

September 2025

Out in the Open:

Rethinking Sustainability in Public Art Commissions



GCDN
Global Cultural
Districts Network
An Initiative of AEA Consulting

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The Global Cultural Districts Network (GCDN) is committed to improving the quality of urban life through the contribution of the arts, culture, and creative industries. GCDN brings together policymakers, planners, and leaders from around the world, all working at the intersection of culture and sustainable urban development through convenings, research and collaboration. GCDN is an initiative of AEA Consulting. www.gcdn.net



The GCDN commissioned creative consultancy [Kerbside Collective](http://www.kerbsidecollective.com) to undertake this research & design. Kerbside produces leading international research and creative projects that push sustainability through collaboration, transparency and tangible action. www.kerbsidecollective.com



UAP | Urban Art Projects is a global art consultancy and manufacturing organization that brings ambitious creative visions to life through collaboration, craftsmanship, and a deep belief in the power of the arts to shape meaningful, sustainable places. Founded in 1993 by brothers Matthew and Daniel Tobin in Brisbane, UAP has evolved from a modest local practice into one of the world's leading art foundries and cultural producers. With major studios and facilities in Brisbane, New York, and Shanghai—and satellite offices across Asia and the Middle East—UAP's reach is truly international. The 2019 acquisition of the renowned Polich Tallix foundry in upstate New York further solidified UAP's global stature. www.uapcompany.com

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As an international membership organization committed to improving the quality of urban life through the contribution of the arts, culture, and creative industries, the Global Cultural Districts Network (GCDN) recognizes the pivotal role that cultural districts play in sustainable urban development. Our network brings together leaders of cultural districts from around the world to foster knowledge-sharing on critical issues and we are pleased to share this report, commissioned on behalf of our members.

Sustainability has become an increasingly central theme in our convenings, research, and collaborations. This report builds on our previous work, including the report, ‘Sustainable Development in Cultural Districts: A Public Realm Perspective’, published in 2022 with the City of London Corporation and written by Helen Kearney and Kat Pegler, the authors of this report. This research reflects our ongoing commitment to supporting a vision for a sustainable future by centering the work of artists in creating works that have the power to uniquely prompt collective responses.

Artworks can become powerful symbols for mitigating the effects of climate change and the practical application of reducing emissions. Furthermore, art possesses the unique ability to forge meaningful narratives and move people in ways that other sustainability-focused activities cannot, playing a vital role in creating a more sustainable future.

This report explores how concerns of sustainability, climate resilience, and environmental impact are affecting the commissioning of public art. It delves into the ways in which cultural organisations and artists are responding and adapting to climate change through sustainability initiatives and creative outputs, with a focus on arts programming in outdoor spaces.

By examining case studies from cultural districts around the world, this report seeks to share knowledge of best practices, raise awareness, and highlight efforts to mitigate against challenges in making commissioning public art more sustainable.

GCDN’s intellectual agenda is deeply aligned with the three pillars of sustainable development: the environment, society, and the economy, which are also fundamental to the UN's Sustainable Development Goals. We believe that cultural districts have a crucial role to play in promoting sustainability across all these domains, both through their own practices and by engaging their publics with meaningful cultural experiences and conversations.

We are grateful to Kerbside Collective for their thoughtful research, analysis, and continued collaboration on this important topic. As a Supporting Member, UAP provided thought leadership and commitment to advancing sustainability in public art. Their contributions have been instrumental in shaping this report.

The concluding section of the report offers a joint call to action—a roadmap for cultural districts and other commissioning bodies to adopt more sustainable approaches. We hope this report provides valuable insights and practical inspiration for cultural district leaders, artists, policymakers, and all those committed to employing art and culture to take the actions necessary to foster a more sustainable future.

Sincerely,

Gregorio Scarpella, Director & Stephanie P. Fortunato, Special Projects Director
Global Cultural Districts Network (GCDN)



MOTHER EARTH IS AN ALTAR

Part 1

Executive Summary

The unique position of cultural districts in a shifting global context

Cultural districts, with their active staff, engaged communities, and unique sites, can often feel like havens. They have potential to be environments in which people act sustainably, want to communicate issues such as climate justice, and understand the need to consume within our planet's ecological boundaries.

Yet we are all working within political, economic, and cultural contexts where the challenges of making the shift to sustainable practices feel large, even overwhelming. What had felt like a trend towards progress is now – in some places – being reversed. Data is showing that 2024 was the first year to break the 1.5°C barrier for global warming. Governments across the world are rolling back carbon emission reduction goals, and our reliance on fossil fuels is increasing. Political leaders are too often looking in the wrong places for solutions, spending vast sums on technological development that aims to lift us out of crisis rather than aiming to reduce extraction.

This problem, of course, is not confined to the cultural sector: it is a global societal issue. But we contend that cultural districts can play a significant role in shifting our practices, not just within the sector itself but within wider society.

What can art do? What is the role for cultural districts? What is our collective call for action?

The research presented in this report showcases initiatives across different scales, on different continents, and with different communities. Uniting the efforts is an understanding that artwork commissioning can have meaningful, positive impact, both environmentally and socially.

We demonstrate that the role of cultural districts is twofold:

- **Firstly, as leaders within their field** and more widely. When districts implement sustainable practices in commissioning, they demonstrate to others how working practices can be adapted.
- **Secondly, as communicators of narratives** that tackle questions of sustainability and the climate crisis head-on. Through storytelling, artworks can communicate messages, listen, question, reflect, and construct narratives in ways that engage people with their environment.

In this way, we contend that cultural districts can play a significant role in shifting practices. We believe this can take place through the power of art: the core business of cultural districts.

Global Connectivity: the Power of the Network

A theme running through the research findings is the importance of mutually-supportive networks. At GCDN, members recognise that art can be utilised to inspire communities, and commissioned artists are able to use their platform to advocate for change. By bringing minds together to explore these issues collectively, through learning and sharing information, the works can become greater than the sum of their parts. Whilst a localised approach is deeply important when addressing the climate emergency, the barriers to achieving sustainability initiatives for cultural organisations are often the same.

A sense of global connectivity is threaded throughout this report – the following cultural districts are featured:

- Alserkal Avenue, Dubai, UAE
- Victoria Yards, Johannesburg, South Africa
- Kingston Creative, Kingston, Jamaica
- The Bentway, Toronto, Canada
- Southbank Centre, London, UK
- Stavros Niarchos Foundation Cultural Center (SNFCC), Athens, Greece
- El Perpetuo Socorro, Medellín, Columbia

Introduction

Artworks may appear to be a relatively small contributor of a cultural district's emissions. However, art is the core foundation underpinning a cultural district and is the centrepiece of activity.

The role of art in the climate conversation is becoming increasingly important as greater emphasis is placed on the value of the arts in social wellbeing at a time of crisis, both ecological and societal. Whilst funding cuts are taking place across the arts in many areas of the world, new avenues are also forming through health initiatives such as socio-prescribing.

With such activity front-and-centre, artworks can become figureheads, symbols for the practical application of reducing emissions. Simultaneously, they can utilise the unique ability of art to forge a narrative for audiences and to move people in ways that other sustainability-focused activities cannot.

How can artworks be more sustainable?

Through this, artworks have a role above and beyond themselves in the movement to create a more sustainable future.

