

Twelve Architects – Net Zero Roadmap

Twelve Architects is committed to achieving Net Zero emissions by 2050 and this Roadmap will outline our approach. We have also joined the RIBA 2030 Climate Challenge, which sets a series of targets to reduce operational energy, embodied carbon, and potable water. These targets align with the future legislative horizon and set out a trajectory to realise the significant reductions necessary by 2030, in order to have a realistic prospect of achieving net zero carbon for the whole UK building stock by 2050.

Business Operations

Twelve Architects has implemented an environmental management system (EMS) in accordance with the BS EN ISO 14001:2004. Our EMS minimises the environmental impact of our operations and promotes environmental best practice by periodically reviewing aspects of staff commuting, business travel, building energy use, waste reduction and recycling. We aim to reduce these carbon emissions in the following ways:

- We try to buy second-hand furniture for our office where possible.
- We aim to minimize the use of paper and printing by working digitally as much as possible and using electronic filing systems.
- All paper, cardboard and glass is recycled, and plastics where suitable. Centralised recycling bins ensure staff recycle properly.
- We purchase sustainable, eco-friendly office supplies such as recycled toilet paper, surplus/rescued coffee pods, washing up liquid etc. We also buy in bulk.
- Our office is equipped with cutlery, kitchen utensils, crockery, cloth towels, etc to discourage staff from using disposable items.
- We use the Podback coffee programme to recycle our used coffee pods.
- We re-use and repurpose equipment where possible and recycle/responsibility dispose of anything that can no longer be used.
- We use a green-energy provider in our office.
- We implement energy efficient practices such as using energy-saving settings on computers etc.
- We offer flexible/hybrid working arrangements so that employees can work from home twice a week, reducing transport-related emissions.
- We are part of the Cycle To Work scheme, encouraging staff to reduce travel emissions by cycling.
- Transport for London aims to achieve zero-carbon transport by 2023, which will help us reach net-zero for travel emissions. All employees either walk, cycle or use public transport to travel to the office or site visits.

Project Based Impacts

As architects we acknowledge that, of all our activities, it is the buildings we design that have the most significant environmental impact. Through the design of environmentally sound buildings

we pass on associated benefits to our clients, in terms of image and reduced running costs. As part of our implemented EMS, we closely monitor these 'Project Based Impacts' of our activities. No specific targets for the environmental performance of project based impacts have been set under the Twelve Architects Environmental Management System as the impacts are in agreement between our clients and Twelve Architects for each specific project.

Twelve Architects is proactive in promoting environmental best practice and delivering low energy buildings.

We have a three-stage internal environmental design audit monitors the progress and integration of energy efficient strategies into projects from their outset.

In summary, the first stage of the audit consists of identifying and agreeing energy consumption and sustainability targets with the client, accompanied with feasibility studies and lifecycle assessments of the environmental design strategies thus determining their appropriateness to the scheme. The subsequent two stages aim to monitor the implementation of the adopted strategies and ensure that the agreed targets are being designed to.

As caring designers and specifiers of the built environment, we are committed to minimising the impact of our designs and operations on the environment by means of a programme of continuous improvement and in particular by:

- Working closely with our clients and consultants to set a sustainability brief at the outset of projects to reduce the overall impact on the environment and working co-operatively with others to further common environmental objectives;
- Integrating meaningful user and community consultation into the design process;
- Setting clear objectives and targets with the aim of ensuring continual improvement of the company's environmental performance and policies both in projects and in the day-to-day operation of the company;
- Taking part in research and debate on key environmental issues, within the context of the UK Climate Change programme;
- Careful consideration of the local conditions of a site, its landscape and topography which may involve decisions on the position, orientation, mass and building form to minimise impact on Greenfield land, biodiversity, soil erosion and removal of soil from site;
- Reducing materials used in finishes and structure and in waste materials created during construction through the use of standardised sizes and offsite construction and through the reuse of materials where appropriate;
- Carry out assessments for the means of waste and emissions disposal in the development of a Site Waste Management Plan;
- Careful analysis and selection of construction methods and materials from local, sustainable, non toxic and recycled resources which use the minimum of primary energy to extract the initial resource and do not require high levels of manufacturing energy;

- Considering the recycling strategy for buildings in use, and the decommissioning plan including the detail of components for replacement and recovery;
- Considering passively responsive design suited to year-round weather conditions
- producing energy-efficient and environmentally friendly buildings with regard to indoor temperature and humidity, ventilation, daylighting, as well as efficient mechanical heating, cooling and artificial lighting;
- Considering zero and low carbon technologies;
- Considering user friendly controls, smart metering and zoning strategies for heating, cooling, lighting and ventilation;
- Considering the reduction of water consumption and surface water run off in the specification of fittings and systems, the selection of surface materials and the landscape design strategy;
- Providing for the physiological, mental and spiritual aspects of well-being in the design of our projects though the consideration of; crime prevention, noise, daylight and the provision of outdoor space.

Training

Twelve Architects is committed to promoting environmental awareness and understanding amongst its entire staff to ensure that working activities are carried out in accordance with this policy. The environmental awareness of our designers is enhanced by training and instruction so that they can all assess environmental and sustainability issues as an integral part of the design process from the outset and as such can act in an environmentally responsible manner and can contribute to the collective effort.



Matt Cartwright
Founding Director
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