

# Sustainable Report 2022

Sustainability has always been on the top of our agenda. We welcome the increasing global recognition and formalization of sustainability development goals to which WindSpace adhere.



As the impact of decades of unconstrained economic growth becomes increasingly visible to everyone, it is reasonable to expect demand for and contribution to a global change.

This call for action, justice, and equality around the world underlines that the Sustainable Development Goals (SDG) are not just ideals to aspire to. They are fundamentals in creating a just society with equal opportunity for all on a planet that is habitable. Time is running out. Urgent action is required.

When WindSpace was established, the goal was to reduce carbon emissions by maximizing the development, construction, and operation of as many renewable energy projects as possible.

During 16 years of operation and as we see climate, societies and economies evolve, it has been obvious to us, to develop conscious values and goals towards a better future. Some of these actions are expertly defined in the SDGs and the 10 principles of UN Global Compact.

We have found with our team, clients, and partners that awareness of the SDGs is high.

Analyzing the business practices implemented in WindSpace confirmed that the Ten Principles have been embedded. Importantly, they are also being disseminated to new employees. We are very much aware that as WindSpace and our activities are expanding, our responsibility for delivering deeper change in our business and community is steadily increasing. We need to move further from policy commitments to significant measurable actions that can lead to performance improvements.

We note the progress made during last few years, but also that there is much more to do. Achieving the needed change requires a ramping up of ambition and action among all stakeholders of WindSpace.

I feel confident, that the WindSpace team and our partners will use their best efforts to contribute directly to the green transition by developing an accelerating amount of renewable energy projects while adhering to the Ten Principles and to the SDGs.

Hence, we recognize that passivity cannot be an option. We are committed to do our utmost to contribute to the green transition in a sustainable way. This is how we will contribute to the transformation needed.

**Jens Elton Andersen**  
CEO, WindSpace

## We are a member of UN Global Compact Network



## Sustainable Corporate Principles

**Holistic approach** to optimize the value chain and processes from an environmental perspective

**Open minded** in how we think, what we do, and which problems we face

**Self evaluation and continuous improvement** of our projects and operating facilities using experience gained for future projects, company development and opportunities to improve the industry

**Be fully transparent with everything we do** throughout the whole process with all stakeholders

**Build good relations with local communities** and contribute to their positive development

**Committed to a good and safe working environment** of our employees and contracted suppliers throughout the entire value chain of suppliers

**Promote a way of working which is open, inclusive, and supportive**

**Actively engage in issues of diversity and gender equality** when recruiting



# WindSpace's values

Our purpose comes to life through our core values: passion, responsibility, innovation, commitment & collaboration

**We are passionate...**

... about renewable energy. We aim to develop solutions and projects that contribute to the solution of a global problem, while creating value for all stakeholders

**We nurture innovation,...**

... value the ability to think out of the box, agility and use of common sense solving problems, developing new ideas and creating innovative solutions

**Collaboration**

We believe collaboration between people and entities positively impacts problem solving, process and results

**We take responsibility...**

... and deal with all challenges in a trustworthy, transparent and sustainable way with uncompromising adherence to strong moral and ethical principles and values, including the UN sustainable development goals

**With strong commitment,...**

... and perseverance in what we do, we deliver in all phases of development, from early inception to project completion, no matter the size, towards a successful closure





# Climate change events are extremely worrying

In a utopian world without human-caused climate change, we would expect to see records set randomly, following our planet's natural variations in climate. But global warming shows record heat events outpacing record cold ones by a wide margin. This imbalance is starkly evident in the famous "warming stripes" graphics created by climate scientist Ed Hawkins of the University of Reading in England. These graphics render each year's average temperature as a shade of red or blue, depending on how much above or below the long-term average it is.

The version on the next page shows summer temperatures going back to the mid-19th century in the Northern Hemisphere, relative to the average for 1971–2000. The 1990s were supplanted as the hottest decade by the 2000s, which were then replaced by the 2010s. The 2020s will eventually follow suit.

