



The RHS Sustainability Strategy

Net Positive for Nature and People by 2030

A photograph of a woman and a young boy planting a tree in a garden. The woman, wearing a blue top, is kneeling and holding a shovel. The boy, wearing a blue and white striped shirt, is also kneeling and using a small shovel to work the soil around the base of a young tree. The background is a lush green garden with trees and foliage.

The Planet-Friendly Gardening Campaign
The RHS and gardeners tackling the
climate and biodiversity crisis together

Foreword

The RHS believes that collectively the actions of each and every one of our nation's 30 million gardeners and the general public can create change and help mitigate the climate and biodiversity crisis and tackle some of our biggest social concerns, including loneliness, obesity and mental health. That is why we are committed to this ambitious Sustainability Strategy, which includes a new nationwide RHS Planet-Friendly Gardening Campaign. Within the decade the RHS aims to become net positive for nature and for people and to encourage and enable the garden public to do the same.

The RHS recognises the meaningful scale of positive impact that Britain's 30 million gardeners and the general public can have on the health of the environment, wildlife and ourselves.

We are committed to leading by setting stretching sustainability targets for our own operations and energy sources that provide benefits for both nature and people. The RHS will be climate positive within the decade by capturing and reducing more greenhouse gas emissions than it emits.

Other targets include eliminating all single-use plastic, be peat free by 2025 and be water neutral. We will send zero waste to landfill – all our waste will be reduced, reused, recycled, composted or sent to energy recovery.

We want all our activities to be truly inclusive and reflecting all the communities of the UK.

DEFINITION Net positive for nature: In the RHS Strategy, this means not just having zero impact, but actually improving biodiversity, and removing more carbon from the atmosphere than is produced by the RHS and inspiring Britain's gardening public to do the same.

Net positive for people: In the RHS Strategy, this means actively and consciously improving the wellbeing, physical, mental or social health of people through the activity of gardening.

Find out more

The RHS Planet-Friendly Gardening section of the website offers a range of solutions and tips to help gardeners at rhs.org.uk/sustainability

In the lead-up to COP26 the RHS is sharing daily nature-based tips to help everyone become Planet-Friendly Gardeners @rhstwitter

Right: The RHS wants to be truly inclusive and reflect all the UK's communities in its activities and approach.

Far right: The Wellbeing Garden at RHS Hilltop – Home of Gardening Science



Sue Biggs

RHS Director General

New major initiatives and projects to deliver this Sustainability Strategy include:

- Supporting NHS key workers to cope with the pressure of the Covid-19 pandemic by creating healing gardens at hospitals and healthcare settings. We will pilot these in Manchester and London, and will develop more sites across the UK if successful.
- Develop a Flower Shows Sustainability Strategy.
- A new evidence-based Wellbeing Garden Blueprint, promoting the health benefits of gardening to everyone.
- A Planet-Friendly Sustainability Calculator for gardeners by 2025.
- Online access to a Garden Plants for Purpose tool that helps gardeners choose plants that deliver the environmental and health benefits they want.
- Delivering the RHS water roadmap, creating a new lake at RHS Garden Wisley and making the RHS water neutral by 2030.
- An RHS Flourish Fund to promote diversity and inclusion in horticulture.
- The RHS COP26 Garden at 2021 RHS Chelsea Flower Show re-established at RHS Garden Bridgewater.

The results of these initiatives will be shared widely and used in the Planet-Friendly Gardening Campaign, helping gardeners make the most of the physical and emotional benefits of gardening, and making choices that will have a positive impact on the climate and biodiversity crisis.



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While much has been communicated on the world’s climate challenges, the biodiversity crisis is less well-known and, within that, a lot of the focus is on fauna biodiversity. We need to elevate the engagement and understanding of flora biodiversity, which animals are also so dependent on.

We will build on our 217-year history and create an even greener future, making even greater efforts to inspire and support the nation’s gardeners to make changes, some small and some large, to increase biodiversity, mitigate pollution, save water, plant for pollinators, reduce flooding and create a more sustainable and healthier nation.

We are also acutely aware that we need to shine a spotlight on our own actions and activities and really understand the breadth of the impact, positive and negative, that gardening has, and work out ways to address that. Through our own actions and experiences we can share our learnings to improve the positive impacts for all gardeners.

We cannot wave a magic wand and solve these challenges overnight, but what we can do is make plans, with ambitious targets for positive outcomes for both nature and people and work with a cross-section of the industry and society, to implement these.

Gardening is good. Gardening does good. Not only for the environment but for public and urban spaces and outside our own homes. It also promotes physical and mental health, wellbeing and provides a positive social impact. Gardening well, in harmony with nature, and growing together as gardeners is the way in which we can improve the sustainability of our planet, pollinators, other wildlife and humankind.



Keith Weed
RHS President

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Executive Summary

Our planet and the natural world are facing multiple crises, from the climate emergency, the dramatic loss of biodiversity and invasion of species threatening our flora and fauna, to the plastic-pollution problem. These are all taking place at a time of upheaval in society, not least from the Covid-19 pandemic, with soaring levels of mental, physical and social health problems.

With its strong foundations in science and wealth of horticultural knowledge, the RHS is equipped to become part of the solution. By working together with Britain's 30 million gardeners we can have the biggest impact to tackle the climate and biodiversity crisis. The RHS will deliver this through its Planet-Friendly Gardening Campaign.

This document sets out our strategy and key actions needed. Developed with high levels of participation across the organisation at all levels and externally the driving principles are to:

- Focus on issues most relevant to gardening and horticulture
- Look at our own operations as well as activities in the horticulture supply chain and the positive actions Britain's 30 million+ gardeners and others can take
- Better understand the main social issues facing the industry
- Promote the positive physical, mental and social impacts that gardening can bring to millions of people
- Use our position in the horticultural industry and relationships with government and policymakers as an active force for good

We have set ourselves highly stretching sustainability targets and ambitions, based on available data about the scale of the problem and ability to address it.

Sustainability targets will be refined in time, as data becomes available, but delivery is what counts now,

so this document summarises our planned actions. We welcome both collaboration in delivering it and constructive challenge on how to improve it.

LEFT The Wildlife Garden at RHS Hilltop – Home of Gardening Science



Introduction

Climate and biodiversity crisis

The recent Intergovernmental Panel on Climate Change (IPCC) report [1] confirms that we are now in a climate crisis. Lethal temperatures in the US and Europe; a rapid escalation in forest fires from Siberia to California; huge floods causing hundreds of deaths; are all early consequences of that change in climate and, without action, these will worsen and intensify. Even the disruptive effect of the Covid pandemic in 2020/21 did not slow the growth in emissions.

The new IPCC report clearly shows that there is now a very small window of hope in which to act if we are to avoid the planet heating by up to 3°C in the next 50 years. As an organisation steeped in a deep relationship with nature – both flora and fauna – the RHS acknowledges that every effort needs to be made to tackle emission levels. This requires ambition, speed and collaboration.

Equally urgent and critical is the biodiversity crisis, which comprises species extinction, both wild and cultivated, loss of numbers in each species, soil health and the loss of pollinators and impact on the food chain. The Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Chair said “we are eroding the very foundations of our economies, livelihoods, food security, health and quality of life worldwide”. Urgent action is needed to address this across all activities of the economy.

The RHS and UK gardeners tackling the climate and biodiversity crisis together

As Britain's leading gardening charity with strong foundations in science, a wealth of knowledge and range of activities, the RHS is well equipped to advise, support, encourage and promote a message of sustainability to Britain's 30 million+ gardeners and the wider public.

Through good practices, planting choices and avoiding products and materials that reduce biodiversity, gardeners

Citation advice RHS, (2021). The RHS Sustainability Strategy: Net Positive for Nature and People by 2030: Planet-Friendly Gardening Campaign, The RHS and Gardeners tackling the climate and biodiversity crisis together. RHS, London, UK.

References [1] <https://www.ipcc.ch/report/ar6/wg1/> [2] <https://sdgs.un.org/goals> [3] <https://www.gov.uk/government/publications/25-year-environment-plan> [4] <https://www.ons.gov.uk/economy/environmentalaccounts/datasets/accesstogardensandpublicgreenspaceingreatbritain> [5] <https://www.ons.gov.uk/economy/environmentalaccounts/bulletins/uknaturalcapital/urbanaccounts> [6] <https://www.ons.gov.uk/economy/environmentalaccounts/articles/oneineightbritishhouseholdshasnogarden/2020-05-14>



and the horticultural industry can help us: deliver on the United Nations' sustainable development goals (SDGs) [2] and deliver the Government's 25 Year Environment Plan [3].

Gardening can make a meaningful contribution to reducing and storing carbon and to better adapt to and mitigate against climate change. The choices gardeners make, for example about what they plant, or what potting compost they use, can add up to a significant level of action.

Our research tells us that British gardeners are looking to make a positive contribution to reverse the climate and biodiversity crisis and the RHS wants to enable this.

With 30 million+ people involved in gardening through gardens, allotments, community spaces and the potential to grow even on a windowsill, a cornerstone of our future activity as a charity is to enlist everyone in the Planet-Friendly Gardening Campaign.

The strategy's most ambitious and impactful goal is to mobilise Britain's 30 million+ gardeners and the general public to tackle the climate and biodiversity crisis together through the Planet-Friendly Gardening Campaign. The RHS also has stretching, defined 2030 ambitions, goals and targets in its own operations and will continue to collaborate and work with the horticulture industry, partners, policy makers and regulators to deliver this strategy to accelerate sustainable change.



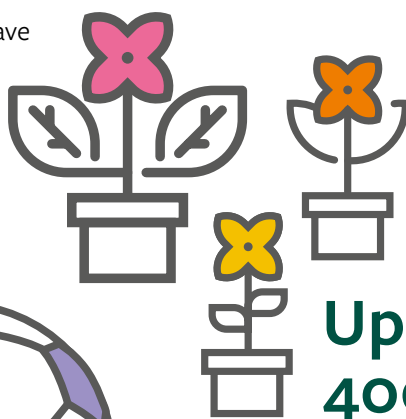
Developing our Sustainability Strategy

The RHS Sustainability Strategy builds on existing sustainability work and was developed over the past year using scientific, horticultural and gardening expertise and knowledge from across the RHS. The RHS Director General and Leadership Team, RHS President and Council, RHS Science Committee, Horticultural Board and Green Team and a sustainability workshop comprising team members from across the RHS helped with its development. The RHS consulted externally with members and industry and was supported by an external sustainability expert, Sue Garrard Consultancy Ltd. Based on existing baseline data, this strategy evaluates where our charity can invest resources, expertise and networks to have the biggest impact.

Residential gardens comprise

29.5%

of Great Britain's total urban area [5]



Up to **400,000**

different types of plants grow in UK gardens.

