

Jiffy Group Sustainability Report & Five-Year Plan

Jiffy's vision

Be the innovation and service leader in ***sustainable*** plant growing ***solutions*** to feed and beautify the world

Welcome

Welcome to this first sustainability report from the Jiffy Group.

Although this is the first time we have reported our sustainability efforts, we have already been working hard to become more sustainable in both our products and production processes.

Climate change is undeniably an issue that needs urgent global attention. We at Jiffy are committed to working even harder to meet the needs of our current customers without compromising the ability of future generations to meet their needs.

In 2020 we commissioned a survey of a cross section of customers, suppliers, and other stakeholders, asking about their knowledge of Jiffy and their opinion on various key topics relating to the industry and Jiffy's business. The results showed that our customers and stakeholders believe Jiffy is a 'green' company, but many would like to be better informed about our sustainability actions and plans, and some would like to work more closely together on these initiatives.

Through this first report we want to inform you of the recent improvements made and their positive effects. It also provides an insight into our plans for the five years to 2025.

Under the leadership of Thorleif Hals, our CEO since 2019, Jiffy's mission statement and values have been updated. Sustainability is now a key pillar of our business.

We become more sustainable through focusing on environmental and social improvements

Sustainability will become part of the DNA of everything we do in the coming years. Often small daily changes added together make a significant difference overall, so we will actively encourage all employees to contribute directly in relation to their own job function, but also to support the wider group in this important challenge.

At the beginning of 2021 we appointed our first Global Sustainability Manager to support, guide and further accelerate our transition towards our target of being one of the leading sustainable suppliers in the Horticultural and Agricultural sectors.

Sustainability will become part of the DNA of everything we do in the coming years



SUSTAINABLE

“Look out for the sustainability icon on Jiffygroup.com and our leaflets for products that are especially sustainable.”

About Us

Jiffy is a truly global company with its headquarters in Zwijndrecht, the Netherlands, and employing more than 1,000 people throughout the world. We have production locations in the US, Canada, Sri Lanka, Japan, Norway, Denmark, Spain, and Estonia.



Jiffy harvests its own peat from bogs in Sweden, Estonia, and Canada. We blend quality substrates in the Netherlands, Estonia, and Canada. And we produce Preforma bonded plugs in the Netherlands, US, Spain, and Japan. We also manufacture a complete range of coir products at three facilities in Sri Lanka.

We offer a wide variety of options to create tailor-made solutions for growers worldwide. With our portfolio of biodegradable pots, propagation pellets, coir products, substrates, and plugs we aim to provide the best solution for professional growers' needs.

Jiffy is perhaps best known for the 'Jiffy Pot'. This root protection and propagation product was launched in the early 1950s and gained huge success in the US and European markets. After more than 60 years it is still going strong, with renewed interest in it as a replacement for plastic plant pots. Over the years new sizes have been added to align with standard sizes of plastic pots more closely, as well as more retail friendly options. Stronger versions for longer crops and peat-free versions are also available.



Now produced in Denmark and Canada, Jiffy is proud that the DK2C version was recently awarded a Gold Cradle-to-Cradle certificate by the [Products Innovation Institute](#).

This globally recognized institute works closely with product manufacturers, suppliers, accredited assessors, and other industry influencers and stakeholders. It aims to maximize the positive impacts of products and materials and work towards safer, more sustainable products made for the circular economy.

An innovative Jiffy product which is equally well-known in the growing industry, is the Jiffy-7 pellet. This product was launched in Europe in the late 1960s and began production in North America in 1982. Today we produce Jiffy-7 in Norway and Canada, as well as a 100% coir version in Sri Lanka. Billions of plants all over the world start life in a Jiffy in a huge variety of plant propagation facilities. Over the years, the Jiffy-7 pellet has evolved to include new sizes and handling systems, as well as peat-reduced and peat-free versions.

Thanks to the 2002 acquisition of the Preforma Plant Plug, Jiffy became a world leader in state-of-the-art propagation systems, providing tailored propagation plugs to suit each grower's specific needs. The high-quality plug system can even be refilled into growers' own reusable trays.

Jiffy Pot certified C2C Gold Standard



This provides a propagation system perfectly suited to growers in nursery handling and growing systems and prevents the need for any single use plastic trays in the process.

