Sustainability

At the opening of the co-sponsored meeting of ICOMOS / IPCC / UNESCO on 6 December 2021 IPCC Chair Hoesung Lee said:

"*Our culture and heritage are windows into millennia of human experience from which we can draw and use them to shape our strategies to adapt and to make our communities more resilient to climate change risks and challenges. Are we capable of projecting from our collective past into our shared future? I believe yes, we are. I believe this is not only possible, but it is imperative that we do so*."[1]

In the lead up to COP26 in Glasgow in 2021, three respected international conservation bodies: IIC, ICCROM and ICOM-CC also issued a collaborative statement – their Joint Commitment for Climate Action in Cultural Heritage. This statement says:

"*…it is both our duty and our passion to advocate for cultural heritage. We recognise that the climate crisis represents one of the greatest threats to that heritage in a world with depleting natural resources, growing inequality and social injustice. In response to these challenges, it is incumbent on all of us to adapt, innovate and pioneer change*."

Icon shares this commitment to embedding sustainability within our own policies and practice and to empowering our members to catalyse changes in their workplaces. Cultural organisations can play a role in achieving the targets of the UN Sustainable Development Goals and in particular: SDG 11.4[2] which asks that we "*strengthen efforts to protect and safeguard the world's cultural and natural heritage*."

Icon believes that conservation supports communities in their response to climate change in three key ways:

- **through direct rescue of threatened sites**
- **by supporting decision-making through building an improved understanding of materials, risk and impact**
- **through developing and promoting mitigation actions**

Conservators and heritage scientists have a valuable role to play in climate action. This briefing sets out the contribution that conservation and heritage science makes.

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THE INSTITUTE OF CONSERVATION

Our Message

- Objects and artefacts held within museum collections provide evidence that supports our understanding of the planet's changing climate and demonstrates its impact.
- Heritage scientists can uncover new layers of data held within the objects during condition assessments and analysis.
- Conservation professionals ensure that objects and artefacts are maintained in a condition that allows them to be used for study.

The Evidence

Paintings and sketches allowed researchers in Switzerland to understand how the Lower Grindelwald Glacier, located in the Alps, behaved after 1600 and before photography was invented.[3]

Research on insect and plant specimens in London's Natural History Museum and the Oxford University Museum of Natural History revealed that bee life cycles have become increasingly uncoordinated with the orchids that provide their pollen.[4]

- Heritage sites serve as opportunities for climate communication and education and objects tell stories about how previous generations have adapted to climate change.
- Researching past responses to changing climate conditions informs present adaptation and mitigation strategies.
- This evidence of the resilience of humankind offers hope for the future as we can take encouragement from evidence of past adaptation and survival.

Annual flooding river island of Majuli, in the Brahmaputra River in Assam, India causes significant erosion of the river. Over hundreds of years, local communities have developed modular and portable building techniques using local materials including building on stilts. This knowledge is captured in the building practices used today.[5]

Our Message

- Conservation professionals and heritage scientists understand the chemical and physical properties of materials and are able to assess the likelihood of future risks and damage caused by the changing climate.

- Conservation professionals and heritage scientists identify causes of decay and damage, and the rate of change. They also offer advice on the actions needed to stabilise objects and their environments.

- Conservators' appreciation of the intrinsic value of cultural heritage means that they can ensure mitigation and adaptation measures are sympathetic to the significance of cultural heritage objects.

- Professional conservators have the skills to protect and conserve at heritage at risk.

The Evidence

Icon contributed to *A Guide to Climate Change Impacts*[6] which identifies many of the climate change risks and hazards that are facing Scotland's historic environment. The guide also offers owners, local communities and custodians of historic sites suggestions about how to take action to implement adaptation measures and enhance the resilience of their sites to climate change.

In the summer of 1998, the shifting sands of Holme beach on the North Norfolk coast revealed the remains of a unique Early Bronze Age timber circle now known as *Seahenge*. The monument was threatened by the sea and the decision to excavate it was taken. A complex conservation project followed, involving many experts at the Bronze Age Centre at Flag Fen and then the Mary Rose Trust. Parts of *Seahenge* are now on display in the Lynn Museum.[7]

Our Message

- Conservation is based on the aim of conserving rather than replacing heritage assets, naturally promoting the sustainable use of resources.
- Conservation is an inherently waste-avoidance activity. This mindset informs the way that conservators embed sustainability within their workplaces.