**Science and facts confirm that we need to do much more to combat climate change and reach our targets to prevent catastrophic results on the climate and our planet**

We are on a pathway where global warming is significantly exceeding the 1.5°C limit that was agreed in Paris in 2015. Providing the scientific proof to back up that stern assessment, the latest IPCC report noted that greenhouse gas emissions generated by human activity, have increased "across all major sectors globally" since 2010, intensifying the green house effect. For many years now, scientists have been warning about the catastrophic results on the

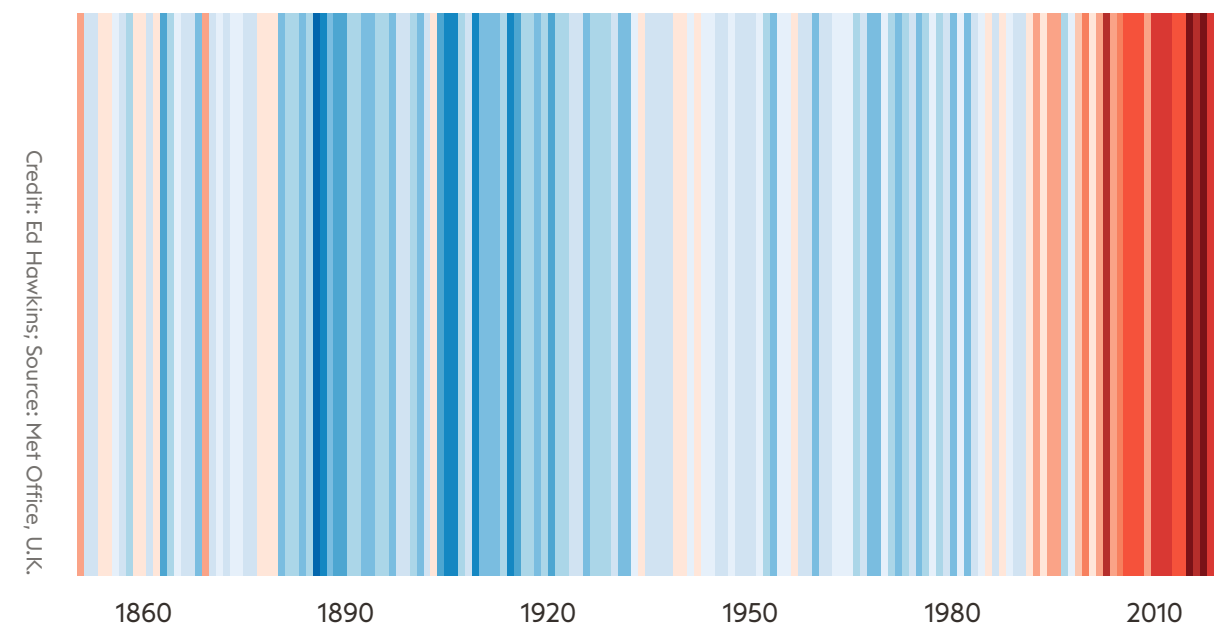
climate if the world reaches average temperatures of 1.5°C above pre-industrial levels. According to the World Research Institute, global temperatures have risen by 1.1°C so far, and we are already seeing an increase in natural disasters such as flooding, hurricanes, and other events.

**Recent numerous climate related catastrophes further highlight the urgency to act with global climate indicators all flashing red**

These warnings could not be more accurate and timelier in view of recent climate events in 2022. In summer 2022 a punishing heat wave in Europe pushed temperatures in many countries above 40°C for the first time in history. At the other part of the globe Shanghai recorded its highest-ever temperature in July with 41°C. And even before the summer officially began, searing heat settled in other parts of the globe in the US and India with a heat wave early summer and

## Summer Temperature Changes over Land in the Northern Hemisphere (1850-2021)

Each stripe shows the temperature difference for one year, relative to the average of 1971–2000. Years when temperatures were lower have **blue** stripes, and warmer years have **red** stripes. Darker shades indicate more extreme differences, compared with the reference years.



extreme temperatures around 50°C in March and April breaking a 120-year record.

This extreme weather and related dryness sparked severe major fires across the globe.

These unprecedented heat waves that swept the planet this summer melted snow and ice not just in Europe's Alps but in the iconic Himalayan range, where the mountains shelter the largest reserve of frozen freshwater outside the North and South poles.

