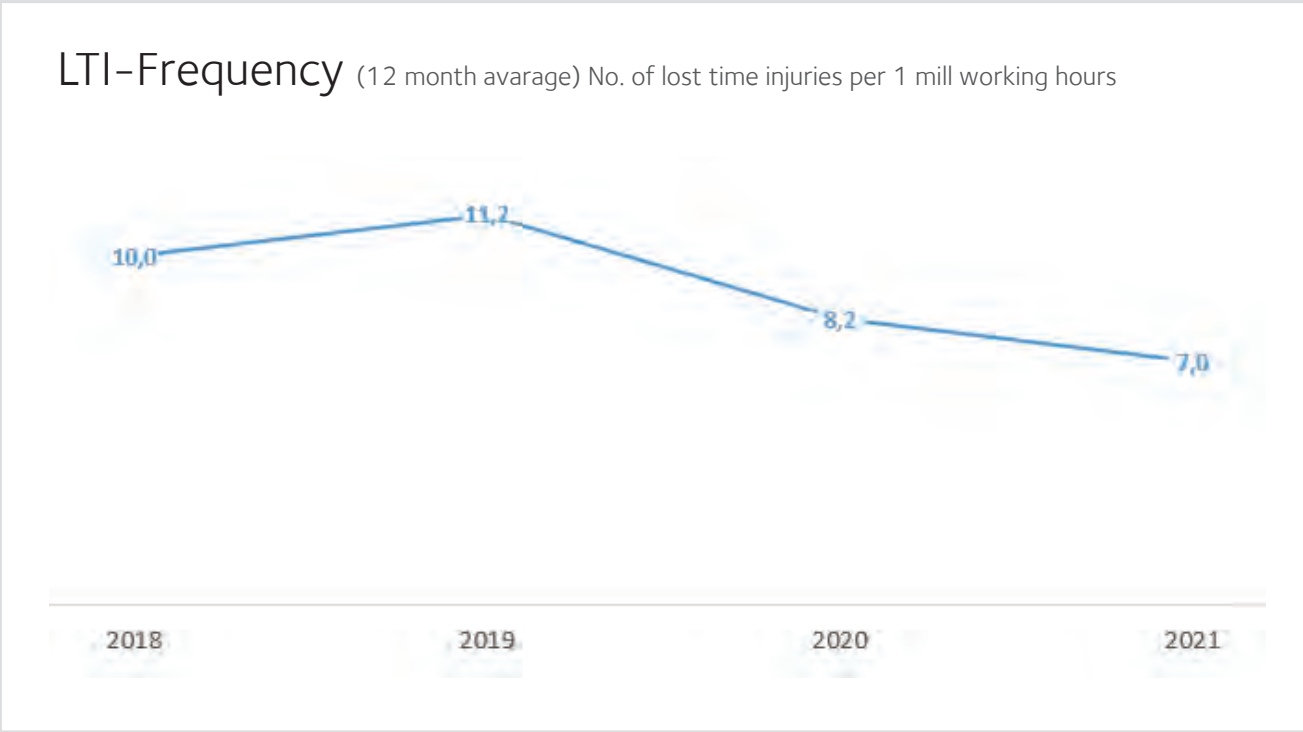


4.2 Occupational injuries

Minimizing safety risks towards injuries reduction

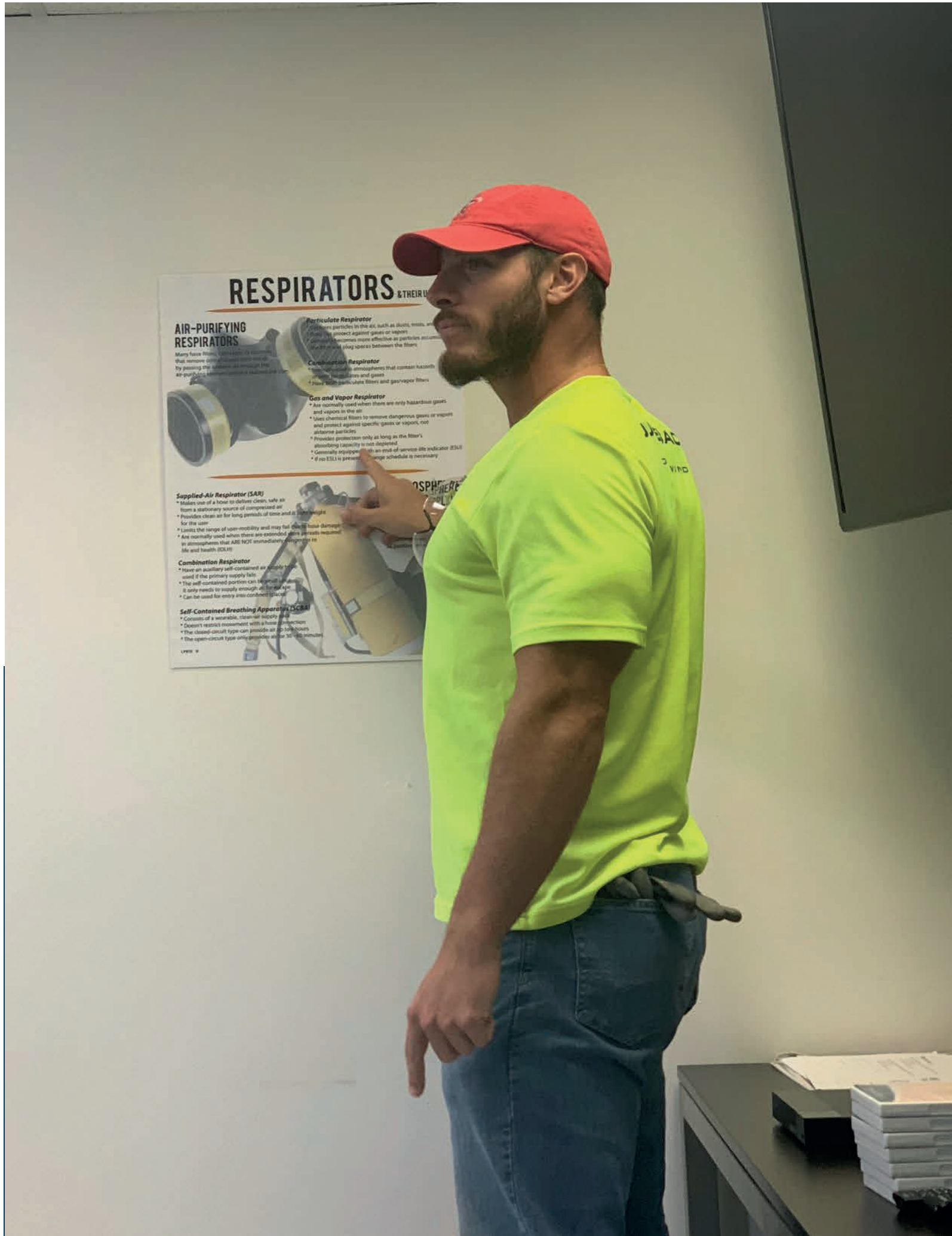
Constant efforts are necessary to keep decreasing number of injuries at workplace, by minimizing health and safety risks and pursuing our goal of zero injuries. Our performance is monitored through our main KPI in terms of safety, frequency of lost time injuries.