Our production units in Sri Lanka have also helped us to become leaders in the coir (coconut fiber) market. Our Jiffy-7C pellet factories in Mirigama and three other locations in Sri Lanka produce top-quality hydroponic media such as Jiffy Growbags and Jiffy Growblocks made from coir. Our environmental and quality standards are at the forefront of the industry, which has allowed us to grow sales of these product ranges very quickly in recent years.



Our state-of-the-art substrate production location, opened in 2016 in Zwijndrecht, Netherlands, is often referred to inside Jiffy as '1Plant' because it was the amalgamation of three previous locations into one purpose-built production facility. Moving to one production location significantly reduced the amount of truck movements between locations.



Jiffy substrate production facility, Zwijndrecht, Netherlands

1Plant can produce 1 million m³ of high-quality substrates for the professional grower market each year. This location has more than 30 different raw materials available, allowing us to make high-quality growing media suitable for almost all crops and cultivation systems.

The harborside location allows efficient transport of bulk raw materials to the factory by ship, and the proximity to the main Dutch growing areas keeps final product delivery distances short. Meanwhile, the factory design allowed us to reduce the number of wheel loaders by more than half, greatly reducing our fuel consumption (emissions) in both production and logistics.

Our Estonian substrate facility sits at the raw material source and specializes in simple but consistently high-quality growing media mixes. These are mainly sold in compressed forms to maximize logistics efficiency for global deliveries.

The locations reflect our ongoing strategy to produce either close to the raw material source or the major market, to minimize logistics movements.

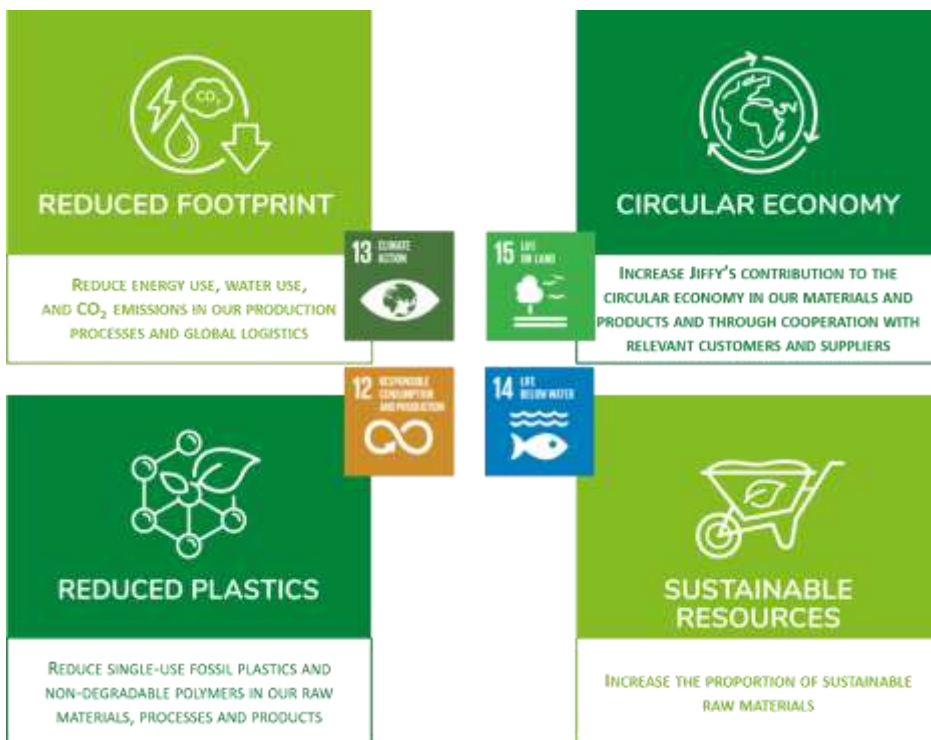
Our Five-Year Sustainability Plan

As we increase our focus on sustainability, this first report highlights some of the main improvements we have already made and details our ambitious five-year plan, running until the end of 2025.

The implementation of Jiffy's global sustainability strategy will see all our entities working on 'smart goals' aligned with the Sustainable Development Goals of the UN. The 17 UN goals are a blueprint to a better and more sustainable future for all, by addressing the global challenges we face in today's world.