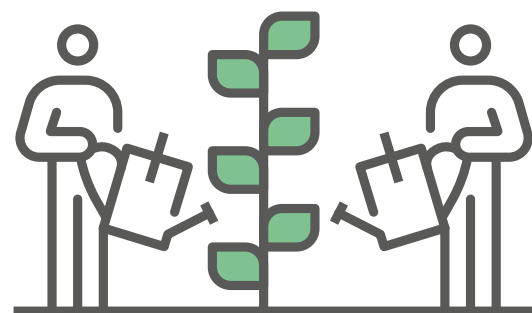
Total area of UK domestic gardens
700,000 hectares

(equivalent area of 93,000 professional football pitches) [4]



Number of UK gardeners
30 million

88% of households in Great Britain had access to a private or shared garden during the Covid-19 lockdowns. [6]



The RHS and the British Public – Net Positive for Nature and People

The RHS believes that a healthy, resilient population is essential for humans to achieve all other sustainability goals and there is strong evidence that gardens and gardening can improve mental, physical and social health. Therefore, we felt it was essential that the strategy delivers benefits for both nature and people, and below we set out our ten targets – six Net Positive for Nature Targets and four Net Positive for People Targets. The ambitions, targets and goals set out below are defined in more detail under each Target in this report. Please also see the glossary for an explanation of other sustainability terminology.

Scope	Downstream*	Own Operations	Upstream**	Upstream**
	RHS Members gardening and general public	RHS Gardens and Shows	Policy makers and regulators	Horticulture and landscape industry
Benefitting nature and people RHS Planet-Friendly Gardening Campaign	1 Climate-positive gardening	Climate positive by 2030	Horticulture and climate	Embed sustainable horticulture within industry, through RHS education, research and training programmes
	2 Biodiversity-positive gardening	Biodiversity positive by 2025	Horticulture and biodiversity	
	3 Biosecurity-neutral gardening	Biosecurity neutral by 2025	Horticulture and biosecurity	
	4 Water-neutral gardening	Water neutral by 2030	Horticulture and biosecurity	Share our operational learnings on water, peat, plastics, plants with purpose and other sustainable initiatives for wider impact
	5 No, better, less plastic gardening	Circular plastic by 2030		
	6 Zero-waste gardening	Zero-waste to landfill by 2030	Horticulture and resources	
Benefitting people RHS Planet-Friendly Gardening Campaign	1 More people gardening for enjoyment and wellbeing	More people enjoy the benefits of gardening	Employment, training and diversity in horticulture	Create partnerships to extend the impact of the OHRG growth strategy, collaborative research and the RHS Planet-Friendly Gardening Campaign
	2 Five ways to wellbeing gardening	Create Wellbeing Garden Blueprint by 2025	Horticulture and public health	
	3 Sharing sustainable gardening knowledge	Sustainable education, research and training	Ornamental Horticulture Roundtable Group (OHRG)	
	4 Equality, diversity and inclusion	Accelerate equality, diversity and inclusion	OHRG growth strategy, scientific research and RHS Planet-Friendly Gardening Campaign	

*Where the RHS can influence the gardening and general public (Downstream) **Where the RHS can influence the horticultural industry and government (Upstream).

PART 1

NET POSITIVE FOR NATURE

If every UK gardener planted a medium tree in their community, school, workplace or garden and nurtured it to maturity, these trees would store carbon equivalent to driving 11.4 million times around our planet.





1 Net Positive for Nature

Nature Target 1 – Climate Positive by 2030

DEFINITION To capture and reduce more greenhouse gas emissions than the RHS value chain emits, without affecting the growth of the RHS.

AMBITION Stimulate climate-positive actions among the gardening public.

MEASURE Progression on Scope 1 and 2 emissions will be reported on an annual basis. By 2026 we aim to have measured our Scope 3 emissions and our land's GHG emissions and storage potential.

Approach

The recent Intergovernmental Panel on Climate Change (IPCC) report confirms that we are now in a climate crisis and that, with urgent action, we can turn this around. This is why the RHS aims to become climate positive within the decade.

The RHS has established baseline emissions and aims to evaluate 'upstream' emissions by 2025.

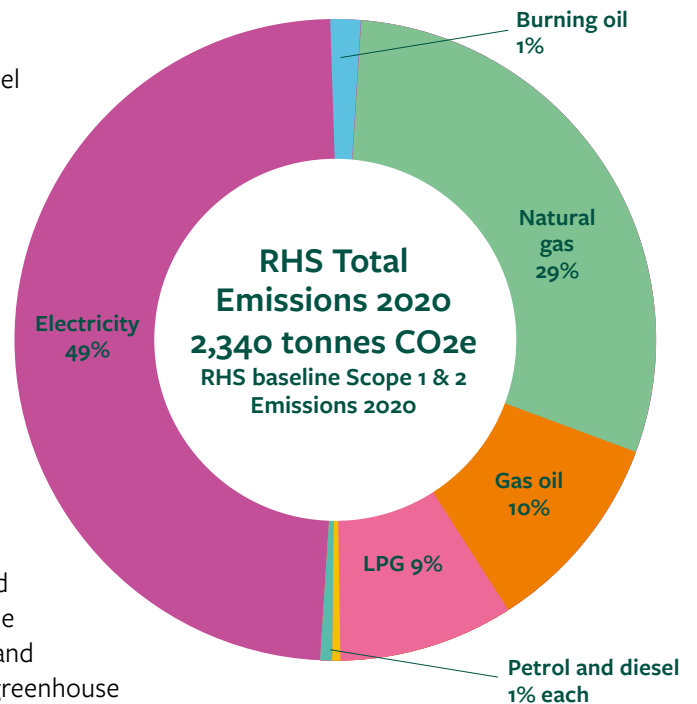
The RHS has a renewable energy tariff (wind and solar) for electricity and has installed air- and ground-source heat pumps in some gardens. We will further measure and reduce our carbon footprint and greenhouse gas (GHG) emissions as rapidly as possible, in line with climate science through a science-based target approach with a focus on becoming climate-positive by 2030.

The RHS will focus on measures to maximise energy reduction and efficiency, increased adoption of renewable-energy generation and new energy-saving technologies. Furthermore, we will work to understand and measure carbon and GHG sequestration and storage provided by our gardens.

TOP LEFT Ground-source heat pumps at RHS Garden Bridgewater

ABOVE LEFT Electrical vehicle chargers at RHS Garden Wisley

LEFT Biotope Indoor Green Wall at RHS Hilltop – Home of Gardening Science



Our approach aims to rapidly reduce emissions within our direct control, and work with our supply chain to accurately quantify our value-chain emissions and encourage our suppliers to set their own science-based targets.

Our Environmental Horticultural Science team will collaborate with UK researchers, industry partners and gardeners to deliver applied scientific research that leads to climate-positive nature-based solutions for climate resilience, adaptation and mitigation.

As a charity we feel that one of our biggest Scope 3 impacts is delivering the RHS Planet-Friendly Gardening Campaign to enable Britain's 30 million+ gardeners and others to take climate-positive actions in their community, schools, workplaces and homes.



The RHS approach to becoming Climate Positive by 2030

ENERGY EFFICIENCY

Implement energy-efficiency measures, reduce RHS gardens and shows greenhouse gas emissions.

RENEWABLES AND TECHNOLOGY

Support and increase RHS gardens and shows renewable energy and technology.

NATURE-BASED SOLUTIONS

Maximise carbon draw-down in RHS gardens and develop climate-positive solutions through adaptation and mitigation.

COMBINED Energy efficiency, renewable energy and new technologies and nature-based solutions

Climate-Positive Commitments

The RHS has direct control to:

- Reduce our carbon footprint and greenhouse gas emissions as rapidly as possible, below our science-based limits, helping to reach a target of 1.5°C warming.
- Develop energy strategies for RHS gardens and shows, analysing our energy needs and infrastructure to deliver our climate-positive ambition.
- Increase renewable and sustainable energy use in our gardens and shows.
- Be peat free in all our operations by 2025.
- Work to understand and measure the carbon and GHG sequestration and storage provided by our gardens.
- Ensure that new major RHS Developments are carbon positive by 2030.
- Develop a Planet-Friendly Sustainability Calculator for RHS gardens.
- Electrify all outdoor equipment and garden vehicles.
- Develop further our sustainable travel plans for staff, visitors and volunteers.
- Develop further an ethical plant-based food and drink offer and reduce animal products use to minimise the climate impacts of the food we serve.

“The future of humanity and indeed all life on earth depends on us.”

– David Attenborough



The RHS can influence the horticultural industry and government (Upstream) and the gardening and general public (Downstream) by:

- Delivering the RHS Planet-Friendly Gardening Campaign.
- Obtaining funding and working with others to measure natural and social capital of UK gardens.
- Working with Frank P Matthews tree nursery to design a Blueprint for Climate-Resilient Garden Trees.
- Developing a Planet-Friendly Sustainability Calculator for UK gardeners.
- Developing further our gardens and shows travel plans.
- Installing electric-vehicle charging points for visitors (already available at RHS Gardens Wisley and Bridgewater) by 2023.
- Working with our supply chain to accurately quantify our value-chain emissions and encourage suppliers to set their own science-based targets.
- Working with the horticulture and landscape industry and government to accelerate climate-positive gardening.

Actions for gardeners

1 Plant a tree in your community, school, workplace or home to draw carbon out of the air: Grown to maturity, a small tree stores up to 376kg of carbon; a medium tree 511kg; and a large tree 3,350kg.

2 Pull up a paver (1m²) and grow perennial plants to maturity: Herbaceous perennials (lawn grasses and non-woody plants) draw 3.21kg carbon/m² out of the air; shrubs 19.54kg and trees 40.38kg.

3 Grow your own bunch of flowers: Growing or buying UK-grown cut flowers can save up to 7.9kg Carbon per bunch compared with buying imported bunches.

4 Go peat free: Protect precious peatland habitats, which are the largest land carbon store, of global significance for biodiversity, and reduce flood risks.

5 Make your own compost: Every 1kg of home-made compost typically saves 0.1kg fossil CO₂ emissions, which could save more than 5.1kg carbon, per gardener, every year.

6 Electrify your garden: Switch petrol to green electric for your gardening power tools. An average gardener uses 9L petrol a year, equating to 7.6kg fossil carbon.

7 Switch your fence to a green screen or grow a green wall: Indoors or out, green walls or screens can sequester up to 0.68kg carbon/m² per year.

8 Green your roof: A green roof increases biodiversity and can sequester up to 0.375kg carbon/m² per year.

9 Eat more fruit and veg: Eat more home-grown, UK, local and seasonal fruit and vegetables.



TOP and ABOVE Lis Larsen, RHS five-year post-doctoral researcher, working in collaboration with Frank P Matthews tree nursery on Designing a Blueprint for Future Garden Trees.