This is destabilizing a fragile system that's helped regulate the earth's atmosphere and key water cycles for millennia. The International Centre for Integrated Mountain Development in Nepal predicts the Himalayas could lose 64% of their ice by 2100.

The impact this year was most acute in Pakistan, where floods have submerged farmland and cities, affected more than 30 million people, and killed upward of 1,500 with 1 million houses damaged, 50 million people displaced and one third of the country underwater.

Extreme floods often lead paradoxically to extreme drought. The Indus River basin, which begins in Tibet and flows through Pakistan before emptying into the Arabian Sea near Karachi, is twice the size of France and generates 90% of Pakistan's food. When the basin floods, much of the water flows to the ocean rather than seeping into the soil, paradoxically causing water scarcity.

A World Bank study estimates that by 2050, 1.5 billion to 1.7 billion people in South Asia could be vulnerable to dwindling water supplies.





More anecdotally awkward events like a sunken World War II-Era Higgins landing craft that used to be nearly 200 feet (65m) underwater was revealed near the Lake Mead Marina in the US. Or falling water levels in the Danube River revealed wrecks from a Nazi German flotilla of warships that were deliberately sunk there in the last months of World War II. Many of the wrecks still containing tons of unexploded ammunition that endanger local fishers, river traffic and wildlife. These dropping water levels also created dangerous conditions for shipping on many rivers on the continent, like the Danube, Europe's second-longest river that flows through 10 nations. In Texas a severe draught revealed 113-million-year-old dinosaur tracks in Dinosaur Valley State Park with these prints usually covered by the Paluxy River.

Drought affected many parts of the world, including areas in Canada, United States, Islamic Republic of Iran, Afghanistan, Pakistan, Turkey, and Turkmenistan. In Canada, for example severe drought led to forecast wheat and canola crop production levels being 35%–40% below 2020 levels.

Those were just a few of the dramatic events that contributed to the Northern Hemisphere's land areas.

Science is very clear about the interconnectedness of the ocean and the active water cycle, since they regulate the earth's atmosphere. India's record-smashing heatwave, Pakistan's floods and accelerating glacial melt could shift the content of climate negotiations at COP27, which is taking place in November in Egypt.

#### **Drastic cuts in emissions are needed to stop climate change**

If not enough is done, the world is close to reaching tipping points on climate change, meaning that we will have gone beyond the point where the damage can be repaired.

#### **Global warming itself has cascading negative consequences**

Carbon Dioxide (CO<sub>2</sub>) is responsible for about three-quarters of global warming. The other quarter is taken by six greenhouse gases,

which are much more powerful than CO<sub>2</sub> in a molecule-for-molecule comparison but are released in lower amounts.

In 2019, the most recent year with complete data, new worldwide emissions from all human sources were the equivalent of 52,000 million metric tons of carbon dioxide. That works out to more than 1,600 tons per second.

Atmospheric CO<sub>2</sub> lingers for hundreds or thousands of years. Methane (CH<sub>4</sub>) is 25 times more potent than CO<sub>2</sub> over a century, the timespan over which estimates are calculated. Sulphur hexafluoride (SF<sub>6</sub>), a chemical used in the power sector, is 22,800 times stronger than CO<sub>2</sub>.

These are called "greenhouse gases" as they trap the heat of the sun producing the "greenhouse effect". The excess of energy accumulated in the atmosphere is partially absorbed by the ocean. The added energy warms the ocean, and the consequent thermal expansion of the water leads to sea-level rise, to which is added melting land ice.

As the concentration of CO<sub>2</sub> in the atmosphere increases, so too does the concentration of CO<sub>2</sub> in the ocean. This affects ocean chemistry, lowering the average pH value of the water, a process known as ocean acidification. All these changes have a broad range of impacts and interactions in the ocean and coastal areas.

The IPCC Sixth Assessment Report concluded that there is very high confidence that open ocean surface pH is now the lowest it has been for at least 26,000 years and current rates of pH change are unprecedented since at least that time".

Ocean acidification threatens organisms and ecosystem services, and hence food security, tourism, and coastal protection.

#### **There is a 'lifeline' right in front of us**

UN Secretary-General António Guterres said that while time is running out to prevent the worst impacts of the climate crisis, there is a 'lifeline' right in front of us though and he is right.





