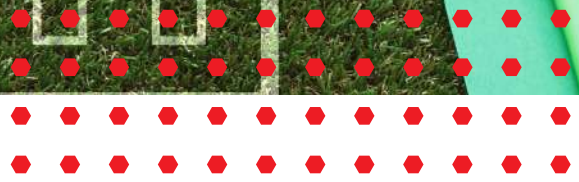


# How Portable And Modular Buildings Can Support Green Construction





As environmental concerns continue to concern businesses and organisations alike, construction companies are increasingly looking for ways to reduce their impact on the natural environment. However, creating a more sustainable footprint in this industry is rarely straightforward – unless we first consider how portable and modular buildings can play a role.

The term “green construction” refers to a multi-faceted approach that aims to embrace the right construction methods that protect the environment and reduce the carbon footprint of construction, so in this eBook, we discuss how the application of portable and modular buildings can support a more sustainable form of construction.



# How does traditional construction affect the environment?

## Global emissions

Emissions from construction are one of the largest contributors to the global warming crisis. According to the Irish Green Building Council (IGBC), construction accounts for 38% of the total carbon emissions in Ireland. This figure includes 23% of operational emissions from the energy used to light, heat, and cool buildings.

A further 14% of the emissions come from producing construction materials, transporting them, and the construction process. Without green construction practices, these figures would only continue to rise, particularly in the current climate of supply chain woes and economic uncertainty.

## Toxic pollution

Traditional construction often relies on the use of materials that are toxic and contribute to harmful pollution. These materials can release pollutants such as gases, particles, and chemicals, leading to serious issues like respiratory health problems for nearby residents. For example, during the demolition of traditional buildings, hazardous materials such as asbestos can be released into the air.

These pollutants may sometimes spread beyond local neighbourhoods into ecosystems and aquatic environments, causing further detrimental impacts. For instance, rain or wind can carry pollutants into rivers, ponds, lakes, and other water bodies.



## Excess waste

Traditional construction methods require a lot of energy, materials, and water resources. This leads to the generation of large quantities of waste and excessive consumption of resources.

Construction sites often produce a lot of waste materials such as wood, concrete, metal, and plastics. Ireland's construction industry accounts for 48% of all waste in the country, and it's rarely recycled or reused. Furthermore, these materials take up valuable space in landfills, leading to the threat of ecological degradation.

So, amid all this environmental destruction, what can be done to support a greener form of construction? And how exactly we do define that term in the first place?





# What is green construction?

Green construction is a method aimed at reducing the negative environmental impact. The approach is designed to reduce emissions, conserve energy and water, protect ecosystems, reduce waste, and improve overall efficiency.

One of the principles of green construction is to create livable communities that support public health and well-being. This means sustainable buildings are designed to provide occupants with a safe and comfortable environment while safeguarding the environment around them.

# How portable and modular buildings lead to more sustainable construction

Portable and modular buildings go hand in hand with green construction because they are designed to reduce environmental impact and energy consumption. Here are some of the ways that portable and modular buildings support sustainable construction:

## Less waste

Portable and modular buildings are prefabricated off-site, meaning less waste is generated during the construction process. Producing these buildings in a factory setting encourages recycling and reuse practices.

Furthermore, when modular buildings reach the end of their life cycle, they can be disassembled, recycled, or repurposed for another use, thereby reducing waste.



## Reduced cost

Portable and modular buildings cost less than traditional ones, but they still provide all the benefits. The construction process is not as resource intensive given that they require less time to build and have less requirement for plant and machinery. The reusability of these buildings also saves costs over time.

Whatsmore, portable and modular buildings are highly customisable. Customisation saves costs because it eliminates the need for costly remodelling and repurposing during the building's lifecycle.



## Energy efficiency

Portable and modular buildings are designed with energy efficiency in mind. These buildings are constructed according to LEED standards, meaning they are well-insulated and use energy-efficient lighting systems.

Using insulated materials means less energy is required for heating and cooling purposes. For instance, our EcoPod Mobile Welfare Units are energy efficient with their own generators and lighting to minimise reliance on the grid.





## Fewer carbon emissions

The production of portable and modular buildings has a much lower carbon footprint than traditional construction methods. This is because they are made in a factory setting, resulting in fewer trips to and from the construction site and less fuel used for transporting materials. There is minimal or no use of large machines and equipment onsite, reducing the amount of carbon dioxide emitted into the atmosphere.

# EcoMod is your provider of sustainable portable and modular buildings

EcoMod can help your organisation achieve greener construction methods with our range of portable and modular buildings.

- **The SpaceMaker** – A high-quality ‘plug and play’ portable building unit that can be used for many different purposes. These modular buildings come in small, medium and large sizes to fit your needs and multiple units can be linked together or double-stacked with external staircases fitted



- **The SpaceMaker Plus** – A single-module building that’s perfect for open-plan offices, staff facilities and training rooms. Its contemporary modern design and high-quality specs set the standard for large portable buildings



- **The EcoSpan** – This highly-customisable modular building comes in individual 3m wide modules which connect to form large workspaces of any scale or layout. The modules can be joined end to end, side by side or double-stacked and can be internally designed to meet any specifications



- **The EcoSecure** – Ireland’s foremost anti-vandal portable building for sites with security requirements. The EcoSecure is fully compliant with health and safety regulations and can be linked and double-stacked, making it suitable for an extensive range of uses and industries



- **The EcoPod Mobile Welfare Unit** – Modern, fully equipped and ready for rapid dispatch, the EcoPod range of modern, super-efficient mobile welfare units can be towed to any location, providing you with the welfare facilities you need within 30 seconds of arrival

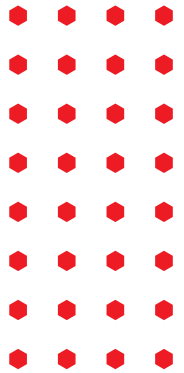


We design all of our buildings to be green and sustainable, helping you build greener and play your part in the fight against climate change. Our highly-customisable portable and modular buildings are also available for either hire or purchase, allowing your organisation even more flexibility with how you utilise them.

Get in touch with our experienced team today at **sales@ecomod.ie** or call **01 862 3702** to learn more about our range of portable and modular buildings.



# EcoMod



 [ecomod.ie](http://ecomod.ie)

 01862 3702

 [sales@ecomod.ie](mailto:sales@ecomod.ie)