

The IGNITION Project: Urban Green Spaces and Business



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Why is greenspace good for your business?

Urban green spaces are multi-functional areas within towns and cities made up of vegetation and natural elements. They can include a range of natural features, including parks, green roofs, trees, rain gardens, verges, sustainable drainage systems (SuDS) and woodland areas.

Research into green spaces shows they can provide social, environmental and economic benefits. As pressures associated with increased urbanisation continue to grow, understanding and harnessing the potential benefits of green spaces in a business context has never been more important. Since COVID-19 has impacted the ways we work, there has been a noticeable uplift in the number of people who value access to green space to help maintain their health, wellbeing and focus during the working day.

What are urban green spaces?

Despite our urban areas being densely covered with grey infrastructure, such as buildings, car parks, roads and pavements, there are many ways in which green and blue spaces can be incorporated into the urban environment. These nature-based solutions (NBS) include rain gardens, street trees, private gardens, green walls and roofs, and public parks and green spaces. With simple but careful management, these green and blue spaces can provide a multitude of benefits to individuals and businesses. The IGNITION project has compiled an evidence base from over 1,000 sources to support the value of greenspace in our towns and cities.





Climate change adaptation

Climate change is having considerable impacts on extreme weather in the UK, and we are seeing an increase in both flooding and heat waves. So far, the UK's average annual temperature has increased by 1.2°C above pre-industrial levels. The heatwaves of 2003 and 2006 each caused more than 2,000 deaths in the UK. This impact is likely to worsen given the global average temperature increase is expected to reach 1.5°C between 2030 and 2052 and, if climate action isn't taken, 4°C by 2100. For the UK, this means hotter drier summers, which by 2040 are estimated to regularly reach 38.5°C and by 2050 could cause 7,000 heat-related deaths a year.

The estimated cost of floods to the UK per annum is £340 million and is forecast to rise to £428 million at a 2°C rise and £619 million at a 4°C rise. The impact of flooding on businesses is huge; during 2013/2014, the average cost of flood damage to businesses affected was £82,000 and 40% of businesses failed to reopen after a flood.

NBS can be harnessed to increase the ability of the built environment to adapt to the impacts of climate change by:

- managing and storing water from increased rainfall to avoid flooding
- mitigating changes in air temperature to prevent overheating

Climate change mitigation

If UK businesses achieve net zero carbon by 2030 rather than by 2050 then a £1.1tn cost to society would be avoided. With increasing recognition that we are facing a climate emergency, organisations are increasingly taking steps to measure, reduce and offset their carbon emissions.

NBS have a role to play in mitigating climate change through carbon capture and storage. Whilst this is an important function, there is considerable evidence that some NBS can also reduce carbon emissions at source by providing insulation and temperature control.

Resource use

Increased development of hard infrastructure in urban areas impacts the natural flow of water and increases pressure on local waterways and drainage networks. Many sites further increase the demand on water networks by using potable water irrigation systems for greenery or maintenance.

As irrigation and maintenance do not require potable water, SuDS can provide a more efficient way to store water for this use. This reduces runoff pressure on local waterways and reduces the consumption of chargeable potable water onsite. This could range from a simple water butt to an in-built system that diverts water from buildings through pipes into raingardens or irrigation systems for existing green spaces.

Refurbishment and thorough maintenance of properties can be extremely resource intensive. The inclusion of NBS within new projects and existing structures could provide significant improvements in the longevity and quality of a site's assets. Green walls and green roofs provide buildings with an additional layer of protection from solar radiation and extremes in weather such as frost or heat waves.



As we move towards a more circular economy and responsible consumption and production, we can use NBS to:

- Capture water for onsite use
- Increase the lifespan of buildings and infrastructure

Nature and biodiversity

Creating a 10% uplift in biodiversity on new developments has recently become a focus of national government policy to deliver on their 25-Year Environment Plan. This is likely to become law by 2023. Restoring nature and biodiversity results in increasing the long-term resilience within the systems that support our communities and businesses. We rely on healthy ecosystems for food security, water management, air quality and regulating temperature. The existing evidence provides no single metric that can be used to summarise the impact of NBS on nature and biodiversity, however, valuable insights can be found in individual studies that are available to view in the IGNITION evidence base. NBS have a positive impact on nature and biodiversity by:

- creating spaces and greater connectivity for wildlife
- maintaining suitable temperatures for native species
- limiting disruption to wildlife by reducing noise pollution
- reducing the run-off of pollutants into rivers



Health and wellbeing

Exposure to nature is widely evidenced to improve human health and wellbeing. The inclusion of nature within our built environment will contribute to happier healthier communities. The COVID-19 pandemic re-emphasised the critical importance of good-quality green space for health and wellbeing, particularly in urban areas where these spaces are rarer. Data from green spaces highlights their ability to:

- remove air pollution
- provide exposure to nature that improves mental health
- provide green space for physical exercise
- positively impact employees leading to a reduction in sick leave, greater employee retention and increased productivity

Socio-economic impact

NBS have been found to stimulate socio-economic value by:

- reducing crime rates and improving quality of life
- increasing land and property values
- generating local economic growth

NBS have been shown to reduce crime rates, potentially as a result of increased social cohesion. Green space allows individuals to engage in more social activities, fostering social interactions and promoting a sense of community. It is also suggested that areas with good-quality green space appear to be in good social control and so deter criminal activities.

The value of green space can be identified in people's willingness to pay for access to it and services within it. The presence of parks, urban green spaces and street-tree-lined avenues also contributes to the enhanced attractiveness of an area, recreational opportunities and environmental functions, which can all contribute to individuals' willingness to pay a higher price to buy or rent land or property nearby.





The high street continues to decline, with an 8% reduction in high street shops since 2013. NBS as part of placemaking can have a direct impact on consumer behaviour and help bring life back to high streets. Street trees can help form a more positive consumer experience and increase consumers' willingness to pay. In general, studies on the economic benefits of green walls for local business suggest that high-quality green spaces can help businesses build a good image and improve reputation, which will encourage inward investment and employment into an area. Accessible green roofs can provide valuable onsite recreation or hospitality areas for previously underutilised space.

More detailed information on the value of green spaces for business can be found in the IGNITION project report: [Nature-based solutions for the climate.](#)

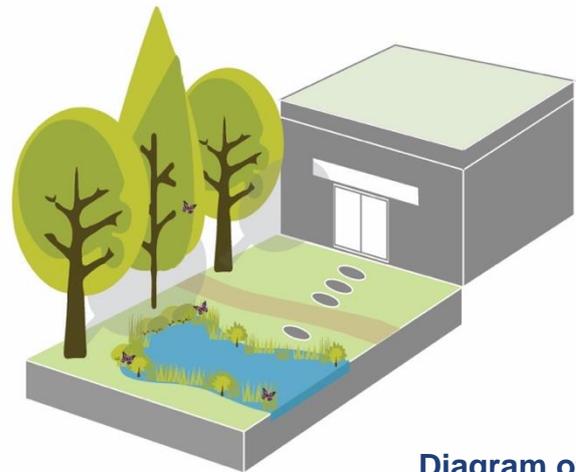


Diagram of building with a rain garden

