Unlocking green growth:

A plan from the environmental horticulture, arboriculture & landscaping industry

Introduction

We at the Environmental Horticulture Group (EHG) are a body of industry representative organisations and the UK's leading gardening charity that have come together to offer a single voice to champion the value and benefits of the UK's environmental horticulture and landscaping sector to government.

With 30 million gardeners and millions more utilising green spaces, our industry has a hugely positive impact on people's lives in the UK. We have all seen how important the physical and mental wellbeing of gardens and green spaces have been in supporting people through the most demanding of national and global crises. In addition, as an industry built around the supply of plants and trees, we play a crucial role in many of those environmental-based solutions to tackling climate change. It is part of who we are and what we do.

Environmental horticulture and landscaping is the original 'green economy' industry. Our industry includes garden centres, public and private gardens, commercial growers, arboriculture, and domestic and commercial landscaping. It includes British-based multinationals, through to independent, multi-generation family run businesses. It is one of which the UK can be proud.

Millions of people across the UK use our facilities, services, and products every day and yet the environmental horticulture and landscaping industry is often undervalued and misunderstood. This needs to change if our industry is to grow and reach its full potential – not only for the hundreds of thousands who work in our industry, but also for the whole of the UK.

In 2018, the EHG published independent research to provide the first ever evaluation of the environmental horticulture and landscaping sector's socio-economic and environmental contribution to the UK economy. The research showed that through its own operations, supply chain, and wage-induced impacts, the industry supported over £24 billion of GVA contributions to UK GDP, almost 570,000 jobs, and £5.4 billion in tax payments in 2017.

To update this work, we commissioned a new report from Oxford Economics and Foresight Factory: 'Growing a green economy: the importance of environmental horticulture and landscaping to the UK'. This research modelled what a growth agenda could look like for the UK industry. It not only highlights the existing value of the industry as of 2019, but also demonstrates that under the right conditions, it could grow to support GDP contributions worth £41.8 billion by 2030.

With our industry underpinning almost half of the government's 25 Year Environment Plan, we are ready and willing to direct our industry's full creativity, expertise and 'can do' spirit to help deliver on the 'levelling up' agenda, to utilise trade opportunities from Brexit, and to 'build back greener' by achieving ambitious climate change targets - particularly in the build up to COP26.

The potential is certainly there, but what is needed is the will from both the government and industry to work more closely together in a real partnership. This will unlock the barriers to growth so that we can fulfil that opportunity. We are proud of our collaboration with government in the past – such as with the Plant Health Management Standard, led by the Plant Health Alliance, and previous biosecurity campaigns – and we look forward to working together in the future. This document is the start of that discussion. It establishes how the 'Growing a green economy: the importance of environmental horticulture and landscaping to the UK' report can be brought to life.

It sets out how we can lead the way on environmental sustainability and provide real impetus to the climate change agenda; how planners can better incorporate green space; how outdoor space can lead to urban renewal and improved human health; how our industry can be at the forefront of exciting new trade opportunities; and how we can develop the skills for our future workforce. It also outlines the specific industry commitments that we are prepared to make at this unique moment in the industry's development.

The time is now if we are to make the most of the next decade of growth opportunities and work together to create a truly greener, happier, more sustainable society and economy. We are delighted to outline our action plan to unlock and grow a 'green economy' for the future.

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Executive Summary

The UK environmental horticulture and landscaping sector is hugely important to the success of the UK, providing a range of significant economic, social, and environmental benefits.

The 'Growing a green economy' report outlines how the industry can support an extra £13 billion to the UK economy by 2030 and directly employ an additional 39,000 people. We can expand the UK's gardens and green spaces which mitigate the worst effects of climate change, foster biodiversity gain, and improve physical and mental wellbeing.

This document provides an action plan for how the environmental horticulture and landscaping industry can fully realise this potential through a collaborative relationship with government.

'Best of British' – backing UK production and green spaces (pp 5-7)

By working more closely together with government, we can improve the productivity and sustainability of the industry. The 'Growing a green economy' report has identified potential growth from productivity and capacity gains across the industry that would add an extra £2.5 billion in direct GDP contributions to the UK economy per year by 2030.

This can be unlocked by:

- Improving the planning system for commercial plant and tree production.
- Industry being able to access business improvement funds.
- Simplified water abstraction and easing of water infrastructure regulations.
- Establishing a greater proportion of British-produced plants in public sector projects.
- Expanding the existing tree nursery production grant scheme.
- Government and industry working together on a realistic and sustainable peat-removal growing media strategy.

Developing urban community renewal (pp 8-9)

Gardens and green spaces in urban developments maximise human health and biodiversity. By bringing the benefits of green spaces and gardening, both indoor and outdoor, to a wider cross-section of society, including in inner cities and built-up areas, we will renew and enhance urban communities.

