Case study: Stourbridge Glass Museum's award-winning environmentally friendly approach

10/09/2025

Artwork was created using recycled materials for the Greener Glass exhibition. Credit: Stourbridge Glass Museum.

The joint winner of our Sustainable Project of the Year prize at the Museums + Heritage Awards 2025 shares tips for reducing carbon emissions in museums.

The project

The glass industry is energy-intensive, so Stourbridge Glass Museum is taking steps to reduce its impact on the environment, including the creation of Europe's first fully carbon-neutral glass studio.

An energy management audit helped the museum understand how it uses energy and where to reduce costs. As a result, the studio now operates with electric furnaces, solar panels, voltage optimisers and LED lighting.

The museum has also reduced carbon emissions in its exhibitions. Students from the University of Birmingham curated <u>Greener Glass</u>, which is showcasing environmentally sustainable glass art to highlight the importance of protecting the natural world.

To install the exhibition, the museum used recycled cardboard panels instead of PVC 'Foamex' boards and screens powered by solar panels. When digital or recycled materials weren't an option, the museum paid for the carbon offset of its environmental footprint.



Young people's artwork has been celebrated throughout the exhibition. Credit: Stourbridge Glass Museum.

Local and regional artists – including children and disabled artists – created artwork using repurposed materials such as driftwood, car windscreens and broken glass.

In addition, the museum hosted a series of community glass workshops and activities to raise awareness of climate change, including free canal walks for 2,000 people.

"This is a testament to all staff and artists at Stourbridge Glass Museum... flipping the Black Country's namesake from a smog-filled industrial area, into a modern, eco-friendly and sustainable tourist destination."

Alexander Goodger, Director at Stourbridge Glass Museum

The organisation

Stourbridge Glass Museum, run by the British Glass Foundation, is a largely volunteer-led accredited museum, providing a look back at the origins of glass making in Stourbridge, West Midlands.

Set across two floors, the museum offers visitors live glass making demonstrations and interactive digital displays to explore.

The funding

We awarded the museum over £1.4million to transform its space and bring the region's glass making heritage to life. Part of our funding was also used to develop the Greener Glass exhibition.

The project received additional support from Museum Development Midlands, Arts Council England and Association of Independent Museums.



Director Alexander Goodger and the museum's team have embedded sustainable technology throughout. Credit: Stourbridge Glass Museum.

The results

The museum has found that by making the initial investment to become eco-friendly, it now pays less per exhibition thanks to reusable materials like solar-powered display screens.

Since launching the Greener Glass exhibition, the museum has welcomed glass artists and factory owners from across the world who want to learn how to set up a functional all-electric system powered by solar.

The Greener Glass exhibition is available to visit until January 2026.

Sustainable Project of the Year Award

Stourbridge Glass Museum was a joint winner of the sustainability category at the Museums + Heritage Awards 2025, sharing first prize with Railworld Wildlife Haven. The award, which we sponsor, recognises projects which are responding to the climate crisis in innovative and inspiring ways.



The judges were impressed by the museum's work to transform the carbon position of a high energy traditional craft. Credit: Museum and Heritage Awards.

Alexander Goodger, Director at Stourbridge Glass Museum, said: "This is a testament to all staff and artists at Stourbridge Glass Museum, working extra hours, evenings and weekends, experimenting with groundbreaking technology, global firsts and flipping the Black Country's namesake from a smog-filled industrial area, into a modern, eco-friendly and sustainable tourist destination."

The future

Stourbridge Glass Museum is continuing to reduce its environmental impact. It's planning a new exhibition showcasing recycled glass art and more sustainable glass workshops with award-winning artists such as Terri Malcolm.

Following the success of the Greener Glass exhibition, contemporary artists have reached out to showcase their work. As a result, the museum is creating a permanent space dedicated to upcycled and recycled art.

Top tips

Alexander shares the museum's top tips for reducing carbon emissions in exhibitions:

- You don't need to be a sustainability expert people will help you every step of the way. "You can ask your local Museum Development team to support an energy management audit to understand your energy usage, what equipment you need and an estimate of the costs."
- Use the sun as a free energy source. "Our energy costs reduced by about 80%, imagine what you could do with the money you save to benefit your museum and staff team."
- Stop using Foamex. Instead use recycled panels or low-energy screens powered by solar panels.

Developing your own project?

All projects we fund must consider how they will <u>protect the environment</u>. Our <u>environmental sustainability</u> guidance provides information on how to plan a heritage project with the planet in mind.



Joint winners of Sustainable Project of the Year, Stourbridge Glass Museum Eco-friendly Upcycled Glass Exhibition in New Eco Museum. Credit: Hayley Bray.

Winners announced for Sustainable Project of the Year 2025



Meet the Changemakers event on Manchester Museum Top Floor. Credit: Manchester Museum.



Some of the team stand in front of the newly completed roundhouses. Photo: The Scottish Crannog Centre.

Case study: The Scottish Crannog Centre