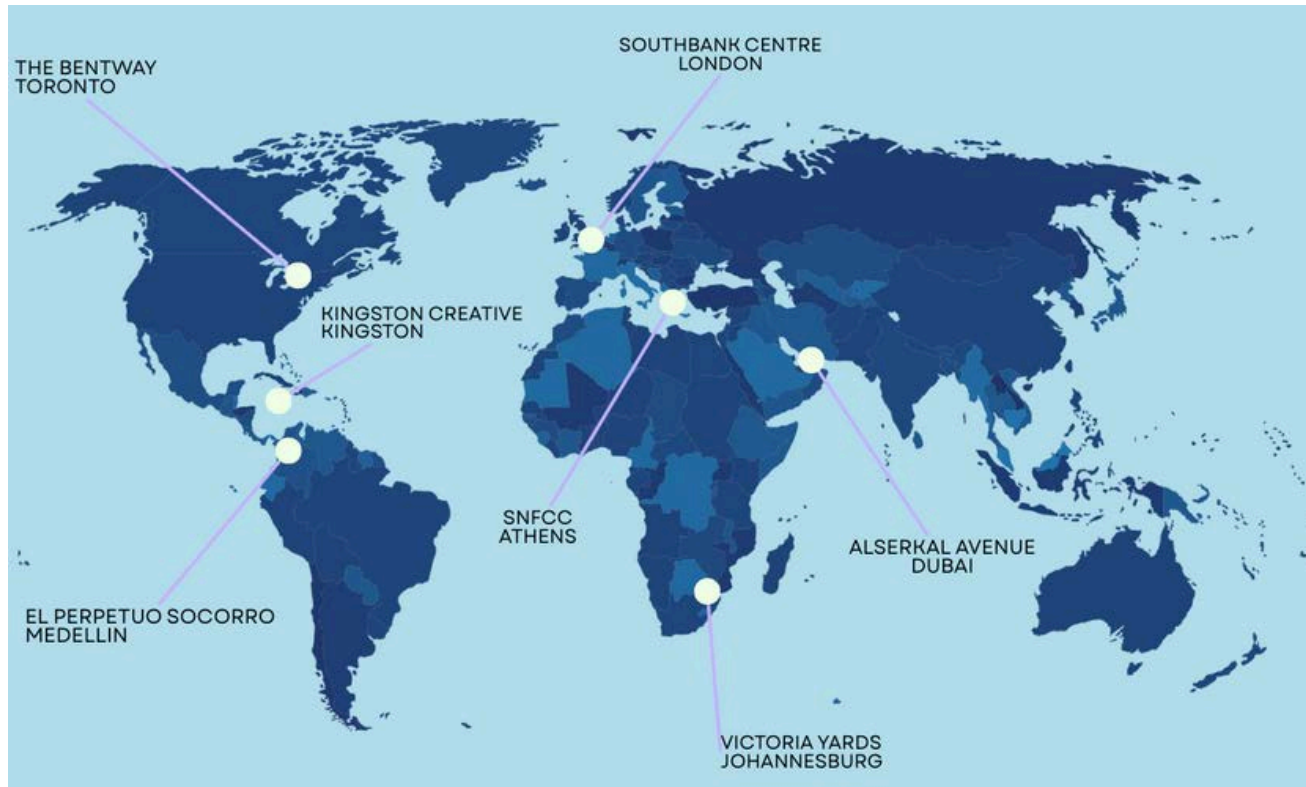
We showcase examples of projects that prompt people to deepen their connections with the environment and the world around them. This connectedness has the power to inspire people to alter their own lifestyles.

How, then, can artworks be made more sustainable?

Part of the answer is: understanding the constraints and challenges; discovering new ways of countering these problems; and learning about how our peers are tackling the same issues. For example, there is currently a gap in carbon emission data collection, evaluation and target setting which would spur action. This report shares an example of best practice where carbon emissions data collection and analysis is embedded from the very start of the project at the commissioning process. To take another example, we also need to consider economic issues such as the implications of the risk of disasters relating to touring artworks. We share an innovative new "touring" model in which intellectual content is shared across locations but the artworks themselves do not travel.



The Journey to Sustainability: Findings Summary



Map showing the locations of the case studies that are featured in this report

To ensure the success of a cultural district's climate justice efforts, artwork commissioning must form the central part of the journey.

In 2022, the City of London and GCDN published a report written by Kerbside founders titled, '*Sustainable Development in Cultural Districts: A Public Realm Perspective*'. That report explored sustainable initiatives undertaken by cultural districts around the world. It highlighted that many cultural districts are implementing effective 'quick win' initiatives. However, there was also a recognition that districts were **facing significant challenges in creating a fundamental shift in practices** to a fully sustainable future across all of their operations. We are now at a moment whereby these fundamental shifts are needed.

Moving forward to 2025, this new report now demonstrates that artwork commissioning forms a central part of this story. In this period of climate crisis, cultural districts around the world have started to embed sustainable practices into their commissioning of artworks. The report that follows highlights a series of environmental and social examples, which form inspiration and provide valuable lessons.

The Journey to Sustainability: Findings Summary



Biodiversity Net Gain

The artwork at Kingston Creative, *Chain of Love: Rice and Peas Bush in Lower South Camp*, raised the profile of a maligned botanical species, by elevating the status of a weed.



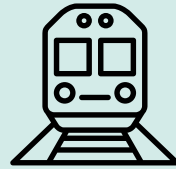
Third Sector Partnerships

Victoria Yards is a cultural district whose spaces provide a home to NGOs and food charities, as well as cultural industries.



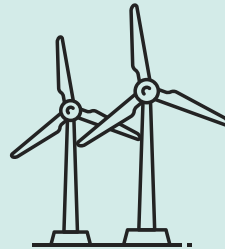
Circular Economy

In The Bentway's Beyond Concrete season, 87% of materials used were recycled, donated, or reused. The experience prompted an even more ambitious target for future seasons. In Victoria Yards, artist Io Makandal's new wildlife bridge used bricks found onsite that had been part of the district's industrial past.



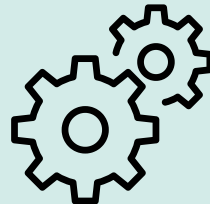
Sustainable Transport

In El Perpetuo Socorro, staff are incentivised through pay increments to arrive via bike. They work with the municipality to advocate for local mass transit systems.



Climate Action Policies

The Southbank Centre has a clear set of sustainability policies that embeds a three pillars approach alongside both top-down target-setting and grassroots engagement with staff, partners and artists.



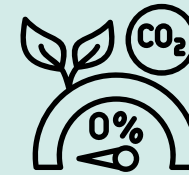
Leadership

In Alserkal Avenue, the leadership prioritises a philosophy that promotes non-western leadership approaches to art, critical theory, and place-making.



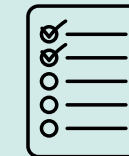
Local Engagement

In Kingston Creative, artist Camille Chedda regenerated an abandoned site through close engagement with a local elder and continual work with local communities.



Net Zero Emissions

SNFCC demonstrates exemplary building design to foster renewable energy. It uses onsite solar panels and staff are able to undertake carbon footprint counting related to the site.



Ethical Procurement

In El Perpetuo Socorro, the team are empowered to say 'no' to suppliers or partners that do not meet their values and sustainable ethos; whilst the team at The Bentway are looking at embedding future life-cycle thinking into purchasing and commissioning, and require an after-life plan to be developed by with the artist alongside the work.



Transparent Reporting

SNFCC integrates data relating to its site with emissions published regularly. The innovative work of UAP embeds reporting on carbon footprint and social value data in the commissioning, making and installation processes.



Part 2

Aims & Methodology

Fig. 4

Aims & Methodology

Research Aims & Questions

This research aims to consider how concerns of sustainability, climate resilience and environmental impact are affecting the commissioning of art. It explores the ways in which cultural organisations and artists are responding and adapting to climate change through sustainability initiatives and creative outputs. With a focus on arts programming in outdoor space, the work aims to share knowledge of best practice, raise awareness and highlight efforts to mitigate against challenges.

Methodology

The Research Lead was Kerbside Collective in collaboration with GCDN, with support from UAP.

The initial stage of research involved a desktop study to give an overview of sustainability practices in artwork commissioning. Then, for the main research phase, the chosen approach for data collection was to focus on case study examples, and to produce qualitative data through semi-structured interviews. Using interviews with case study organisations results in nuanced information that allows for consideration of context and detailed follow-up questions.

The anecdotal, qualitative, data from these interviews has a depth and specificity that is not always possible from a survey. Interviews with representatives from the cultural districts took place online via Zoom. In addition, we reviewed data from UAP in relation to their research strands: the Artwork Ingredients List and Public Art 360. We then analysed the responses and presented them in this report, as individual district-based case studies, and as common key learnings from across the full range of districts and commissions.