The 'Growing a green economy' report identifies a potential economic benefit to the UK of an extra £1.8 billion in total GDP contributions per year by 2030, dependent on the rate of expansion or contraction in the UK's domestic and non-domestic gardens and green spaces.

This can be unlocked by:

- Reviewing new home building and other urban planning guidelines to ensure sufficient green space is designed into developments and can be maintained.
- Industry and government collaborating to integrate nature and gardening into key campaigns – including COP26.
- Supporting people's physical and mental wellbeing and backing British growers during future pandemics by keeping garden centres open.

Generating a Brexit premium for UK trade (pp 10-11)

Leaving the EU has created an opportunity for the UK to set out its own trading strategy. As a sector, we want to work with government to contribute to a Brexit growth premium. There is a significant opportunity to export our iconic knowledge and expertise of gardens and landscaping. A more pragmatic imports regime is an enabler to support growth in other areas outlined in this document.

Separately, the 'Growing a green economy' report predicts tourism, supported by the environmental horticulture and landscaping industry, could be worth £1.4 billion per year in extra GDP by 2030, compared to the lower scenario in 2030.

Growth can be unlocked by:

- Introducing a more proportionate plant health regulatory regime for the import of seeds and plants.
- Establishing a plant health agreement with the EU for the export of plants, seeds, and trees.
- Including UK environmental horticulture and landscaping as part of the government's global export strategy.
- Including garden destinations in targeted Visit Britain campaigns.

Expanding employment opportunities across the whole supply chain (pp 12-13)

People are at the heart of everything we do. The 'Growing a green economy' report demonstrates how the industry can support, at the upper end of the modelling, 130,000 more UK jobs by 2030, to help deliver the extra £9.6 billion per year in predicted GDP contributions. As well as being a huge economic boost for the UK, this will boost rural economies, establish the UK as a research and development leader, and drive new urban jobs in maintaining our vital green spaces. The key to unlocking this is through:

- Government, industry and training providers collaborating, identifying, co-ordinating and sharing best practice in skills delivery for horticulture and landscaping.
- Expansion of the current Seasonal Worker Pilot or creating a new scheme to better reflect the broader nature of environmental horticulture seasonal labour needs.
- Recognising the skills shortage in environmental horticulture occupations in the Shortage Occupation List.

Environmental-based solutions to cultivate a sustainable future (pp 14-15)

Climate change is the defining crisis of our time. Our trees and landscapes are under unprecedented threats from both new and established pests. Horticultural scientific research and development aims to tackle these threats by delivering innovative and sustainable solutions. A co-ordinated approach by government, industry, and research providers to R&D can be an enabler to unlocking £9.6 billion of extra growth in annual GDP contributions by 2030.

This can be unlocked by delivering the following:

- Government, industry and research providers producing a co-ordinated research and development plan – including match-funding.
- Collaborative approach from government and industry towards plant health and biosecurity, to actively promote self-regulatory best practice.

1. ‘Best of British’ - backing UK production and our green spaces

Rationale

In the UK, we have a distinguished history in plant breeding and botany, going back to Charles Darwin. We produce some of the finest varieties of plants and trees in the world, fuelling the UK’s love of gardens and green spaces. Plant imports are a vital part of this and, whilst we will always need them, we can also produce more of our own plants and trees. Doing so will create jobs and increase UK production capabilities.

The UK ornamental plant and tree production sector directly contributed £880 million to the UK economy in 2019, employing around 17,800 people. By 2030, Oxford Economics and Foresight Factory assess that this could grow to £1.3 billion in direct GDP contributions with the direct employment of almost 21,000.

UK growers need to be able to modernise and expand to meet new demand for green spaces and environmental-based solutions to reduce the impacts of climate change. Investing at production level will have a positive impact further along the supply chain, with supply of plants and trees being key to potential GDP growth in the garden retail, arboriculture and landscaping sectors of the industry. Yet, growers often face time-consuming and costly planning regulations and a lack of confidence in procurement processes, which slows and disincentivises investment, hindering growth.

At present, there is a missed opportunity to ensure full lifecycle value delivery through green infrastructure projects. The government can be a supportive partner to the industry through public procurement policies. Enough notice of plant and tree requirements for infrastructure projects will help provide the confidence for UK growers and landscapers to produce the necessary plants and trees.

Greater clarity and transparency would also help those who design, construct and maintain landscaped public spaces, particularly in the early stages of developments.

Modernising and expanding the industry to meet demand will involve investment in facilities, technology, and the staff and skills to get the most out of them. Our industry has a range of sustainability plans and business support schemes to improve productivity and output. However, government funds designed to enable the UK economy to become more sustainable and productive have overlooked our industry.