Big RHS Initiatives

- The RHS COP26 Garden at RHS 2021 Chelsea Flower Show, designed by landscape architects Balston Agius, led by Marie-Louise Agius, to be replanted at RHS Garden Bridgewater.
- RHS five-year post-doctoral fellowship working with RHS environmental horticulture scientists and supporting PhD projects to develop and deliver a Planet-Friendly Sustainability Calculator for gardeners by 2025.



2 Net Positive for Nature

Nature Target 2 – Biodiversity Positive by 2025

DEFINITION Reversing habitat destruction in gardens and community green spaces around the country; protecting and improving conditions for pollinators and other wildlife; and enhancing and conserving cultivated plant diversity for the future.

AMBITION Stimulate biodiversity-positive action among the gardening public.

MEASURE Total number of plants and cultivated plant diversity in RHS gardens and the herbarium will be reported on an annual basis. Wildlife diversity of specific surveys in our gardens will also be recorded and reported on.

Approach

We're in a global biodiversity crisis, which is happening alongside the climate crisis. The RHS knows that gardens can have a huge positive impact, offering important refuges for biodiversity. Gardens represent a unique habitat, rich in a diversity of plants both native and non-native, with an estimated 400,000 different types of plant in cultivation in the UK. This represents a remarkable resource, although threatened by the lack of awareness of its value and, over time, sadly some of these plants have become extinct.

The living collections in the RHS gardens represent a significant resource for cultivated plant diversity. In addition, the RHS's herbarium, with more than 90,000 specimens, constitutes an important record of the UK's cultivated plant diversity. RHS gardens also comprise a number of different habitats that we manage to support wildlife and native plants.

The RHS has established baseline data on cultivated plant diversity grown in its gardens and has some records of the wildlife and native plants in our gardens through individual surveys or specimen records identified on site. In 2020 we began documenting the cultivated plant diversity of UK Gardens through RHS My Garden online. Currently My Garden has 121,750 users, contains 2.4 million plants consisting of 77,577 different types. It is the RHS's mission to spread the word that gardens as habitats and garden plant diversity is essential for the health of the planet and us. The RHS aims to inspire Britain's 30 million+ gardeners and others to play their part in valuing and protecting these important habitats and plant diversity. We'll also be monitoring the biodiversity of all RHS gardens to demonstrate the effects of our activities.

Cultivated plant diversity in RHS gardens

The RHS will focus on using our newly built herbarium, at RHS Hilltop – Home of Gardening Science, to create the first complete UK scientific collection of garden plants by 2050 and make our existing collections available online. The RHS will further focus on cultivating, conserving, undertaking scientific research and sharing knowledge of our plant collections, both living and preserved, and their benefits to humans by developing a Garden Plants for Purpose online tool that helps gardeners choose plants to deliver on the environmental and health benefits they want.

Wildlife in RHS and UK gardens

RHS gardens support a wide range of wildlife and native plants and has held a centralised digital record of this biodiversity since 1997. The database contains more than 58,000 records.

Since 1987 the RHS has shared its biological data with the National Biodiversity Network (NBN) and more than half the records submitted are of the biodiversity supported by the Society's gardens. This includes more than 100 years of recording at RHS Garden Wisley together with records from RHS Gardens Hyde Hall, Rosemoor, Harlow Carr and Bridgewater.

Cultivated Plant Diversity Grown in all RHS Gardens 2021

5,877

Total Number of different types of plants threatened in cultivation

31,790

Plant Diversity – Total number of different types of plants

812,130

Total Number of Individual Plants



The RHS approach to becoming Biodiversity Positive by 2025

FIRST UK SCIENTIFIC COLLECTION OF ALL UK GARDEN PLANTS

Home of Gardening Science Herbarium and online

GARDEN PLANTS FOR PURPOSE TOOL

Helping gardeners choose plants that deliver the environmental and health benefits they want

ECOLOGICAL GARDENING

Gardening with a natural balance for pollinators, wildlife and wellbeing; pesticide- and herbicide-free gardening

COMBINE Scientific Collection, Cultivated Plant Database and Garden Plants for Purpose Tool and ecological gardening

We also share information collected through our advisory service enquires with the NBN, helping us track UK garden biodiversity.

Biodiversity data from RHS gardens and UK gardens from our advisory work has been made available through the NBN. More than 1.1 million records from RHS datasets have been downloaded by NBN users, showing the value of this garden biodiversity data-sharing to increase growth, reach and value.

We will continue to document biodiversity in RHS gardens and share data on the NBN to highlight the importance and value of protecting UK garden biodiversity.

Further metrics will be developed to measure biodiversity in our and UK gardens and targeted ecological surveys undertaken to gather baseline data and demonstrate impacts, enabling us to measure biodiversity improvements. These efforts will support the delivery of the Convention on Biological Diversity Biodiversity Goals and Targets and its 2050 Vision for Biodiversity that “biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people”.

Biodiversity-Positive Commitments

The RHS has direct control to:

- Produce an RHS Scientific, Heritage and Living Collection Policy.
- Create the first complete UK garden plant scientific collection by 2050 and make our existing collections available online.
- Undertake scientific research to advance ecological gardening and control and management strategies, such as herbicide- and pesticide-free gardening with findings demonstrated in RHS gardens.

- Inform more people about the importance of cultivated plants and inspire people to cultivate and conserve a greater range of cultivated plants.
- Increase and conserve cultivated plant biodiversity and threatened cultivated plant diversity within our gardens. This includes the 19 National Plant Collections within our gardens.
- Work more closely with Plant Heritage and others who support the cultivation and conservation of the UK’s cultivated plant diversity and to champion cultivated plants and garden biodiversity in policy development – at local, national and international levels.
- Continue to manage our gardens and shows to support biodiversity on our sites. We will obtain and develop metrics to measure biodiversity: ecological surveys baseline and impacts.
- Further develop an ethical plant-based our gardens food and drink offer and reduce animal products use to minimise the biodiversity impacts of the food we serve.

The RHS can influence the horticultural industry and government and the gardening and general public by:

- Launching more widely RHS My Garden online and encouraging UK gardeners to catalogue their diverse garden plants by adding them to RHS My Garden online.
- Developing an online Garden Plants for Purpose tool that helps gardeners choose plants that deliver the environmental and health benefits they want.
- Building on the RHS Plants for BUGS scientific research, focusing on Gardening for Pollinators & Wildlife, with findings



**The Dry Garden
at RHS Garden
Hyde Hall.**

demonstrated in RHS gardens, sharing new knowledge with UK gardeners.

- Undertaking scientific research to advance ecological gardening management strategies for gardens, garden plant pests, diseases and weeds – investigating herbicide- and pesticide-free gardening and demonstrating findings to RHS visitors, in RHS gardens, online, through our advisory and networks and to UK gardeners.
- Working with the Ornamental Horticulture Roundtable Group (OHRG) industry and government and others to highlight the delivery of COP15, the Convention on Biological Diversity Aichi Biodiversity Goals and Targets and the 25-Year Environment Plan.

Actions for gardeners

1 Help map UK garden plant biodiversity:

Add your garden plants to RHS My Garden online to help map the UK's garden plants and we will help you grow and conserve this important biodiversity for future generations to enjoy.

2 Plant perennials: Planting trees, shrubs and herbaceous perennial plants helps provide food and shelter for wildlife and increases garden biodiversity.

3 Plant for pollinators: Help slow and reverse declines in bees, butterflies, moths, hoverflies and other pollinators by growing a wide variety of plants including a mixture of native, near-native and exotic plants to support pollinator biodiversity.

4 Garden without pesticides: Pesticides are not specific to the target pests, pathogens and weeds, so can detrimentally impact biodiversity. Adopting good practice in cultivation, cultivar selection, garden hygiene and encouraging or introducing natural enemies helps reduce pest, disease and weed problems and helps you become biodiversity positive.

5 Let lawns grow naturally: Mowing less frequently increases flowers, nectar and pollen to support pollinators.

6 Make a pond: Ponds or even a small water container provide an extra habitat in gardens and green spaces, significantly enhancing biodiversity.

Big RHS Initiatives

- Mapping the UK's garden plant biodiversity for the first time through RHS My Garden online by encouraging gardeners and others to add their garden plants.
- Creating the first complete UK garden plant scientific collection of 400,000 different plants by 2050 and making these available online.
- Developing an online Garden Plants for Purpose tool that helps gardeners choose plants that deliver the environmental and health benefits they want.





3 Net Positive for Nature

Nature Target 3 – Biosecurity Neutral by 2025

DEFINITION Management and control of biosecurity risks in our gardens and shows; sharing our knowledge with the wider gardening community to help protect the environment.

AMBITION Stimulate biosecurity and plant healthy actions among the general public.

MEASURE The delivery of the RHS Plant Health Principles across our operations and reporting on the Pilot Plant Healthy Certification of Harlow Carr Gardens.

Approach

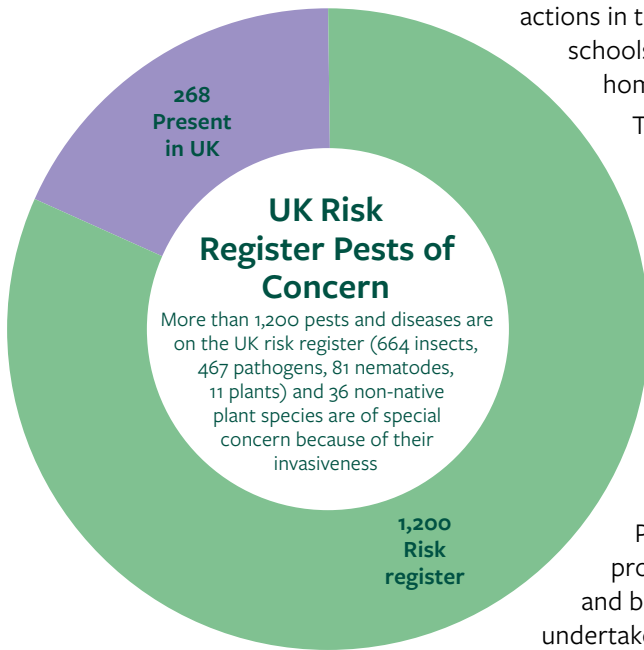
Over the past decade, the arrival of new pests and diseases in the UK, especially on trees, has had major impacts on our gardens and landscapes. Changes in climate, especially warmer winters, may also enable more pests and diseases to become established in our gardens. The RHS aims to keep its gardens and support UK gardeners and others to be plant healthy. Maintaining healthy gardens and plants ensures that the climate-biodiversity and health benefit services are maximised.

As a charity, one of the biggest impacts we can make is delivering the RHS Planet-Friendly Gardening Campaign to enable Britain's 30 million+ gardeners and others to take plant health and biosecurity actions in their community, schools, workplaces and homes.