Transforming energy systems is a low-hanging fruit with renewable energy technologies available and cheaper than fossil fuels. Projects installed 20 years ago were measured in kilowatts. Multiply by a million and it is a gigawatt, a scale that some of the biggest wind and solar farms can now have.

The world achieved this scale by cutting down costs. Generous subsidies in Europe and the US pushed companies to ramp up manufacturing. Low-cost production took root in China. These factors have transformed wind and solar from one of the costliest ways to make electricity into the cheapest in most of the world.

#### **More countries need to be involved**

Clean power until now has been mainly built in five countries. Two-third of the solar panels and wind turbines installed globally are situated in the US, China, Japan, Germany, and the UK. Those nations absorbed more than 40% of new solar capacity added in 2021 and more than 45% of wind.

However, for the worldwide energy transition to work, more countries need to harness much more of their renewable power potential.

Secure, resilient, and sustainable clean energy supply chains are central to the global energy transition

The fallout from the Covid-19 pandemic and Russia's invasion of Ukraine has put global energy supply chains under enormous pressure, leading to soaring prices of oil, gas, and coal, as well as shortages of semiconductors and critical minerals needed to manufacture clean energy technologies. While the current energy crisis poses a threat to near-term economic prospects, it also provides an opportunity to accelerate the shift from fossil fuels through a massive surge in investment in renewables, energy efficiency and other clean energy technologies.

Yet we must ensure that the path out of the current energy security crisis and the race to net zero emissions do not replace one set of concerns with another. Clean energy supply

chains largely depend on minerals, not fossil fuels. As a result, the related considerations will be about access to the critical minerals, materials and components needed to manufacture clean energy technologies rather than the supply of fuels alone. Establishing secure, resilient, and sustainable supply chains for these technologies will be essential.

The global adoption of sustainable mining practices that minimise the environmental, water and social impacts of resource extraction will also be central to the sustainability of many clean energy technology supply chains.

The emissions intensity and environmental impact of clean energy technology supply chains must also be reduced rapidly. The emissions intensity of solar PV manufacturing has decreased by 40% in the last decade thanks to process improvements and a switch to low-emissions power generation. But further steep declines in the emissions intensity of solar PV and other clean energy technology supply chains will be critical in a net zero by 2050 pathway.





## The real way forward

“Greenwashing” is performed on a grand scale globally these days. This clearly needs to stop, and talks need to become real actions! As a responsible society, we need to be clearer in terms of what we mean by sustainability when we use the word. As we want to promote useful initiatives to improve the world, we must measure the right elements, report them unambiguously and use them correctly.

The risk of becoming ‘numb’ and not acting is high and perhaps this is one of the key factors holding back the real acceleration towards the climate goals for 2030 and 2050.

Sustainability according to our understanding is represented as the synergy between society, economy, and the environment. The environmental aspects include the use of natural resources, pollution prevention, biodiversity, and ecological health. The social aspects include standard of living, availability of education and jobs, and equal opportunities for all members of society. The economic factors are the drivers of growth, profit, cost reduction and investment in research and development.

Going forward we want to increase our active role as a core actor of the sustainable movement and we hope many will follow suit!

### **Implications for WindSpace and its way forward on a sustainable journey**

- We are active in the solar and wind energy industry. We will aim to ramp up our activi-

ties in solar and onshore wind even further.

- We are active in countries where renewable energy capacity is not fully developed yet. Our focus will continue to be on countries which can do a lot more.
- We need to understand the full picture both in terms of climate impact, globally interrelated changes, and the renewable energy value chain.

In Q1 2021 WindSpace decided to find a new investor in the company. The goal was to increase the sustainable impact of the Company in the future. Our priority was to attract an investor with a long-standing experience, a global perspective, and an understanding of climate related challenges.

The process took time and effort but ultimately this very important milestone in our sustainable journey was successfully completed as Triodos Investment Management via its fund the Triodos Energy Transition Europe Fund (TETEF) became a shareholder in WindSpace in Q2 of 2022.

Triodos Investment Management is fully





owned by Triodos Bank, a global pioneer with 40 years experience in sustainable banking and leading roles in influential sustainable finance initiatives across the globe. The fund aims to mitigate the effects of climate change by increasing the share of clean energy in the total energy mix and by reducing carbon emissions.