Since the implementation in 2020 of our 3 Safety Behavior guiding principles (Take Care, Think Twice and Take Away Hazards) we have seen a significant reduction in the number of injuries overall and lost time injuries by 25%. Regular safety walks, internal and external audits, safety inspections as well as initiatives to encourage employees to report all near misses observed have been demonstrated as good practices within our Health and Safety management systems to promote safety culture, raise safety awareness and drive our efforts to reduce injuries at all our sites.



Our commitment to providing and promoting healthier and safer work environment at our workplaces pushed us to develop continuous improvement and minimize those risks related to the use of harmful chemicals whenever possible. As an example, the replacement of acetone by more environmentally friendly and safer cleaner such dibasic ester (DBE), a non-flammable and readily biodegradable, has made a significant difference regarding exposure to employees by decreasing potential air emissions at the workplace among other further risks

Photo: Safety officer, David Barfield, providing onboarding training in Pensacola, US





Case: Improving working environment at our sites

One of our commitments within our sustainability strategy is to make our workplaces healthier, safer, and more attractive to work in. With that purpose of improving working environment, in 2021 our Management decided to make a significant investment in our factory in Taurage, Lithuania where ventilation system upgrade was made to ensure exchange of air at a satisfying level and to decrease the styrene level. Since then, significantly lower styrene content in the air has been seen in all main production halls.

Such improvement impacted positively our work environment and protected our employees, who already reacted positively to the upgrade.

Photo: Ventilation upgrade conducted in Hall C. Jupiter Bach Taurage, LT

Operator Asta Uksiene says:

"We are so happy to see more and more improvements in our work and safety conditions. The upgraded ventilation system fills our department with more fresh air"



2021 achievements

- LTI-frequency reduced by 14% corresponding to 7.0 LTIs per 1 million working hours by year's end
- Renewal of our Health and Safety 45001 multisite certification for all our sites

4.3 Covid-19

Jupiter Bach Group also faced with the impact and the consequences of the Covid-19 pandemic. Since the outbreak of the global pandemic back in early 2020 we have across all factories and offices in the Group been following the Global Jupiter Covid-19 protocol as well as adhering to the local governmental policies issued in the countries we're operating in, including the roll out of vaccination program for Covid-19.

Throughout the COVID-19 pandemic, adequate safety and health measures at work played a crucial role in containing the spread of the disease at our sites, while protecting workers and society at large. That has enabled that our illness rate was hardly impacted by Covid-19. Though still affecting our lives, in Jupiter Bach we continue to move towards building a strong safety and health culture at all levels.

2022 commitment

- Keep reducing all type of injuries, particularly lost time injuries to reach 5.8 LTI- frequency
- Continuous improvement by implementing new tools and methods to promote safety awareness

4.4 Human and labor rights

Signing the UN Global Compact, we promised to do our part to advance business ethics and oppose corruption in all its forms. This commitment is a part of our code of conduct. To learn more, please refer to section 2.3.

Strength in diversity

Diversity makes Jupiter Bach not just inclusive, but smarter and stronger. We are firmly committed to providing equal opportunities for all, in every place we operate worldwide. We enforce high standards by setting uniform global requirements which often exceed legal legislation. Across JB, the proportion of women slightly increased up to 37.6% in 2021 despite the decrease in the share of women in leadership positions, including senior leadership positions by the end of the year. That shall make us to put more focus on gender distribution and continue our efforts in promoting diversity and addressing gender equity at all levels of the organization.



Photo left Team at our factory in Pensacola, US

Supply Chain

We advocate for human and labor rights throughout our supply chain, using them as a key measure in evaluating our suppliers. As part of our approval process, we require suppliers to demonstrate their commitment to our rights requirements by signing the Jupiter Bach supplier code of conduct.

We also perform regular audits of suppliers, ensuring that they live up to our standards for human and labor rights. Since 2021, supplier audits are regularly conducted where sustainability commitment is also assessed, giving value to business ethics regarding our supplier preferences.



Photo right Females working in lamination process in our factory in Police, Poland.

5. Minimizing carbon footprint

- 5.1 Greenhouse gas (GHG) emissions
- 5.2 Science-based targets
- 5.3 Renewable electricity
- 5.4 Managing resources, minimizing waste



Our local team discussing about VOC emissions standard at our factory in Dezhou, China. Behind the monitor where measurements are regularly tracked

Our QHSE Manager, Alan Liu, explains: “It is crucial for us in Jupiter Bach to monitor and control our volatile compound emissions as part of direct GHG emissions. Rather than fulfilling legal requirements, it is also our commitment to do our part to minimize our CO2 emissions and fight climate change”

Photo: Left Quality inspector Lan Dang. Middle QHSE manager Alan Liu. Right Production team leader Yilong Zhang

5.1 Greenhouse gas (GHG) emissions

Jupiter Bach is firmly dedicated to shrinking our carbon footprint and combating climate change. To achieve this, we’ve committed to developing ambitious long-term science-based targets via the Science Based Target initiative.

We calculate our carbon footprint according to the Greenhouse Gas (GHG) Protocol, an internationally recognized standard for determining and managing greenhouse gas emissions. Calculation carbon footprint underwent external validation by an external expert to ensure calculation reliability.

To concentrate our efforts where they will count most, we use our GHG inventory as the basis for our reduction’s targets. Therefore, as committed in our last report, we have expanded our GHG inventory by including full scope 3 emissions. Scope 3 emissions include other indirect emission, such as purchased raw materials, transportation, waste disposal, business travel or employee commuting.

Since 2019, we have measured our carbon footprint, using 2018 as the base year for our scope 1 and 2, and 2019 for our scope 3 emissions.

Direct emissions, scope 1

Scope 1 covers direct GHG emissions from owned or controlled sources. For Jupiter Bach, the major scope 1 emissions include natural gas, fuel used for power generators, volatile organic compounds (VOCs) and company owned vehicles. About scope 1, a decreased by 14% is observed in total emissions since 2018, also thanks to some improvements implemented at our sites that also contributes to a better working environment.

Continue >

As examples, the constant reduction of VOCs by more environmentally friendly products have contributed significantly to that reduction with the switch from solvents with high quantity of volatile organic compounds such acetone by Dibasic Ester (DBE) as well as the minimization of spray adhesive by hot melt adhesive wherever possible. Hot melt glue adhesive is solvent free solution with no VOCs emissions.



