



ADAPTING TO THE CLIMATE CRISIS: THE SCOTTISH CIVIC TRUST'S RESPONSE

May 2020

ITEM

Adapting to the climate crisis: the Scottish Civic Trust's response

ACTION

Note report, consider and approve any recommendations.

1 Background

At the December 2019 Board meeting, Trustees asked the Director to prepare a paper for their consideration in relation to the global climate crisis. The following examines how the Scottish Civic Trust might change and develop its work practices in response to the growing need for increased organisational sustainability to combat changes in climate. It sets out a proposed environmental sustainability policy for the organisation and examines SCT's role from three key perspectives:

1. As an employer, how can we operate more sustainably in our work practices?
2. As a landlord and building owner, what changes can we instigate to conserve resources effectively and ensure the Tobacco Merchant's House continues to be well-protected from decay by weathering forces?
3. As a national charity giving advice to over 127 small trusts and charities across the country, what advice can we give to others trying to become more sustainable?

2 Heritage and the Climate Crisis

The climate crisis is an issue that has rapidly come to the top of the national agenda and has been absorbed into our National Outcomes for Scotland, three of which refer to it directly. Our heritage and its built environment are facing serious risks as the climate emergency continues to grow.

In the UK in general, temperatures are increasing across all seasons and temperatures are fluctuating more intensely. In Scotland, since the 1960s, there has already been an increase, mainly in intensity, in rainfall of 27%; temperatures have risen by 1 degree; and the growing season has been lengthened by 5 weeks. UNESCO has estimated that rainfall will increase by 70% by the 2080s. Around the UK, sea levels are also expected to rise, and by the 2050s some parts of Scotland's coast could see levels around 22 cm higher than they are now. The resulting coastal erosion threatens our cultural heritage of disappearing. With the second largest coastline in Northern Europe, Scotland has

already seen 12% of its coastline eroding. For Scotland in particular, storms are expected to be more frequent.

The impact on the built heritage will be severe, particularly in coastal areas and on floodplains. Historic Scotland is already planning for the loss of several of its cliff-top properties and has been funding Coastal Zone Investment Surveys since 1996 to monitor loss as it happens. More generally, the built heritage can expect to experience more extreme loss of building material than historically – particularly decorative features which tend to be more delicate and project more from the building surface, making them more vulnerable. Rainwater goods are coming under increasing pressure to cope with unanticipated levels of water disposal, while windier conditions are transporting more leaves than before into hopper heads and gutters, blocking their function. This leads to increased leaks in structure, destroying historic fabric.

More wind also increases the rate at which surface finishes such as paint, water repellents and plastic repairs wear out, by increasing the force with which rain and windborne atmospheric micro particles impact.

Milder winters and warmer springs encourage weeds and insects to grow and multiply at faster than their historic rates, dislodging historic pointing mortar and making structures unstable. Lichen growth is also enhanced, feeding on the minerals provided by stonework and weakening them as they do so. In Scotland, lichen are becoming an even greater problem for our harled structures, which make up a large percentage of our built heritage. Lichen are very attracted to lime – a key component in harling – and warmer weather allows them to grow at a much increased rate.

As well as the above, there are larger issues relating to the climate change and the built heritage than simply the impact on the physical fabric of the building. Further information can be found in Historic Environment Scotland's *A Guide to Climate Change Impacts* (2019).

As a national charity whose primary concern in the built heritage, it is clear that SCT has a role to play in ensuring it follows best practice itself in combatting and preparing for climate change, and encouraging others to do so.

3 Policy

The following are recommended policies for the Board to consider:

Reduce

On an annual basis, review, analyse and fund changes to our own organisational practices, and to our role as a landlord, such that they impact less on the environment and reduce our own role in climate change.

***Rationale:** initiatives responding to the climate crisis are receiving increasing support at national and UK level, leading to a rapidly changing field of ways in which it is possible for small organisations and landlords to effectively contribute. By committing to annual review of initiatives, SCT will ensure it keeps abreast of current developments and takes advantage of new technologies as soon as they are practically available. This may include changes to recycling programmes, virtual meeting technologies, cultural shifts and other low-impact initiatives that cumulatively produce a larger benefit to the environment.*

Prepare

Consider our building in light of Best Practice guidance on making historic buildings ready for climate change, and create a plan to deliver the necessary changes within ten years.

***Rationale:** Our eighteenth century townhouse is in excellent condition at present, but will need investment in modifications to make sure it can accommodate higher than anticipated levels of rain and wind. As custodians of one of the most important buildings in Glasgow, it is our responsibility to ensure it is adequately protected against changing conditions.*

Support

Seek out and publicise research, advice and case studies relating to the built heritage and the climate crisis.

***Rationale:** One of SCT's priorities is to empower communities to take action. By using our network to source the best and most current advice on responding to the climate crisis, we can support local change.*

4 Practice

The following outlines how SCT can put the above policies into practice.