Individual sustainability goals and improvements will continue to be implemented at a local level throughout the organization, while being supported and guided by a global sustainability framework.

In this first five-year plan, we will focus mainly on contributing to UN goals 12, 13, 14, & 15 through the following working principles:



We will increase our marketing efforts to spread the news about our progress and initiatives more widely, in the expectation that this will bring us into contact with other likeminded individuals and companies to further accelerate our progress.

Through closer connection and listening to our customers, we will improve our understanding of their sustainability priorities and work together on key projects to achieve common, sustainable benefits.

Reduced plastics

Goal: Reduce single-use fossil plastics by 50%

In recent years we have all become more aware of the negative environmental impact of plastics, especially on our oceans. The World Economic Forum also estimates that by 2050, plastics will be responsible for nearly 15% of all global greenhouse gas emissions if we continue our current trajectory. That's why we see plastic reduction and replacement in our products and processes as critically important and urgent.

Jiffy has been working to replace single-use plastics for several years. In 2020 we took a significant step by starting to convert the net wrapping the Jiffy-7 and Jiffy-7C pellets and growblocks from PP/PE fossil-based plastics to PLA bioplastic. PLA is a natural, plant-based material that is 100% fossil plastic-free, renewable, and sustainable. Made from corn starch, it is certified GMO-free, and is 100% biodegradable and industrially compostable.

By the end of 2020, we had successfully converted more than 50% of our products to PLA. We are on target to achieve 100% conversion by the end of 2021. This seemingly small change took several years of testing and development. It will lower our fossil plastic consumption by around 100 tons each year, as well as reducing the carbon footprint of this netting by more than 60%.

Our intention is to reduce our consumption of plastics in products and packaging for both incoming raw materials and outgoing products. Where no further reduction is feasible, we will change to recycled plastics, non-fossil, bio plastics, or alternative compostable products wherever possible. Increasing the amount of recycled plastics or switching to bio plastics will further contribute to our circularity and CO₂ reduction goals.

In 2021, we already have projects running at three production locations to shrink the amount of plastic packaging, increase the amount of recycled material, and reduce the thickness of the plastics used. These projects are expected to be completed by the end of 2021 or in early 2022. Lessons learned from each project will be used to kick-start further improvements in other products and production locations.



Growblocks & Jiffy-7 with 100% degradable PLA net

Sustainable Resources

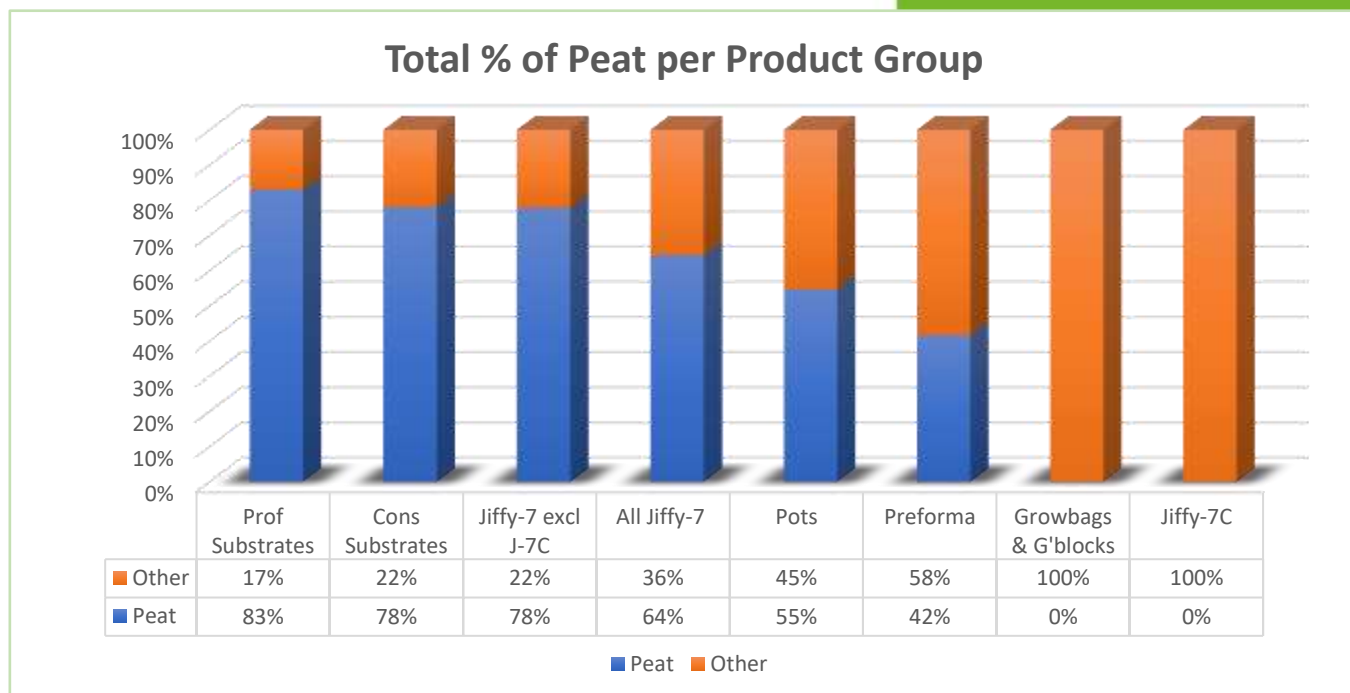
Goal: Obtain 50% of total raw materials from sustainable sources

