# TOOLKIT

The Prince's Responsible Business Network

### **GUIDE TO GREENING YOUR WORKSPACE**

As pressure to tackle the climate emergency grows, it is vital that businesses assess the full range of solutions available to them. As well as taking measures to accelerate towards a net-zero economy, businesses need to build resilience to the changing climate. Nature-based solutions can be used in addressing both issues. This toolkit introduces some of the ways that businesses can use nature-based solutions to increase their resilience, enhance the environment and improve biodiversity through the installation or enhancement of green and blue spaces in and around their premises.

We are in the midst of a climate emergency. Business in the Community and our members are aware that in order to respond to this emergency we need to focus both on achieving a net-zero economy as rapidly as possible, and simultaneously building resilience to the climate changes that are already occurring.

The extreme weather events that climate change is causing bring huge economic and social costs. Research has shown that at least 1,500 UK heatwave deaths since 2000 are a result of the climate crisis<sup>i</sup>. Many UK businesses are also at risk of flooding which has a significant cost attached.

During 2013/2014, the average cost of flood damage to businesses was £82,000 and flooding has been shown to cost the economy around £100,000 per hour at peak times for each major road affected<sup>ii</sup>. On top of the financial implications, experiencing flooding has been found to have a demonstrable negative impact on mental health outcomes<sup>iii</sup>. Extreme weather can also lead to

## BITC MEMBERS REFERENCED IN THIS BRIEFING

- HSBC
- Arup
- Thames Water

water restrictions, supply chain disruption and can prevent employees from reaching their workplaces.

A survey by Deloitte of top Chief Financial Officers found that, despite increasing pressure from governments, regulators, investors, and civil





Business in the Community WWW.BITC.ORG.UK January 2021 society, there is still a lack of understanding of the strategies necessary to take action to mitigate these risks<sup>iv</sup>.

However successfully we accelerate towards a netzero carbon economy, the effects of climate change are already impacting on business and communities. Even in the best-case transition scenario, extremes of weather are set to increase, and we need to build resilience to flooding and heatwaves.

Building economic and societal resilience to climate change requires a holistic approach to Climate Action planning; understanding both your business impact on climate change, and the potential risks and opportunities associated with the effects of climate change.

One component of building resilience to climate change is the use of nature-based solutions. These are actions that involve:

- Protection, restoration and management of natural and semi-natural ecosystems
- Sustainable management of aquatic or land systems
- Creation of new ecosystems in and around cities.<sup>v</sup>

Using these solutions, particularly within urban environments, can reduce flood risk, mitigate the urban heat island affect (which is making emerging heatwaves more and more harmful), increase biodiversity, and enhance personal health and wellbeing within communities.

The installation and maintenance of new green and blue spaces comes with an associated cost, however the benefits it can bring go beyond climate resilience. Functional, well-considered green and blue spaces can:

- Increase property values
- Provide energy and water-savings
- Offer carbon capture opportunities
- Enhance amenity value

#### Towards a green recovery

The COVID-19 pandemic has forced a collective rethink over how we work, where we work and how we use the spaces we live and work in. As individuals, our desire to enjoy outside space has grown as people have found themselves confined to their homes in lockdown. Access to green spaces, parks, parks, woods, and waterways has become key to how we socialise, exercise and maintain our mental wellbeing.

- 97% of people feel being able to access parks and green spaces during COVID restrictions was very important (87%) or important (9%).
- 67% of people valued parks and green spaces more (28%) or much more (39%) than before COVID. <sup>vi</sup>

The need to build resilience to our changing climate has never been more important and the government has committed £80million to green recovery. The government also recognises that whilst taking action to accelerate the achievement of net zero, it remains crucial that steps are taken to adapt to the impacts of climate change. New developments will soon be required by law to ensure that they contribute to biodiversity net gain, ensuring that they provide more functional green space and natural habitat in any area of development than existed before.

However, there is also opportunity for businesses to contribute to a green recovery, providing and enhancing green space in and around their workplaces. Working with nature, urban solutions such as rain gardens, street trees, green roofs and walls and development of green spaces can help urban areas adapt to climate change impacts, such as flooding events and heatwaves, as well as tackling socio-environmental challenges such as poor air quality, biodiversity loss and human health and wellbeing.

Our ambition is to change the way that every organisation views its workplace; to see beyond the concrete and glass, and to make incorporating green space within and around all workplaces as intuitive as recycling paper or reducing water and energy use. There are significant resources in the public domain from our partners and members and where appropriate, we have signposted to existing guides for further information on how to act.



IMAGE: MARK WILLIAMSON

#### The benefits of nature-based solutions

BITC is a lead partner in the <u>IGNITION project</u>, a ground-breaking programme that aims to develop innovative and replicable financing solutions for investment in Greater Manchester's natural environment.