Operators using hot melt adhesive guns during the lamination process at our factory in Poland

Emissions from electricity and district heating, scope 2

Scope 2 comprises emissions from the generation of purchased electricity and district heating. Due to our commitment to only use electricity from renewable sources, scope 2 emissions accounted for less than 1 % in 2021 compared to 63% scope 1+ 2 emissions in 2018. It is estimated that switching to renewable electricity has led to a substantial savings of about 8% in total emissions, incl. scope 3 emissions..

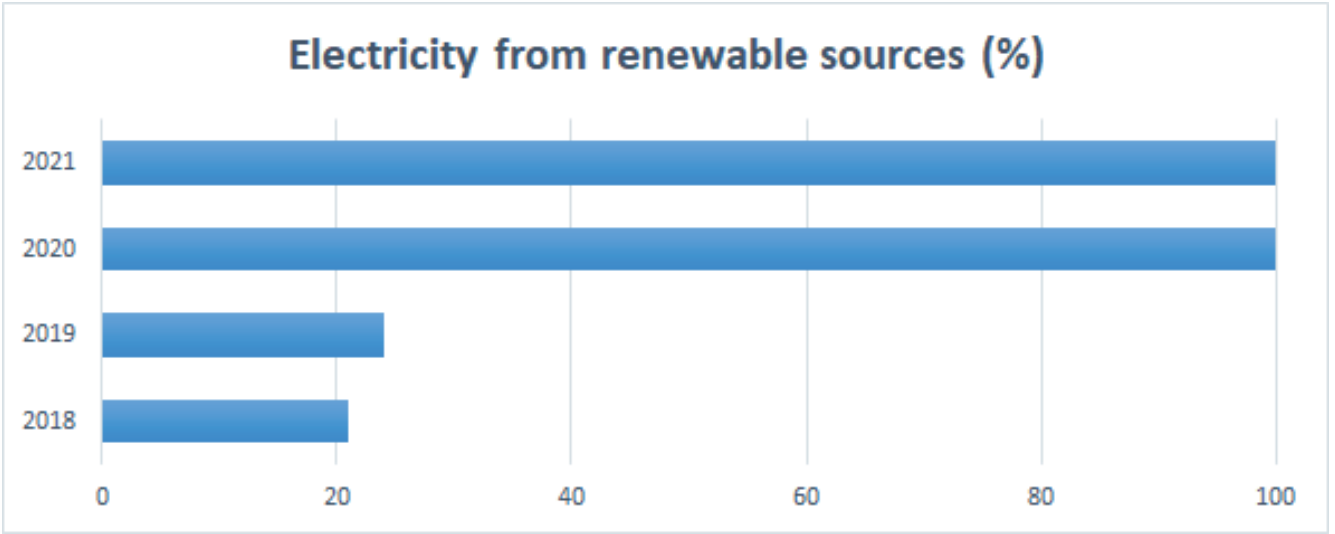
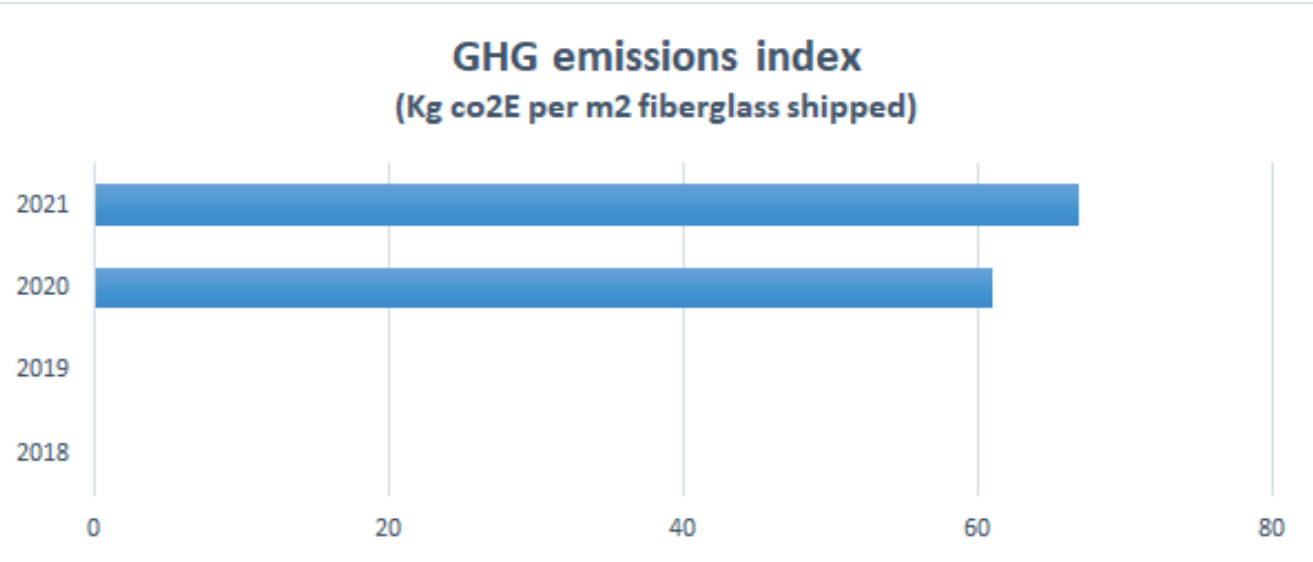
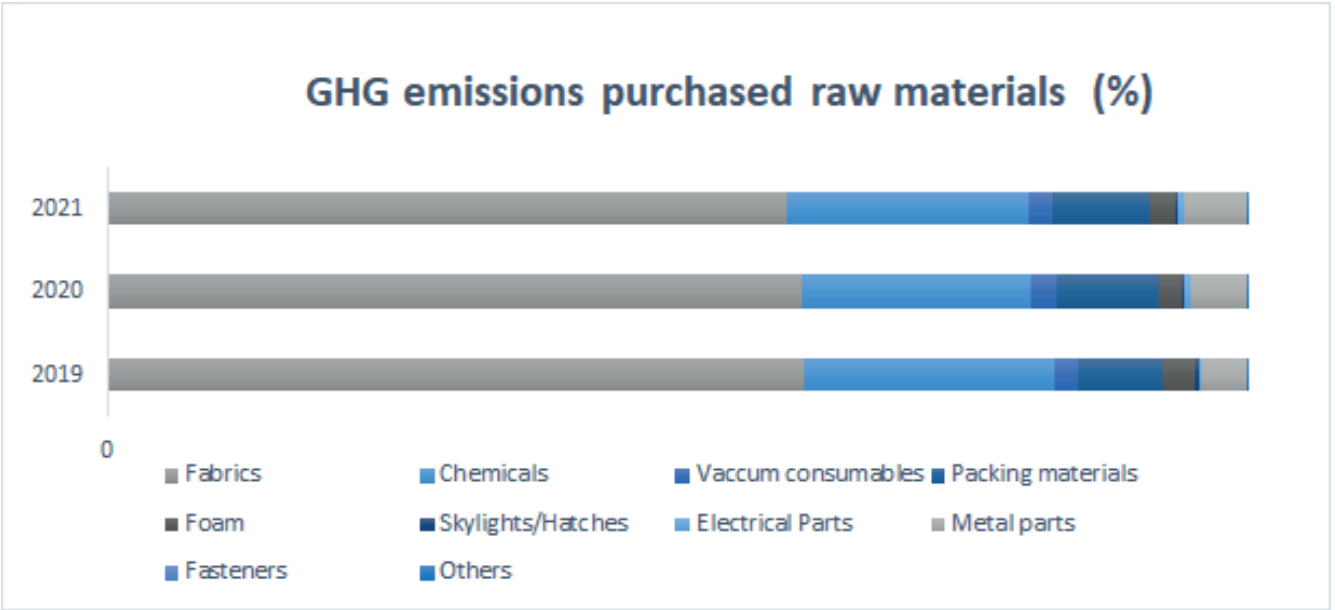
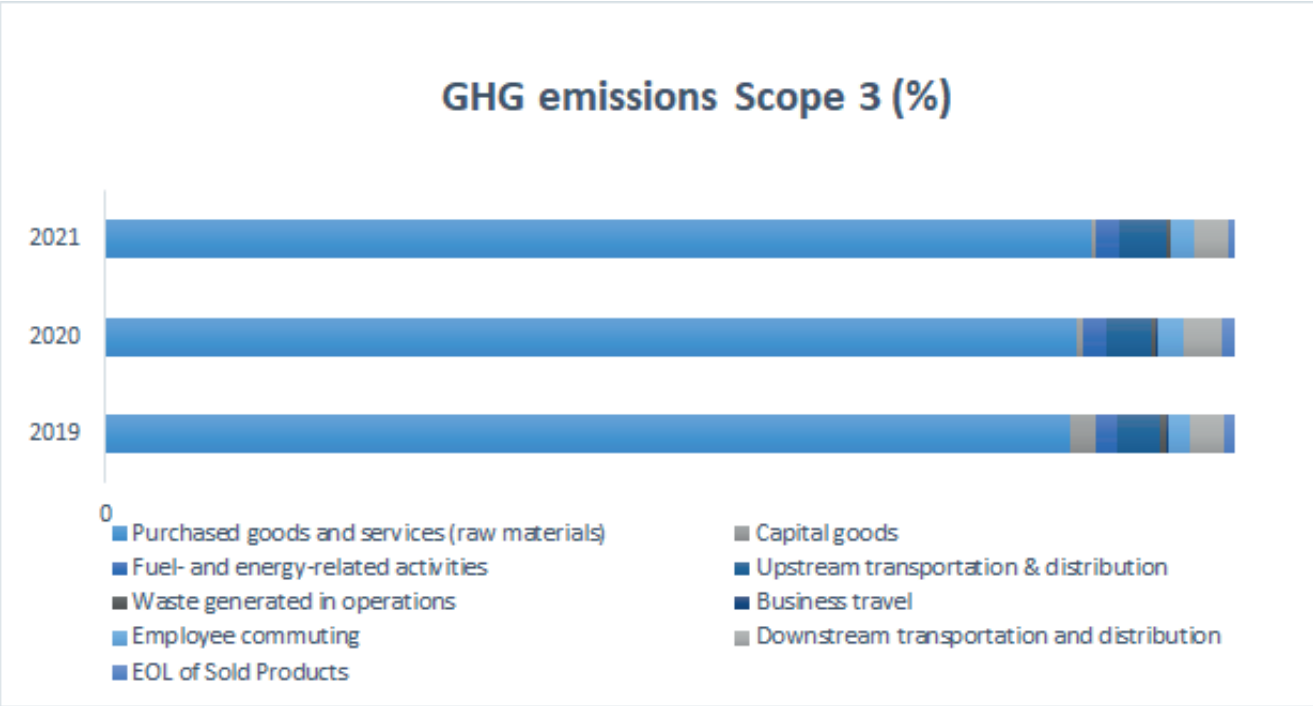
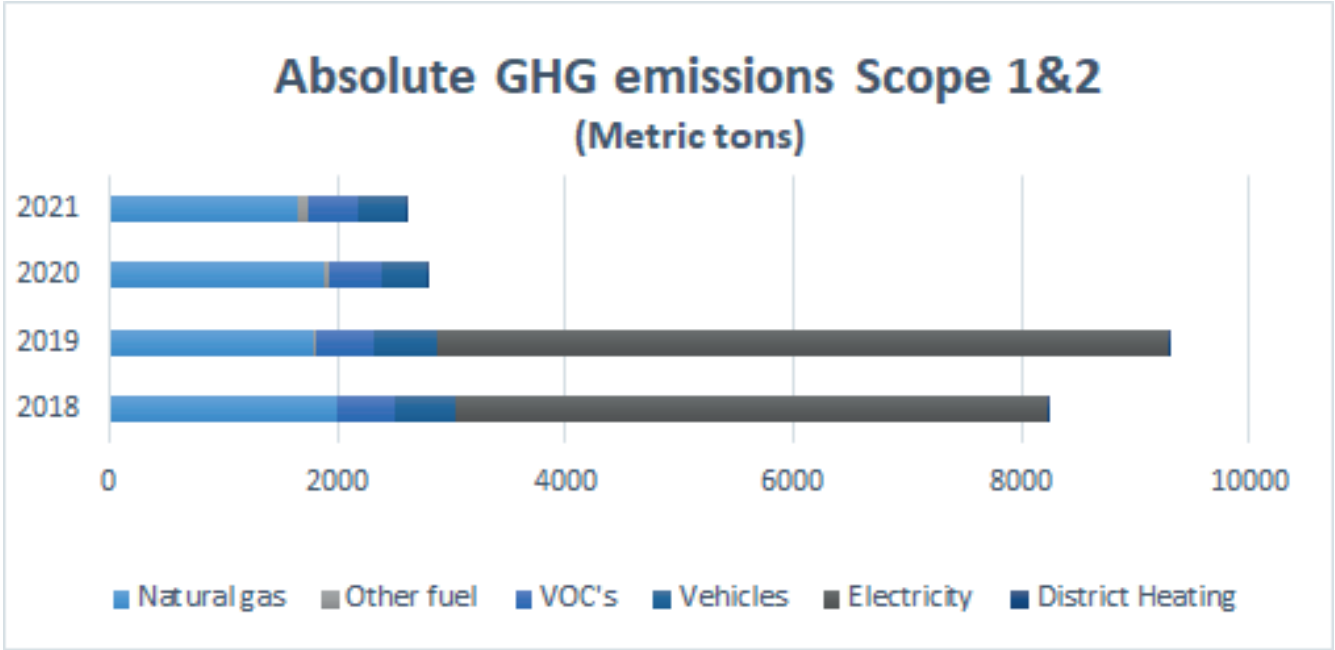
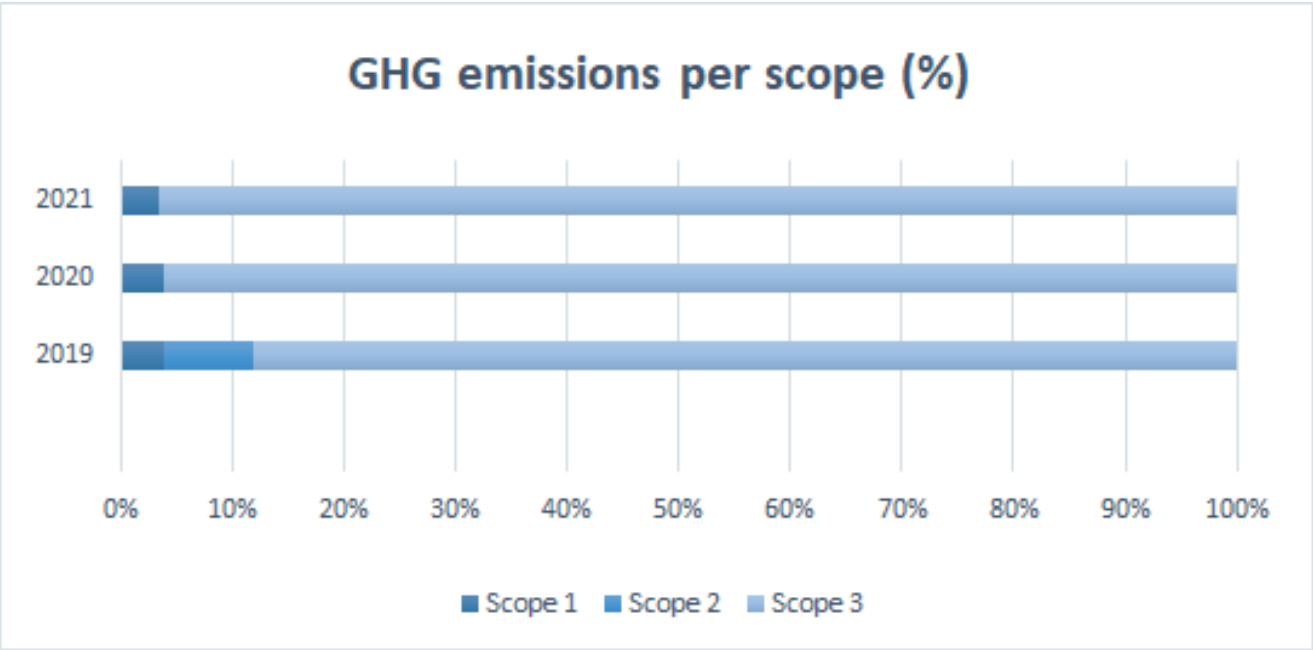
Indirect emissions, scope 3