Solution 1

Work together to improve the planning system by:

- Ensuring that the presumption in favour of sustainable development in the National Planning Policy Framework 2019 is applied to environmental horticulture businesses, including glasshouses.
- Simplifying the application process for such construction to reduce cost and time, for instance in the forthcoming Planning Bill.
- Directing the Chief Planning Officer to issue new guidance to introduce the above and promote best practice examples of where this works well.

Solution 2

Enable access to business improvement funds by:

- Providing specific, sector-wide access to existing or expanded financial incentive schemes designed to accelerate productivity and sustainability gains, through programmes such as environmental land management schemes and the Farming Investment Fund, and a broader definition for capital allowances.

Solution 3

Simplify water abstraction and ease regulations for horticultural and landscaping businesses by:

- Establish dialogue between government figures, industry and water companies. For tree planting and urban greening plans to succeed, the water needs for expanded production and long-term maintenance of green spaces must feature in water resilience and drought planning.
- Developing national guidelines incorporating industry water use in the regional water demand prediction models.
- Support in making it easier for environmental horticulture landowners to develop water infrastructure, such as reservoirs.
- Making progress on access to bore holes and temporary permissions for extraction for landscaping projects, particularly ones focused on developing national or regional infrastructure.

Solution 4

Establish a greater proportion of British-produced plants in public sector projects by:

- Government working with industry regarding the number and type of plants and trees needed for its public procurement, so these can be produced by UK growers. Staged payments are also needed to support UK growers, who must commit to a growing cycle of ten years or more.
- Government working with industry to produce a nationally standardised list of plant varieties and sizes for public sector projects. This will provide confidence and enable UK growers to focus their ranges.
- Greater funding for maintenance of landscaped green spaces in public sector projects beyond the end of construction and project sign off, to allow for higher survival rates and better-quality landscapes.

Solution 5

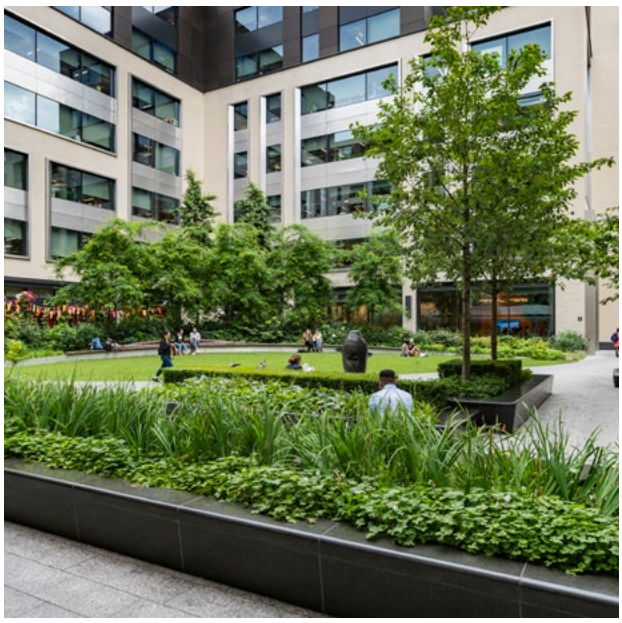
Expand the existing tree nursery production grant scheme:

- The Department for Environment, Food and Rural Affair's (DEFRA) existing tree nursery production scheme needs to be expanded, with a plan to support all nurseries with production grants. Currently production grants are only available for forest reproductive material-registered nurseries.

Solution 6

Government and industry working together on a realistic and sustainable peat-removal growing media strategy by:

- Establishing meaningful and realistic targets for peat removal from the environmental horticulture supply chain, caveated on the availability of peat alternatives, the principle of exemptions for specialist stock, and ensuring those who move away from peat are not commercially disadvantaged.
- Government and industry working together to ensure access to alternatives for over two million cubic metres of peat currently used in UK growing media. The government could encourage high level dialogue with industries that could provide peat alternatives such as the water, food waste, or biomass power industries.
- Amending the End of Waste regulations to enable effective use of many organic raw materials.
- Identifying ways in which government business transition support funds can be made available, to enable growing media manufacturers and growers to adapt their infrastructure to peat-free alternatives.



