



Towards Greener Horticulture

WAYS IN WHICH HORTICULTURE CAN INCREASE ITS ENVIRONMENTAL AND SOCIAL VALUE

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Foreword

As our planet warms, it is becoming increasingly clear that society – indeed humanity – is facing huge challenges. Decisions that are made in the coming decade will set the direction for our climate for decades and even centuries to come, with huge impacts for the Earth's biodiversity and for our societies. It's easy to feel powerless in the face of such challenges, and to ask ourselves what we alone can do to make a difference. Horticulture has a huge part to play in solving the challenges that face us.

At present, the only solutions to the scale of the challenges we face are natural ones. There are no machines or technologies as effective as plants, trees and landscapes in sequestering carbon, cooling our towns and cities, fostering biodiversity, or alleviating flash flooding. Indeed, in our assessment the horticulture and landscaping industry has the potential to underwrite half of the goals of the UK government's 25 year environment plan.

But, in order to mobilise our industry's potential, we need to rise to the challenge in a sustainable way ourselves. It's clear that there are opportunities for us as an industry to become more water efficient, to reduce our CO2 emissions, and to reduce waste and use of unsustainable natural resources and raw materials. It's also clear that by reaching outside of our

industry – to government, to environmental organisations, to other industries – we can learn together, work together, and move faster together. That's why I'm pleased to introduce this report summarising discussions between leading industry figures from organisations in horticulture and those with a stake in greater industry sustainability. It draws out principles for industry and for policy makers in ensuring that the contribution to our planet from horticulture is maximised. All of us in horticulture have a huge part to play in solving the climate challenges of the 21st century, and the HTA will continue to champion and support the work of our members in this area.



A handwritten signature in black ink, which appears to read 'James Barnes'.

James Barnes
HTA Chairman

Driving sustainability is a reality for business and for us all as individuals. With time against us, industries have an opportunity to go onto the front foot, and we need to act now. Sustainability will be a more dominant part of our lives; embracing its ideas and building business strategies around it can only benefit the environment and us all. The more businesses and industries that start the dialogue and drive a culture of sustainability, the greater the chance that others will follow.

For us at Easitill, we are continuing our sustainability journey by recycling office waste, re-using our packaging materials and using packaging materials that are recyclable or biodegradable. We have implemented a call logging and ticketing system which has created a paperless environment and further improved efficiency. Our 'Do-It-Yourself' labelling enables garden centres and nurseries to print labels on demand to the quantity they need, helping to reduce waste. We have also, for over ten years now, supplied the Floralabel range of recyclable, bio-degradable, compostable, and sugarcane bio-waste labels.

Easitill and Floralabels are privileged to be part of the incredibly important debate regarding sustainability in horticulture. Horticulture is particularly important in terms of the direct and indirect jobs the industry creates and we all have a responsibility in furthering its longevity and sustainability for many more years.



Keith Plekker
Director, Easitill

About the HTA round table series

One of our core values is collaboration; we might be able to go faster on our own, but we can go further when we work together. We're passionate about our industry's potential as a force for good in the UK and globally, and as part of realising that potential we reach out for critical friends and fresh perspectives. We aim to bring together the experience and ideas from our industry with fresh thinking from beyond it. With this in mind we run a series of round table think tanks. These forums, run under Chatham House rules, provide a space in which new ideas and perspectives are generated and challenged, and where new relationships are begun.

This white paper summarises the key discussion points from a forum gathered to explore the issue of sustainability in horticulture which took place at the end

of 2021. It looks at the challenges and opportunities of a sustainable society and the role of ornamental horticulture within this. The paper summarises the key points of the discussion, and action points for industry and for policy makers. Information on the environmental and economic contribution horticulture makes to the UK can be requested in two reports from the HTA. The first reviews how horticulture supports half of the goals of Defra's 25 Year Environment Plan. The second shows the potential for the industry to increase its environmental and economic impact by 2030. Both reports are available on our web site or on request from sustainability@hta.org.uk. We hope you find this white paper useful.





Summary

There is an urgent need for the UK to transition to a sustainable economy, and net zero presents opportunities for the UK horticulture industry to expand its output of the plants and trees that are part of the solution. This expansion in output is essential to delivering UK's climate and environment ambitions – nature-based solutions to climate change such as plants for urban greening and tree planting are the only way of mitigating the impacts of climate change at scale and speed.