The RHS is focusing on implementing its six plant health principles across our gardens, shows and retail operations. Furthermore, we are continuing to protect our gardens and National Plant Collections, provide plant health and biosecurity training, undertake research and

development for sustainable management of pests and how to stop them spreading. We will invest in and improve our plant health reception infrastructure and operations across all RHS gardens and pilot the Plant Healthy Certification scheme at RHS Garden Harlow Carr.

Our Plant Health Science team, based at RHS Hilltop – Home of Gardening Science and RHS Garden Harlow Carr, are collaborating with UK researchers, industry partners and gardeners to deliver applied scientific research that leads to plant health solutions to protect plant biodiversity.



Biosecurity focus areas

PROTECTING RHS GARDENS AND NATIONAL PLANT COLLECTIONS

Implement biosecurity policy changes and practices that protect genetic diversity

EDUCATION AND OUTREACH

Increasing and influencing biosecurity awareness in the wider gardening community

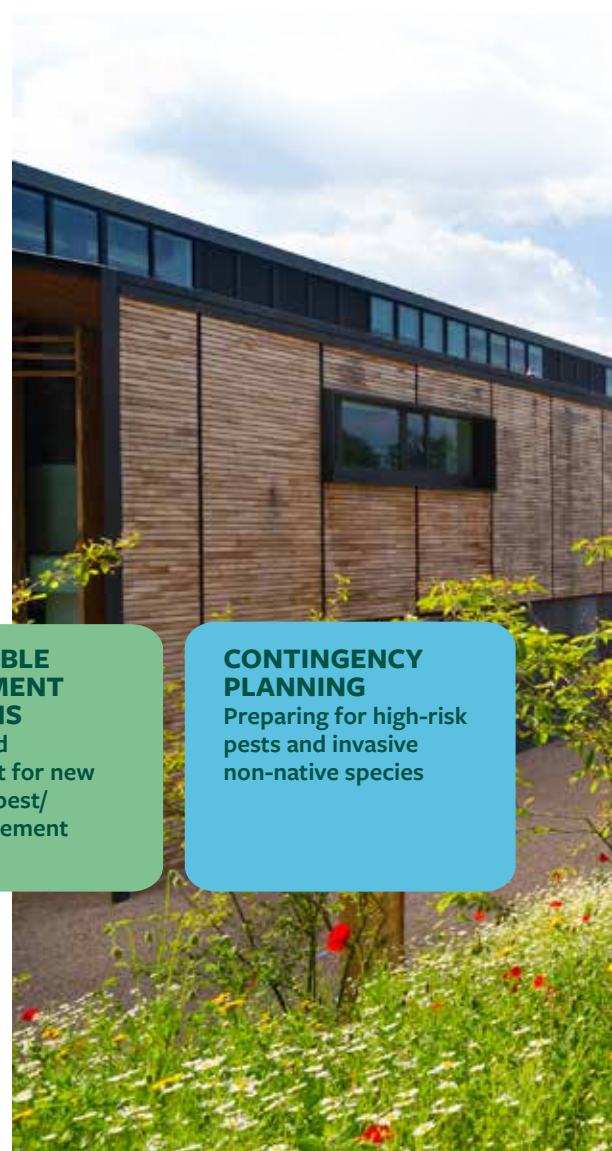
SUSTAINABLE MANAGEMENT SOLUTIONS

Research and development for new methods of pest/weed management

CONTINGENCY PLANNING

Preparing for high-risk pests and invasive non-native species

COMBINED Protecting collections, education and outreach, sustainable control methods and contingency planning



Biosecurity-Neutral Commitments

The RHS has direct control to:

- Adopt practices across RHS activities that minimise plant health risk by implementing the RHS six plant health principles.
- Pilot the Plant Healthy Certification scheme at RHS Garden Harlow Carr and, if successful, roll out to all operations by 2025.
- Develop a collection policy that includes more in-house propagation, safe sourcing and procurement and understanding the vulnerability of plants/collections to pests and invasive plants.
- Increase our preparedness for potentially damaging pests and diseases including identifying potential risks, developing plans to contain their spread and preparing responses to emergency situations.
- Undertake research into sustainable management and control strategies for common pests and pests not yet in the UK, including non-chemical plant-protection products and new pest-resistant plant-lines, and encourage gardeners to choose more sustainable pest-control methods.
- Invest in and improve the RHS Plant Health Reception facilities and services.

The RHS can influence the horticultural industry and government and the gardening and general public by:

- Increasing plant health and biosecurity awareness across Britain's 30 million+ gardeners and others to encourage good biosecurity and achieve thriving gardens and plants that provide the maximum benefits for carbon capture, pollinators and wildlife, the environment and human health.
- Providing guidance to gardeners and industry on plant health issues to protect the sustainability of gardens and horticulture in the UK.
- Communicating and exchanging knowledge to help gardeners and UK horticulture sustainably manage plant health risks.
- Collaborating with external organisations and our suppliers to help manage – and develop the skills necessary to manage – plant health risks to the UK.
- Working with OHRG (industry and government), Plant Health Alliance and others towards delivering a plant-healthy, biosecure Britain.



BIOSECURE RESEARCH

RHS Scientists are researching ways to minimise plant health risks.

Findings are presented in our gardens, such as the Wildlife Garden at RHS Hilltop – Home of Gardening Science.



Actions for gardeners

1 Source UK-grown plants: Where possible, buy plants from reputable UK nurseries or propagate your own from seed or local cuttings. Don't bring plants, flowers, seeds or vegetables home from abroad or overseas online sources, which could harbour devastating pests. Many pests and diseases enter gardens on new plants or in their soil.

2 Inspect plants: Check plants for signs of pests or diseases before purchase and after planting. Use RHS Gardening Advice for help.

- If in doubt, isolate new plants for a few weeks before planting out in your garden.
- Monitor the health of new plants; if you spot unusual symptoms, contact the supplier or RHS Gardening Advice.

3 Promote plant health: Grow strong, healthy plants that are more resilient and less likely to be severely affected by pests and diseases, reducing their impact.

4 Keep it clean: Cleaning garden tools, greenhouses and water butts reduces the spread of pests and diseases in the garden and the wider environment.

5 Monitor plants: Checking plants regularly means that pest and disease problems are more likely to be noticed early, before they cause serious damage. Report unusual symptoms to UK Plant Health Services or talk to RHS Gardening Advice.

RIGHT Good plant cultivation helps produce strong, healthy plants.
BELOW The plant health exhibit at RHS Hilltop – Home of Gardening Science raises public awareness on biosecurity and plant health.



Big RHS Initiatives

- Raise awareness of the importance of plant health and biosecurity.
- Pilot the Plant Healthy Certification scheme at RHS Garden Harlow Carr and, if successful, roll out to all operations by 2025.



4 Net Positive for Nature

Nature Target 4 – Water Neutral by 2030

DEFINITION To use less, capture, reuse and recycle water in RHS operations including gardens and shows and to encourage water-neutral gardening practices.

AMBITION Encourage and empower the gardening public to become climate resilient and increasingly efficient and effective in their garden-watering activities.

MEASURE The total amount of water used and its source (rain or mains water) in all RHS Gardens and Shows will be reported on an annual basis.

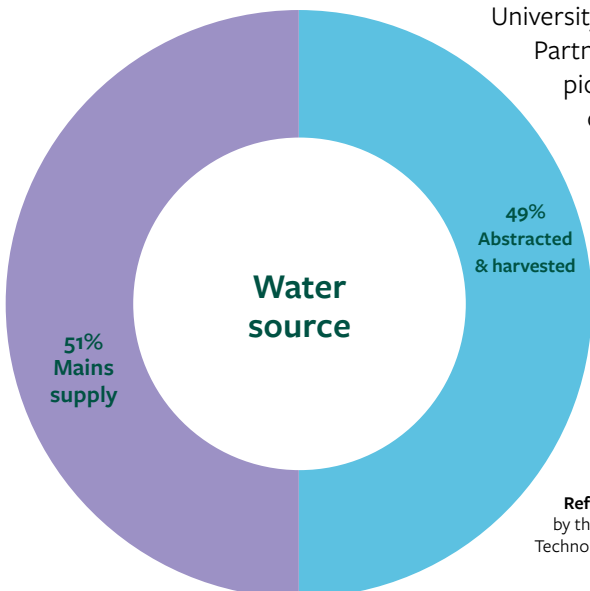
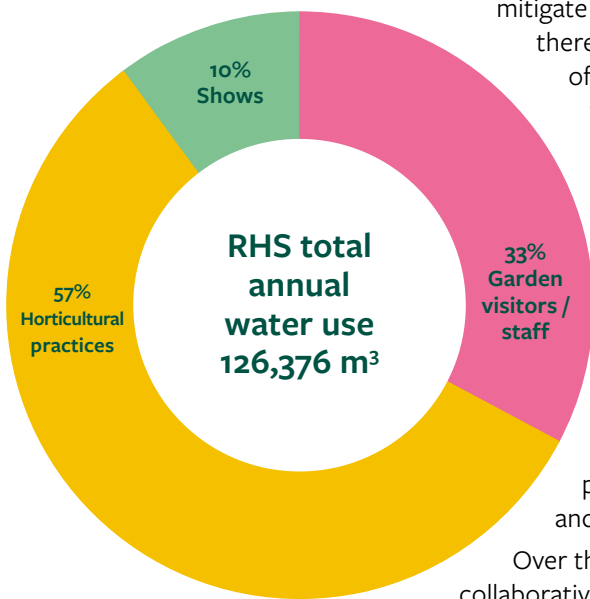
Approach

In 25 years, areas throughout the UK could face not having enough water to supply their needs. In addition, climate change is causing increased flooding and long periods of drought and heathland fires. The RHS is progressing towards improved understanding of water supply and demand across all its operations and sites and for UK gardens. The RHS water-management advice and resources are assisting the gardening public to reduce their reliance on mains water, become more climate resilient and use water more effectively and efficiently in their gardens and green spaces. This is also helping gardeners adapt to and mitigate against the climate crisis, thereby increasing resilience of their gardens, reducing flood and drought risk and protecting biodiversity. Within the decade, the RHS aims to become water neutral, playing our part towards building climate resilience into gardens and green spaces, leading to healthier and better-protected waterways and wildlife.

Over the past three years the collaborative RHS and Cranfield University Knowledge Transfer Partnership (KTP) [1] has pioneered the quantification of water information across the RHS. It has led to the development of a water roadmap for us to work on, in collaboration with others, to meet our water-neutral target by 2030.



NEW TECHNOLOGY
The permavoid system installed at RHS Hilltop – Home of Gardening Science Learning Garden helps reduce flooding and water use.