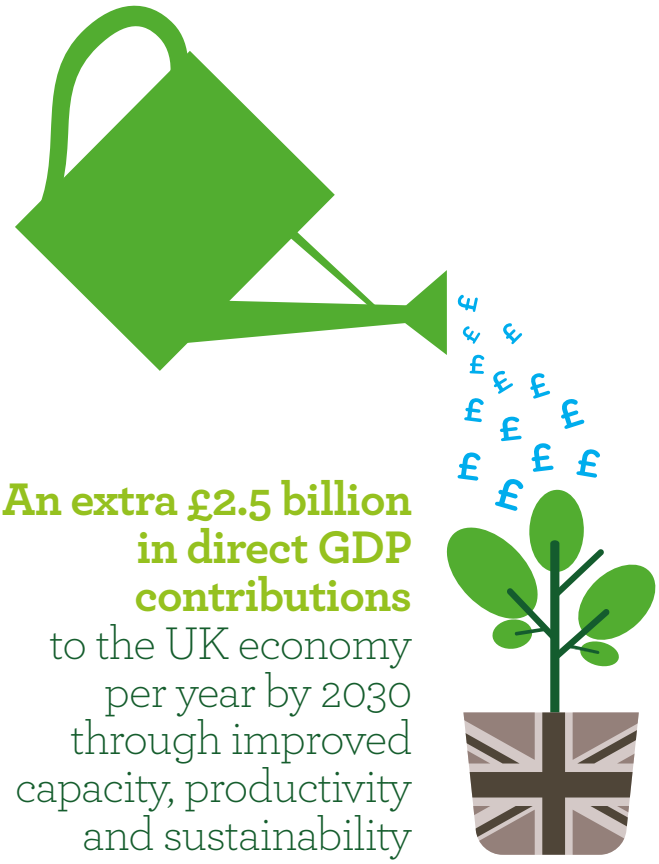
Industry commitments

- Developing and building a plant specification tool to enable developers, buyers, and gardeners to select or specify ranges of plants suitable for different situations and projects. This can potentially draw on the work of the Royal Horticultural Society and the Landscape Institute, which includes 400,000 cultivated plant names and is being populated with data on plants' natural capital benefits.
- Developing and sharing evidence on best practice to planners and government on cultivated plants and green space design, using research and development projects.
- Delivering industry sustainability strategies, such as the Horticultural Trades Association's (HTA) industry sustainability roadmap, the RHS sustainability strategy and the National Farmer's Union's (NFU) net zero strategy.
- Engaging with the government's peat action plan, to transition to peat-free.
- Putting forward best practice examples from other countries to inform how we develop our sector and how the government can help support. For example, the development in the Netherlands of the Groen Label Kas standard for commercial glasshouses helps to minimise the use of energy and water whilst maximising outputs. The adoption of this standard is linked to fiscal incentives to encourage Dutch growers to invest.

Outcomes

An extra £2.5 billion in direct GDP contributions to the UK economy per year by 2030:

- By working more closely together, we can improve the productivity and sustainability of the industry, and increase UK GDP. Increased government support for the industry will enable us to expand and modernise sustainably, with long-term confidence, and meet growing demand for plants, gardening and environmental-based solutions to climate change.
- Greater biosecurity from home-grown production.
- Expanding UK capacity will have a positive 'up stream' impact, allowing retailers and landscapers in particular to source greater amounts of UK grown plants and trees. This will reduce reliance on imports whilst boosting self-sufficiency and export opportunities.
- Modelling and analysis from Oxford Economics and Foresight Factory has identified potential growth from productivity and capacity gains across the industry that would add an extra £2.5 billion to the UK economy per year by 2030, compared with the lower-case scenario outcomes for 2030.



An extra £2.5 billion in direct GDP contributions to the UK economy per year by 2030 through improved capacity, productivity and sustainability

2. Developing urban community renewal

Rationale

Nature and 'green' solutions have a hugely important role to play in climate resilience, biodiversity, and human health. This natural and social capital includes plants and trees providing cooling and insultation (Office for National Statistics found the shading of urban trees saved around £250 million in energy costs and productivity gains), flood control, and improving air quality (over 27,000 lives were saved because of the effects of vegetation on pollution, according to the Office for National Statistics).

This is alongside the social capital benefits of access to public and private green space, contributing to positive mental and physical well-being, with substantial cost savings for the NHS, improved community cohesion, reduced crime, and decreased loneliness and depression. It is about creating happy, prosperous, and environmentally beneficial cities, towns, and communities to live and work in.

EHG analysis shows a potential gain in annualised asset value of £9.6 billion in health, environmental, and social value by 2030, depending on the extent to which our green spaces expand or contract.

Solution 1

Review new home building and other urban planning guidelines to ensure sufficient green space is designed into developments and can be maintained by:

- Ensuring that gardens, landscapes, and green spaces are designated as ways to deliver biodiversity net gains in the forthcoming Planning Bill.
- Introducing points-based green infrastructure for housing and commercial developments.
- Producing guidelines for a minimum ratio of new housing to gardens, balconies and community green space, per acre in new build areas.
- Promoting exemplars of 'regreening' of urban areas, such as around street trees, green roofs, office mixed-use developments, and the incorporation of more community green spaces within the urban planning process.

Solution 2

Industry and government collaborating to integrate nature and gardening into key campaigns – including COP26:

- Ensuring that government environment campaigns include representatives from groups such as the HTA and the RHS, particularly in relation to COP26.

Solution 3

Support people's physical and mental wellbeing and back British growers during future pandemics by keeping garden centres open:

- Whilst we hope this is no longer necessary, we are asking for garden centres to continue to be recognised as 'essential retail' in any future lockdown requirements.