However, this expansion needs to be sustainable – the industry needs to build on its work to reduce waste and its responsible use of resources. The industry has a responsibility to identify and improve the environmental impacts of its activities across their entire lifecycle. This extends, for instance, to our use of water, plastics, energy, transport, and materials used in growing media.

Government has a key part to play in accelerating this. Many simple and inexpensive steps such as regulatory change and facilitating access to pre-existing fiscal incentives for decarbonisation could benefit the environment, society and the industry's journey to sustainability.

Equally though, industry and government have major opportunities to work together. One example is collaboration to develop a growing media industry that can lead the world in its use of commercially, socially, and economically sustainable materials. Many of these materials, such as sphagnum, are in their infancy and require collaboration between industry and government to bring on stream at commercial scale.

Such partnership working is vital to ensure that gardening develops as a means of enabling millions of citizens to connect with nature and do their bit to address the climate and biodiversity crises.

Increasingly over the next decade, the nature of gardens and gardening will transition to being a key ecosystem service, the beginning of a generational shift for horticulture. We'd conclude that as our children grow, they will see horticulture as a way to contribute to our environment, whether as a sustainable hobby or a career path and vocation in an increasingly green industry.

Key points for policy makers

There is a strong business case to be made for investment in growing the UK's horticulture industry. Innovative and creative ways of financing a sustainable growth in the UK's horticultural output would yield huge benefits.

Whilst ornamental horticulture is at the forefront of providing nature-based solutions to climate change, it lags by comparison to other industries in terms of access to fiscal incentives to accelerate the decarbonisation of its value/supply chain. The industry should build partnerships with stakeholders such as government, environmental NGOs, and stakeholder industries such as water or planning to build robust business cases for financial investment in sustainably expanding the industry's capacity. In many cases this could be as simple as addressing procedural red tape to enable horticulture business to access existing funding initiatives. This will help to accelerate the delivery of nature-based solutions to combat the climate emergency. Policy makers have an opportunity to engage with the industry to develop robust assessments of the contribution horticulture has to offer, and work at the national, devolved and local levels to enable access to the financing to turn these assessments into solutions on the ground. As regards growing media, there are opportunities and an urgent need for government and industry to collaborate to enable a transition away from the use of unsustainable materials such as peat to more sustainable alternatives that the industry currently struggles to access.

Horticulture has enormous potential to benefit the UK economically, environmentally and socially. There is an opportunity for government and industry to collaborate on achieving this potential.

Gardening already enhances the natural beauty in our towns and cities, and will increasingly become a way of delivering environmental and social value, for instance through cultivating plants and green spaces. For instance, Defra's Natural Capital Accounts for 2019 reported that the annual value of the UK's green spaces in terms of urban cooling alone was £244m in labour productivity savings and avoided air conditioning energy costs. The horticulture industry has an opportunity to use its research and development to bring new products and gardening concepts to market that benefit the environment. In order to accelerate this, there is an opportunity for the industry to align with government on understanding further the natural capital value of gardens and green spaces, and to collaborate on research and development that brings this potential to bear in achieving the UK's climate change and social cohesion goals.

Gardening and gardeners have a role to play in mitigating climate change, and gardening habits are already changing. The horticulture industry has a responsibility to continue to cultivate and promote sustainable gardening,



for instance through schemes such as the Responsible Sourcing Scheme for Growing Media; policy makers have a role to play in facilitating this.

More responsible and sustainable gardening practices and habits need to be nurtured. The industry needs to play its part by innovating to produce more sustainable products and packaging, and educating and informing gardeners how to garden in an environmentally friendly way. The Responsible Sourcing Scheme for Growing Media, the trial of compost bag collections for reprocessing into garden furniture, and the development of recyclable plastic plant pots are just three examples of the industry coming together to make gardening more sustainable. We call on policy makers to enable and encourage such initiatives, for example in recognising and incentivising industry-led schemes to reduce waste in forthcoming packaging regulations or in addressing regulatory barriers restricting access to peat alternatives such as green compost from the UK's garden waste or anaerobic digestate.