The original research questions that formed part of the brief for the research were:

1. What do we mean by 'sustainability' and how is it useful to engage artists in these conversations?
2. What has happened through *A Feral Commons*, a global artwork co-commissioning project?
3. What are other cultural districts and institutions doing?
4. What can we learn from all this?
5. How do movements gain enough momentum to make change?



Fig. 5

Definitions

This research is presented within a framework of **global considerations of sustainability**; the position taken within these frameworks and definitions of terms are given below.

‘Sustainability’

The definition of ‘sustainability’ accepted by governments around the world and built into global-level target setting, is that from the United Nations, with reference to the report *Our Common Future: Towards Sustainable Development*, which defines it as:

‘Development that meets the needs of the present without compromising the ability of future generations to meet their own needs’. [1]

This conception of sustainability explicitly ties environmental protection with economic development; reflecting the UN’s priorities of poverty reduction alongside environmental protections. However, this marrying of economic development to environmental protections has, from the outset, been contested.

Many consider the inclusion of ‘development’ to be problematic due to questions of whether development can ever truly be sustainable. The term may itself be a paradox.

Other definitions for sustainability on a global scale have also emerged; such as discussions of ‘prosperity without growth’ [2] and the ‘doughnut economics’ model developed by Kate Raworth [3]. Both of these conceptions call for the earth’s planetary ‘ceiling’ to be the limits to development and therefore an inherent part of the conception of what it means to be ‘sustainable’.

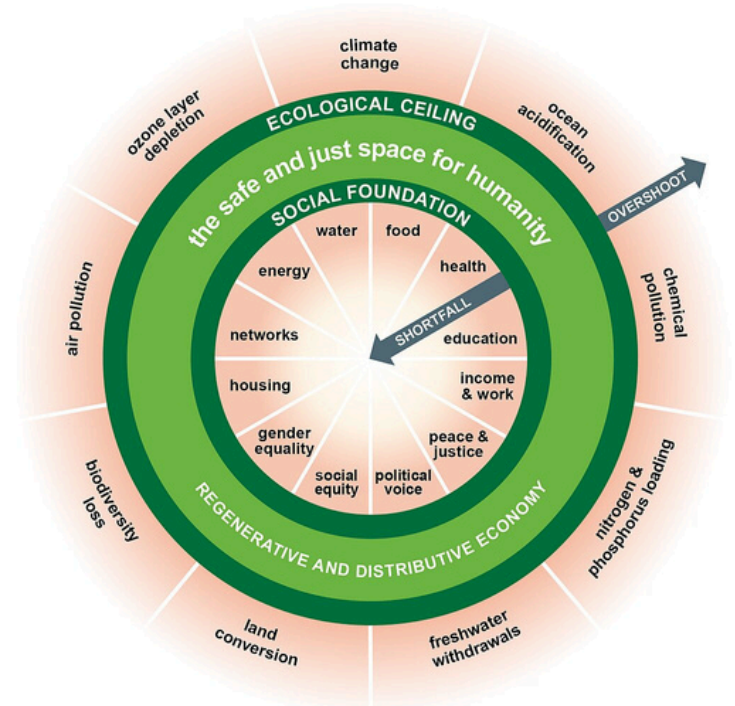


Fig 6: The ‘Doughnut’: diagram showing an alternative economic model for structuring society



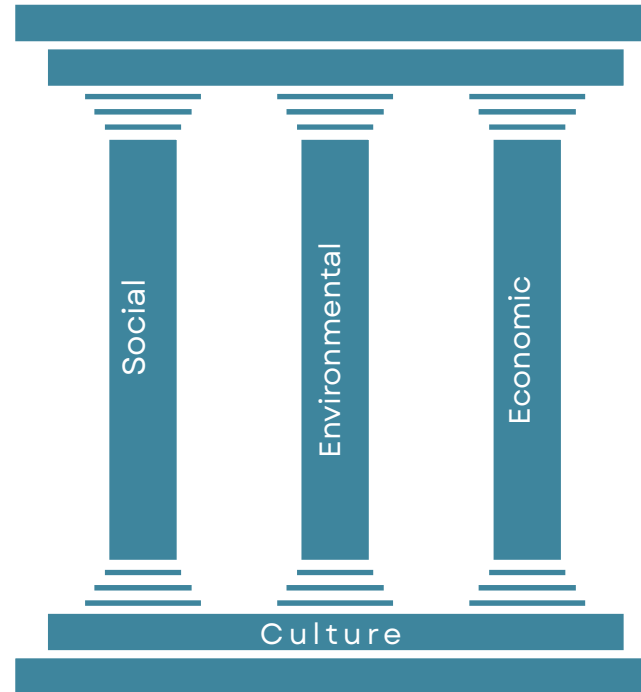
‘Sustainable Development’

In 2015, the UN General Assembly adopted a resolution that set out a strategy to achieve 17 ‘Sustainable Development Goals’ (SDGs) for 2030. SDGs are target-led goals that incorporate measurable indicators for which governments have agreed measures.

Also in 2015, the Paris Agreement was signed: an international treaty whose goal is to limit the increase in global temperatures to 2°C at most, and preferably 1.5°C, above pre-industrial levels. As of the end of 2024, it appears that the 1.5°C limit has already been breached. The SDGs and the Paris Agreement targets, although positive due to them being measurable, are also not without controversy. There remains a question of accountability, wherein no government is held to meeting the targets, which are voluntary.

In addition, measures relating to the reduction of Greenhouse Gas emissions overwhelmingly place responsibility onto producer nations rather than consumer nations, leaving questions of true responsibility for emissions in a situation that favours the global north. Issues around climate justice and the long-standing legacies of colonisation push questions of accountability further.

‘The Pillars of Sustainability’



Three pillars of sustainability with ‘culture’ as the foundation to all.

In order for a practice to be truly sustainable, it must be socially, environmentally, and economically sustainable. The integration of all three factors is often referred to as the ‘three pillars’ of sustainability. Since this conception, the Agenda 21 for Culture [4] campaign has set out an approach to sustainability that places culture at the forefront of achieving sustainability in an urban context.

In this framework, ‘culture’ has a wide definition that includes the arts and cultural practice and industries, alongside heritage, intangible cultural practices, governance, human rights, the knowledge economy and education, and community-led citizenship.

In addition, there continues to be discussion about culture as a possible ‘**fourth pillar**’, or as an all-encompassing body that surrounds and supports the three pillars. The research presented in this report aims to propel these ideas forward, showing demonstrable means through which culture (defined as arts practice in this case) can have an impact on day-to-day behaviour.

‘Sustainable Artwork’

The definition adopted for ‘sustainable artworks’ in the research was twofold. It included artworks that were:

- Sustainable in their process or practice, e.g. in their making process, use of materials or re-use strategies; or
- Sustainable in their artistic content, e.g. art that addresses environmental issues or is itself a form of climate communication.

The definition of ‘artwork’ in this research is wide, including any artform such as sculpture or installation, performance, environmental art and more. It also included both temporary and permanent work, and touring work.

‘Outdoor Artwork’

For this research, artworks that are sited in outdoor space was the focus. Artwork commissioning for outdoors adds an additional dynamic to the conversation.

Outdoor art is distinctive for a number of reasons. It may be that some communities do not feel comfortable or welcome inside a theatre or concert hall or gallery, but they are able to feel welcome in – even ownership of – an outdoor space. Outdoors can function like a commons: a place to connect with the largest numbers of people, and the widest range of communities. It is the only truly democratic space. Add to that, the natural environment, its wildlife and ecosystems, in outdoor space and you have a powerful potential collaborator waiting for you to work with.

Artworks also have a relationship with their environments, and their materiality has a relationship with the climate and weather-related risks.

In this research, ‘Outdoor’ did not necessarily need to be a) free to access, or b) in an accessible site – indeed one of the case study examples is not usually accessible to the public despite being in an outdoor site.