Industry commitments

- Working with government and planners to research best practice on green space design, with a plan to be in place by Q1 2022.
- Continuing to promote the benefits of gardening to consumers through visitor gardens, national shows, and garden centre retailer-led marketing. We will use shows and events such as the RHS Chelsea Flower Show, visitor garden promotional activity, and the nationwide National Garden Gift Voucher scheme to enhance the profile of gardening.
- Supporting government COP26 campaigns by mobilising consumers and businesses to back environmental-based initiatives, including delivering social prescribing schemes. The RHS and the HTA are publicly supporting the 'Plant for our Planet' initiative, for example.

Outcomes

An extra £1.8 billion in total GDP contributions per year by 2030:

- Oxford Economics and Foresight Factory identify a potential economic benefit to the country of an extra £1.8 billion in GDP per year by 2030, compared to lower case scenarios for 2030, depending on the rate of expansion or contraction in the UK's domestic and non-domestic gardens and green spaces.
- Gardens and green spaces in urban developments maximise human health and biodiversity. By bringing the benefits of green spaces and gardening, both indoor and outdoor, to a wider cross-section of society, including in inner cities and built-up areas, we will renew and enhance urban communities.

An extra £1.8 billion in total GDP contributions to the UK economy per year by 2030 by safeguarding the UK's domestic and non-domestic gardens and green spaces

3. Generating a Brexit premium for UK trade

Rationale

The UK leaving the EU has created an opportunity for this country to set out its own trading strategy. Our sector wants to work with the government to maximise the chance to contribute to a Brexit growth premium.

We support the UK setting its own plant health and biosecurity regime, as well as research and development capabilities, but this should not be an either/or in terms of trade. We rely on imports, not only to provide a wide range of plant genetic diversity that builds up resistance to pests and diseases, but because some plants and plant material cannot be produced here. That is everything from the smallest cuttings and young plug plants, through to exotic species. These imports are worth approximately £400 million a year to the British industry.

Post-Brexit, we have been subject to some of the most restrictive and stringent trade measures of any sector. The industry is being hampered in achieving its full potential: an HTA survey shows that companies are facing £25-£30 million in additional costs to trade.

We need a collaborative approach from government that acknowledges the high standards which the industry holds itself to and the significant research and development that goes into control and management strategies to underpin responsible trade in plants and trees. This will benefit UK-based producers, as well as the UK economy.

With global population growth comes the opportunity for environmental-based solutions that mitigate the effects of climate change. As a UK industry, we have the chance to develop and increase our export market (£68 million for exports in 2020), both to EU countries and the wider world. Whilst we are exporting some iconic and classic British plants like roses, we can go much further through a joined-up and collaborative international growth programme. We can make the most of British success stories like breeders' rights and seeds, plant health technical services, landscape architecture, and garden design services for large scale civil engineering and urban developments.

Solution 1

In the short-term, introduce a more proportionate plant health regulatory regime for the import of seeds and plants by:

- Reviewing the inspection process, alongside the industry, to include inspection fees and the plant risk hierarchy by Q1 2022. Further reviews should then take place, based on evidence of what has happened during a season.
- Ensuring border control posts, inland third-party customs posts, and the necessary import pre-notification IT systems are fit for purpose and ready well in time for any change by January 2022.
- Developing, in collaboration with the industry, an E-phytosanitary system by the end of 2021.
- Reducing the time for the granting of an export inspection from seven days to 24 hours.
- Working with industry to develop a Trusted Trader scheme, incorporating relevant certification, accreditation and/or assurance schemes within the supply chain.

Solution 2

In the longer-term, establish a plant health agreement with the EU for the export of plants, seeds, and trees by:

- Recognising respective plant health regimes and particular inspection approaches, taking an intelligence-led approach.
- Reaching a pragmatic solution to the movement of plants from Great Britain to Northern Ireland without phytosanitary certificates.
- Easing restrictions and associated costs for CITES requirements, by recognising adherence to the Convention.

Solution 3

Include UK environmental horticulture and landscaping as part of the government's global export strategy by:

- Government and industry working together to develop a plan by the end of 2022 for targeting specific markets for promoting plant and seeds exports, as well as the licensing of plant breeders and services for landscaping and green urban and garden design services.
- Removing the onerous one-way restrictions imposed on the industry by the EU third country status that prevents nearly all plants and trees from being exported.

Solution 4

Boost UK tourism by including garden destinations in targeted Visit Britain campaigns:

- Promoting gardens as national assets of high cultural value will help to drive visitor numbers and overseas tourism. Inbound garden tourism could be worth £1.5 billion in direct contributions to GDP in 2030 in the upper-case scenario described by Oxford Economics.

