

WE ARE PLANET PASSIONATE

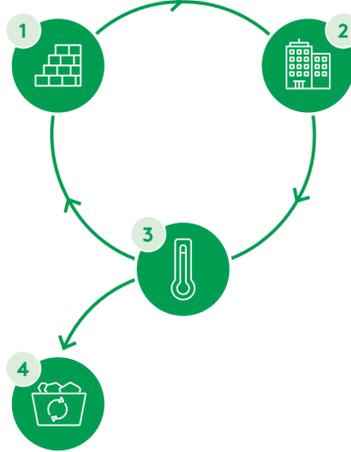


The role buildings can play in the fight against climate change

Climate change is one of the most important issues facing the world today. To protect our planet, we need to prevent a 1.5° rise in global temperatures this century.

To do this, carbon emissions need to be cut to net zero globally by 2050 – but we are currently on course to miss this goal by at least five-fold.

The built environment has a key role to play in this challenge. Today, buildings and construction together account for **36%** of global final energy use and **39%** of energy-related CO₂ emissions when upstream power generation is included¹.



1. Manufactured materials

17% of CO₂ emitted by all the products made for the global economy each year is attributable to building materials²

2. Global construction

The world's building stock is expected to **double** by 2060. However, **two thirds** of this new construction is in countries without mandatory building energy codes³

Embodied carbon will be responsible for **half** of the entire carbon footprint of new construction between now and 2050⁴

3. Buildings in use

3.8 GtCO₂ in emissions would be saved if all 2020 global building stock adopted advanced envelope design measures⁵

This would account for approximately **10%** of all global CO₂ emissions

4. End of life

70-80% of global construction and demolition industry waste is discarded to landfill, accounting for approximately **30%** of all global waste to landfill⁶

Our approach to supporting global sustainability

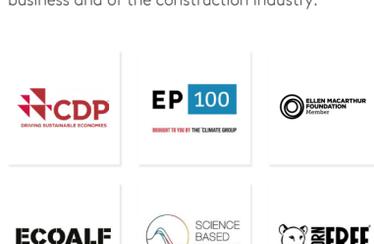
At Kingspan, we want to play our part. We believe advanced materials, building systems and digital technologies hold the key to addressing these issues.

Working in partnership with the industry, and through our new IKON innovation centre and our Planet Passionate global sustainability programme, we are confident that together we can:

- Move to a clean energy future
- Manage the earth's resources more sustainably
- Protect our natural environment



In line with the UN Sustainable Development Goals, we will work with our partners and in collaboration with the industry to play our part in improving the environmental footprint of our business and of the construction industry.



Our journey to date

In 2011 through our Net Zero Energy programme, Kingspan committed globally to matching 100% operational energy with renewable energy by 2020. We are on track to achieve this target through a three pronged approach of Save More, Generate More and Buy More.

Image: Wind Turbine at our Holywell site, generating 1.6GWh of clean energy each year.



As part of our strategy we have:



Signed up to the Science Based Target Initiative with a commitment to reduce absolute GHG emissions Scope 1, 2 and 3 by 10% by 2025

Opened our new IKON global innovation centre focused on advanced material research and the digitalisation of construction, to create solutions that address climate change, circularity, wellbeing and safety in buildings

Achieved A-list rating in the CDP (formerly known as Carbon Disclosure Project) in 2015/16/17 and A- in 2018

Announced as a Member of The Ellen MacArthur Foundation - the world's leading circular economy network

Some highlights so far:

- 256 million** PET bottles upcycled in 2018 into raw materials for Kingspan's advanced insulation products
- 6-fold** reduction in energy carbon intensity (CO₂ tonnes per €'000 of turnover) between 2012 and 2018
- 69%** of waste recycled in 2018
- Deployed solar PV systems on **20%** of our sites
- Approximately **21 million** litres of rainwater harvested across our sites globally

In 2018 the total energy saved⁷ by our insulation systems was equivalent to:

- 110m** Over one hundred and ten million barrels of oil
- 20m** Taking 20 million cars off the road
- 66** The annual output of sixty-six power station
- 4.7** Up to 4.7 times the annual electricity consumption of Greater London

Introducing Planet Passionate – our global sustainability programme

Planet Passionate is Kingspan's ambitious 10-year global sustainability programme that aims to impact three big global issues:

- Climate change
- Circularity
- Protection of our natural world



By setting ourselves challenging targets in the areas of energy, carbon, circularity and water, we aim to make significant advances in the sustainability of both our business operations and our products.

By being Planet Passionate in our operations we aim to:

- Directly powered by **60%** renewable energy
- Reduced transport emissions and air pollution
- Zero waste to landfill & increased material efficiency
- Reduction in value chain carbon emissions
- Upcycling consumer plastic waste into insulation
- Reduced mains water use & emissions
- Help to clean our oceans and protect wildlife

By being Planet Passionate our products will be:

- Manufactured using **renewable energy** and harvested rainwater
- Lower in **embodied carbon**
- Containing **recycled materials** and recycled production waste
- Manufactured in **zero waste** facilities
- Packaged in **recyclable materials**

Our 2030 global commitments

- Energy**
 - Maintain our **net zero** energy status
 - Increase** our direct use of renewable energy to **60%** by 2030
 - Increase** our onsite generation of renewable energy to 20% by 2030
 - Install solar PV systems on **all owned facilities** by 2030
- Carbon**
 - Net zero** carbon manufacturing by 2030
 - 50% reduction** in product CO₂ intensity from our primary supply partners by 2030
 - Zero emission** company cars by 2025
- Circularity**
 - 1 billion** PET bottles upcycled into our manufacturing processes by 2025
 - All Quadcore™** insulation to utilise upcycled PET by 2025
 - Zero company waste** to landfill by 2030
- Water**
 - 5 active** ocean clean-up projects by 2025
 - 100 million** litres of rainwater harvested by 2030

1. UN Global Status Report 2017 2. "The Circularity Gap Report", Circle Economy, 2019 3. IEA (2017), Energy Technology Perspectives 4. World Green Building Council 5. AECOM research based on UNEP Emissions Gap Report 2018 and UNEP Global Status Report 2017 6. The Ellen MacArthur Foundation, World Economic Forum, The Boston Consulting Group 7. Figures relate to sales of Insulated Panels and Insulation Boards between 1993 and 2018