Fig. 8



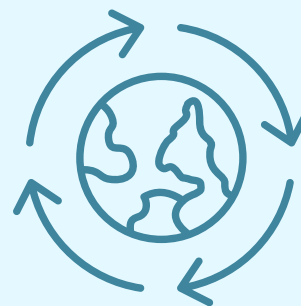
Fig. 9

Key Learnings



Community

Embedding local engagement to create meaningful understanding of the land and cultural practices



Organisational Culture

Shifting culture to embed circular economy approaches and net zero targets



Prepare the Ground

Creating partnerships with local municipalities and advocates for the projects



Messaging

Using narratives that generate positive responses to climate adaptation



Spatial Context

Integrating the artwork with the place it is located

Although the experiences of the districts were particular to their cultural and geographic contexts and the workings of their institutions, nonetheless a number of common findings were apparent across the case study areas.

All expressed interest in methods of **sustainable commissioning**, understanding a duty to address the **climate crisis** and a desire to move to more **sustainable practices**.

The Key Learnings given here demonstrate the common findings across the research.

They also act as recommendations for cultural district staff who work in the field of commissioning artworks.

Key Learnings



Community

Embedding local engagement to create meaningful understanding of the land and cultural practices

Climate change and sustainability are **global issues** that we engage with on a **local level**. Many of the artworks featured in the research were able to accomplish this engagement in an **active and collaborative way**. The connection of the artwork to its local communities creates **social sustainability** outcomes, empowering people.

The case studies show that artwork commissioning can be made more socially sustainable through:

- Engagement with local people throughout the process to ensure artworks are informed by relevant local issues, including climate change, social issues and disaster risk.
- Promoting free or low cost, easily accessible cultural experiences for people in the local area.
- Incorporating local and cultural concerns around climate justice. This includes considerations of Indigenous community practices and environmental understanding, or narratives exploring decolonisation.
- Governance, for example through locating artworks in citizen-maintained sites, which in turn enhances access to, and care of, those sites.
- Local partnerships that can generate environmental outcomes, such as the partnership of Victoria Yards and Io Makandal with organisation Water for the Future in Johannesburg in which the artwork and the project to improve the local river were integrated.
- Considering ‘more than human’ perspectives, i.e. the experience of non-human collaborators and populations. The flora and fauna of the site should be considered to understand how an art installation may impact that constituency.
- Use of ex-industrial sites for artworks to create an impulse towards a ‘circular economy’ of places. This means a re-use of the embodied carbon within the buildings and materials already onsite.
- Embracing the role of artworks in bringing pride into local areas, including previously forgotten or marginalised areas.



Fig. 10

Key Data

Of seven case study districts...

7 described outdoor commissioning relating to sustainability that was free to experience for communities.

4 used some form of metrics for community impact when commissioning.

3 described community co-design practices in artworks.

3 created new green spaces that focused on biodiversity net gain and non-human communities.

2 asserted the power of artworks to generate community care practices for local spaces.

1 implemented the building of new citizen-maintained spaces as part of artwork commissioning.

Key Learnings



Organisational Culture

Shifting culture to embed circular economy approaches and net zero targets

Although cultural organisations had sustainability strategies in place, in many cases, artwork commissioning was **not considered** as part of **wider sustainability initiatives**. For example, target setting over energy use and net zero often **did not apply** to commissioning, and there were a range of approaches to circular economy of materials.

The following are drawn from best practice we saw within the case studies. It is recommended that:

- Targets for carbon footprint emissions relating to artworks should be incorporated into operations and strategies.
- Carbon counting for artworks should be implemented from the start of the commissioning process.
- Detailed discussions with artists ahead of any design and installation should cover: materials use; making processes; circular economy practices; and planning materials re-use schemes, in line with sustainability targets.
- The longevity of an artwork should be considered from the start. Where once commissions may have been conceived as temporary, they should now be considered for their ability to be in place longer, or with permanence as a goal.
- Incorporate learning from artworks in which rewilding of spaces and biodiversity net gain is achieved.
- Touring cultures should be reconsidered, with a particular focus on understanding the extent to which transport (especially air travel) drastically increases carbon emissions.
- Other options for transport, touring and travel should be considered, to reduce carbon emissions as much as possible.

Key Data

Of seven case study districts...

5 cultural districts had undertaken some form of carbon footprint counting in commissioning. However, they undertook counting for one or some artworks, but not for all.

Therefore, **0** districts enforced carbon footprint targets throughout all of their artwork commissioning.

4 described processes of communicating with artists about carbon footprint counting.

4 described efforts to re-think touring cultures in response to the transportation emissions.

3 had materials re-use/ circular economy approaches to artwork commissioning.

2 reported challenges in collecting correct or useful data on net zero measures.

2 explicitly linked organisational carbon footprints, net zero goals, or sustainability targets to their art commissioning work.

1 enforced strict rules on transportation in certain circumstances.

Key Learnings



Prepare the Ground

Creating partnerships with local municipalities and advocates for the projects

Installing sustainable artworks in outdoor or public places can be **highly complex** as installations are subject to local processes in a similar way that new buildings are. There are issues to consider such as: risk assessments; structural soundness; capacity to withstand weather, damage, and vandalism; licensing and permitting; and health and safety legislation. A **'preparing of the ground'**, in a **literal and metaphorical sense** is required.

The experiences of the case studies in outdoor artwork installation (particularly the challenges) provide learnings for future work:

- Where installations are in public sites, a close working relationship with officials from the local municipality is crucial. These individuals can act as advocates for the project within the local authority, helping to explain the work and its rationale to other technical officers (e.g. transport or highways officials, town planning teams, engineers) who may be influential in the permitting of the artwork. They can also provide useful local connections, context, and news updates.
- Ensure that the environmental impact of the work is understood, and if possible demonstrate net environmental gain. Environmental impact assessments are increasingly demanded and these are best started at the very beginning of the process; they can influence making and installation processes.
- Understand the length of time required for permitting and licensing processes, alongside the production process of the artwork. Integrate these into timelines.
- Where there are delays, these can mean opportunities for deep, reflective consideration of the issues with local stakeholders and the artist that may not have been possible otherwise.

- Local collaborations and partnerships should be planned and maintained throughout, for example through engaging local suppliers, working with communities on making processes, upskilling local people, and creating links with education providers and schools to enhance understanding of environmental issues that are prompted or inspired by the work.
- Whether the artworks are sited in locally-owned, state-owned, or community-owned spaces, consider how the artwork can equitably enhance access to the site.

Key Data

Of seven case study districts...

4 districts reported connecting with local environmental partners through artwork commissioning.

3 gave examples of challenges working with local partners and authorities on outdoor artworks in public spaces.

3 described the usefulness of longer timescales, as it meant time to embed partnerships.

Key Learnings



Messaging

Using narratives that generate positive responses to climate adaptation

The Challenges...

Narrative and **storytelling** about the environment is a huge **opportunity** for artists and cultural districts. However, effective messaging relating to the environment and climate change in relation to artworks was an identified gap in many of the case studies.

Gaps that were identified included:

- The Public Art 360 report highlighted gaps in audience knowledge of the artworks and how they engaged with sustainability.
- There was a fear that with too much messaging, a project risks not being authentic or creative, and too instrumentalised or marketed.
- Language was considered, with different terms having different meanings depending on contexts, audiences, locations. One district representative interviewed spoke of engaging advisors on language to mitigate these risks.
- In some cases there was no time for constructing messaging specifically dealing with the ecological issues related to the piece, or sometimes the artist or producer may not be the best person to do this. In these cases the opportunities were lost.
- There was a concern that messaging around the environment could risk triggering 'eco grief' or 'eco anxiety' amongst audiences.
- There was a fear that some audiences could be turned off by climate change content, seeing it as over-saturated as an issue, or simply dull content.
- The process of constructing a narrative around artworks that engage with climate change and sustainability may be different to the way that narratives around artworks are usually constructed (e.g. a catalogue entry or exhibition signage).



Fig. 11

Key Data

Of seven case study districts...

7 of the districts gave examples of art commissioning that communicated to audiences about sustainability and/or environmental issues.

4 reported that more could be done in terms of messaging about the climate crisis and potential solutions.