Professional growers demand high-quality, consistently stable growing media to produce superior crops. Across the industry, the range of raw materials able to provide this guaranteed performance level together with reliable availability is relatively small at the moment.

Our current range of over 30 raw materials includes peat, perlite, coir, wood fiber, composted green waste, bark, and pumice. All of these can be used as a component in growing media. Some can be used as a major, or sole, component in certain circumstances. However, many can only be used in small quantities. Peat remains the single most accessible, high-quality, low-cost, and reliable component in growing media. Hence it is still the dominant raw material across the industry.

In recent years, much of our product range has transitioned away from using 100% peat-based raw materials, although peat remains by far our largest single raw material type. The graph below shows the percentage of peat per product group (individual products vary). It illustrates that peat, in particular for substrates, remains an important raw material for Jiffy, as it does for the wider industry.

Our goal to increase the proportion of renewable raw materials covers our entire product range. Because of the specific challenges regarding peat in substrates, we also have a target to reduce peat in our European growing media/substrates to a maximum of 65%.



One challenge faced by the industry is the higher cost of many alternatives. Even more significant is the insufficient availability of more sustainable raw materials that provide the same qualities as peat.

Our Innovation Team is working hard to increase the amount of renewable raw materials available in our portfolio. Multiple fibers are currently under test and review. We are hiring additional specialists to work directly on the challenge of sourcing and assessing alternative materials. This will broaden our knowledge and speed up development. Even with this clear intent to find and introduce new renewable raw materials, bringing new materials to market can take several years.

As a responsible business, Jiffy will continue to work towards minimizing the environmental impact of all our raw materials. As peat is our largest single raw material type, to provide independent verification of the steps already taken and those agreed for the future, we are working towards [Responsibly Produced Peat](#) (RPP) certification of all our European peat fields by the end of 2021. Responsibly Produced Peat certification ensures that peatland is used, managed, and restored in a responsible way.

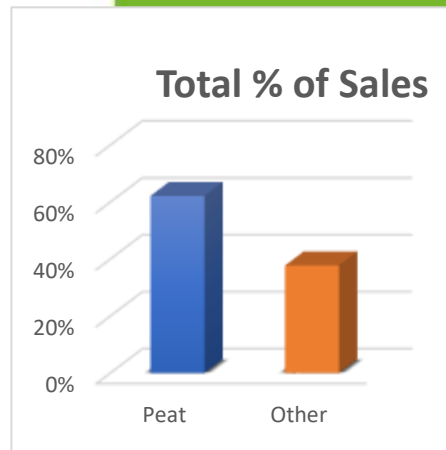
The RPP certification system does not allow peat extraction from high conservation value areas. Instead, it only allows peat extraction from areas that are already degraded (e.g. previously used for agriculture). Extraction must be followed up by appropriate after-use measures.

This certification secures the best possible development after completion of peat production, with preference for restoration. Stakeholder consultation, including local authorities, NGOs and local communities, is an important part of this process.