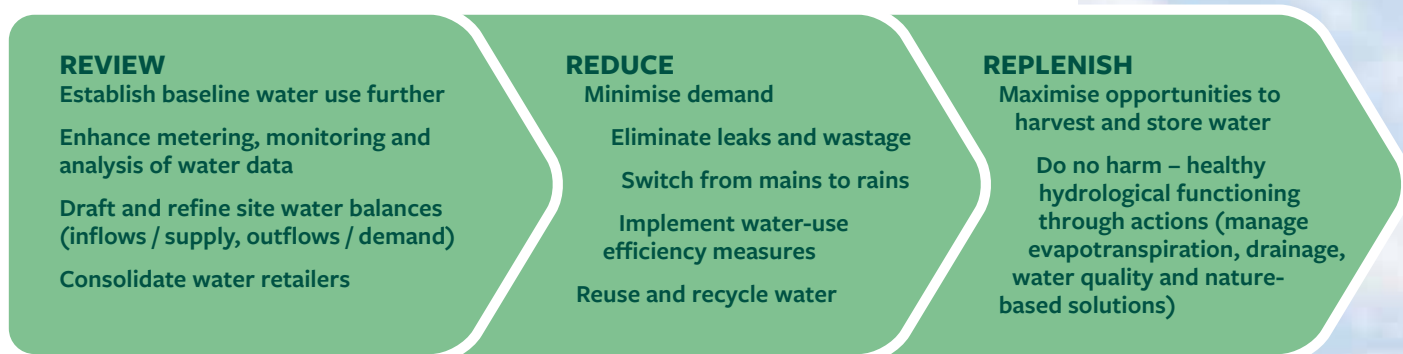


The RHS will review, reduce and replenish its water across all RHS operations. As a charity, one of our biggest impacts can be made downstream, through delivering the RHS Planet-Friendly Gardening Campaign to enable Britain's 30 million+ gardeners to become more climate resilient and take climate- and biodiversity-positive actions in their community, schools, workplaces and home. The Mains2Rains pledge initiative is assisting this effort. Please make your pledge at <https://mains2rains.uk>.

Our Environmental Horticultural Science team is working with UK researchers, water and horticultural industry partners and gardeners to apply scientific research that leads to gardens becoming water neutral in their practices, helping gardeners to adapt to and mitigate against climate change and protecting biodiversity through gardening practices that minimise impact on wildlife in natural waterways.

Reference [1] The collaborative RHS and Cranfield University Knowledge Transfer Partnership (KTP), was funded by the RHS and Innovate UK, through the Biotechnology and Biological Sciences Research Council (BBSRC), the Technology Strategy Board (TSB) and the Natural Environment Research Council (NERC).

The RHS approach to becoming Water Neutral by 2030



COMBINED Climate Resilience and Reduce, Reuse and Replenish Water

Water-Neutral Commitments

The RHS has direct control to:

- Value water and recognise its critical importance to the RHS and general gardening public.
- Reduce our water footprint across all operations as rapidly as possible to reach zero mains-water supply for RHS horticulture by 2030.
- Develop and implement the RHS water roadmap, measuring and analysing our improvements.
- Research and understand in more detail the water dynamics and water balances of all RHS gardens, thereby facilitating more informed water-management decisions.
- Implement further rainwater harvesting and storage solutions and explore grey-water reuse across all RHS sites and shows, to maximise opportunities to reduce, recycle, reuse and switch from mains-water to rain-water use.
- Develop optimised garden-watering systems for each RHS garden and improve water-use efficiency and climate-resilience technologies within our gardens and shows. Provide appropriate training for staff on optimal water-management techniques.
- Review, audit and collate baseline measures of water use across the RHS, to report on and use this data to prioritise investment in facilities and business practices to climate-proof our gardens and make them more sustainable.
- Develop a Planet-Friendly Sustainability Calculator for RHS Gardens, focusing, among other things, on water use.
- Provide robust evidence-based guidance, internally and externally, on optimal water-management practices to protect and enhance the sustainability of RHS gardens, shows and retail.
- Assess RHS water-related risks prior to undertaking activities that are likely to have water management (demand, use, storage or discharge) impacts and identify the most appropriate adaptations and mitigation options.
- Value horticulture and the water required to optimise plant quality by recognising the contribution that horticulture makes to ecosystems and its regulating functions in the hydrological cycle.
- Prioritise, fund and undertake research to generate the knowledge necessary to manage water-related risks to UK gardens and horticulture, with sound investment in our capability in knowledge and infrastructure.
- Communicate our findings and support knowledge exchange, internally and externally, to support more informed decision-making to reduce water risks to UK gardening and horticulture.
- Work internally and with external stakeholders to contribute to the improved management of water within gardens and horticulture in the UK and help build capacity and the resources and skills necessary to manage future water-related risks.

WATER HARVESTING Lakes are being established at RHS Gardens, such as the Moon Bridge Water outside the Welcome Building at RHS Garden Bridgewater, used to irrigate the plant centre and topped up with rainfall.

The RHS can influence the horticultural industry and government and the gardening and general public by:

- Launching the RHS Planet-Friendly Gardening Campaign to inspire Britain's 30 million+ gardeners and others to take up the Mains2Rains pledge for healthier plants.
- Working with our supply chain to better understand our water footprint and minimise negative impacts, encouraging our suppliers to set their own science-based targets.
- Researching and understanding the water dynamics/water cycle of domestic gardens.
- Working with water-related businesses, retailers, wholesalers, government and the horticultural industry to drive improved garden water management policy and incentives towards greater water resilience for biodiversity- and climate-positive gardening.

Actions for gardeners

Use <https://mains2rains.uk> to keep your gardens and plants healthy

See potential saving of mains water you can achieve (Litres per year L/yr)

No	Pledge	MAINS WATER SAVED (L/YR)					
		Garden Size			Other Areas		
		Small*	Medium*	Large*	Balcony	Courtyard	Allotment
1	Avoid irrigating lawns	3,600	12,768	35,200	0	0	0
2	Use a watering can not a hose	2,435	4,969	7,488	0	690	0
3	Install a water butt	512	1,321	1,385	0	417	599
4	Right plant / right place	351	656	656	0	117	0
5	Add mulch	83	154	154	0	28	1,084
6	Use self-watering containers	40	80	120	40	40	20
7	Add compost	53	100	98	0	18	205
8	Use drip trays	11	22	42	11	11	2
9	Swap paving for plants	0	0	0	0	0	0
10	Use permeable paving	0	0	0	0	0	0

* Small garden (<100 m2). Medium garden (100–250m2). Large garden (>250m2 in size).

Big RHS Initiatives

- Implement and deliver the RHS water roadmap developed by the Knowledge Transfer Partnership (KTP) with Cranfield University.
- Develop a new lake at RHS Garden Wisley towards making the RHS water neutral by 2030.
- Water the Way Nature Intended: Switch from Mains2Rains exhibit at 2021 RHS Chelsea Flower Show linked to the mains2rains public pledge campaign to keep gardens healthy while saving water to protect the environment and wildlife.





5 Net Positive for Nature

Nature Target 5 – Circular Plastic by 2030

DEFINITION We will eliminate all single-use plastic; encourage reduced plastic use; ensure that all packaging is 100% reusable, recyclable or compostable in RHS operations and encourage these gardening practices to our members and visitors.

AMBITION Stimulate the gardening public to use less, better or no plastic.

MEASURE This will be developed from the completion of a waste audit.

Approach

Despite the imagery of gardening being about nature, several aspects are in fact harmful to nature. Plastics that harm the environment feature in product packaging including hard-to-recycle plastic film; plant pots; gardening tools and appliances; and many other products. The wider global crisis of plastic pollution is mirrored in the horticulture industry and needs to be tackled with the same speed and vigour. The Ellen MacArthur Foundation forecasts that there will be more plastic than fish in the oceans by 2050, which is another profound challenge that all sectors need to tackle.

As an environmental charity, we are committed to reducing plastic use across all our operations. We will continue to focus our operations on less, better and no plastic – using less plastic wherever possible, choosing better plastic by switching to recycled and recyclable plastics, increasing the amount of reusable, recyclable or compostable packaging and switching to paper, glass or aluminium materials.

As a charity, one of our biggest impacts can be made by delivering the RHS Planet Friendly-Gardening Campaign to enable Britain's 30 million+ gardeners and others to use less, better and no plastic while gardening in their community, schools, workplaces and homes.

Circular Plastic Commitments

The RHS has direct control to:

- Use less plastic: reduce and cut down our plastic use.
- Use better plastic: switch to recycled, recyclable or compostable products in our operations.
- Use no plastic: choose, wherever possible, alternative materials, such as paper, glass or aluminium.
- Adopt a circular-loop system for plastic: reusing plastic for as long as possible by collecting, processing and repeatedly re-using plant pots, trays and other items.

The RHS can influence the horticultural industry and government and the gardening and general public by:

- Delivering the RHS Planet-Friendly Gardening Campaign to enable Britain's 30 million+ gardeners and others to use less, better and no plastic when gardening in their community, schools, workplaces and home.
- Working with our supply chain to accurately quantify our value-chain, to understand and minimise negative impacts of plastics in our supply chains.
- Developing a Planet-Friendly Sustainability Calculator for UK gardeners.
- Working with the horticulture and landscape industry and government to accelerate circular plastic gardening.

RHS MEMBERSHIP CARDS

The RHS is replacing its plastic membership cards with fully biodegradable cardboard cards.





Actions for gardeners

1 Plant pots Reduce plastic pot use by buying bare-rooted perennial plants. Wherever possible, re-use plastic pots, share with others or take to a garden centre recycling point. A few councils accept pots in kerbside collections and larger municipal tips also accept coloured rigid plastic.

2 Plastic-free plants Opt for real rather than plastic plants, which benefit human health, pollinators and the environment.

3 Plastic-free plant labels Choose bamboo and wooden plant labels that can be composted at the end of their usefulness.

4 Plastic string and netting Swap plastic string and netting for jute or hemp products. Natural twine is readily available and, unlike plastic ties, it doesn't cut into stems, but needs replacing every few years.

5 Compost bags Reuse compost bags as rubbish sacks or recycle through some local councils and supermarkets, once cleaned. Make your own compost at home, rather than buying in.

6 Plant protection Plastic-free solutions include glass cloches, hessian and straw and cardboard insulation. Delay planting frost-sensitive plants to avoid using horticultural fleece and wrap tender plants such as bananas in hessian or newspaper stuffed with straw over winter.



Big RHS Initiatives

- Since 2019 the RHS has used a paper wrapper for *The Garden*, *The Plant Review* and *The Orchid Review* magazines, removing 5.25 million items of single-use plastic each year.
- A fully-compostable cardboard membership card is being trialled in 2021 and from December 2021 all new and renewed membership cards will be cardboard.