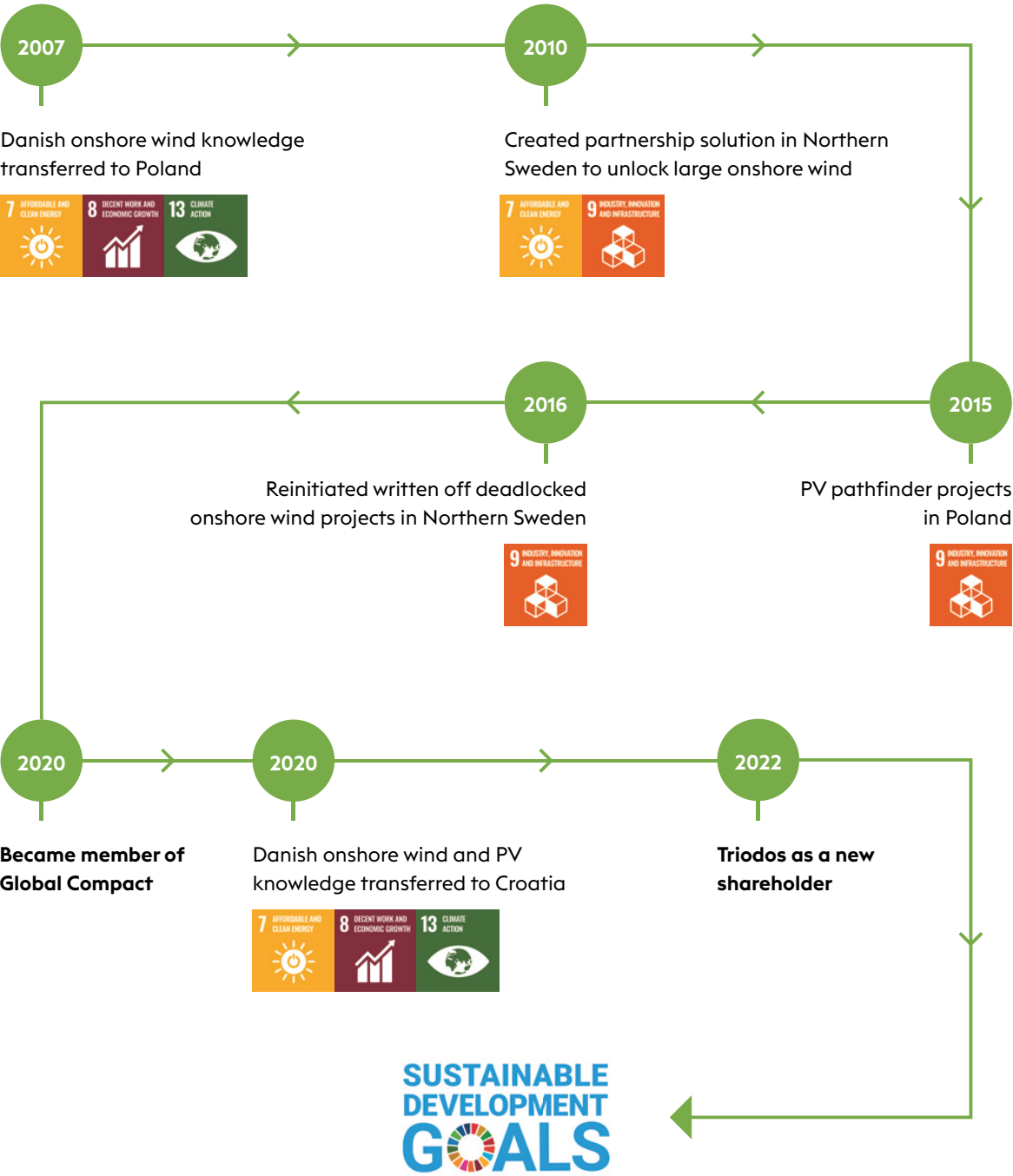
The focus of TETEF is to:

- Enable renewable energy by accelerating the development of projects and plugging the financing gaps in business models
- Reduce energy waste by increasing energy efficiency and optimizing generation place/time/demand





# The sustainable journey of WindSpace





## UN goals and Global Compact membership

WindSpace is since 2020 a member of Global Compact and as such has committed itself to follow and apply certain principles of the UN Global Compact where it can have most impact.