Industry commitments

- Continuing to work with government to establish a pragmatic solution to how a post-Brexit trade regime could operate. This includes working with other respective EU governments and trade bodies to promote a common, mutually beneficial approach, including to plant health.
- Coming together with the International Association of Horticultural Producers (AIPH), GardenEx, the Commercial Horticultural Association (CHA) and the government to co-develop a draft exports plan by the end of 2022 for overseas licensing of plant breeders' rights, seeds, and landscaping and green urban design services.
- Supporting and working with the government to get the best out of the Visit Britain campaign, sharing images and examples to help promote the scheme.

Outcomes

A more agile and outward-looking industry that can maximise the benefits of Brexit:

- A more pragmatic imports regime is an enabler to support growth in other areas outlined in this document, including growth in UK production, retail sales, and public landscaping. The UK could also benefit from an increased export market, both in the EU and the wider world.
- There is a significant opportunity to export our iconic knowledge and expertise of gardens and landscaping, resulting in additional investment and jobs to UK environmental horticulture and landscaping businesses. Quantifying what this could look like needs to be done between industry and government.
- Based as they are on knowledge, science, and human capital, these opportunities for green services have the potential to be high value-added areas for the UK. Oxford Economics predicts that tourism supported by the environmental horticulture and landscaping industry could be worth £1.4 billion per year in extra GDP by 2030, compared to the lower scenario in 2030.This highlights the industry's importance to the UK's image abroad alongside global brands such as the RHS Chelsea Flower Show.

5. Environmental-based solutions to cultivate a sustainable future

Rationale

Climate change is the defining crisis of our time. Our trees and landscapes are under unprecedented threats from both new and established pests. Horticultural scientific research and development aims to tackle these threats by delivering innovative and sustainable solutions, enabling the UK to 'grow back greener'.

These new approaches can provide biodiversity, climate and environmental resilience, increase productivity, improve plant health and human mental, physical, and social health.

However, analysis cited by Foresight Factory and Oxford Economics from the RHS and the Agriculture and Horticulture Development Board (AHDB) in 2018 concluded that investment in research and development in environmental horticulture fell from £14 million in 1986 to around £3 million in 2015. With the future of the AHDB now uncertain, this levy funding for esearch and development in the sector is at further risk.

This industry growth strategy, as well as the millions of gardeners and those who use green spaces can play a vital role in delivering a world-leading bio-secure environment, jobs, and economic growth.

Solution 1

Government, industry, and research providers to facilitate a co-ordinated research and development plan to deliver this industry growth strategy by:

- Providing matched funding and a co-ordinated, commissioned research and development approach to deliver this growth strategy (research providers, industry, and government).
- Supporting changes in nursery and supply chain infrastructure to accelerate productivity, deliver the 25 year Environment Plan, and meet the climate change targets.
- Supporting training, development, and succession planning opportunities to train the next generation of horticultural scientists.
- The Health and Safety Executive being more pragmatic and constructive in discussions with the industry about the appropriate use of crop protection chemicals.

Solution 2

Collaborative approach from government and industry towards plant health and biosecurity to actively promote self-regulatory best practice by:

- Supporting the delivery of the Plant Health Certification Scheme (PHCS).
- Supporting improving the nursery and supply chain infrastructure to increase in-country production develop isolation capacity and systems to deliver biosecure practices.
- Ensuring full alignment with the industry on regulatory activity. The government needs to better balance regulatory interventions, with promoting best practice throughout the sector.
- Developing a collaborative public engagement and communications plan to deliver a biosecure UK and meet biodiversity climate targets.
- Working to develop a Trusted Trader scheme for plant health inspections.

Industry commitments

- Bringing together input and funding from the industry, policymakers and researchers along the lines of the Dutch 'triple helix' model of research. This approach will ensure that research is focussed on delivering this growth strategy, government policy goals, and is applicable in real-world contexts to drive economic growth and improve our natural and social capital.
- Developing a research model that creates an initiative to deliver on the growth strategy. This will be broken down into collaborative projects and include PhD studentships and post-doctoral fellowships at research organisations. These will be focussed on delivering the strategy (see Appendix 1 for projects, PhDs, and Postdoctoral studies).
- Delivering industry sustainability strategies across the supply chain, such as the HTA's industry sustainability roadmap, the NFU's net zero strategy, and the RHS's sustainability strategy.
- Continuing to fund RHS Scientific Research and knowledge sharing, PhDs and Postdoctoral fellowships. This will develop RHS Hilltop, the UK's first horticultural scientific centre of excellence, into a world-leading centre in horticulture research and development and to train the next generation of horticulturists and horticultural scientists.
- Improving the nursery and supply chain infrastructure to increase in-country production, develop isolation capacity, and systems to deliver biosecure practices.
- Working to ensure that the UK's SmartHort programme on technology, automation, and robotics in horticulture provides adequate knowledge transfer to the industry.