6 Net Positive for Nature

Nature Target 6 – Zero waste to landfill by 2030

DEFINITION All waste produced is reduced, reused, recycled, composted or sent to energy recovery from all RHS operations, and gardeners and members of the public are encouraged to do the same in their gardening practices.

AMBITION Stimulate the gardening public and others to reduce, reclaim, reuse, recycle, repair, recover and re-invest in recycled products.

MEASURE This will be developed from the completion of a waste audit.

Approach

Producing, using and disposing of products and services generate significant greenhouse gas emissions both through energy use and also from land use change and chemical processes. So, improving resource efficiency and sufficiency are important weapons with which to tackle climate change.

The RHS will undertake a waste audit to inform the development and implementation of a waste strategy so that we can reach our target by 2030. We aim to minimise waste to landfill and support the waste hierarchy (prevention, re-use, recycling, recovery, disposal) approach. We will aim to design-out waste and look to reduce, reuse, recycle, repair, recover and reinvest in products made from recycled materials.

As part of the circular waste economy the RHS composts and re-uses green waste in all its gardens. Similar principles will be applied to achieve zero waste to landfill by 2030.

Zero-Waste Commitments

The RHS has direct control to:

- Complete a waste audit of our gardens and shows to inform the development and implementation of an RHS waste strategy.
- Review and improve green-waste recycling at all our gardens.
- Reduce, reuse, recycle, repair or recover office waste across the RHS.
- Ensure that visitors can easily recycle waste in our gardens and shows.

The RHS can influence the horticultural industry and government and the gardening and general public by:

- Delivering the RHS Planet-Friendly Gardening Campaign to enable Britain's 30 million+ gardeners and others to work towards zero-waste gardening to landfill in their community, schools, workplaces and homes.
- Working with our supply chain to minimise waste.
- Developing a Planet-Friendly Sustainability Calculator for UK gardeners.
- Working with the horticulture and landscape industry and government to accelerate zero waste to landfill.

Actions for gardeners

- 1 Reduce** resources in your garden wherever possible.
- 2 Re-use** household materials and seasonal items year on year and recycle through car boot sales, online and reclamation sites.
- 3 Recycle** garden waste, plastic, glass and metals.
- 4 Repair** and maintain tools and garden items rather than buying new.
- 5 Reinvest** in items made from recycled materials or that are recyclable.

RHS Example

- All green waste is composted and re-used on our sites to grow healthy plants and gardens.



CIRCULAR WASTE
The RHS composts and re-uses green waste in all its gardens.

PART 2

NET POSITIVE FOR PEOPLE





1 Net Positive for People

People Target 1 – Enable more people to enjoy the benefits of gardening

DEFINITION A more diverse group of people understands that gardening brings joy and is accessible and relevant, especially for their mental, physical and social wellbeing.

AMBITION Stimulate gardening activities that bring joy and improve mental, physical and social wellbeing among the general public.

COMMUNITY BENEFITS Therapeutic Gardener Ozichi Brewster leads a social gardening session in the Community Wellbeing Garden at RHS Garden Bridgewater.

Approach

Over the past eight years the RHS has undertaken scientific research to provide evidence on the health and wellbeing benefits of gardening and, as the UK's largest gardening charity, we will continue to lead on this research. Scientific research at our new health and wellbeing living garden laboratory at RHS Hilltop – the Home of Gardening Science will provide new knowledge on garden design and gardening for wellbeing (and barriers to participating in or enjoying gardening) that we will share.

We aim to increase RHS presence digitally and on the ground across the UK, focusing on wellbeing and the environment.

Engaging wellbeing projects, programmes, interpretation and content will connect with a significantly larger and more diverse audience across the UK, with increased topics on wellbeing. We will support green

social prescribing across the UK, starting with our new social and therapeutic garden at RHS Garden Bridgewater.

We will continue to build our important relationship with the NHS and work with other partners to develop urban community hubs and projects.

Commitments

The RHS has direct control to:

- Continue to lead the research on gardening and garden design to improve the UK's mental, physical and social wellbeing.
- Explore the development of new urban gardening community hubs, with a focus on delivering environmental and wellbeing benefits, locally and nationally.
- Build on RHS My Garden online to develop a new digital gardening assistant app to



increase engagement for those who wish to grow gardening knowledge in digital environments. Ensuring that gardening for wellbeing is centrally embedded within new technology.

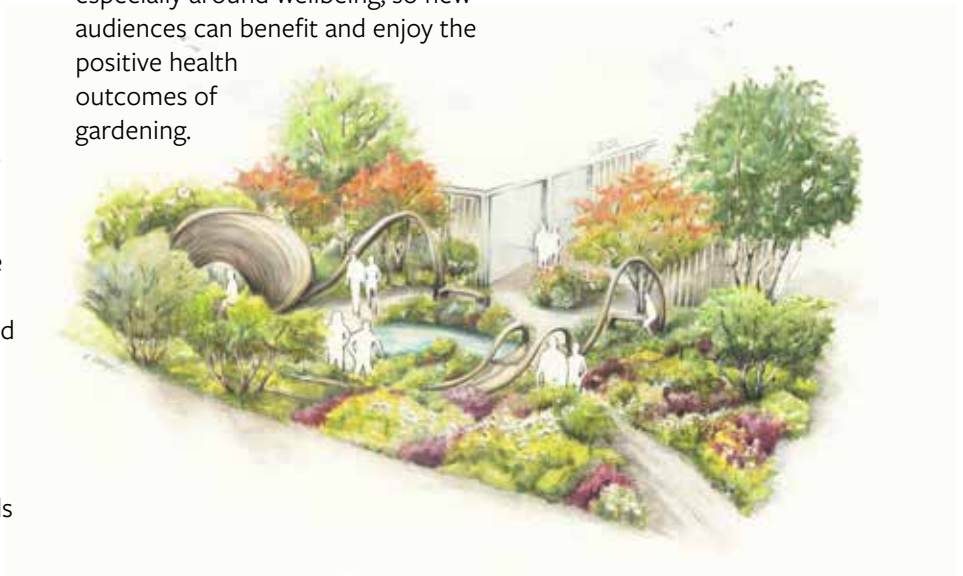
- Invest in the RHS brand to position the RHS as reflective of the broad UK population. Demonstrate genuine examples of diversity and inclusion in our publicity and promotional material.

The RHS can influence the horticultural industry and government and the gardening and general public by:

- Continuing to build on the existing, successful wellbeing partnership with the NHS. After the 2021 RHS Chelsea Flower Show, The BBC One Show and RHS Garden of Hope will be moved to provide a safe, inspiring space at a specialist mental health centre for new mothers and their babies.
- Supporting NHS key workers to cope with the severe and increasing pressure of the Covid-19 pandemic, through a network of healing gardens in the grounds

of hospitals and healthcare settings, to create a lasting, positive impact on the health and wellbeing of staff and the wider community. This will be a pilot scheme that, if successful, we will extend to other sites.

- Support social prescribing of gardening across the UK, starting with our new social and therapeutic garden at RHS Garden Bridgewater.
- Encourage everyone to share their experiences of gardening with the RHS, especially around wellbeing, so new audiences can benefit and enjoy the positive health outcomes of gardening.



GARDEN OF HOPE Designed by Arit Anderson, The BBC One Show and RHS Garden of Hope at the 2021 RHS Chelsea Flower Show illustrates how gardening and growing plants provides hope and joy as plants flourish and grow.



Big RHS Initiatives

Social and Therapeutic gardening at RHS Garden Bridgewater (left)

The BBC One Show and RHS Garden of Hope at the 2021 RHS Chelsea Flower Show (above).



2 Net Positive for People

People Target 2 – Design a new evidence-based Wellbeing Garden Blueprint by 2025

DEFINITION To further research and create a new evidence-based wellbeing garden blueprint, regarding both design and process, that enables everyone to enjoy the health and wellbeing benefits of a garden.

AMBITION To improve recognition of gardens and gardening as valuable health resources to reduce poor wellbeing and promote better wellbeing for all.

WELLBEING BENEFITS
The Wellbeing Garden at RHS Hilltop – Home of Gardening Science contains a succession of ‘garden rooms’ set among large fragmented beds, positioned to entice visitors to explore and enjoy the many ways gardens can support physiological and psychological health.

Approach

A healthy and resilient population is essential to reach all other sustainability goals and there is strong evidence that gardens and gardening can improve mental, physical and social health. The RHS will build on the extensive evidence it has already published in collaboration with others regarding gardens and human wellbeing and create a new evidence-based blueprint for gardens to optimise human wellbeing, taking design and process into account.

This blueprint will demonstrate how gardens can be an important part of promoting good health, preventing poor health as an early intervention and supporting recovery from health issues. It will provide an example of best practice, with guidance on how it can be adapted to suit different contexts. Through our expertise in garden health, science and community outreach, the RHS can lead the way in this effort.

We will conduct and publish research on the emotional and stress responses to multisensory elements in gardens, focusing on plant scent, colour and flower shape, using the Wellbeing Garden at RHS Garden Wisley as a living laboratory.

As part of this and our dedication to community gardening, we’re planning to create a network of community hubs in healthcare and other settings, where people can learn horticultural skills and improve wellbeing by being involved or spending time in gardens. This partnership between RHS community groups, the NHS and other partners will be inclusive for all people who can benefit from these spaces. Learning from the community hubs, currently being piloted, will also help to inform the blueprint’s evolution.



DESIGN

Experimentation: emotional and stress responses to garden plants, features and activities across socio-cultural groups. Including using the Wellbeing Garden at RHS Garden Wisley as a living laboratory

Integration of scientific knowledge with garden design expertise

PROCESS

Community-led creation of wellbeing gardens

Removing barriers to participation and access to encourage inclusivity, equitability and diversity

Capacity building: Facilitation of shared expertise across community sites through volunteers



COMBINED Coupling scientific evidence on design and process to empower people to optimise wellbeing benefits from gardens in a way that is locally relevant, empowering and ever-evolving

Commitments

The RHS has direct control to:

- Conduct and publish scientific research and share how gardens and gardening influence human health and wellbeing.
- Develop plans to implement community hubs across UK communities.
- Produce evidence and knowledge regarding design and process that will feed into the new wellbeing garden blueprint.
- Host a health and horticulture conference in 2022 to encourage cross-sectoral collaboration.
- Support social prescribing of gardening across the UK, such as the RHS Garden Bridgewater social and therapeutic garden.
- Create an accessible digital platform for wellbeing content to be shared and disseminated.

The RHS can influence the horticultural industry and government and the gardening and general public by:

- Building capacity for wellbeing gardens by sharing expertise across community sites and creating designs and processes.
- Working with the horticulture and landscape industry and government to embed health and wellbeing design principles and activities into UK planning and developments.

ABOVE Nailsworth residents green up their local environment through a Greening Great Britain Project planting session at Market Street Garden.

