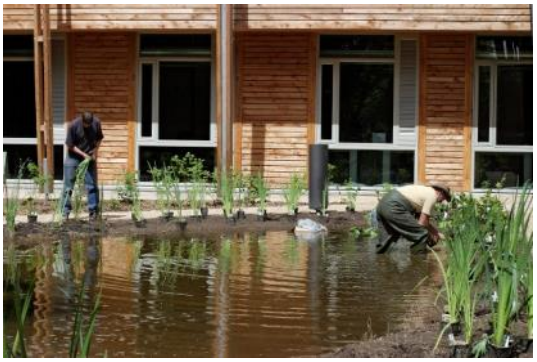
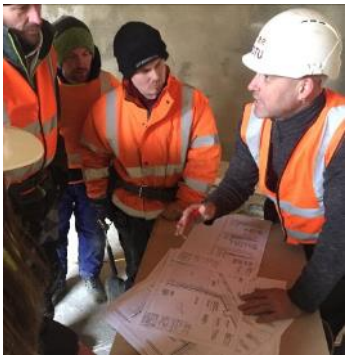
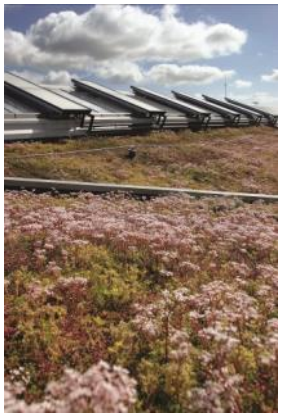
# ENVIRONMENTAL POLICY

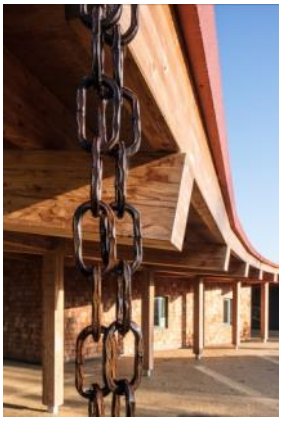
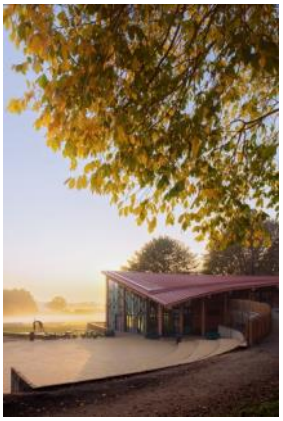
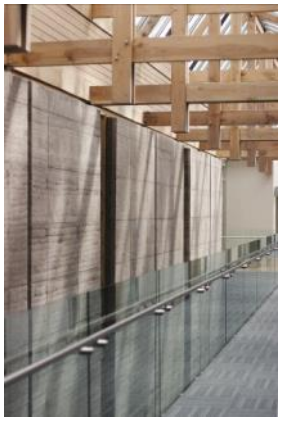
At JDDK Architects, we have been keenly interested in sustainable design throughout our 30 year history. However, business as usual is no longer sufficient. The climate crisis and the planet's biodiversity loss both threaten our way of life. Individuals and businesses all now have a responsibility to work together towards a better future.

The built environment contributes 40% of the UK's total carbon footprint. Clients, design professionals and contractors must come together to deliver buildings with a reduced impact on the environment. Our industry already has the technology to do this, but we need the will and commitment to make a difference. At JDDK we recognise the important role that architects have to play in shaping a low carbon future, and that is why we're setting out our new sustainability strategy. We will work with our clients and colleagues to make a difference.

Building on our history, in 2020 we set our own sustainability strategy **"20:20 - a vision for our future."** In developing this strategy we have looked carefully at the role JDDK Architects can play in tackling the climate and biodiversity crisis, whilst designing buildings that are comfortable, healthy and meet the needs of our clients. Our strategy is organised around three key strands which will guide our work and our business in the coming years.:

- **Knowledge :** This describes the knowledge, skills and experience that our technical staff can bring to our projects.
- **Business :**This is how we will manage our business to minimise our own impacts on the environment.
- **Leadership :** This is how we will collaborate with others in our industry to make a positive impact beyond our own business


**t.** 0191 286 0811 **f.** 0191 286 3870 **e.** millmount@jddk.co.uk
JDDK Architects | Millmount | Ponteland Road | Newcastle upon Tyne | NE5 3AL

### Knowledge

We seek to embed the principles of sustainable design into every project. We ensure our staff are empowered to have knowledgeable conversations with clients, consultants and contractors about sustainable design and delivery. We provide training for our technical staff to ensure they can provide the skills our clients need.

### Key Actions:

- Work with clients and project teams on the opportunities for embedding sustainability within each project whether new build or refurbishment. We write about this in more detail later in this policy.
- Continue to provide training for our staff to maintain and improve their skills in sustainable design. Report annually on training provided. JDDK have two certified Passivhaus designers in their staff and a Retrofit Coordinator in training.
- Work towards implementing the RIBA 2030 Challenge—JDDK are signed up to this ambitious challenge
- Invest in software and BIM tools to incorporate sustainable design into our workflow—JDDK have software that allows us to assess embodied carbon and energy movement in construction details
- Aim to create space for nature within our projects
- Carry out post occupancy evaluation (POE) including monitoring of in-use energy.