Full scope 3 emissions account for all other indirect emissions that occur across the value chain, including upstream and downstream emissions. For Jupiter Bach, scope 3 emissions related to purchased raw materials (purchased goods and services), capital goods (incl. plugs and molds), fuel and energy-related activities, upstream and downstream transportation and distribution, waste disposal, business travel, employee commuting and end-of-life treatment of sold products.

Scope 3 has been calculated for the last three years, from 2019 to 2021, including all emissions as consequence of activities appointed above. What observed is that raw materials purchased accounted for more than 85% of scope 3 emission all years, increasing up to 87% in 2021. Fabrics (fiberglass mats) is our main contributed in terms of emissions, followed by chemicals. Both categories contribute to about 80% of the total scope 3.

To track performance overtime a new emissions index has been defined that shows kg CO₂ equivalent emitted per m² fiberglass of finished product shipped to siter sites and external customers, as unit of production. Index shows an increase in 2021 compared to 2020 from 61 to 67 kg CO₂e/m² fiberglass shipped, meaning an increase in almost 10%. That increase is mainly due to a higher consumption of chemicals and fabrics as well as location where those raw materials were manufactured. Location where raw materials are manufactured is significance important as it is related to the emission factor allocated for calculation.

Thus, collecting reliable data is crucial to have a starting point where to begin from and to define our sustainability strategy going forward. As expected, raw materials are where our efforts must be addressed so we expect, in close cooperation with our customers and our supply chain, propose and work on new solutions to drive emissions reductions in future and be able to achieve our targets and to do our part in combating climate change.



5.2 Science-based targets

Concerning climate change, science has spoken. We are answering with science base-targets.

High ambitions

We are highly dedicated to do our part to combat climate change.

To achieve this, we've committed to developing ambitious long-term science-based targets via the Science Based Target initiative and we are already working on developing our targets by the end of this year.

This is a very important and ambitious step in our "Minimizing carbon footprint" pillar within our sustainability strategy.

Science-based

CO2e reduction targets are considered science based if they are in line with what the latest climate science deems necessary to meet the goals of the Paris Agreement. This international accord limits global warming to well below 1,5 °C above pre-industrial levels, in response to increasing urgency for climate action.

5.3 Renewable electricity

From our core values to the products we design, Jupiter Bach is fully committed to reducing our carbon footprint.

In our latest advance, we've converted the entire company to using 100% renewable electricity and decreasing our absolute greenhouse gas emissions (scope 1+2) by more than 65%.

Since 2020 all sites at Jupiter Bach only use green electricity via Energy Certificate Attributes (ECAs), coming mainly from wind sources. We expect we will need to continue to purchase EACs for a proportion of our renewable electricity needs in the foreseeable future to maintain our green electricity commitment while looking at other options (PPAs or renewable generation energy onsite) wherever it makes sense.

2021 achievements

- Full GHG Inventory, including complete scope 3 emissions
- Continuous consumption of 100% renewable electricity
- Absolute GHG emissions reductions (scope 1+2) decreased by 68% compared to base year 2018

2022 commitments

- Develop and set science-based targets via SBTi
- Continue to consume 100% renewable electricity

5.4 Managing resources, minimizing waste

Consumption of materials and generation of waste are significant factors in our environmental footprint. Aligned with our contribution to “responsible consumption and production” (SDG12), we focus on efficient resource utilization, reducing our environmental impact by minimizing waste and increasing the use of recycling as a primary mode of waste disposal. As with GHG emissions, new indexes have been defined for environmental parameters (energy, waste, water) in relation to production, switching from consumed glass to m2 fiberglass shipped to sister sites and external customers, as unit of production, having data available only for the last two years.