We missed our certification target for 2020 because of Covid. The global pandemic made it impossible for inspectors to visit the bogs for assessment in 2020, meaning we were unable to complete certification on any of our peat fields. Alternative arrangements are being implemented to allow certification to take place this year. We are optimistic that our target of full certification is achievable in 2021, or in the first quarter of 2022 at the latest.

Our Canadian peat fields conform to strict environmental conditions imposed by the local government. An end of life restoration plan is part of the application process for a new extraction license, which must be updated every few years based on the latest environmental requirements.

Until recently, the environmental discussion about harvesting peat mainly related to conservation of habitat and biodiversity. Hence our work with RPP to ensure external certification of our peat fields and harvesting. As more data relating to global ecosystems and carbon sequestration and storage becomes available, the focus has now moved more towards peat's greenhouse gas emissions.



Although there is varying data and opinions about the extent of the emissions caused by peat harvesting and use, we accept we need to treat this important natural resource carefully and consider our approach to peat use to minimize future environmental impact.

The industry as a whole is grappling with the complex subject of emissions caused by raw materials. There is a need for an industry standard tool to accurately compare the life cycle of raw materials. This would allow us to make informed choices about raw materials based on standardized sustainability criteria.

Jiffy is working closely with the substrate industry body, Growing Media Europe (GME), to develop this tool for the benefit of the whole industry. We expect it to be available during 2021. Such a tool will not only help to guide our raw material choices. It will also allow our sales teams to better support customers to make informed decisions according to their sustainability priorities.

Reduced Footprint

Goal: Reduce greenhouse gas emissions by 25%

Our goal is to significantly reduce our emissions in the coming five years. Unfortunately, we are unable to fully quantify our emissions across all parts of our business and products at this moment.

We still need to quantify emissions relating to many of our raw materials, where our suppliers have been unable to provide accurate data, or where there are differing approaches to emission calculation. Logistics emissions also present a significant challenge due to the global nature of our business and the huge number of transport providers, types, and routes used.

During 2021 we will work hard to capture the required information to further guide our emission reduction strategy, but we do not see this missing data as a reason to delay taking action today.

Globally, our production locations emitted a total of 8,891 tons CO₂ in 2020 from electricity consumption. As a first step towards reducing these emissions, in June 2020 we installed solar panels on the roof of our Kobeigane coir growbag factory in Sri Lanka. The panels can produce 628 Kwh of renewable electricity. This substantial installation generated equivalent to almost half of Kobeigane's total electricity requirements in its first six months, avoiding 293 tons of CO₂ emissions.

Due to the success of this installation, during 2021 we will install solar panels at our Mirigama production location in Sri Lanka and at our Puerto Lumbreras factory in Spain.

Not all of our production locations or local climate conditions are suitable or economically viable for local power generation. Where it is not feasible to install local power generation, we will move towards purchasing renewable energy where available or carbon offsetting/credits where green energy is not available.

Our Norwegian Jiffy-7 factory already benefits from clean electricity thanks to almost all of Norway's energy coming from hydropower, and our Danish factory already buys renewable electricity, avoiding 409 tons of CO₂ in 2020.

Ongoing production improvements will always seek to include emission reduction wherever possible, like the recent conversion from oil to (lower CO₂) gas for the drying ovens at our Jiffy Pot production location in Denmark.



Solar panels, Kobeigane, Sri Lanka

702 tons of greenhouse gasses avoided in 2020 through use of renewable energy

Conversion to more energy-efficient lighting and zoned lighting controls is already under way in our production and office locations. This will continue during the coming period, as will various other production energy efficiency projects.

Logistics Emissions

As a global company, dealing with many voluminous raw materials and finished products, logistics forms a significant part of our daily business and our total emissions. It is therefore a key focal point.

Using specially made intermodal containers to bring peat blocks from our Swedish peat fields to our Zwijndrecht production site allows these containers to travel all except the first and last few kilometers by train. This has significantly reduced the emissions for this frequent route.

The harborside location of our Zwijndrecht factory allows peat and other bulk raw materials to travel from source to production mainly in vessels containing the equivalent of up to 65 truckloads, greatly reducing our road kilometers and emissions.

The continuing turmoil in global logistics makes any form of forward planning extremely difficult at this moment. As the industry returns to a more normal situation, we will continue to work on modal switches on major trade lanes for both incoming raw materials and outgoing final product deliveries, to reduce road kilometers and emissions.