Working with the UK Green Building Council (UKGBC), BITC developed a report that summarises and translates the key findings in the IGNITION nature-based solutions (NBS) evidence-base to address the priorities of business and the built environment. This report, <u>Nature-based solutions to</u> the climate emergency aims to inspire confidence in business leaders and investors to increase their use of NBS to deliver greater outcomes for business, society and the environment. It is worth reviewing if you want to understand the detailed business drivers for installing green space in or around your workplace.

This evidence-base for the report draws on data and insights from over 1,000 sources to demonstrate the economic, social, and environmental drivers for nature-based solutions. The <u>evidence base on urban NBS</u> pulls together the extensive available data into an accessible resource. This will continue to be an open-source, live repository of knowledge on NBS performance.

#### Things to consider in the planning stage

Increasing functional green space in and around your workplace doesn't have to be a large investment. This toolkit provides ideas for increasing greens pace for a range of budgets and to deliver a range of benefits. Here are some key things to consider:

**Functionality** As highlighted, green space can offer a range of functions and it is worth considering what benefits you want from any new or renewed green space. This could be:

- Biodiversity
- Reduced flood risk
- Increased shade
- Improved air quality
- Carbon capture

Considering the functionality of various options is essential at the start of planning. Understanding the benefits of different NBS will help you identify the best options for your workplace. We recommend you review the guide: <u>Nature-based solutions for</u> <u>the climate emergency</u> to understand what benefits you could achieve. <u>Edie explains: Biodiversity and</u> <u>Business</u> is another useful guide which focuses on biodiversity benefits but also looks at the wider benefits for business.

Accessibility – some of the key benefits of green space are improved health and wellbeing. When planning new or renewed green space, consider who will be able to access it. Ensuring that green space can be used by employees is a way to improve wellbeing and productivity as well as increasing connectivity with nature. Depending on your site, you could go beyond employees and consider whether you might make your green space accessible or visible to the local community.

Many types of green space can also enhance the aesthetics of your premises, improving your amenity value, encouraging customers and visitors to stay longer, and demonstrating your environmental ethos. Maintenance – to ensure that any green space stays healthy, functional and attractive will require some level of maintenance. However, depending on the type of green space, this need not be onerous. For example, converting a previously manicured lawn area to wildflower meadow will actually reduce maintenance costs by removing the need to mow.

Whilst planning, consider what the maintenance needs and how you will incorporate these into existing maintenance schedules. This is also an excellent opportunity to engage employees. Volunteers and green champions may be happy to take over some or all of the maintenance of green space, again improving wellbeing, providing opportunities to reconnect with nature and taking ownership and pride in their workplace.

#### **Getting started**

It is easy to get started greening your workplace, regardless of budget and resource. Below we have detailed suggestions on how to green your workplace with useful links with more details.



#### Small scale

Small scale green spaces are simple ways you can increase the green space in and around your business for limited cost. The main benefits of carefully selected small scale NBS are enhanced biodiversity, improved wellbeing, and a more desirable and attractive place for your employees to work and interact. However, some small-scale options, such as stormwater planters can also help manage local rainwater and surface water, reducing the risk of localised flooding.

- Window Boxes window boxes and small planters are a simple way to both brighten up your workplace and improve local biodiversity. There are even companies who will plant, install, and maintain your window boxes all year round. Or take a look at the <u>RHS plant chooser</u> to help decide on resilient, functional plants.
- Downpipe planters connecting a downpipe to a planter is a great way to collect rainwater runoff from roofs and reducing the risk of flooding or increased burden on the local sewer networks. The planter is made up of a layer of soil, gravel for drainage, and plants that can tolerate times with high rainfall and times without rain.
- *Indoor planting* although they don't provide climate resilience, planting within your office can improve air quality and enhance wellbeing.
- Create nature corridors and habitats even in our towns and cities, wildlife such as butterflies and hedgehogs need corridors to enable them to feed and reproduce. Consider how you could enhance existing outdoor space to improve habitats such as creating bug hotels, planting bee friendly plants or providing small hedgehog holes in fences to enable wildlife to travel safely across the city.

To find out about other small-scale green options that could be applied in the workplace or at home, see the <u>RHS Guides to Getting Growing</u>.

#### Medium scale

Medium scale NBS may require a little more resource, an element of planning and construction and would probably benefit from the input of landscape gardeners or other professionals to help understand the opportunities and constraints offered by your particular site.

• **Planting trees** – trees provide a huge number of environmental benefits from improving air quality, capturing carbon, enhancing biodiversity, reducing flooding, cooling our cities and towns through to enhancing wellbeing. There are a range of organisations who will support you in tree-planting, including <u>the</u> <u>Woodland Trust</u>. IGNITION partner, <u>City of Trees</u> also has some great guides to planting, growing, and maintaining trees, particularly in built-up areas.