Waste

Waste is managed at each facility according to our global requirements. We work locally with waste-handling companies to identify optimal ways of recycling our waste. In 2021, we recycled 16,7% of our waste, compared to 9,8% in 2020, exactly double as the previous year. A stable value is observed in terms of Kg waste/ m2 fiberglass shipped.

Though the technology for recycling fiberglass is still very limited, in 2021 we started to dispose some glass mats waste from our factory in Taurage, Lithuania by recycling. To learn more, please refer to “Case. Recycling of fiberglass waste” below.

Raw material utilization

Through innovation and operational projects, the material utilization is essential in our production. We continue looking for optimization and responsible consumption for a wide variety of materials including chemicals and glass mats. In this regard, glass mats kitting delivered directly from glass suppliers is an option already in use when convenience to optimize cost and consumption as well as reduce waste.

Water

What it comes to water consumption in production, usage is limited to washing fiberglass parts before shipment. We track usage of water and put focus on reduction wherever possible, including water conservation measures and potential improvements in our factories and offices.

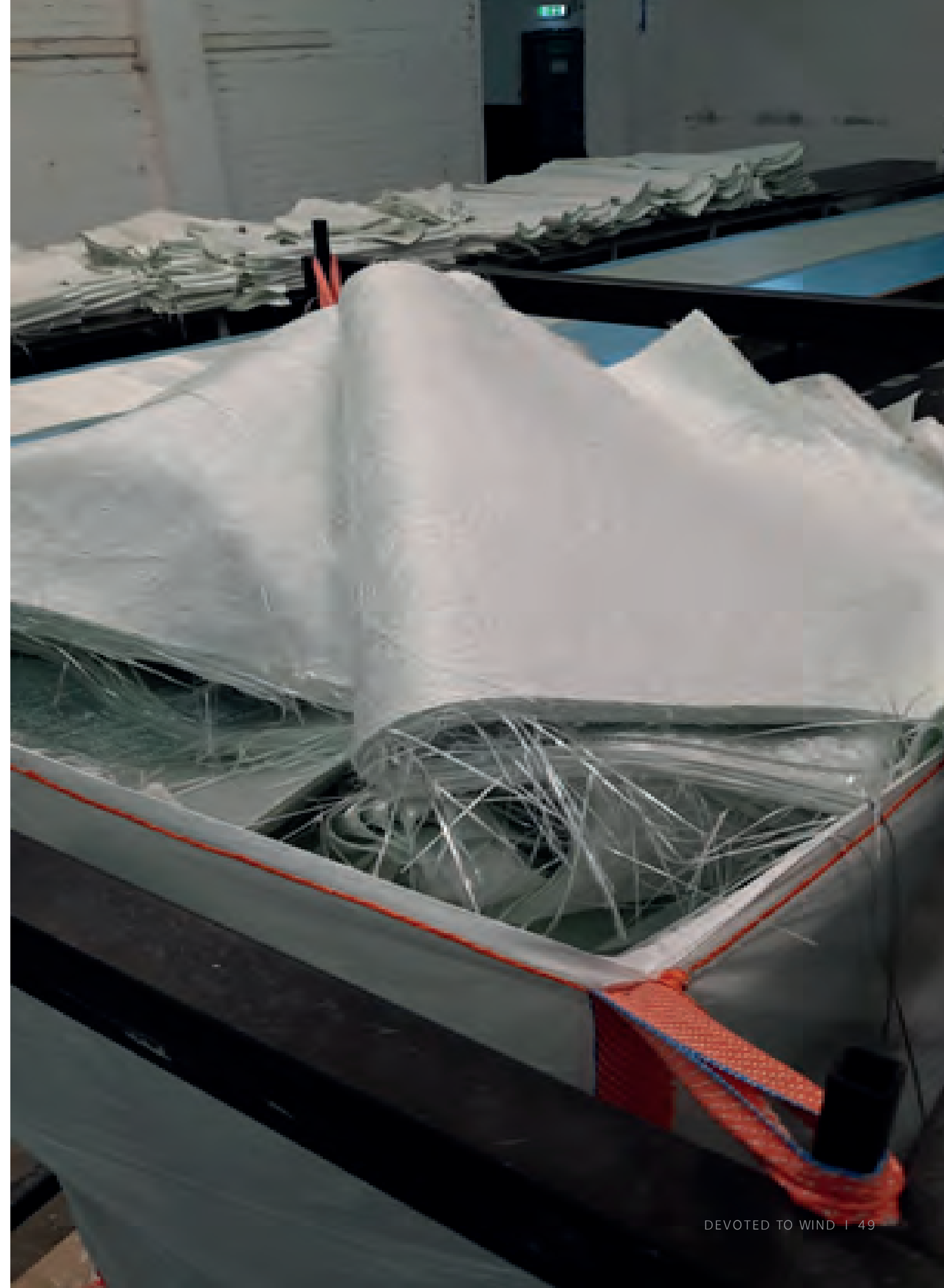
As an example of continuous improvement, free hands faucets as well as quick connection for pressure washers were installed in our factory in Pensacola, US, in 2021, meaning a significant reduction of water in the consumption at the site. Overall water consumption is about 23 liters/ m2 fiberglass shipped for the last two years.



Case: Recycling of fiberglass waste

With the effort of looking for sustainable solutions, in 2021 our site in Taurage, Lithuania started up sending their fiberglass waste to Ucomposites in Denmark, a pioneer in recycling of composites and glass fibers. Just deliveries from September represented about 9 tons of glass waste sent for recycling, providing savings overtime on GHG emissions to environment.

Recycling is a sustainable way opposed to landfill and it will contribute to diverting waste from landfill which is an important element in EU policy on improving the use of resources and reducing environmental impacts of waste management. Recycling of our glass waste is based on cutting the glass fiber and tear the fabric apart into individual fibers. The fibers are baled and used for glass fiber reinforced plastic parts for automotive industry or for acoustic insulation for industrial plants. Thus, this solution contributes to give a second life to our waste and overall reduce carbon footprint based on material circularity. We expect to keep increasing the recycling rate this year thanks to this solution.



6. Promoting clean energy

6.1 Innovation

6.2 Electronic Inspection and Auditing Tool



Doing our part for a cleaner and more affordable energy

Our business contributes to the transformation of the global energy system through our customer and product portfolio which is 100% focused on the wind industry.

We design and supply nacelle and spinner covers, providing maximum customer benefit at minimum cost. As a result, we support the supply of affordable clean energy. We work in close collaboration with our customers, maintaining a determined focus on innovation to drive continuous improvement.

6.1 Innovation

In 2019, we introduced a new platform for innovative nacelle covers. We call it iO.

iO concept minimize investments with pre-certified components, and this concept also offers digital design with streamlined configuration and flexible construction variations. Because the use of only one platform for design, we reduce development costs and minimize the need for plugs and molds. Our suite of standard molds with pre-certified components enables automated manufacturing and also enables shorter lead time for prototyping and high-volume production. During 2021 one of the top 3 OEM's have shown big interest in our iO concept.