4.1 Reduce

Tobacco Merchants House

SCT already carries out dry recycling of card and plastics, both within the office and for the tenants' waste. Interestingly, the recycling of plastics was brought in earlier this year, at a slightly increased cost to tenants. They responded uniformly positively, indicating the extent of cultural shift towards valuing environment sustainability. We will also investigate whole-building initiatives such as Bring Your Own Lunch to work day to further promote the use of food storage materials. We will purchase some smaller plates for our own use so that we can do away with paper plates for meetings entirely.

It is not possible to recycle food waste or glass in a viable way from our offices at present, due to the way waste disposal is organised in Glasgow City Centre. However, our quantities of both are very minimal so the impact of this is low. We will monitor this on an annual basis.

We use recycled paper for all internal and the majority of external communication in the office, and have recently switched accountancy package to allow for digital processing and issuing of all invoices, further cutting down on paper.

All cleaning products used by our cleaner are environmentally sustainable.

We have changed our lightbulbs in our own office and in common areas to energy-saving versions and have instigated a policy of turning off our computers at the end of each day, rather than keeping them on standby. Once we return to the office, we will also power down the photocopier/printer completely at the end of the day – and when we replace this, we will look for a more energy-efficient model. We will investigate switching to a greener energy supplier.

Once we return to the office following the pandemic, we will investigate the practicalities of turning off heating in our own offices at the end of each day. If this proves feasible, we will discuss the possibility of tenants doing the same in their own offices.

The building's boiler was replaced just over two years ago with a condensing boiler using both gas and electricity. Once it becomes time for replacing the boiler, we will switch to an electricity-only version. This will allow us to run the building on green power only. We will investigate installing a smart meter to track our energy usage.

Due to the nature of our A-listed building, we are unable to install double or secondary glazing to reduce draughts in the building and further reduce our need for power. In addition, historic buildings are designed to allow passive airflow through their outer skin, so we would not consider any major alteration that might disrupt this. However, we can ensure the windows are properly maintained to create as tight a seal as possible and minimise discomfort.

Zero Waste Scotland have developed a Green Office Guide through their Resource Efficient Scotland programme, which suggests measures for Scottish offices to reduce their environmental impact. It creates a system of measuring and monitoring resource use through regular data gathering, which can help track improvement over time and highlight where additional changes can be made. We will investigate if the Guide can be implemented successfully in our offices.

The Director spends a considerable amount of time in Edinburgh in consultation with the national organisations who are based in the capital. Other staff members occasionally have need to travel to other locations to meet with project partners. It is already our policy to use public transport wherever possible, and avoid flights where we can. We will continue to operate on this basis.

To encourage our staff to use active transport methods, we will investigate installing a bicycle rack to the rear of the building.

Doors Open Days

Doors Open Days has considerable potential for promoting sustainable heritage tourism, through encouraging its participant venues – of which there are over a thousand – to make as much content as possible available online. As part of our pandemic response, this process is already underway.

On a more strategic level, we are considering working towards ISO 20121, which management standard aims to ensure and improve all aspects of sustainability around the design and production of events in a systematic manner.

ISO 20121 covers:

- How to identify community aims, possible benefits and desirable outcomes
- How sustainable development draws together environmental, economic and social concerns – engaging all possible stakeholders
- Guidance for organizations to recognize their relationship with and impact on society and society's expectations of events
- Measuring and reviewing progress

Implementing an internationally-recognised standard for sustainability in events would ensure that we maintained a focus on sustainability in all our event planning, as well as demonstrating our commitment to the heritage sector. However, we are concerned that the intricacies of implementing

an ISO may create barriers to participation for small local groups, and may instead look to create our own guidance on achieving sustainability for regional co-ordinators to disseminate.

My Place Photography Competition

We have agreed a theme of sustainability for the 2021 My Place Photography competition, which will mean a new generation looking at the built heritage (old and new) through a different lens and hopefully inspire greater awareness about how the built environment is impacted by climate change.

Diverse Heritage

Our experience in working with BAME and LGBTQI+ communities indicates that a high premium is placed on face to face contact for developing and maintaining quality relationships and promoting their input into heritage. As this a strategic priority for the organisation, it is not appropriate for SCT to seek to minimise such interactions. However, the majority of such communities are located in close proximity to urban transport hubs, making it possible for us to reach them using sustainable means of transport and communicating with them via digital means where appropriate.

Groups of disabled people and support organisations also appreciate in-person delivery of activities. Bringing disabled people together to participate in activities and to build peer networks are significant objectives of organisations SCT works in partnership with, such as Glasgow Disability Alliance.

Participation of disabled people is best achieved by supporting transport costs for taxi journeys rather than public transport which is often inaccessible or difficult to access for would-be participants.