- Converting lawns to wildflower meadows. Lawns and grass areas require regular maintenance, so while converting these areas to wildflower meadows can take some initial resource and time, in the medium to long-term they will require minimal maintenance and enhance biodiversity. The <u>RHS has advice</u> on how to establish a wildflower meadow.
- Sustainable Drainage Systems (SuDS) despite the technical name, SuDS refers to a range of solutions that enable the management of rainwater in a way that more closely mimics nature, reducing the strain on existing sewage networks and reducing local flood risk. SuDS can be either engineered (grey) or soft (green); both will help manage surface water run-off, but the green ones bring with them all the other benefits of green space. Carefully planned and installed SuDS can help manage rainwater runoff from hard standing areas and buildings. CIRIA worked with BITC and Robert Bray Associates to create a series of SuDS sector guidance for the GLA. These guides help understand the most effective solutions dependent on your premises and are focused on commercial, retail, schools, social housing, parks and green spaces and hospitals. Some examples of green SuDS include:
  - Permeable paving or cellular grass paving

     if you are looking to renovate or install
     new areas of parking or pathway, consider
     permeable paving, which enables surface
     water to be reabsorbed rather than running
     into the sewer network. With cellular grass
     paving, you can have robust, yet green
     areas for parking or paths.
  - Swales a swale is a shallow, vegetated channel that stores and transports surface water, both reducing flood risk in extreme weather and removing pollutants

 Rain gardens – rain gardens can be designed to fit the space and resource available on your site. They provide lowmaintenance, wildlife-friendly areas to effectively manage rainwater both in times of extreme rain and drought. These are under medium scale as they don't have to take a huge amount of design or engineering. However, they have the opportunity to be large areas and can sometimes be more complex to install depending on the ground conditions around your site.



IMAGE: University of Salford Living Lab

#### Large scale

If you are in the process of developing new sites or have a plan for capital maintenance of your site, you could consider larger scale NBS installations. For these you will want to consult with professional landscape architects, engineers, or bespoke suppliers.

- Green roofs and walls living walls and roofs not only provide a haven for wildlife, but they can also improve insulation, enhance air quality and reduce flood risk. These don't have to be installed to cover entire walls or buildings, in many cases they have been successfully installed on structures such as bike shelters, storage units or sheds.
- Wetlands a wetland is a distinct ecosystem that is flooded by water, either permanently or for varying periods of time during the year. Wetlands may support both aquatic and landbased species. If you have significant area of green space that is not providing any services or benefits, converting this to a wetland may be an opportunity to massively enhance biodiversity, create an attractive community space, reduce flood risk, and improve water quality.

#### What are the new innovations?

All of the NBS detailed above are well established and there are many suppliers who can advise on what would work best within your workspace. However, if your business is keen to push the boundaries and look at innovative ways to incorporate green and blue space within your workplace, below are a few examples that show the art of the possible.

#### **Tiny forests**

Dense, fast-growing nature woodlands, that bring the benefits of forests right into the heart of our cities and urban spaces.

#### **Rooftop farming**

Farm Urban has designed and installed an urban farm on the roof of the <u>Liverpool Guild of</u> <u>Students</u> that showcases the latest in sustainable growing techniques and renewable energy technologies from the University, growing healthy and resource-efficient food for the Guild. BITC are collaborating with Lancaster University, prototyping an intelligent renewable energy capture device which combines an automated PV array and wind turbine, with a GPS system to ensure maximum solar and wind energy capture to power the aquaponic systems. https://farmurban.co.uk/projects/

#### **The IGNITION Project**

BITC is one of 12 partners on the IGNITION project that is working to identify innovative solutions to financing urban nature-based solutions, based in Greater Manchester. The project is funded by the EU Urban Innovative Actions fund. All resources can be found at <u>www.ignitiongm.com</u>. This toolkit has been created for business as part of the project.



IMAGE: Mark Williamson

#### Where to go for more support

We hope that this toolkit has provided an introduction to the various ways that your businesses can enhance the natural green and blue spaces in and around your workplace.

Here are some places to go for more information and support:

The Royal Horticultural Society (RHS) has many guides and tips on creating small scale NBS and planting and maintaining beautiful and functional green spaces. www.rhs.org.uk

**Groundwork UK** can help provide support and guidance on developing green spaces, with a strong focus on building communities and developing skills in the process. www.groundwork.org.uk

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**City of Trees** can provide expert advice and guidance on how, where, and why to plant trees to ensure maximum benefit for the environment, your organisation and the community. www.cityoftrees.org.uk

UK Green Building Council (UKGBC) has a wealth of resources and case studies that support transformation to a sustainable built environment, ensuring planning, design and construction support nature, climate mitigation, resource use, biodiversity, and social value. www.ukgbc.org

IGNITION project has resources to support the business case for NBS as well as other resources. For more information contact <u>Amanda.skeldon@bitc.org.uk</u> or visit www.ignitiongm.com

Our Advisory team supports organisations in various stages of maturity with their environmental

priorities through ongoing light touch engagement or targeted advisory support. We work with members to help them understand their environmental issues and set an environment strategy; measure their greenhouse gas emissions and set their net-zero targets; and align with the Task Force on Climate-related Financial Disclosures (TCFD).

This guide was produced as part of the IGNITION Project.





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Talk to one of our expert team today to learn how membership of BITC can help you take your responsible business journey further and drive lasting global change.

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#### REFERENCES

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