Continue >



Ulrik Raimund, Chief Technology Officer:

“During the last couple of years, we have intensified our R & D and innovation work to always include sustainability goals. We approach new ways of thinking with an open mind in order to improve and we empower to act and find new solutions. We are a frontrunner in this field in our business and look forward to a time where our customers recognize this effort, and it becomes a requirement.”

Setting new standards

By implementation of our iO-structural concept, direct steel structure savings of up to 50% can be achieved.

The iO concept's new casting methods enable automated production with timely optimization for both high-volume and prototyping. The single platform also makes packaging, transport and assembly more efficient and optimized. Compared to traditional nacelle cover production, the iO design enables better utilization of materials and less generation of waste, contributing too to reduce our carbon footprint and deliver more sustainable solutions into market.

The iO concept is a huge step forward in our support of clean and affordable energy to the benefit of a more sustainable world.

Process optimization

With the aim of given continuity of our High-Speed Infusion project, in 2021 we installed three moving production lines in the high-volume production area in our factory in Taurage, Lithuania.

By expanding the conveyor system already installed in the gelcoat robot cabin, all the way to the end of the process, improvement has meant an increase in efficiency and quality of products, decrease internal transport, and ease the lamination and infusion work for our operators. This also contribute to safer work conditions and elimination of employees walking between the processes.

Thinking outside the box for sustainable solutions

Composite production has for many years been fairly traditional yet not at all simple. We have over the years introduced considerable innovation in the production methods and we continue to do so.

During the past year we have increased the research for obtaining composites with significant decreased carbon footprint and expect that this investment will pay off with innovative solutions to be offered to our customers over the coming year and including sustainability in those coming solutions.

Photo: New moving production lines in Taurage, Lithuania



2021 achievements

- Start getting interest of our iO concept among OEMs.
- Optimization and efficiency increase in the lamination process as part of our commitment with continuous improvement
- Full implementation of electronic inspection and auditing tools at all sites

2022 commitments

- Continue innovation and promotion of iO structural concept
- Expand products range to composites that may substitute steel as well as concrete structures
- Continue to combine cost out and sustainability

6.2 Electronic Inspection and Auditing Tool

In 2021 a new cloud-base system was implemented at all sites where all the inspection plans and audits are documented directly via iPads at the shop floor since then, providing remarkable benefits when it comes to quality, but also efficiency and environment.

Among others, main benefits observed in daily operation are:

- poka-yokes ("mistake-proofing") introduced in the system to prevent human mistakes and guiding employees towards full compliance with customer specifications and procedures.
- evidence collection and sharing to avoid personal appreciations when it comes to defect categorization
- involvement across departments, particularly to resolve conditional approvals (engineering department)
- full transparency of the inspection process, including improving compliance during inspections.

In addition to benefits above, there are other significant environmental benefits as:

- reduction of paper consumption used for registration that contributed to save emissions of 4.5 Tn CO2e in total.
- elimination of paper waste, in terms of material and transport to treatment destination.



The feedback from the quality inspectors is very positive, as this tool is found easy and simple to use.

Rimante Eičaitė, Quality Inspector:

" I really like this simple and clear electronic inspection system. System is in local language, and it alerts if value is out of specifications. This is very helpful in making decisions on your own as well as working more efficiently"

7. Advancing business ethics

7. Advancing business ethics

Before we call our work sustainable, it must meet high ethical standards.

Advancing business ethics, like all our other sustainability goals, is an ongoing effort that is the responsibility of every person in Jupiter Bach.

No business over bad business

Jupiter Bach doesn't just promote free and fair competition – our policies enforce it. We actively work against extortion, bribery, facilitation payments and all other forms of corruption, unlawful and unethical market conduct. We avoid conflicts of interest, ensuring that personal interests do not unduly influence our professional judgment.

In short, we choose no business over bad business.

Our guide for making the right decisions

In 2021, new versions of our code of conducts were implemented. In our codes of conduct, Jupiter Bach has set out the basic values of our company concerning corporate and personal responsibility. They are a comprehensive set of principles which appear in two main versions, both sharing the same basic content, with one specifically addressing employees while the other focuses on suppliers. Our IT code of conduct completes the set of codes.

Continue >





2021 achievements

- 100% of all employees trained in the renewed code of conduct
- Start involving of our suppliers in sustainability by accepting our code of conduct and demonstrate commitment

To serve as a guide for every employee and every decision in our daily operations, it's essential that each one of us understands our code of conduct. Therefore, all employees have been trained in our new code of conduct during 2021. For non-operators, this training is done through a mandatory e-learning session. For operators, it is a part of their ongoing training.

Since implementation all new workers in JB have been trained when started as part of their onboarding training program. Follow up on fulfillment and understanding of code of conduct is done via audits and management reviews.

About IT security and conduct, when acting on behalf of Jupiter Bach, it's essential that we demonstrate professional IT communications behavior.

From compliance with internet ethics to following software license rules, we maintain high standards in our IT conduct.

Supplier commitment

As part of our approval process, we require suppliers to demonstrate their commitment to our rights requirements by signing the Jupiter Bach supplier code of conduct, including gift and entertainment policy.

Since 2021, all suppliers of direct material have been requested to sign the new code of conduct to demonstrate their commitment. The same goes for selected suppliers of indirect materials, as well as suppliers of transport and distribution solutions. We have also included business ethics as well as health, safety, and environmental topics within our supplier evaluation assessment, being also part of our criteria when choosing partners for our business.

2022 commitments

- Increase the focus on business ethics when auditing suppliers

8. Data

8. Data

Occupational health and safety	Unit	2021	2020	2019	2018
Lost time injuries	Number	20	23	35	28
... of which fatal	Number	0	0	0	0
Frequency of Lost Time Injuries (LTI's)	LTI's per 1 mill. working hours	7,0	8,2	11,2	10,0
Frequency of Lost Time Injuries (LTI's)	LTI's per 200.000 working hours	1,4	1,6	2,2	2,0
Absence due to illness	%	5,1	6,0	6,0	5,1
Absence due to short term illness (< 2 weeks)	%	1,7	2	2,5	2,5

Energy	Unit	2021	2020	2019	2018
Direct energy	MWh	10.253	11.102	11.304	12.114
... of which natural gas	MWh	8.135	9.313	8.809	9.909
... of diesel (for heating)	MWh	420	203	124	0
... of fuel for vehicles	MWh	1.698	1.586	2.371	2.205
Indirect energy	MWh	13.903	14.521	14.693	11.439
... of which is electricity	MWh	11.432	12.428	12.220	9.330
... of which is from renewable sources	%	100	100	24	21
... of which is district heating	MWh	2.471	2.093	2.473	2.109
Total energy use	MWh	24.156	25.623	25997	23553
... of which is form renewable sources	%	57,0	56,3	20,3	17,0
Energy Index	Kwh energy/ Metric m ² fiberglass shipped	22,0	22,2	-	-