Outcomes

An enabler to unlocking an extra £9.6 billion of extra growth in annual GDP contributions by 2030:

- Foresight Factory and Oxford Economics' analysis highlights research and development as a key enabler in unlocking the drivers of growth identified in their report, such as:
- Developing our understanding of how cultivated plants, gardens, and green spaces can be selected, bred, and designed to provide new nature-based solutions that optimise natural and social capital gains.
- Increasesing UK climate change resilience.
- Enabling a healthier, more productive UK population and workforce.
- Improving UK biosecurity, with accelerated and increased UK productivity of high-quality healthy plants.
- Supporting sustainable business operations and technology through the supply chain is essential. From accelerating a transition to more sustainable growing media, through to developing resource efficient technologies that underpin plant production. From the management of green spaces to the gardeners that cultivate their gardens for natural capital, social capital and economic benefits.

Horticultural scientific R&D will help to tackle climate change through innovative and sustainable solutions

Conclusion

We believe this document is a blueprint for delivering the twin aims of economic growth and the wider ambitions around UK environmental sustainability strategy.

Working together, we believe that the total contributions to UK GDP can reach £41.8 billion - an increase of £13 billion on 2019 - and that the objectives within the 25 Year Environment Plan can be complemented by a strong UK environmental horticulture and landscaping sector.

As an industry that directly and positively touches the lives of 30 million who garden in the UK – whether it's indoor plants, balconies, patios, gardens, wider community planting projects, and millions more who enjoy green spaces - we can harness the power of this movement. But to maximise this potential, we need a more collaborative partnership with government to make the most of our wonderful industry. And with it, a happier and more environmentally conscious society.

Total industry contributions to UK GDP can reach **£41.8 billion** by 2030 - an increase of **£13 billion** on 2019

4. Expanding employment opportunities across the whole supply chain

Rationale

People are at the heart of everything we do. Part of the industry's success has been how it has nurtured the technical skills of its workforce, including supporting apprenticeships and T-Levels. However, to make our growth ambitions a reality and compete in a global marketplace, our industry – and the future of the planet - relies on developing the next generation of horticulturists and landscape professionals.

The sector needs workers of all disciplines – entry, developing, and advanced levels - equipped with the skills to design, construct, and manage a diverse range of landscapes and horticultural processes associated with the 'green revolution'. The environmental horticulture and landscaping industry has a proud record of hiring and investing in UK workers. It is essential that employees are equipped with the necessary skills to service the growing range of roles, which combine horticultural and landscape construction knowledge with the latest technology.

Ensuring nationally strategised and funded training at a local level will allow the industry to reach its potential.

In a global world, it is not viable to rely entirely on domestic workers and this is already clear in evidence from ornamental horticultural and landscaping businesses. The ability to attract workers - both seasonally and on a permanent basis - in a flexible manner is critical to enabling the industry to thrive and grow. Strategies which address both the development of the domestic market and the availability of overseas seasonal workers will support this aim.

The development of a world-class, skilled workforce should be done in unison with an integrated immigration policy, so that key individuals can be fast tracked to work in the UK. This would make the UK a top destination for skilled talent and help the industryto grow.

Solution 1

Government, industry and training providers to collaborate, identify, co-ordinate, and share best practice in skills delivery for horticulture and landscaping by:

- Supporting an audit of the training provision across the sector to assess gaps against skills needs, and implement subsequent recommended action to ensure there is appropriate, funded skills provision, drive improvements, and look for opportunities to further develop training.

Solution 2

Maximise the environmental horticulture and landscaping sector's pool of available labour by:

- Expanding the current Seasonal Worker Pilot to the environmental horticulture sector or creating a new scheme to better reflect the broader nature of the sector's seasonal labour needs.
- Recognising the skills shortage in environmental horticulture occupations in the Shortage Occupation List.

Industry commitments

- Continuing to engage with the Department for Work and Pensions (DWP) to support domestic seasonal workers to fill the worker gap as much as possible.
- Using resources, such as those available through the DWP, to increase the diversity of its workforce.
- Making horticulture and landscaping a career to be proud of through strategies to improve diversity and inclusion, including by increasing minority ethnic and LGBTQ+ communities.
- Developing existing careers outreach programmes, with emphasis on the skills needed to support the economic growth of the industry.
- Continuing to provide and contribute to the development of environmental horticulture and landscaping educational programmes for lifelong learning, including work-based programmes, Continuous Professional Development (CPD), apprenticeships and T-Levels.
- Engaging in an audit of the training provision across the sector to assess skills gaps, drive improvements, engage on the government's Skills White Paper and look for opportunities to develop training.
- Working with the Institute for Agriculture and Horticulture to ensure full alignment of cross-sector expertise and promote environmental horticulture and landscaping within that forum.