The Evidence

The American Institute for Conservation's Sustainability Committee has created a Sustainable Practices section on the Conservation Wiki.[8] This contains a wealth of information about sustainable work practices, choosing 'green' materials and life cycle assessment. Sustainability Tools in Cultural Heritage (STiCH)[9] comprises a suite of resources including a life cycle assessment (LCA) *Carbon Calculator* and *Library of Case Studies* and *Information Sheets* developed to help cultural heritage professionals make educated, sustainable choices to lower the environmental impact of their work.
Icon's Environmental Sustainability Network has curated a compendium of resources which is available on the Icon website.[10]

- Cultural heritage is an accessible resource for communicating climate change, empowering people to confront the challenge and inspiring more sustainable lifestyles.
- Cultural heritage enables the impact of climate change to be demonstrated through tangible material culture, expressing complex and abstract ideas in meaningful ways through human stories.
- Cultural heritage is a powerful motivator of action because it strengthens people's sense of history, place, and meaning, and nurtures their desire to secure a sustainable future.

SCAPE led the SCHARP[11] citizen science project that encouraged communities in Scotland to think about how their vulnerable cultural sites influence who they are and why the coast is important to them. Beginning from a place of meaning rather than a place of fear led to hopeful and creative conversations built from a shared sense of identity.

Taking action

In response to the climate emergency, Icon published an *Environmental Sustainability Action Plan.*[12]

Our plan has three parts:

1. To ensure that Icon acts in an environmentally sustainable manner.
2. For Icon to take a leadership role in the wider cultural heritage world to advocate for environmental sustainability and create positive change on the issue.
3. To support Icon members in their efforts to work in an environmentally sustainable manner.

To address the second point Icon has embedded sustainability and climate action in our policy and campaigning work. This briefing is one element of our outward-facing advocacy. We therefore urge decision-makers to take note of the messages set out in this briefing and more importantly to commit to the following actions:

- Take an integrated approach to climate change adaptation that draws on the conservation sector's environmental expertise and experience to support national policy-making.
- Embed cultural heritage within climate planning and policy.
- Support or commission heritage bodies to run environmental projects to encourage wider participation across society and enable messages to resonate with a broader audience.
- Place cultural heritage at the heart of sustainable development.
- Build a creative economy that offers low-carbon employment opportunities at the intersection of heritage, design, social enterprise, and creative skills.
- Ensure that cultural policy frameworks are aligned with international climate targets.

Further reading and resources

- *Sustainable Heritage: Challenges and Strategies for the Twenty-First Century*. May Cassar. APT BULLETIN: JOURNAL OF PRESERVATION TECHNOLOGY / 40:1 (2009). https://discovery.ucl.ac.uk/id/eprint/18790/1/18790.pdf
- *Climate change impacts on cultural heritage: A literature review*. Elena Sesana, Alexandre S Gagnon, Chiara Ciantelli, JoAnn Cassar, John J Hughes. First published 4 May 2021. https://doi.org/10.1002/wcc.710
- *Sustainability in Conservation Practice*. Megan de Silva, Jane Henderson. Journal of the Institute of Conservation. Volume 34, 2011 Issue 1. https://www.tandfonline.com/doi/full/10.1080/19455224.2011.566013
- Agenda21 case study resource database: https://obs.agenda21culture.net/index.php/en/about

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[5] Cathy Daly, Jane Downes and William Megarry. *Cultural heritage has a lot to teach us about climate change*. Accessed 21.12.2021 at https://theconversation.com/cultural-heritage-has-a-lot-to-teach-us-about-climate-change-103266

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[9] Sustainability Tools in Cultural Heritage (STiCH). Accessed 24.12.2021 at https://stich.culturalheritage.org/

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[11] Scotland's Coastal Heritage at Risk Project (SCHARP). Accessed 23.12.2021 at https://scapetrust.org/coastal-heritage-at-risk/

[12] Icon Environmental Statement. October 2020. Accessed 23.12.2021 at https://www.icon.org.uk/resource/icon-environmental-statement.html