3 described challenges in communicating climate issues through/ in relation to artworks.

2 identified gaps in local communities' understanding of how artworks linked to the environment.



Messaging

Using narratives that generate positive responses to climate adaptation

...and the Opportunities

Despite the cited challenges to messaging around climate change and the artworks, the opportunities are vast. Messaging around sustainable artworks can engage with issues in a variety of ways and can reveal hidden insight that itself can be creative content.

The opportunities that the case studies highlighted included:

- The exciting and enriching potential for engaging people in the built environment, nature, and wildlife.
- Narratives about the environment can be a means of gaining feedback from audiences, so that districts can learn and adapt.
- Examples from The Bentway in Toronto and SNFCC in Athens demonstrated how artworks could engage audiences in the theme of consumption and waste.
- In Kingston, the installation of a structure to support the cultivation of the rice and peas bush aimed to challenge the narrative about that species, which to date had been seen as a weed, but in actuality is edible and has medicinal and biodiversity benefits.
- Ideas such as that in Alserkal, Dubai, of ‘AC Ecologies’, representing nature’s resiliency and adaptation to anthropocentric climate change, could have incredible transferable potential; it was cited that the concept was already being considered for use in South Africa.
- In Victoria Yards the partner organisation, Water for the Future, had seen how effective the artwork had been in generating awareness about the river regeneration project, and was now engaging other artists to work on the project.

- Narratives about specific artworks can be complementary to the work the cultural district is doing on greening, energy use and sustainability more generally (see also Key Learning 1).
- Transparency and legitimacy about efforts districts are making on sustainability are increasingly important to audiences.
- Narratives on these issues have the potential to bolster prestige, showing off the good work that is being done but that is currently under the radar, can give pride for staff, and give hope to audiences.
- Stories of the making of artworks can often be as interesting to audiences as the product itself; this can be embraced as its own content.



Fig. 12

Key Learnings



Spatial Context

Integrating the artwork with the place it is located

Art is not just a means for reflection on society; it is also a way that we can envisage a future with an alternative set of practices and structures. This imaginative function of art is one of the most powerful ways it can have an impact. What if that envisaged future is not distant but rather immediate, and is possible in the space you are in, right now?

The case studies showed that there is huge potential for artworks to reflect and ask questions of their immediate context: of the district, city, time and geography that they are located within. The artworks were placed within a specific geography, and those artworks had a dialogue with the site and the people in that place. A feedback loop is created between art and site, with the two asking questions of each other, prompting audiences to consider how places can change in the age of climate crisis. There is creative potential in the interaction between art and its site, both physically and in the imagination.

The examples highlighted in this report responded to their immediate spatial context, for example through:

- Highlighting climate change risks that are affecting the specific geography of that place, e.g. flood risks, or urban heat island effect.
- Creating new green space, enhancing the landscape.
- Creating dialogue about urban greening, landscape practises, biodiversity, planting schemes, water use, and air quality.
- Highlighting and questioning local consumption practices and their effects on the environment, wealth inequalities, and societal structures.
- Considering issues around waste, transportation, energy use, and the effects of these on the environment

- Artworks that responded to the specificity of place included The Bentway looking at creating shade to mitigating the urban heat island effect; the art park in Kingston creating a dialogue about decolonisation of space and climate justice; and artworks that highlight global waste and over-consumption were present in multiple case studies.
- Interesting, engaging and revealing narratives about the environment are given further depth of meaning when the artwork is presented within a specific spatial context. This type of messaging is looked at in more detail in Key Learning 2.

Key Data

Of seven case study districts...

7 of the districts had commissioned artwork that was concerned with local environmental or climate crisis issues.

7 described artworks that had positive local impacts.

5 described artworks that themselves were designed to have a positive impact on their local environment, e.g. in biodiversity, greening, or climate conditions.

2 reported technical or logistical challenges working in outdoor spaces.

1 described a clear practice of refusing partnerships with organisations that did not meet aims for sustainable practices.

Fig. 13



Research Approach: Three scales

Three Different Scales

The report structure reflects the approach taken by the research which considered arts commissioning at different scales: the global-scale; the cultural district-scale; and the artwork-scale.

Due to the range of approaches across these different contexts, the research highlighted the value of exploring both the micro and the macro. It demonstrated the importance of sustainable actions at all levels, from the global scale to individual artwork scale. Learnings within each can inform decision-making across all scales.

Inherent throughout is an assertion of the benefits of the various connections between local-scale artwork and global-scale knowledge-sharing and partnerships.

At both the global and the local scale, the research interviews posed questions to cultural district staff, including art commissioners, about their own methodology.

1: Global-Scale

This section of the report interrogates a co-commission that partnered three districts from three different continents in one commission, titled: *A Feral Commons*. The research includes: detailed case studies of the three artworks and their districts; description of the ground-breaking approach they took to carbon footprint counting and sustainability data under guidance from UAP; and reflections on the co-commission as a whole, drawing Key Learnings from this experimental approach.

2: Cultural District-Scale

Then case study findings are presented at a cultural district-scale, over four different case study areas. This section explores sustainable commissioning practices along with key local contexts, and a deep-dive into chosen artworks that reveal more about the practices, processes and challenges of sustainable commissioning at this scale.

3: Individual Artwork-Scale

Finally we zoom into a one-off, individual, scale. A number of commissions from around the world are considered. The case study artworks demonstrate ways of working that are socially and environmentally sustainable. They are selected to represent innovative methods of incorporating sustainability in commissioning and climate messaging.

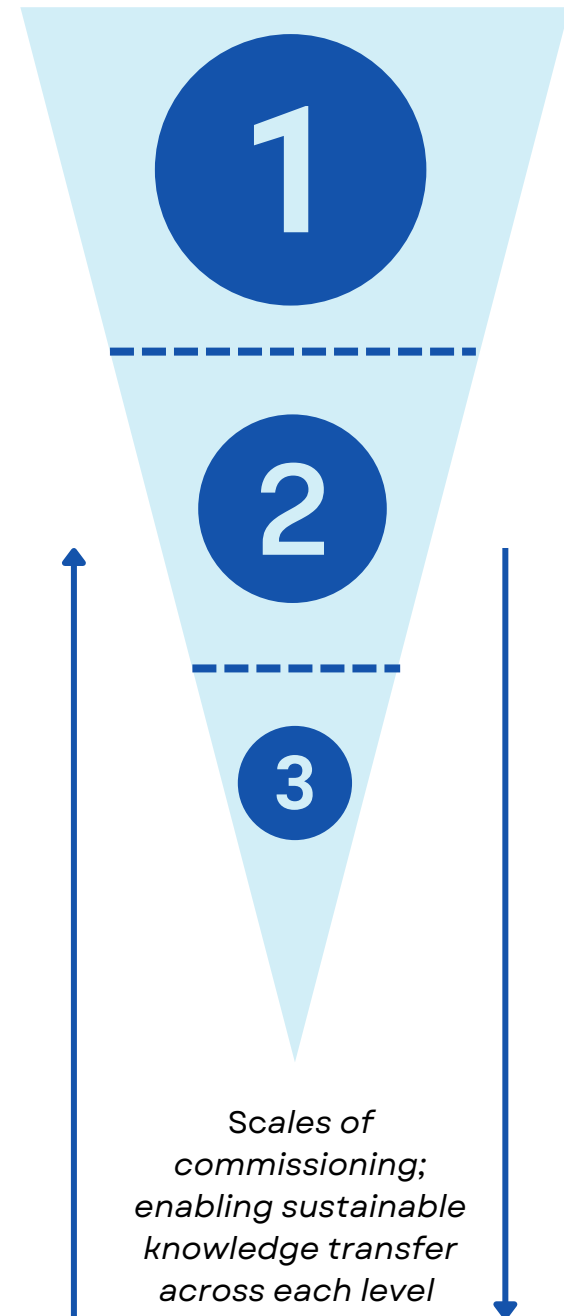


Fig. 14



Part 3

Global-Scale Artwork Commissioning Lessons from *A Feral Commons*

A Feral Commons

What is A Feral Commons?

