

CASE STUDY

ENVIRONMENTAL SUSTAINABILITY: DUNDEE MUSEUM OF TRANSPORT

Dundee Museum of Transport, by adopting a sustainable agenda, hopes to become Europe's first fully carbon neutral transport museum. With the exhibitions reflecting sustainable transport, and a net zero target for the operations of the museum and the building itself, we strive to find ways to implement environmentally responsible practice in everything we do.

ADDITIONAL INFORMATION

RECOGNITION AND AWARDS:

- Accredited
- National Transport Trust - Green Wheel Award
- TripAdvisor Travellers Choice Award 2020
- TripAdvisor Travellers Choice Award 2021
- Sustainable Project of the Year- Museums + Heritage Awards 2022 (Hall of Fame Shortlisted)

PROJECT FUNDERS:

- Museums Galleries Scotland
- Creative Carbon Scotland
- Arts and Humanities Research Council
- Alec Dickson Trust
- National Lottery Heritage Fund
- Keep Scotland Beautiful

PROJECT TARGET:

The Museum plans to be operating at net zero by 2025.

THE PROJECT:

Dundee Museum of Transport, covering cars, bikes, buses, motorcycles and trams, is spread across three buildings in Dundee: the main museum on Market Street, the object storage facility at Seagate and the dilapidated Grade B Listed Maryfield Tram Depot that is planned to be replaced to become Europe's first fully carbon neutral transport museum, complete with displays on sustainable transport. All three buildings are undergoing changes to reach the ambitious target, and new exhibitions are being made from upcycled or recyclable materials.

Our holistic carbon management planning framework:

1	2	3	4	5
Healthy Workspace	Green Materials and Technology	Operational Practices	Reduced Consumption	Measuring and Communicating
Good Ventilation	Low-impact materials	Waste stream management	Heating	Engaging audiences
Natural Lighting	Low-impact technology	Cleaning and procurement	Lighting	On-going evaluation and improvement
Ergonomic work spaces	Catering services and café products	Café and retail operations	Water	Support local economies
Clean air	Life-cycle assessments	Transportation	Paper and other materials	Connecting with mission statement
Plant-based foods	Building and infrastructure	Investment Portfolio	Space	Sustainability policies

THE NEW GREEN BUILDING WILL INCLUDE:

- Ground source heating using underground pipes to extract the heat from the ground to heat the building as well as water supplies
- Cycling facilities and electric car and e-bike charging ports.
- Exhibitions on the Future of Transport, and electric cars
- Solar panels
- Increased insulation

THE IMPACT IT HAS MADE:

- The exhibition Cars, COP-26 and the Climate Crisis, using recycled and sustainable materials, focused on sustainable transport at Glasgow Science, COP-26 Green Zone from July until November 2021, and was seen by more than 60,000 people. The heightened exposure helped result in the highest increase in visitor numbers ever at the main museum at Market Mews during 2021. 2022 sees the exhibition hosted at the main museum in Dundee.
- Due to increased funding, 4 fully-funded new interactives made from recycled or upcycled materials were commissioned for the current museum.
- The journey to carbon neutrality has saved more than £10,000 in energy costs, and the energy usage has been cut by 37%, whilst all museum sites have switched to using 100% renewable energy.

LESSONS LEARNED:

- Some materials for exhibition costs are non-recyclable- you can re-use Foamex panels to create things like light boxes for your collections management department.

- It is cheaper and more environmentally friendly to re-use and re-purpose exhibition materials, panels, and interactives from other partner museums if your themes are similar. Ours were from the British Motor Museum, Fifex Interactives and Glasgow Science Centre.
- Producing retail stock in-house or through local sources, allows for greater control over materials; wood, metal and recycled materials rather than single-use plastic items sourced from China and Southeast Asia.
- Communicating positive environmental impact changes to visitors and staff through signage and exhibitions is essential and involving visitors in the conversation concerning a move to net zero through interactives helps to increase engagement.
- The Museum can become an activist for change by demonstrating the changes that our visitors can consider for their own lives.

GUIDANCE:

- There are 5 minute changes you can make now such as; sign up your museum for the water refill station app on refill.org.uk, change all your default search engines to ecosia.org which plants trees with revenue earned, list your cafés Vegan and Vegetarian options on the [Happy Cow app](https://happycowapp.com).
- Join a sustainability network such as Julie's Bicycle, Creative Carbon Scotland, Fit for the Future, Zero Waste Scotland, Climate Heritage Network, Scottish Climate Beacons, Keep Scotland Beautiful.
- Create a carbon management plan, example ones can be found at: [Field Studies Council](https://www.fieldstudiescouncil.org), [Historic Environment Scotland](https://www.historicenvironment.scot), [V&A Dundee](https://www.vandadundee.co.uk)

USEFUL RESOURCES:

If you would like more information about this project please contact, Alexander Goodger, Museum Manager, Dundee Museum of Transport: manager@dmof.co.uk

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