Sustainability presents an opportunity to inspire more hobby and professional horticulturalists – the next generation of greener gardeners.

Gardening will continue to provide the UK's citizens with the opportunity to connect with nature, for children to learn where their food comes from, for neighbours to chat over the garden fence. But as the role of gardens in fighting climate change becomes more widely known, this will inspire more people into gardening as a hobby or horticulture as a profession. The industry is already working on apprenticeships and careers outreach activities into schools. There is an opportunity for policy makers to expedite this by working with the industry on skills frameworks and ensuring that routes into horticulture as a profession are well sign-posted.

The discussion in detail

Sustainability – an opportunity for horticulture to grow

Sustainability in horticulture was understood by participants in the discussion in several ways. Initially the environmentally beneficial aspects of horticulture were to the fore of the discussion. There was a broad consensus over the strengthening evidence base for the benefits of plants, gardens and green spaces; its benefits to wildlife, human health and well-being and carbon sequestration are well documented. In terms of what horticulture can contribute, participants observed that the only current solutions that can be deployed at scale to address the climate emergency are natural ones. This presents horticulture with the opportunity and responsibility to reach out to and help other industries, disciplines and society in its widest sense adapt to climate change.

“You’re doing something that’s incredibly important for society and the environment in one”

“We’re not just balancing what we’re doing, we’re improving on that and covering other people’s backs”

However, what idea of ‘weights and balances’ for the horticulture industry quickly emerged in the discussion – the idea that in order to deliver these benefits there is a (currently) unclear societal cost, particularly in terms of environmental impacts. The environmental cost of raw materials and inputs such as energy, fuel miles, water, peat and other materials was particularly highlighted in the discussion. Participants identified a need both for better data and science on these impacts, and for the industry to drive these impacts down and where possible remove them.

There was general view that horticulture, on balance, is likely to contribute more than it detracts from our environment and communities. However, a key risk identified by participants in this consensus was that of the industry standing still. Participants from outside horticulture in particular took the view that the benefits of plants, trees and gardening should not take away from the responsibility of the industry to do all it can to move away from unsustainable operations. In particular the need for the industry to maintain and accelerate its work on transitioning away from peat and reducing reliance on mains water for irrigation were flagged and explored.



Sustainable business operations – growing greener

In spite of general acknowledgement of the positive environmental and social aspects of horticulture, some participants debated the extent to which UK horticulture can be considered truly sustainable based on its use of peat, packaging, water and its only partially quantified CO2 impacts. This stirred animated debate, particularly with regard to the balance between the environmental benefits of horticulture and the environmental costs incurred to deliver these benefits.

Increasing demand for plants and trees for government tree planting and urban greening projects is likely to drive increased 'inputs' of energy, water and raw materials; this will create a pressing need for more access to and use of sustainable resources and inputs. At present these sustainable resources are not available to businesses in horticulture in sufficient quantities to enable increased plant production. For instance, current reliance on mains water supply for irrigation, and peat extraction for plant production were highlighted as examples of unsustainable practice. Some participants also flagged the role government has to play in enabling businesses to transition to more sustainable resource use, for instance in accelerating access to peat alternatives and enabling or encouraging business investment in rainwater capture or reservoirs.

“We’ve got water tanks at one of our sites, but it’s no-where near what we need. It’s more of a top up”

“I think there could be some help from government to encourage us in the right direction (on removing peat from horticulture). After all, an awful lot of the alternative components to peat such as wood and wood fibre, the government is paying vast sums in renewable heat incentives for people to stick them in a boiler and burn them”

Among the key challenges made by participants to the group is for horticulture to see itself as part of a wider societal and ecological system and to develop alliances that stretch beyond the traditional confines of the horticulture industry. A key challenge and opportunity for the industry is to think of itself more broadly than as a vertical chain or 'balance sheet' of inputs and outputs in the production of plants and products with a net environmental or social benefit.