A Feral Commons is a public artwork commission that crosses three continents, exploring issues of place, community, and ecology.

The initiative is described as a **'global co-commission'** comprising three separate but inter-related works:

- *Chain of Love: Rice and Peas Bush in Lower South Camp* by Camille Chedda in Kingston, Jamaica;
- *Ophidian's Promise* by Io Makandal in Johannesburg, South Africa; and
- *A Forgotten Place* by Muhannad Shono in Dubai, UAE

The global co-commission was led by Alserkal Advisory, in partnership with GCDN and UAP.

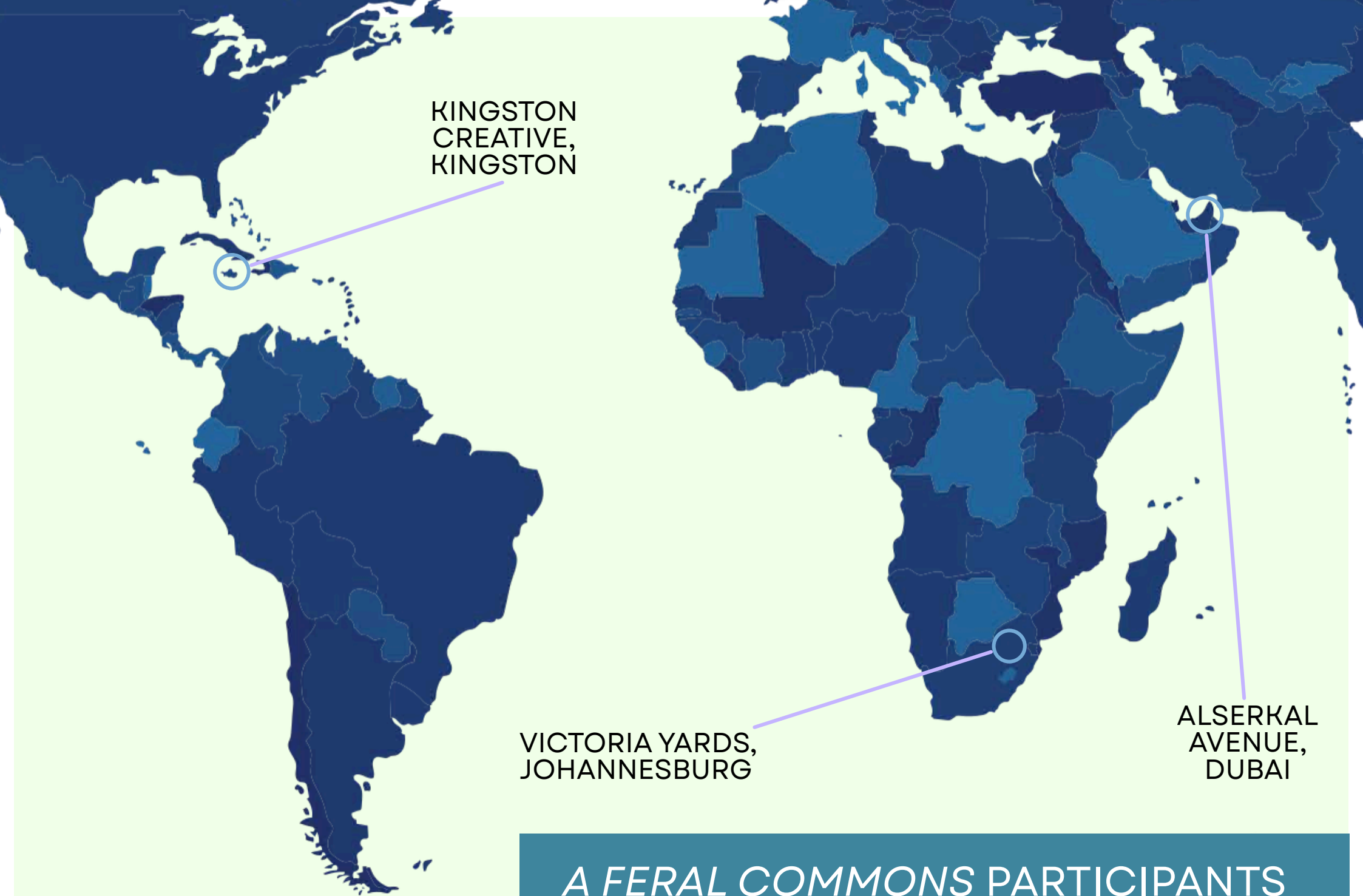
The thematic basis for the co-commission was conceived by Tairone Bastien, the curator throughout the brief, commissioning, making and installation stages of the project. The theme's intellectual underpinning was the work of Anna Lowenhaupt Tsing, in particular her work on the 'more-than-human' and the Feral Atlas project. [5]

'Feral' here is, "natural phenomena resisting human control". In response, the artists created work that explored issues of non-human interests; ecological considerations; the role of public space; and themes of sustainability.

The co-commission is unusual and innovative in a number of ways. A comparison can be made to the touring model whereby an artist's commission would usually involve a partnership of galleries or sites, with the intention that the artwork would tour to all of those sites around the world. This model means that shipping and transport costs of material and personnel are inherent. **A Feral Commons, however, proposes a different model.** There is one curator and one brief across three sites in three different continents. But within each site, a different artist is chosen to produce a site-specific work that will not tour. Instead, **the ideas, conversations, and intellectual questions are the aspects that can travel.**

Descriptions of the artworks are given in the following pages, forming part of three detailed case studies which relate to their 'home' cultural districts: Kingston Creative, Alserkal Avenue and Victoria Yards. The rationale for the approach of this research, which grounds the artworks in their site, is an assertion that there is huge value in understanding the geographical contexts for each work locally, alongside considering how they interact globally.





KINGSTON
CREATIVE,
KINGSTON

VICTORIA YARDS,
JOHANNESBURG

ALSERKAL
AVENUE,
DUBAI

A FERAL COMMONS PARTICIPANTS

Urban Art Projects (UAP)

As part of the *A Feral Commons* co-commission, UAP was engaged to produce guidance on sustainability measures throughout the lifespan of the commissions. The definition of ‘sustainability’ in this work had a three pillars approach, with social and economic measures considered alongside environmental ones.

The presence of UAP throughout the process was both effective and innovative: it meant that even before the artist had started their making processes they were being given guidance on the potential carbon footprint of their practices and their materials. With this insight, they were able to make informed decisions about their making that took into account the potential environmental impact of their work.

From the beginning, UAP held awareness-raising sessions for the artists to upskill in carbon literacy and other sustainability issues such as waste. This guidance then continued through the life of the commission: through the making process, installation, and finally an evaluation was made after installation that set out the carbon emissions of each artwork, its ‘Artwork Ingredients List’.