Outcomes

An extra £9.6 billion in direct GDP contributions per year by 2030:

- Oxford Economics and Foresight Factory found that there is an opportunity for the industry to employ almost 460,000 people by 2030 to deliver an extra £9.6 billion per year in the upper-case scenario, compared with the lower-case scenario. Together, the government and industry can collectively create thousands of vital new jobs. As well as being a huge economic boost for the UK, this will also boost rural economies and drive new urban jobs in maintaining our vital green spaces. The next generation will benefit from a career path in the new green economy, from land-based jobs to high skill research and development roles in the life sciences.
- Whilst some automation will replace more manual seasonal picking roles, there are some production areas that do not have automation available, meaning that there will still be some reliance on the availability of seasonal labour. This is key and could be the difference between the industry growing or declining. The UK is not alone in this need; in the Netherlands, approximately a third of the labour input to ornamental horticultural production is seasonal.

130,000 more UK jobs supported by the industry in 2030

Appendix 1: Growing a Green Economy

‘Best of British’ - backing UK production & our green spaces **Generating a Brexit premium for UK trade**	**Accelerate UK horticultural production, improve UK supply chain, biosecurity and plant health** **New nature based solutions and technologies for climate resilience, improving biodiversity, and human health**
Developing urban community renewal	**Nature and ‘green’ solutions for climate resilience, biodiversity, and human health**
Expanding employment opportunities across the whole supply chain	**Increased skills and improved succession planning across the whole supply chain**
Environmental-based solutions to cultivate a sustainable future	**Increased productivity minimise resource use and waste**

Projects, Research & Development & Estimated Costs (£)

Impacts

Project 1: Improve UK biosecurity, productivity and supply chain – import substitution and export opportunities

Work Package 1: Plant Healthy Assurance Scheme delivered (£TBD)

Work Package 2: Research & Development under the following research themes (£4m)

- Sustainable plant protection products
- New pest resistant plant-lines
- Management and control strategies for existing pests and high risk pests not yet in the UK
- Public engagement and behavioural change with the general public (tree/plant health)
- Supply chain pathways and mechanisms to reduce pest risks

Work Package 3: Infrastructure investment (digital and physical)

Work Package 4: Biosecurity and plant health; employment, upskilling, and training

Work Package 5: UK Biosecurity Communications Plan (see Plant Health Alliance Communications Plan)

- Increased productivity and economy
- Improved UK biosecurity
- Healthy plants that maximise nature-based solution benefits
- Government and industry cost savings (fewer biosecurity breaches)
- Delivers 25 Year Environment Plan
- Delivers Sustainable Development Goals (SDGs)

Project 2: Nature-based specification tool

Work Package 1: Nature based solution specification tools for landscapers and gardeners

1a) Nature-based specification tool for domestic gardeners

1b) Nature-based specification tool for landscapers

Work Package 2: Research & Development under the following themes (£4m)

Optimising cultivated genetic resources landscapes for environment and human health:

- Climate, carbon, and green house gases (GHGs)
- Human health: mental, physical and social
- Biodiversity and pollinators
- Water resilience
- Soil health

Work Package 3: Natural and Health Capital Accounting of UK domestic gardens

Work Package 4: Nature Based Solutions Communications Plan

- Increased productivity and economy
- Increased carbon drawdown
- UK climate resilience from new plant-lines, gardens & landscapes
- Extra £2.5 billion per year by 2030
- £10 billion more natural capital growth
- A healthier, more productive UK population from new wellbeing plant-lines, gardens and landscapes
- Biodiversity and pollinator positive
- Delivers 25 Year Environment Plan
- Delivers SDGs

Project 3: Grow skills and employment

Work Package 1: Audit of existing industry and training provision

Work Package 2: Green jobs

- Strategies to improve the diversity of, and access to, the horticulture industry
- Promotion of the environmental horticulture and landscaping sector as providing careers of the future
- Continued development of educational programmes and investment in research positions

Work Package 3: Further development of horticultural training programmes

- Increased productivity and economy
- Next generation horticulturists delivering industry growth
- Extra GDP contributions of £7.9 billion per year by 2030
- Delivers 25 Year Environment Plan
- Delivers SDGs

Project 4: Environmental-based solutions to grow back greener

Industry and gardeners 'footprints' and 'handprints'

Work package 1: Environmental footprint and handprint tool for the Industry

Work Package 2: Environmental footprint and handprint tool for gardens and gardeners

Work Package 3: Research & Development under the following themes (£4m)

Carbon and GHGs; water; growing media (transitioning to peat free); soil carbon and health; circular plastic and waste

Infrastructure investment (digital, technology and physical)

Work Package 4: Sustainability: Employment and skills

Work Package 5: UK Sustainability Communications Project with industry and gardeners

- Increased productivity and economy
- Increased carbon drawdown
- Delivers 25 Year Environment Plan
- Delivers SDGs
- Delivers against government and international climate change and climate adaptation targets