“What’s your vision for horticulture in the next ten, twenty years as we transition to net zero . . . nature-based solutions are the only ones out there at the moment to sequester carbon”

A clear conclusion to be drawn from the discussion is for more work to understand the environmental and social impacts of what the industry produces across its lifetime. Whilst plants are in broad terms beneficial, there is a need for the industry to measure and minimise any potentially harmful impacts. This would include reviewing the sustainability of the energy use in producing crops, the use of fossil fuels in transport and distribution, the impact of the growing media they are produced in, and the disposal of packaging involved in their production or retail. The development of consistent lifecycle assessment methodologies, for instance those being developed in Europe for cut flowers and pot plants, provides an opportunity for UK horticulture to develop business improvement tools for members to better focus and drive action in this area.





“(Horticulture) can’t work in a silo anymore. Functional approaches to thinking about the future don’t work. The world is so much more connected – it operates as a system”.

“There’s an opportunity here, and if government would invest in building supply chains, building the training, giving you – the industry – help to start forming longer term sustainable horticulture industry then it would meet a lot of its own goals”

“What contribution can horticulture make to the big challenges . . . there has to be enormous opportunity for the horticulture sector to operate for the greater good and actually to get income and partnerships across other sectors where you can help”

Partnership working – reaching out beyond horticulture

This intersection of horticulture with a wider system of organisations and interests became very clear in the forum. This was both in terms of the benefits horticulture provides to the UK’s economy and environment, and also in terms of building the partnerships horticulture needs in order deliver on its economic and environmental potential.

Given the scale of the opportunity for horticulture, some participants observed that it was unrealistic for the industry alone to address structural barriers to growth and more sustainable business practice. For instance, there is a clear role for government and policy makers in unlocking regulatory or financial barriers to more sustainable operations. One of the key calls from participants was for the industry to develop partnerships with organisations outside of horticulture, such as environmental NGOs, planners, government, and other industries. Participants felt that coalitions encompassing stakeholders and partners from beyond horticulture would be key to achieving the policy changes needed to accelerate sustainable operations and environmental value delivery from UK horticulture.

Some participants drew parallels between horticulture and other industries in the level of support they received from national and local governments. Opportunities to unlock the potential of horticulture were seen to exist both in transitioning to more sustainable ways of working and in harnessing the benefits of plants, trees and green spaces to deliver policy goals such as climate change mitigation and green economic growth. This was seen as an opportunity for both government and industry to work together to develop the investment cases and policy developments that help horticulture grow to underwrite government's environmental ambitions.

“Some of the activities you talked about, about being more self-sufficient, about collecting what you can, investing in (water) storage, it's very difficult because of the payback periods involved and the uncertainty of when you'll need them or not; that's where government comes in, and we'll certainly talk to government about grants for businesses”

One particular area of opportunity is for government and industry to work together in creating a growing media industry that leads the world in delivering effective product from increasingly sustainable materials. At the time of writing, just under a third of the volume of the growing media sold in garden centres is made of peat. Key barriers to removing peat from horticulture include a lack of access to alternatives such as anaerobic digestate fibre, green compost, or – in the longer term – sphagnum moss that could be grown on former peat extraction sites. Government playing an active part in developing a plan to accelerate access to peat alternatives is essential to enable the industry to move away from peat.

Re-inventing horticulture – gardening in the climate and biodiversity emergencies

The opportunity for gardening and horticulture to evolve in the context of environmental and biodiversity challenges facing the planet came through strongly in the forum. Whilst there was a consensus on the benefits of gardens and green spaces, there was also a consensus that horticulture needs to evolve to provide nature-based solutions. For instance, in the context of scarcer availability of water facing the UK, plants bred for drought tolerance were flagged as an area where greater investments in scientific research and development could pay dividends. Such developments will require significant, world leading scientific research, and will create high-skill horticultural jobs as part of the growing UK life sciences industry.



The forum discussed the need for more holistic approaches to gardening in our towns and cities, and the role the horticulture industry has to play in this. A pressing need was identified to educate consumers on more sustainable approaches to gardening. Examples of behaviours expected to become more prominent include more use of rainwater for watering, more home composting to protect and preserve supplies of scarce peat alternatives in composts, and more selection of plants to deliver environmental benefit, for instance providing habitat and forage for wildlife. In short, the group anticipated a shift in gardening habits in the coming years towards cultivation and away from consumption.