The 17 UN Sustainable Development Goals are a call for action by all countries to prosper while protecting the planet and people around the world. We at WindSpace strive to create specific results within the following goals:

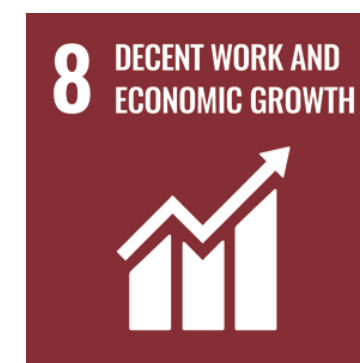


As WindSpace is undergoing expansion and strong growth, the company has a major opportunity to get involved in issues relating to gender equality and diversity.

Our goal is to have an inclusive and equitable workplace and give equal opportunities for leadership, irrespective of gender and race.



Our core business includes reducing the use of fossil energy by generating renewable energy on a large scale. This also promotes technology development with continued increased efficiency and ever lower costs.



Our staff is employed in countries characterized by good employment conditions, and we set requirements for decent working conditions throughout the entire value chain of suppliers. In connection with the establishment of renewable power plants, local suppliers should be hired to the extent that they meet requirements regarding quality and competitive pricing.



The expansion of renewable energy throughout different countries is leading to the reinforcement of regional and local infrastructure, like power grids and roads. This helps to enhance human well-being and local economic development providing work opportunities for the community.



After 11 months of operations a wind park has produced the energy required to offset their own production and construction. This means that after that, energy production produces cumulative net negative emissions.

Our suppliers must comply with the country's legislation regarding the environment, health and safety, labour law, bribery, and corruption. They must also comply with our code of conduct, both regarding their own company and those that they, in turn, engage as sub-contractors.



Greenhouse gas emissions continue to rise, which has serious consequences for ecosystems and human health. WindSpace's business is about expanding the new generation of renewable energy to contribute to reducing greenhouse gas emissions.



## People

As a company we transmit our general sustainability message to our employees. We strive to make our activities a group effort to draw on social norms and make sustainability initiatives fun. Going forward we will pay particular attention to empowering women and local communities, ensuring gender equality and safeguarding the dignity of minorities.

### Priorities for 2022/23:

- Lower gender equality gap and diversity at WindSpace. Medium term goal of minimum 40% of women in our team.
- We also aim to attract younger talent, to give them a chance to start a career in the renewable energy space.

## Society

As a company we want to identify and manage business impact on society. Therefore our company's relationships and engagement with all our stakeholders is critical. As a company we connect with communities early on when projects are in planning stages. Communities want to communicate their priorities and to understand what will happen. Working with respected community leaders can help creating positive outcomes. As a company we will strive to exchange opinions and participates in the social debate to pave the way for additional renewable energy.

### Priorities for 2022/23:

- Fostering education regarding sustainability and renewable energy in Denmark, Poland, and Croatia. This will be executed in cooperation with local high schools.
- Continue to promote knowledge transfer and value creation in the countries where WindSpace is developing renewable energy projects as we use local advisors, consultants, contractors, and operators in the project development.
- Support charities and compensation to municipalities, local investors in countries in which we operate.



# Planet

The world today is facing unprecedented, interconnected environmental challenges. New corporate efforts are needed to increase stewardship of natural resources, implement innovative solutions, and contribute to sustainable development. As a company we want to minimize our environmental impact during construction as this requires materials, manufacturing, transport and – frequently – changing the landscape. This can be minimised by optimising the design of projects, building in non-arable land, and away from water reservoirs and forests.

## Priorities for 2022/23:

- Our largest direct carbon footprint as a company is our office. Even though until now this footprint has been low, we are growing and need larger premises. Thus, our priority will be to move to a new office which qualifies to high standard of sustainability in both directly and indirectly related aspects.







**WindSpace**

Nørgaardsvej 1DK-2800 Kgs. Lyngby  
Denmark

(+45) 70 27 87 00  
[info@windspace.dk](mailto:info@windspace.dk)

[windspace.dk](http://windspace.dk)