Close cooperation with customers will be key to maintaining our current service level while moving to less-polluting forms of transport that may have longer transit times.

In 2022, we will start to make emissions data available for customer deliveries and offer alternative, lower emission, options where available. This emissions data will also help guide our raw material logistics choices towards more sustainable options.

Our five-year plan will not yet achieve carbon neutrality. That is why our goal is to take part in carbon sequestration projects to offset part of the emissions we create. Jiffy currently works with major forestry companies around the globe, and we will explore the possibilities of feasible projects in cooperation with our suppliers and customers. We will take a balanced view between the value of offsetting locally, where we create emissions, versus potentially greater environmental benefits of global offsetting / sequestration projects.



Rail containers bringing peat from Sweden to Zwijndrecht

Water Consumption

Washing and buffering of coir raw material for Growbags, J-7C, and Growblocks uses a significant amount of fresh water. By capturing rainwater from the production locations, and treating and recirculating excess water after production processes, we have already reduced our total water consumption significantly. We no longer need to use any drinking water resources. These processes minimize the environmental impact of our coir significantly.

Other production locations where large amounts of water are used will investigate water reduction and recycling during this plan period. We will also investigate rainwater harvesting where local weather conditions and production facilities could facilitate this.

Substrates are already a voluminous product so adding water to achieve a 'ready to use' bulk density or humidity for the grower can have a significant impact on the loading amount and therefore the emissions per m³. We will continue to support and encourage substrate customers to make 'in nursery' arrangements to add water wherever possible. This helps us avoid the need to ship heavy water as part of the product, maximizes the loaded quantities, and minimizes emissions.



Jiffy Sri Lanka
water recycling

Circular economy

As the global population and consumption increase, it is ever more critical to keep raw materials and products in use for longer, to reduce the demand for natural resources. That is why circularity is an important pillar of our sustainability program. Developing sustainable plant growing solutions together: that is Jiffy's number one goal.

'Developing sustainable plant growing solutions together'

'Together' is a key part of our sustainability strategy for the coming years. While we continue to work hard to improve our business from the inside, we also see the importance, and the benefit, of engaging much more freely with outside parties.

Our goal is to become a more circular business: To increase the amount of uses a product or raw material has before it reaches the end of its life. We can only achieve this by having much closer contact with our suppliers and customers.

We will find out more about the supply chain of the materials we bring into our production locations. This will help us find ways to reduce their environmental impact. At the same time, sustainability will become a key part of the discussion with all suppliers.

In the short term, we will take action to reduce our consumption and increase the life span of the raw materials we use. Most of our production locations already sort and recycle waste received from suppliers (e.g. raw material packaging) and any waste created during our production process. By the end of 2021, all facilities will have fully implemented waste recycling systems.

We already use recycled plastic for many of the ranges where a plastic tray (e.g. Preforma) is an integral part of the product. This contributes to our goal to increase the circularity of our products. It also avoids the additional carbon emissions created by virgin plastics.

Through closer cooperation with suppliers and key customer groups, we will find ways to reduce consumption of virgin raw materials further. We also aim to increase the usable life of our products through end-of-use recovery, reuse or recycling. In particular, reuse will become a focal area as we seek closer cooperation with customers and develop more circular products.

Due to the global nature of our business, it is not commercially or environmentally viable to recover end of life products or packaging materials from much of our customer base. However, we will focus on specific local solutions, working closely with key customer groups to reduce or remove packaging and to support end-of-life reuse or recovery.



In all cases, we will improve the information available to support customers' own local recycling arrangements.

In the longer term, Jiffy aims to become a major player and contributor to the development of circular horticultural systems with a special focus on food production and waste minimization, contributing to UN goals 2, 8, 11, and 12.



Conclusion

In this first sustainability report we have taken the opportunity to pause, look back at what we have achieved so far, and reconsider what is most important in the coming period. We hope it provides an insight into our strategy and some of the specific actions we are taking. Many more improvements will be targeted during the period to 2025. Updates and information will be published periodically on [Jiffy's website](#).

In the meantime, don't hesitate to reach out to your normal Jiffy contact or our Sustainability Manager (Richard.Stevenson@jiffygroup.com) if you have further questions, comments, or suggestions you would like to discuss.