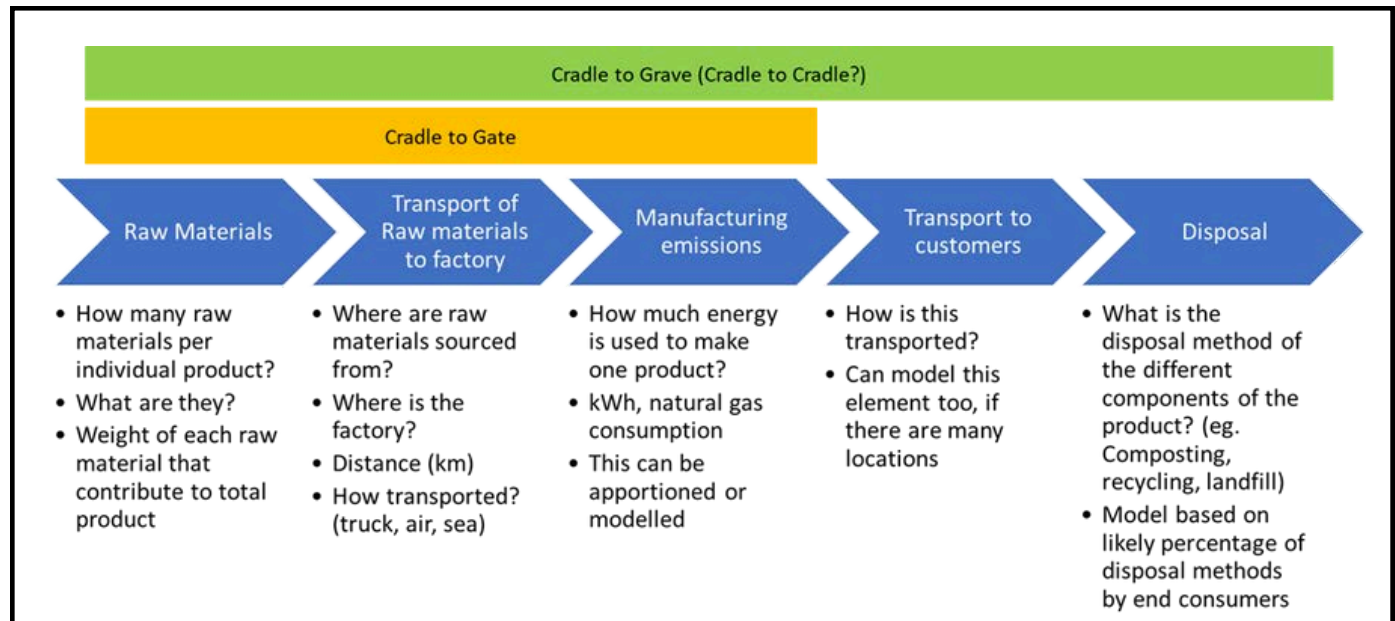
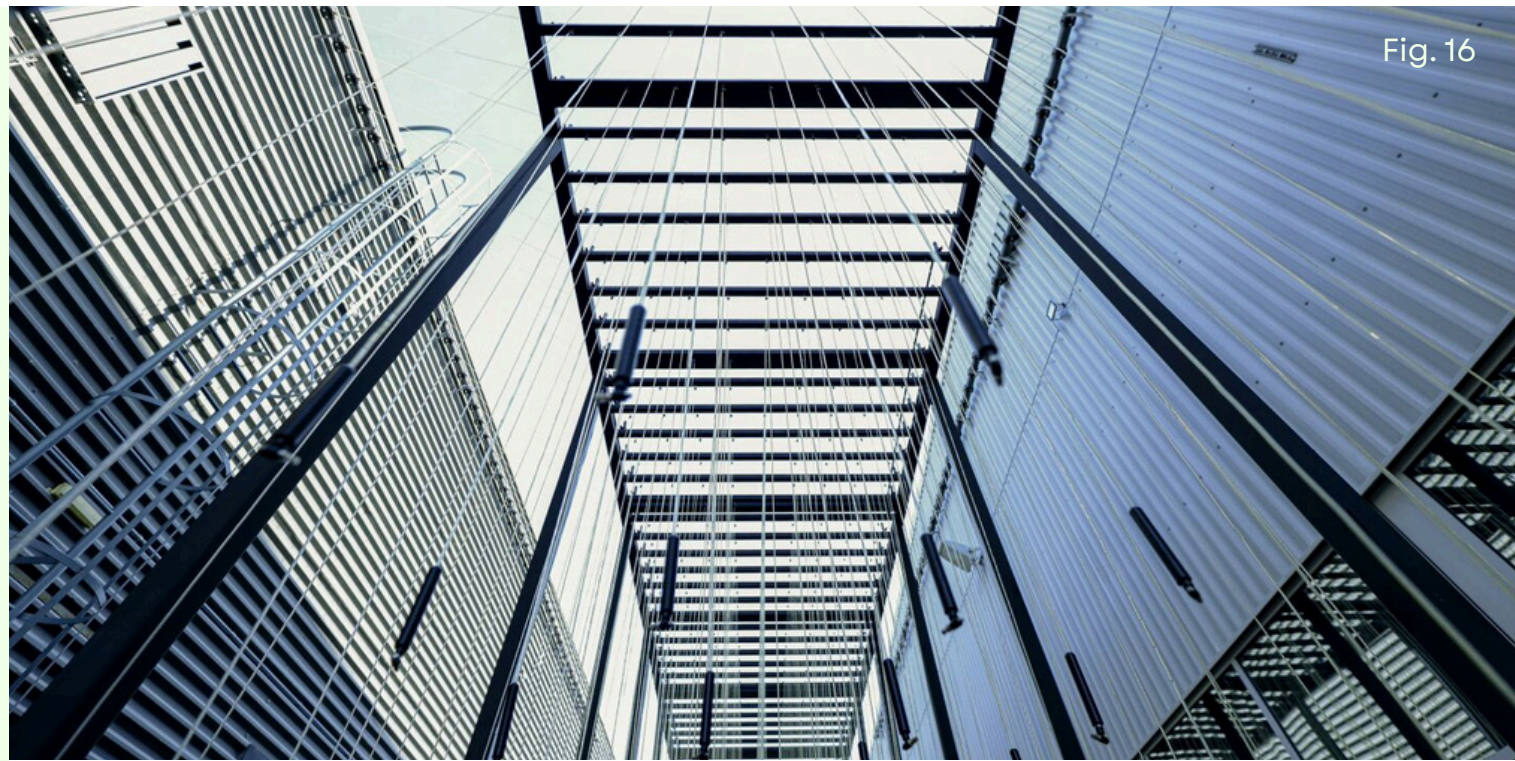


Fig 17: The ‘Cradle to Cradle’ approach used by UAP, who have set out their method for considering a more sustainable approach to materials use in artwork creation.

Artworks Ingredients List

The Artwork Ingredients List (AIL) is a tool that sets out the carbon footprint of the artwork, giving the emissions for elements including flights, materials, transportation, electricity, fuel and gas used, and packaging and waste. **The AIL is the means through which the environmental impact of *A Feral Commons* was understood.** Although carbon counting is an established and growing industry, one element that is unusual in its use here is that artworks are bespoke by their nature, and often include wide varieties of materials, including found or re-used materials, so the method for carbon counting can be highly complex.

The AIL is created through project managers in each location collating data about their processes and regularly sending this to UAP who calculated the whole. Rolling data collection meant that artists could make decisions as they worked about carbon-emitting practices. For example, it was noted that there was a conscious decision to avoid travel as much as possible during *A Feral Commons*. Whilst it was agreed that some in-person communication and experiences are beneficial in a way that online calls cannot be, in-person travel was largely kept to a minimum.

An important part of the AIL is communications, and consideration has been given to how the story of the emissions can be told. **The carbon emissions counting is displayed in a unique and highly accessible way,** similar graphically to a clothes label or the nutritional breakdown on packaged food. An example can be seen in the image (right). The graphic summarises the total carbon emissions in a manner that feels easy to understand for a viewer, even someone who knows very little about the subject matter. Its design prompts questions and discussion, for example when looking at which type of activity creates the highest emissions and comparing these. The AIL summaries for each artwork are given as part of the case study sections later in this report.

It should be noted that there are a number of exclusions in the UAP data for *A Feral Commons*, which are: digital emissions; post-install repairs and maintenance; emissions relating directly to the place the installation is located in. It was also noted that there is a continuing challenge in understanding the carbon footprint of old, re-used or re-purposed materials (where it is easier to source that data for new materials). In the Case Study pages that follow, each study includes a page showing the data for the Artwork Ingredients List information provided by UAP.