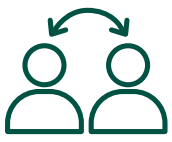
BELOW Children learn about plants at the opening of an RHS and Heritage Fund project to create a garden at Guildford Nursery and Family Centre.



Big RHS Initiatives

Creating a new evidence-based wellbeing garden blueprint, covering design and process, that enables everyone to enjoy the health and wellbeing benefits of a garden.

To support NHS key workers to cope with the Covid-19 pandemic, the RHS aims to support a network of healing gardens in the grounds of hospitals and healthcare settings, for a lasting, positive impact on the health and wellbeing of staff and the wider community. We aim to pilot this in Manchester and London, and if it is successful will develop more sites across the UK.



3 Net Positive for People

People Target 3 – Develop and embed sustainable horticulture within education, research and training

DEFINITION To develop sustainable horticultural research and training, increasing the skills, knowledge and confidence of young people and adults to grow sustainably.

AMBITION Stimulate the gardening public to grow sustainably through active engagement, education, training and skills.

Approach

The RHS will aim to provide sustainable inspiration and information to customers through our horticultural training and learning, from initial engagement to PhD level and ongoing professional development. We will share the best sustainable practices that we and others in the horticultural networks learn.

Commitments

The RHS has direct control to:

- Create core research, knowledge and key messaging on sustainability through RHS science, collections and the Lindley Library.
- Create a suite of sustainability training courses available to staff and volunteers. We will monitor completion rates, course feedback and seek ideas to improve our own sustainability practices from staff.
- Embed sustainability in RHS training programmes: schools, courses, workshops, qualifications, apprenticeships, School of Horticulture and Master of Horticulture.
- Increase the number of RHS-collaborative PhD opportunities on training the next generation of horticultural scientists from 16 to 30 by 2025.
- Increase the number of horticulture and horticultural science apprenticeships we offer, embedding sustainable horticulture in their training plans, from 66 per year to a target of 76 by 2024.
- Ensure sustainability is embedded within all programmes, such as the Campaign for School Gardening.

- Adapt our criteria for sustainable innovation awards to pose challenges to pupils, the public and social enterprises to help identify solutions.
- Develop and offer new, accessible training in sustainable horticulture from beginner to professional.
- Increase our sustainability message through the RHS advisory service, membership and online.
- Share our sustainability knowledge and learn from and work with community groups, schools, gardeners, partner gardens, affiliated societies, plant societies and businesses to help us grow sustainably together.

The RHS can influence the horticultural industry and government and the gardening and general public by:

- Working with the horticulture and landscape industry and government to increase skills and improve succession planning across the whole supply chain.
- Updating the Criteria to ensure more sustainable gardening practices are encouraged across the Britain in Bloom, school and community programmes.
- Build partnerships and focus on guiding and mentoring in sustainable horticulture principles.
- Supporting community groups and schools to grow sustainably by training horticultural volunteers across the UK.



ABOVE RHS Scientist Tijana Blanusa measures leaf temperatures on a privet hedge using an infra-red 'gun'. **RIGHT** Trainer Bernard Boardman instructs trainees on the allotment at RHS Garden Wisley. **FAR RIGHT** Pupils cut herbs to make soup for the RHS Big Soup Share at St Gregory's Catholic Science College, London.

Big RHS Initiatives

Embed the sustainability messaging through RHS training programmes (schools, courses and workshops, qualifications, apprenticeships, School of Horticulture, Master of Horticulture and PhDs).







4 Net Positive for People

People Target 4 – Accelerate Equality, Diversity and Inclusion

DEFINITION Develop the organisation, our employees and volunteers, our brand, operations, marketing and activities to be truly inclusive, reflecting all UK communities.

AMBITION Elevate equality, diversity and inclusion through the gardening community.

Approach

A diverse and resilient population is essential to reach all other sustainability goals. The RHS aims to continue to create an inclusive charitable organisation, through a range of activities that inspire everyone to grow, and demonstrate inclusive values and behaviours, allowing people to be themselves and flourish.

Our approach to accelerating equality, diversity and inclusion is focused on working towards ensuring our people, partners, members and audiences are representative of local and UK demographics by 2030. We will provide a series of internal learning, development and opportunities to increase awareness of issues relating to equality, diversity and inclusion and develop guidance to support the creation of inclusive and accessible gardens and programmes.

Commitments

The RHS has direct control to:

- Drive the implementation of the RHS Diversity and Inclusion Strategy and RHS Inclusion Forums.
- Aim for our people, members, audiences and partners to be representative of local and UK demographics by 2030.
- Develop and implement an inclusive attraction and recruitment strategy to attract a new generation of talent to the horticultural industry.
- Strive for all RHS gardens to attain nationally-approved accessibility awards.
- Support local and national diversity and inclusion awareness-raising events at all RHS gardens.
- Develop and deliver inclusive attraction and recruitment processes, requiring all hiring managers to complete appropriate training.



- Provide a series of learning opportunities, in a variety of formats to increase awareness and enhance the equality, diversity and inclusion learning experience.
- Develop guidance to support the creation of inclusive and accessible gardens to meet the needs of as many people as possible including those with accessible needs, visual impairment, sensory and allergy sensitivities.
- Collect and monitor diversity data across our people, council, committees, members and visitors.
- Aim to achieve year-on-year improvements in the diversity of RHS employees.
- Develop an inclusive RHS brand identity.
- Research, develop and deliver accessible garden guidelines.

The RHS can influence the horticultural industry and government and the gardening and general public by:

- Establishing access forums supported by Local Authority and advocacy groups at all gardens.
- Sharing our expertise with key external stakeholders, such as Local Authorities

and community garden societies, to enable them to create accessible gardens.

- Enhancing our role as an industry leader to support organisations across the horticultural industry.
- Working with the horticulture and landscape industry and government to promote sustainable horticulture and green-skills job opportunities.
- Enhancing our existing successful range of RHS community gardening projects, such as Britain in Bloom, It's Your Neighbourhood, Affiliated Societies, Community Outreach programmes, Campaign for School Gardening, and linking them to career, training or work-experience opportunities.
- Establishing partnerships with equality, diversity and inclusion-specific organisations to support RHS goals.
- Developing programmes to support young people into careers within the RHS and horticulture.
- Launching the RHS Flourish Fund to inspire under-represented groups into horticultural careers at the RHS.
- Developing flexible learning opportunities with expert partner organisations.

Net Positive for People Actions for Gardeners

- 1 Share** your garden, produce, flowers, houseplants or gardening knowledge with others.
- 2 Connect** with your community. Reach out to neighbours and the wider community to share seeds, plants tools, skills, knowledge and your love of gardening.
- 3 Join or start** a local community gardening group. Britain in Bloom, It's Your Neighbourhood, Friends Of groups and our network of Affiliated Gardening Societies all care for community green spaces that can be enjoyed by everyone, providing vital wellbeing opportunities for people who don't have a garden of their own.

4 Be active by gardening indoors or out, incorporating physical activity where possible.

5 Volunteer with your local school, youth group or uniform group. Many organisations need enthusiastic people to share their skills and knowledge to inspire and enable young people to get growing.

Big RHS Initiatives

The RHS Flourish Fund is part of our commitment to promote diversity and inclusion in horticulture by helping more people every year to realise the power of plants. We want to inspire everyone to grow, and the RHS Flourish Fund is part of our pledge to attract and support a wider range of people to connect with horticulture by offering a commitment of £150,000. The Fund aims to support organisations across the UK for people to acquire skills and training to undertake a career in horticulture.

INCLUSIVE FOR ALL The RHS is supporting the creation of inclusive and accessible gardens to meet the needs of as many people as possible.

FLOURISH FUND The RHS Flourish Fund has been launched to inspire under-represented groups into horticultural careers at the RHS.



Transparency

Reporting

The RHS publishes an Annual Report and Financial Statement (ARFS). From 2021 we have reported additional carbon data. For internal progress reporting, we will develop a comprehensive set of Key Performance Indicators (KPIs) to track our sustainability impacts and develop business cases and more detailed action plans setting out how we will achieve these KPIs. Reporting pathways follow below, but we also aim to make our sustainability plans visible to all staff, where data allows, and share what we learn with gardeners as we travel this journey together.

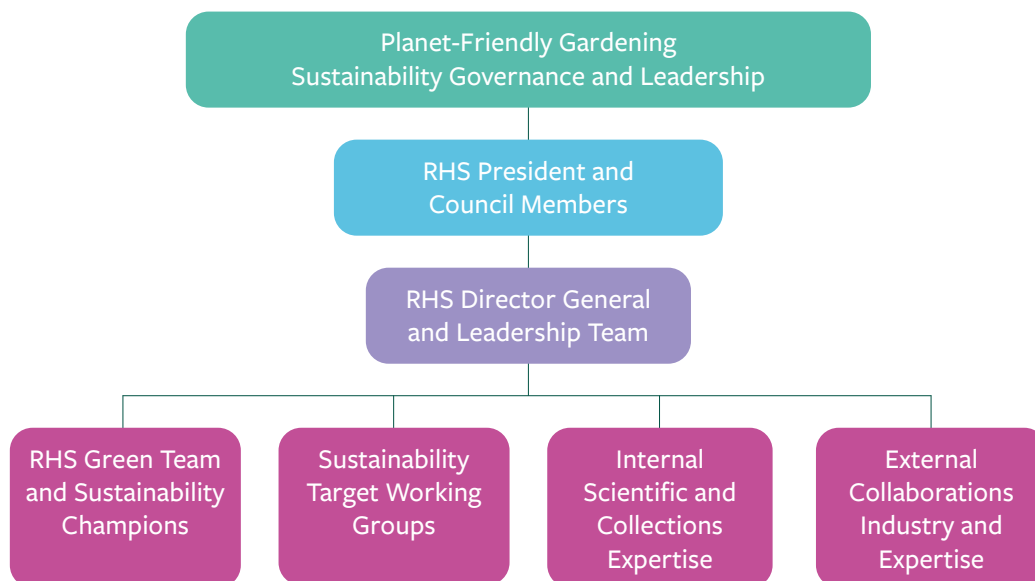
Governance

Achieving our sustainability aims will require collaboration and action from all our passionate, talented and committed staff, volunteers and supporters and our supply chains.

Staff at every level, in all departments and directorates, play an invaluable role in making the RHS special, and will continue to support us as we align for a Net Positive for

Nature and Net Positive for People future. The RHS Green Team and networks of sustainability champions, supported by the new Sustainability Manager, will continue to deliver sustainability and encourage others within their teams and buildings to play their part.