Waste	Unit	2021	2020	2019	2018
Waste	Metric tonnes	5.973	6.131	6.617	5.685
... of which goes for recycling	Metric tonnes	997	600	1.440	413
... of which goes for incineration	Metric tonnes	3.970	4.525	3.446	2.882
... of which goes for landfill	Metric tonnes	666	628	1.360	2.143
... of which goes for hazardous waste	Metric tonnes	340	378	371	246
Waste Index	Kg waste/ Metric m ² fiberglass shipped	5,44	5,31	-	-

Fresh water	Unit	2021	2020	2019	2018
M ³ fresh water	M ³	25.920	26.956	26.264	12.930
Liters fresh water	Liters (1M ³ =1000 l)	25.920.000	26.956.360	26.264.030	12.929.780
Water Index	Liters/ Metric m ² fiberglass shipped	23,6	23,4	-	-

GHG emissions	Unit	2021	2020	2019	2018
Scope 1 / direct energy	Metric tonnes CO ₂ e	2.594	2.777	2.871	3.027
... of which natural gas	Metric tonnes CO ₂ e	1.644	1.883	1.781	2.002
... of gas/oil (heating)	Metric tonnes CO ₂ e	101	50	30	0
... of fuel for vehicles (mobile combustion)	Metric tonnes CO ₂ e	404	378	559	521
... of VOC's	Metric tonnes CO ₂ e	445	466	501	504
Scope 2 / indirect energy	Metric tonnes CO ₂ e	21	18	6.432	5.228
... of which electricity	Metric tonnes CO ₂ e	0	0	6.408	5.210
... of which district heating	Metric tonnes CO ₂ e	21	18	24	18
Scope 1+2 / total CO ₂ e emissions	Metric tonnes CO ₂ e	2.615	2.795	9.303	8.256
... per m ² fiberglass shipped	Kg CO ₂ e/ Metric m ² fiberglass shipped	2,4	2,4	-	-
... per revenue	Metric tonnes CO ₂ e/DKKm	2,9	3,4	9,1	9,8
Scope 3 / indirect	Metric tonnes CO ₂ e	70.803	67.525	71.377	-
... of which is purchased goods and services	Metric tonnes CO ₂ e	61.909	58.149	60.981	-
... of which is capital goods	Metric tonnes CO ₂ e	260	341	1.621	-
... of which is fuel and energy related-activities	Metric tonnes CO ₂ e	1.391	1.454	1.338	-
... of which is upstream transportation & distribution	Metric tonnes CO ₂ e	2.964	2.641	2.780	-
... of which is waste generated in operations	Metric tonnes CO ₂ e	260	320	324	-
... of which is business travel	Metric tonnes CO ₂ e	38	40	214	-
... of which is employees commuting	Metric tonnes CO ₂ e	1.454	1.531	1.326	-
... of which is downstream transportation & distribution	Metric tonnes CO ₂ e	2.118	2.397	2.121	-
... of which is end-of-life of sold products	Metric tonnes CO ₂ e	408	652	671	-

Scope 3	Metric tonnes CO2e				-
... per m2 fiberglass shipped	Kg CO2e/ Metric m² fiberglass shipped	64,5	58,5	-	-
... per revenue	Metric tonnes CO2e	79,8	83,2	69,6	-
Scope 1+2+3 / total CO2e emissions	Metric tonnes CO2e	73.418	70.320	80.680	-
... per m² fiberglass shipped	Kg CO2e/ Metric m² fiberglass shipped	66,9	61,0	-	-
... per revenue	Metric Tonnes CO2e/DKKm	82,7	86,7	78,6	-

Local community	Unit	2021	2020	2019	2018
Official sanctions or fines, safety	Number	0	0	2	1
Official sanctions or fines, environment	Number	0	0	1	1

Certifications	Unit	2021²	2020¹	2019²	2018¹
Sites with ISO 14001 certifications*	%	100%	100%	100%	50%
Sites with ISO 4500/ OSHAS 18001 certifications*	%	100%	100%	100%	50%

¹ Sites with 5 or more employees.
² Sites with 15 or more employees.

People	Unit	2021	2020	2019	2018¹
Employees headcount	Number	1.057	1.254	1.349	1.413
... of which is direct labor	Number	805	1.140	1.217	1.260
... of which is indirect labor	Number	252	114	132	153
... of which is < 30 years	%	21	23	-	-
... of which is 30 – 50 years	%	60	64	-	-
... of which is >50 years	%	19	13	-	-
... of which is in leadership positions²	%	3	5	-	-
... of which is in senior leadership positions³	%	1	1	-	-
Employee headcount per region					
Europe	Number	608	746	689	726
China	Number	283	387	444	399
US	Number	166	121	216	288

¹ January 2019 numbers.
² Managing at least 3 people
³ Director level and above.

Gender diversity	Unit	2021	2020	2019	2018¹
Female employees, headcount	%	38	34	22	28
... of which is < 30 years	%	15	20	-	-
... of which is 30 – 50 years	%	68	70	-	-
... of which is >50 years	%	17	10	-	-
Females in leadership positions²	%	26	30	-	-
Female in senior leadership positions³	%	0	7	-	-

¹ January 2019 numbers.
² Managing at least 3 people
³ Director level and above.



WHERE WE ARE

Contact

DENMARK Headquarters

Jupiter Bach
Theilgaards Allé 9A
DK-4600 Koege
Phone: +45 5589 3333
E: jupiterbach@jupiterbach.com

DENMARK

Jupiter Bach
Vesterled 8
DK-6950 Ringkøbing
Phone: +45 5589 3333
E: jupiterbach@jupiterbach.com

PRODUCTION LOCATIONS

USA

Jupiter Bach
3301 Bill Metzger Lane
32514 Pensacola Florida
Phone: +1 850 476 6304
E: pns@jupiterbach.com

POLAND

Jupiter Bach
Trzuszczyn, ul. Kosciuszki 48
PL-72-004 Tanowo
Phone: +48 91 421 04 20
E: pol@jupiterbach.com

LITHUANIA

Jupiter Bach
Pramones Str. 5 J
LT-72328 Taurage
Phone: +37 044 655 083
E: tau@jupiterbach.com

LITHUANIA

Tabariškės Village,
LT-53330 Kaunas Distr.
Phone: +370 37 478273
E: kau@jupiterbach.com

CHINA

Jupiter Bach
Gaotie Dong Lu
Dezhou 253000
Shandong Province
Phone: +86 534 2751799 E:
dez@jupiterbach.com