### Business

We believe it's vital to carry out our day-to-day business operations in as sustainable a manner as we can. We monitor our carbon footprint annually and have set a bold target to bring this to zero. We are reducing the emissions of our business travel by supporting on-line collaboration as well as low carbon transport for our staff such as cycling and electric vehicles. We are reducing our consumption of water and the waste that we generate.

### Key Actions:

- Measure and report our carbon footprint annually and reduce this to zero by 2030.
- Offset 100% of our carbon emissions using tree planting schemes.
- Minimise our contribution air pollution and carbon emissions by providing excellent facilities for cyclists and drivers of electric cars at Millmount where we are based. We retain an account with car sharing social enterprise Co-Wheels allowing all staff use of their low emission, hybrid and electric cars vehicles in over 60 locations across the country at no cost to the staff member.
- Measure and report annually our water usage and the quantity of waste that we generate and reduce both.
- Minimise our consumption of single-use plastics.
- Volunteer for regular community projects including litter picking days.

### Leadership

Shaping our business to be greener, and creating sustainable buildings, won't be enough on its own. The whole construction industry must embrace the change needed to tackle the climate and biodiversity crisis. Therefore, we collaborate with our colleagues to make a positive impact on our supply chain and the broader industry. We actively share the knowledge and experience that we develop along our own journey.

### Key Actions:

- Use our website, social media and Millmount News to report on the progress of our sustainability journey.
- Collaborate with our clients, colleagues and supply chain to raise awareness of the climate and biodiversity crisis and encourage industry wide transformation. Adam Vaughan, JDDK Director is Co-Chair of the RIBA North East Sustainable Futures Forum— leading events that provide a unique and safe environment where co-professionals share experiences, learn from each other, and improve daily practice.
- Share our knowledge and research openly. Support industry initiatives on sustainability

### Working with Clients and Project Teams, we are committed to:

- raise the awareness of clients about sustainability and environmental protection and help the members of the design team to develop a shared vision of environmental aspirations.
- ensure as far as possible that building projects are supported by a travel plan that promotes sustainable travel choices through public transport and cycling provision.
- work with design teams to assess sites for their ecological value and microclimate and ensure buildings make best use of the natural features of the site including make best use of orientation and shape to reduce the need for artificial forms of air conditioning and support biodiversity protection and/or enhancement
- work with design teams to ascertain the potential for local power generation from renewable energy sources
- operate a 'right-first-time' culture (through our QM system and use of a coordinated 3-D Building Information Model) for our production information in order to avoid wasteful site reworking.
- contribute to minimising the use of construction materials and specifying materials and components with the optimum balance between environmental impact and performance in use.
- work with design teams so that building services are inherently efficient and controllable and that metering encourages monitoring and management of resources use.
- contribute to buildings being fully commissioned before handover and full operating manuals being provided. Support design teams, contractors and clients in the first few months of operation with on-site training and advice to ensure that systems are fine-tuned and operate in accordance with the design intent.

### Closing the Performance gap:

Unfortunately, too many projects don't perform as well as their designers had intended. This is known as the 'performance gap'. The causes are complex, but JDDK understands that architects have a key role to play in closing the performance gap. We work with our construction partners to maintain the quality of design and delivery so our buildings perform as they're supposed to. We already carry out post-occupancy evaluation for some clients and aim to extend this so we can make continuous improvements. We see the benefit of the quality assurance embedded within the Passivhaus Standard and have invested in the challenging training for two members of JDDK Staff to become certified Passivhaus designers.

### Retrofit and Embodied Carbon:

Retrofit is becoming an increasingly important solution to the climate crisis. All buildings retain 'embodied carbon', which derives from the energy and materials used to construct them in the first place. Demolition usually wastes this energy, and a replacement building will cause yet more carbon emissions. It's important to remember that the energy needed to construct a new building causes carbon emissions at the outset, often termed 'Upfront Carbon'. If we're serious about reaching zero-carbon targets as soon as possible then we must focus on retrofitting existing buildings. This will often involve repurposing, refurbishing and bringing old buildings up to the highest possible standards of sustainability. JDDK have carried out numerous refurbishment projects and can advise clients on the benefits as well as the challenges of retrofit work. JDDK are investing in the training of one of our staff to be a Retrofit Coordinator.

### Making Space for Nature:

Landscape has always played a key part in JDDK's work. Sometimes, our buildings are carefully positioned within a natural setting, such as our recent visitor centres at The Sill and Sherwood Forest. In other cases, we work closely with landscape architects to bring nature into the built environment. Part of the challenge for architects in the years to come will be incorporating 'space for nature' within our developments. We must create opportunities for wildlife to flourish, through the careful integration of green infrastructure. At this smallest scale, this could be the provision of bat slates and bird boxes, but the bigger and more connected the green spaces are the more they will support ecological network and a wider range of biodiversity

### Health and Wellbeing:

A drive for sustainability is not just about reducing energy use and carbon emissions. There are numerous benefits from a well-considered sustainable design, particularly for health and wellbeing. Buildings that are thermally efficient provide high levels of thermal comfort for users whilst an airtight envelope with a good ventilation system can ensure that the fresh air supply will remove excessive moisture and odours from interior spaces. The careful design of windows will provide plenty of daylight whilst avoiding overheating. Finally, the specification of natural materials can help to provide good indoor air quality without pollutants, and timber construction techniques can lock up carbon from the atmosphere .

Policy reviewed and updated January 2022, Nicky Watson, Director.