This is a journey that our team and UK gardeners will take together; it's not solely the responsibility of a few. Overall responsibility for ensuring the prioritisation of sustainability lies with RHS Council. For each targeted action there is a team and sustainability progress will also be supported by these working groups, with a lead for each group. Following publication of this strategy, we will develop detailed sustainability Key Performance Indicators (KPIs) and internal reporting dashboards for tracking sustainability progress. Sustainability performance metrics will be incorporated into the operational plans for each directorate and reviewed quarterly by the Leadership Team. Sustainability progress will be reported to our Leadership Team and Council, who will retain oversight of progress.





Working with industry and government

The RHS is committed to working with government, industry and gardeners to help towards a sustainable and climate-resilient planet for future generations to thrive on. We work with a wide range of partners embracing collaboration, sharing research and solutions, and shaping policy.

As the UK's leading gardening charity, the RHS will continue to promote the immense value of adopting greener gardening practices to support biodiversity, stem the tide of climate change and place us in a better place to build resilience to tackle climate change.

We will work closely with government and industry to realise the full potential of major events, such as the UN Biodiversity Conference COP15 and the UN COP26 Climate Conference, and gardening and climate-change campaigns. Drawing on our research and broader scientific evidence, we will call for change and produce solutions on both biodiversity and climate change.

RHS Director General Sue Biggs is Chair of the Ornamental Horticulture Roundtable Group (OHRG), a body of industry leaders and innovators that champion the value and benefits of ornamental horticulture to safeguard the nation's future.

The OHRG's 'Growing a green economy' report and summary report 'Unlocking green growth' outline how horticultural scientific research and development can deliver innovative and sustainable solutions to climate change, increasing biodiversity,

climate and environmental resilience and improving plant health and human mental, physical and social health.

The RHS is continuing to fund scientific research and knowledge sharing, PhDs and Postdoctoral Fellowships. We have invested many millions in RHS Hilltop, the UK's first horticultural scientific centre of excellence.

Funding and fundraising

As the UK's leading gardening charity, we rely on the support of our members, donors, funders and partners to carry out our charitable work. We know that many of our supporters care as much as we do about protecting people, plants and the planet and, over the next eight years, we will be working hard to engage supporters with these plans.

To help deliver our Sustainability Strategy, we will develop a fundraising plan, asking for support from RHS members, individuals, trusts, companies and statutory funders. This financial support, alongside a significant contribution from the RHS, will enable us to deliver plans in our gardens and shows, improve our internal operations, engage gardeners of all ages across the UK, and work with the horticultural industry and government for positive change.

Fundraising will be crucial to deliver RHS Net Positive for Nature and Net Positive for People objectives, and we are looking forward to working with existing supporters and funders, as well as new partners.



The Ornamental Horticulture Roundtable Group is a body of industry leaders and innovators championing the value and benefits of ornamental horticulture to safeguard the nation's future.

Sustainability glossary

To ensure full transparency we have defined some of the sustainability terms contained within this strategy.

25 Year Environment Plan

A Green Future: Our 25 Year Plan to improve the environment has been set out by the UK Government, stating what it will do to improve the environment, within a generation.

Biodiversity crisis the rapid loss of species and the rapid degradation of ecosystems by human actions negatively impacting upon them.

Biomass plant or animal material used as fuel to produce electricity or heat.

Biosecurity taking measures to prevent the introduction and/or spread of harmful organisms to animals and plants to minimise the risk of transmission of infectious pests and diseases and invasive plants.

Carbon dioxide equivalent (CO₂e) the standard measurement for GHG emissions, CO₂e standardises greenhouse gases into units of tonnes of carbon dioxide equivalent.

Carbon footprint measures the total greenhouse gas emissions caused directly and indirectly by a person, organisation, event or product.

Carbon neutral a minimum requirement of covering Scope 1 & 2 emissions with Scope 3 encouraged (see below).

Carbon offset a reduction in emissions of carbon dioxide or other greenhouse gases made in order to compensate for emissions made elsewhere. Offsets are measured in tonnes of carbon dioxide-equivalent (CO₂e). One tonne of carbon offset represents the reduction of one tonne of carbon dioxide or its equivalent in other greenhouse gases.

Carbon sequestration the capture and secure storage of carbon that would otherwise be emitted to, or remain in, the atmosphere. Also referred to as 'carbon draw-down'.

Circular plastic a system designed to keep existing plastic in use for as long as possible, extracting the maximum value from it while in use, then recovering and regenerating plastics at the end of each service life, ensuring that it does not reach the environment. This includes eliminating and reducing plastic use; improving plastic recycling and reuse; and finding plastic product alternatives.

Climate crisis the situation resulting from global warming causing highly dangerous, irreversible changes to the global climate, such as environmental degradation, natural disasters, weather extremes, food and water insecurity and economic disruption.

Climate positive a commitment to go beyond net zero by investing in nature-based solutions, to have a net beneficial impact on the climate.

Climate resilience the ability to anticipate, prepare for and respond to hazardous events, trends or disturbances related to climate. Improving climate resilience involves assessing how climate change will create new, or alter current, climate-related risks, and taking steps to better cope with these risks through adaptation and mitigation.

Convention on Biological Diversity 2050 vision a strategic plan for a world living in harmony with nature in which biodiversity is valued, conserved, restored and wisely used, maintaining ecosystem services, sustaining a healthy planet and delivering benefits essential for all people, by 2050.

Cultivated plant diversity a mixture of native and cultivated plants grown by people in gardens or landscapes.

Ecological gardening gardening with a natural balance for pollinators, wildlife and wellbeing, including herbicide- and pesticide-free management.

Fossil fuels fuels such as coal, petrol and natural gas formed by natural processes acting on organic matter, which release large quantities of carbon dioxide when burned.

Greenhouse Gas Emissions (GHG) gases discharged into the Earth's atmosphere as a result of human activity that are accelerating global warming. Most is carbon dioxide from burning fossil fuels – coal, oil and natural gas.

Mains2Rains an RHS and Cranfield University collaborative pledge initiative for gardeners to harvest and use rainwater, rather than mains water, to protect water resources and wildlife.

Nature-based solutions actions to protect, sustainably manage and restore natural or modified ecosystems, to benefit both human wellbeing and biodiversity.

Net emissions reduction reducing annual GHG emissions with projects that prevent or reduce emissions.

Net positive putting back more into society, the environment, nature and the global economy than is taken out.

Planetary boundaries introduced in 2009, the Planetary Boundary

Acknowledgements and further information

concept aimed to define the environmental limits within which humanity can safely operate and has influenced global sustainability policy development.

Renewable energy energy that is produced by natural resources – such as sunlight, wind, rain, waves, tides, and geothermal heat – that are naturally replenished within a time span of a few years.

Social prescribing enables primary care professionals to refer people to local, non-clinical services, such as gardening, to support their health and wellbeing.

Scope 1, 2 and 3 Greenhouse gas emissions are categorised into three groups or ‘Scopes’ by the most widely-used international accounting tool, the GHG Protocol. Scope 1 covers direct emissions from owned or controlled sources. Scope 2 covers indirect emissions from the generation of purchased electricity, steam, heating and cooling consumed by the reporting company. Scope 3 includes all other indirect emissions in a company’s value chain.

Sustainability the integration of environmental health, social equity and economic vitality to create thriving, healthy, diverse and resilient communities for this generation and generations to come.

Sustainable development goals 17 interlinked global goals set by the United Nations, designed to be a “blueprint to achieve a better and more sustainable future for all” and are intended to be achieved by the year 2030.

UN COP26 summit the 26th UN Climate Change Conference of the Parties (COP26) in Glasgow (31 October–12 November 2021) is bringing parties together to accelerate action towards the goals of the Paris Agreement and UN Framework Convention on Climate Change.

Value chain the full range of activities that organisations do to bring products and services from its conception to its end use and beyond.

Water neutral total water use on RHS land must be equal to or less than total natural water supply on RHS land. This involves using less water and capturing, reusing and recycling water in all our operations.

Zero waste to landfill at least 99 percent of generated waste is diverted away from landfill, which means that all waste produced is either reused, recycled, composted, or sent to energy recovery.

The development of this strategy has received support, input and expertise from many individuals within and outside the RHS. We would like to thank everyone for their support.

We are very grateful to RHS Council, Horticultural Board, Science Committee, The RHS Green Team and Working Group members for inputting their meaningful comments on the targets, definitions and strategy. We would also like to thank Sue Garrard of Sue Garrard Consulting for all her advice, guidance and support in helping us achieve this RHS Sustainability Strategy.

Main author Professor Alistair Griffiths, RHS Director of Science & Collections

Contributors:

Our thanks go to all contributors for their considerable effort and insight Sue Garrard, Tim Upson, Hayley Monckton, Mark Norman, Carole Goldsmith, Helena Pettit, Martine Parnell, Jan Nix, Jon Simpson, Mark Gush, John Pye, Glen Powell, John David, Lisa Ward, Marianne Giovanelli, Glen Willie, Marie Houghton Brown, Ian Thomson, Chris Moncrieff, Lauriane Chalmin-Pui, Marc Redmile-Gordon, Tijana Blanusa, Elisabeth Karlstad Larsen, Kay Clark, Janet Manning, Amy Foster, Paul Griffiths, Emma Thompson, Kim Govier, Andrew Salisbury, Helen Bostock, Martin Ivall, Helen Bensted-Smith, Sue Moss, Yvette Harvey, Harry Earle-Mundil, Caroline Humphries, Dario Spagnoli, Duncan Mclean, Rob Brett, Fryni Drizou, Anna Platoni, Kirsty Wright, Katherine Potsides, Hattie Sherwood, Wesley Olliffe, Laura Birkin, Tom Broome-Hughes, Damian Powell, Tim Hollis, Paul Cook, Mark Tuson, Dan Kitching, Claire Thacker, Diana Levy, Rosie Naylor, Jo Sage, Dan Punnett, Sarah Berryman, Diana Waters, Tom Howard, James Lawrence, Faye Powers, Sophie Reynolds, Kirsty Wilks, Tara Knights, Andrea van Sittart, Emma Marsh, Hayley Jones, Claire Custance, Heather Cooke, Nicola Hankey, Ben Brace, Charlotte Maguire, Ally Page, Mark Timothy, Simona Hill, The RHS Horticultural Board, RHS Science Committee, RHS Director General Sue Biggs, RHS President Keith Weed and all RHS Council members.

Design Amanda Rigby

Copy editing Marina Jordan-Rugg

Further information:

Visit rhs.org.uk/sustainability or email alistairgriffiths@rhs.org.uk

Citation advice RHS, (2021). RHS Sustainability Strategy: Net Positive for Nature and People by 2030: Planet-Friendly Gardening Campaign, the RHS and Gardeners tackling the climate and biodiversity crisis together. RHS, London, UK.

Credits Contributing photographers

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rhs.org.uk

Royal Horticultural Society
RHS Garden Wisley, Woking, Surrey GU23 6QB
scienceadmin@rhs.org.uk

RHS Registered Charity Number 222879 / SC038262