The industry has a role to play in informing gardeners of the environmental role of gardens and gardening in the UK's ecosystems. For instance, it was noted that the UK's gardens if put together would cover an area greater than three times the area of Greater London, and that planning and maintaining these gardens in the coming decades will play a vital part in mitigating the effects of climate change; examples included flash flood alleviation, and urban wildlife corridors to foster biodiversity gain. This shifting perception of gardening will ensure that the UK's gardeners continue to garden with passion, and that gardening remains relevant to the next generation of millennials and our children.

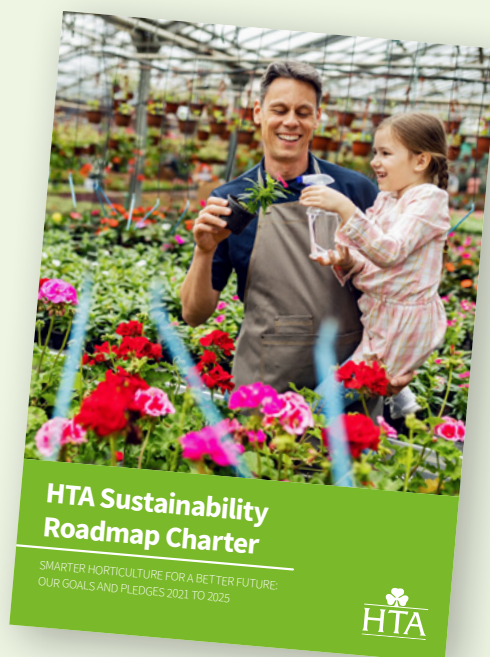
Participants in the forum observed that the increasing association of horticulture and landscaping with environmental benefits will impact on businesses ability to compete for talent in the UK's job market. Whilst participants felt that industry has made inroads in this area already, for instance in the form of the RHS's school gardening scheme, and the YPHA's careers outreach into schools, some participants flagged the opportunity for greater prominence for horticulture in the government's approach to education in STEM (Science, Technology, Engineering and Maths) disciplines, and in vocational routes into the profession such as through apprenticeships. In this sense, increasing the environmental contribution horticulture makes will be essential to attracting and retaining not only the 30 million gardeners in the UK, but also the 420,000 people currently working in the industry.

About the HTA

The HTA represents 1,400 horticultural and landscaping businesses in the UK. Our members include small garden centres, large DIY stores, supermarkets, commercial plant and tree growers, garden manufacturers, landscapers and garden industry manufacturers. Our mission is to help our members to flourish, and we do this by promoting, supporting and nurturing our industry to ensure a robust and sustainable future.

We provide a range of business support services to our members and we represent their interests to government, policy makers and the media. We also manage the National Garden Gift Voucher scheme as a way of promoting participation in gardening to the public.

In 2020 we launched a five-year roadmap for the horticulture industry to move toward greater sustainability. This provides a framework for our member businesses to plan and progress their own sustainability, with particular focus on CO2 reduction, water resilience, pest and plant disease management, growing media (more commonly known as composts), and plastic waste reduction.



About Easitill

Since 1988, Easitill has been supporting horticultural retailers providing EPOS systems to assist them in running their businesses. By the early 1990's Easitill was developing its own EPOS system that has continued to evolve to keep pace with the ever-changing retail

landscape. Easitill has expanded into other areas; developing and maintaining websites and provider of a labelling system and eco-friendly labels that have now become an important part of the business.

The three core pillars of the Easitill Business – EPOS systems, websites and labelling systems & label consumables have continued to grow with an increasing awareness of sustainability. The long-term relationship between Easitill and Floralabels, who have worked in partnership for over 10 years, continues to deliver growth in volumes of label sales with sustainable options such as biodegradable labels for landfill and cane labels (bio-plastic) made of sugarcane waste which are a 100% bio-based natural product. Some of the Floralabels' range uses 30% recycled plastics in their manufacturing process. Floralabels has recently introduced a compostable product that is recyclable and biodegradable, which starts breaking down after around 10 to 12 weeks, a great solution for fast selling plants.

With well over 30 years' experience in supporting the horticultural market, Easitill also provides these services to many other retail sectors including equestrian retailers, pet shops, country stores and general retailers.