While taxi journeys are increasingly discouraged as part of 'Reduce' measures to tackle climate change, it would be important to emphasise that for disabled people, taxi journeys and our support of them are essential.

My Place Mentoring

The My Place Mentoring programme is designed to reach people at an economic or geographic disadvantage, and our experience shows that these groups often live in places without access to frequent and/or reliable sustainable transport. Similar to our Diverse Heritage understanding,

mentored groups view a physical meeting to be of greater importance and quality to a virtual one. While we will offer an initial virtual meeting, we will follow that up with an in-person visit. We already use sustainable transport wherever possible, often relying on the local group to pick us up from their bus or train station. Where this opportunity is not available, our Mentoring Officer hires a hybrid car to make the journey. If more than one person is making the trip, we share transport wherever possible.

There is also the opportunity to utilise technology in terms of both sustainability and resources. By building up a digital pack, this could be utilised for both new groups and existing. A 'sign on' pack of relevant documents/videos/interactive offerings will cut out unnecessary printing and utilising large documents.

We will further explore potential collaborative working with our partners to deliver joint events for groups which mitigates the burden on groups attending the many events. Our annual conference in Wick is an example of successful, collaborative working in this way.

All issued MoU's to be clear and specific about what will be delivered virtually. If geography of groups allow, there may be merit in bringing more than one together for initial meetings where the benefits are not only what the MPM programme will bring but also the peer to peer aspect.

To ensure that climate change is part of the discussion regarding new projects or adaptation of historic buildings; this is ensured by making documents such as Historic Environment Scotland's *Guide to Help Manage Climate Change* an essential part of the initial guidance offered by MPM.

4.2 Prepare

The Tobacco Merchants House has been well-maintained since its refurbishment was completed over twenty years ago. As might be anticipated, the restoration work focussed on restoring the building as closely as possible to its original eighteenth century state, rather than preparing the structure for a changing climate. This means that narrow guttering and hopper heads were installed that are likely to be a close match to the original versions, but are unsuitable for managing current and projected levels of rainfall. We should replace these with larger versions that are easier to maintain and harder to block.

In addition, the paint used on our external timberwork has started to fail, exposing the timber to weathering elements. We should prepare and repaint the timber with a harder-wearing paint that can withstand tougher weathering conditions, and repair any damaged timber where necessary.

The harling to the gable wall has started to fail. The harling protects the stone substrate and provides a barrier to moisture penetration into the building, and should be replaced. We should look to complete these works within the next five years, and continue to follow the schedule of monitoring laid out in our Management and Maintenance Plan, completed last year.

Along with the above it is worth investigating water run-off from both surrounding buildings and footpaths, as well as possible water/salt penetration from passing traffic to the front elevation.

Where the harling is failing, an investigation to the source of the moisture ingress is required. The path (impermeable) levels here are much higher than the basement and butt against the wall. Checking water run off on paths (and direction of same) and looking at mitigation may be required in the form of a limited soak away or possible flashings to allow water to move away from the building.

4.3 Support

We will join the Climate Heritage Network, which is a voluntary, mutual support network of arts, culture and heritage organisations committed to aiding their communities in tackling climate change and achieving the ambitions of the Paris Agreement. This will give us access to the most current thinking on combatting climate change in the built heritage, which we can then disseminate.

There are a number of organisations and long-term projects working on the issue of climate change and the built heritage, including the main heritage bodies in the UK (Historic Environment Scotland, Historic England, Heritage Wales and the Department of the Environment for Northern Ireland), and those internationally (Europa Nostra, the ADAPT Northern Heritage and HERACLES programmes,

UNESCO). More broadly, Keep Scotland Beautiful, Zero Waste Scotland and the Scottish Government itself are regularly producing guidance, case studies and support on how organisations in Scotland can combat the climate crisis.

We can review this information at six monthly intervals to sift out elements that might be useful to those within our network of local organisations, including those who work with us exclusively on Doors Open Days. We can incorporate this six monthly review into our social media cycle to help sustain interest and support in tackling climate change within the built heritage community.

SCT ebulletins will have a regular 'sustainable focus' section highlighting a project, policy or community that is making efforts to become more sustainable. We will also add a climate change resource page to our main SCT website, and add it to our My Place Mentoring website as well.

5 Conclusions

The climate crisis is an area of rapidly developing research and guidance in response to an issue that is already beginning to impact on the historic environment. By following the policies and practices laid out above, it is hoped that we can play an appropriate role in helping to mitigate its effect on Scotland's heritage.

ACTION: THE BOARD IS ASKED TO APPROVE THE CLIMATE CRISIS POLICIES AND PRACTICES OUTLINED IN THIS PAPER.

Susan O'Connor

Additional research for this paper was carried out by SCT intern Lisa Chamberlin.

May 2020