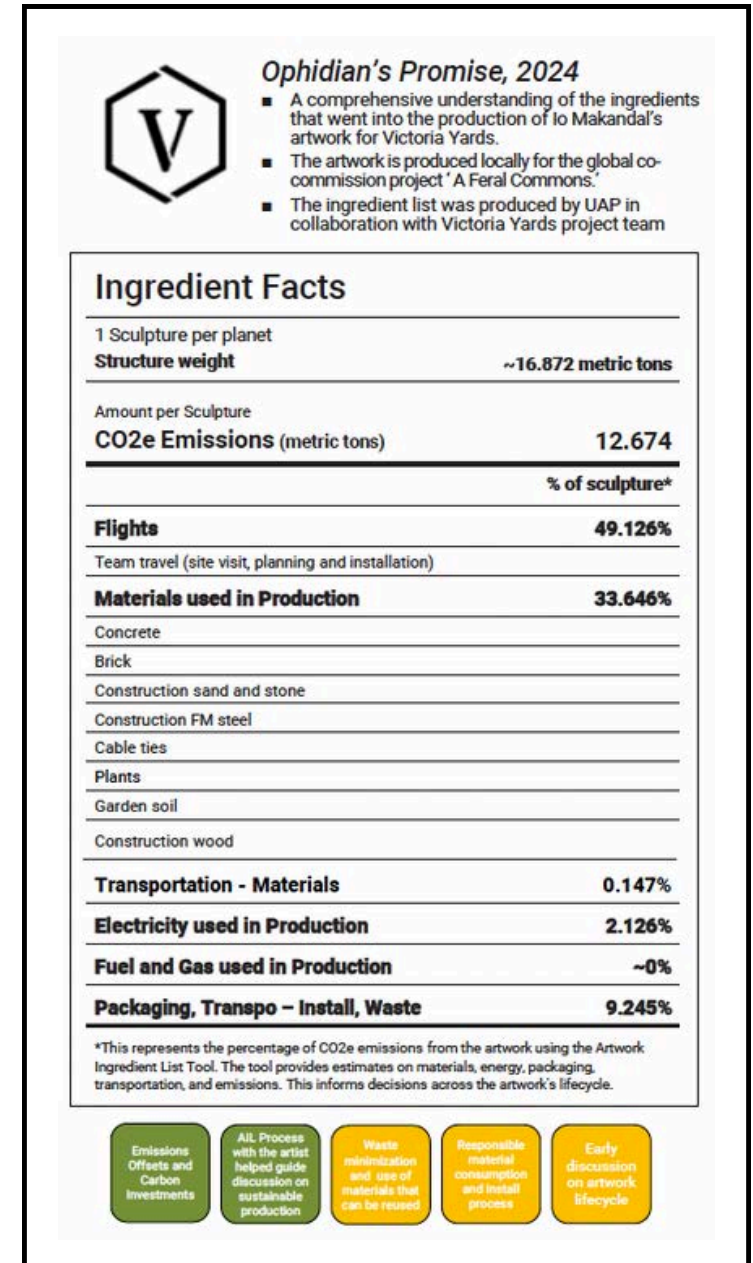


Fig 18: an example of the 'Artwork Ingredients List' carbon footprint label

Public Art 360

The artworks for *A Feral Commons* were also assessed from **the perspective of social sustainability and social value metrics** through UAP's research programme Public Art 360 (PA360). The research assessed the artworks' impact across eight categories: Place, Society, Culture, Economy, Sustainability, Wellbeing, Wisdom, and Innovation. The data provided was both quantitative and qualitative. As these impacts were common across all three artworks, they provided a framework for organising the findings.

Whilst the framework was common to all, in each location the form of the assessment was different and was undertaken by different partners. The research programme is linked to PhD research by an academic at Griffith University in Australia, which brings academic thinking and criticality to the work. UAP and the university will continue to develop the PA360 research programme further, with the *A Feral Commons* commissions being just one part of the development of this framework.

There were some limitations and challenges to the approach used for PA360, for example, the context of considering all three artworks together meant finding commonalities in a set of case studies with different places, artists, timelines, communities, methodologies and consultants carrying out the data collection in each place.

In addition, the pre-install survey was conducted in a context where the commissions had started, so the places were already being prepared for the installations. Lastly, the PA360 method is a new tool and is experimental, so in keeping with this, there were new issues to be resolved as they were discovered. But these issues represented benefits too: in the context of a global co-commission the PA360 framework being shared is highly revealing knowledge-sharing and thought leadership in the field of sustainable commissioning.

Analysis of the experiences for the three artworks in the co-commission has resulted in the following headline learnings by UAP:

- Understand the Vision of the Artist, Curator, and Client
- Finding the right research partners
- Frameworks are essential, but flexibility is key
- Evaluation on different time scales
- Need for funding
- Continuous learning and improvement

Fig. 19

***A Feral Commons*: headline findings from the global co-commission**

A Feral Commons was innovative throughout, in a number of ways. Inherent in the conception of *A Feral Commons* was **an ambition that the project be a sustainable model for commissioning**. Although the project was a one-off, it was also a testbed, with the aim that the processes it trialled could be reviewed and adapted by others in future.

To that end, we have seen how UAP produced transparent data for the artworks and made this available through the Artwork Ingredients List method for publicising **carbon footprint counting** and the Public Art 360 reports for **social value metrics**.

This research has considered the three artworks, both from **the context of within their specific geographical locations** (their cultural districts) as well as in the context of a global set of connections provided through the commission. The research provides a series of learnings that can be drawn from the artworks and the related sustainability data-sets, to add to the projects' outcomes.

The learnings from the review of the collaboration included:

- Knowledge sharing between the three artists, as well as the wider teams of project managers and producers from each location, was an outcome in itself and provided huge additional value. This ranged from conversations that opened up new intellectual ground to practical, problem-solving advice.
- The fact that these conversations started at the beginning meant the process could be much more meaningful, with artists sharing their experiences in real time as commissions developed, and looking to adjust practices to reduce carbon footprints.
- SDG 17 relates to 'partnerships to achieve the sustainable development goals': this project was a practical example of how this can be achieved.
- Collaboration and common goals meant that support could be offered across the sites.
- The sharing of the public programmes and community engagement approaches was another focal point for learning and reflection.
- The fact that this was an innovation and an experiment was important in itself; showing a creative spirit in process as well as content.



ALSERKAL AVENUE, DUBAI



Fig. 21

Introduction

Alserkal Avenue is a district located in Dubai, UAE, which is home to a number of cultural institutions and businesses, and houses artist studios as part of the Alserkal Avenue Foundation. The district's sustainability initiatives include generating renewable energy through solar panels, waste segregation and recycling, shading and planting, and improving pedestrian mobility through the reduction of vehicles on the Avenue. Materials and infrastructure chosen for building fit-outs are sustainable and energy efficient. There is also a pilot project for collecting wastewater from AC units that is used for grey water in washroom flushes.

At Alserkal Avenue, the commissioning strategy aims to address the cultural specificity of the location of Dubai, with, for example art looking to address the role of belonging, and issues of movement and migration. An art commission, *The Circle Game*, by Mary Ellen Carol (2016) addresses issues of 'when did you arrive', 'when will you return?', which respond directly to the fact that there are over 200 nationalities represented in Alserkal, and speaks to the short timespan of expat living-cycles in Dubai.

There is a planting scheme for the Avenue which explores concepts such as new forms of landscaping through decolonisation of botany. Another aim of greening initiatives is to reduce the outdoor temperature within this context of a hot climate.

Alserkal Advisory: the leaders in the global co-commission

The global co-commission was a three-year initiative (2022-2024) to prototype and document principles of responsible commissioning of public art. Alserkal Advisory conceptualized the global co-commission in partnership with GCDN. *A Feral Commons*, curated by Tairone Bastien, spanned three cultural districts across three continents: Alserkal Avenue, Dubai (UAE), Victoria Yards, Johannesburg (South Africa), and Kingston Creative, Kingston (Jamaica). The initiative is supported by UAP, whose proprietary tools help measure the impact of public art not only by providing a framework to audit the project's CO2 emissions, but also by tracking and reporting on the societal impact and afterlife of the three commissions in each of the participating districts.

Artwork in Focus: *A Forgotten Place*

Muhannad Shono's ***A Forgotten Place*** is a site-specific installation that addresses the environmental and climactic conditions of Dubai by focusing on the air conditioning units that are ubiquitous in Dubai, and Al Quoz in particular. Shono's work reused moisture from AC units, engaging with Dubai's environmental conditions.

The installation is a structure that carries waste moisture from the AC units to repurpose it as irrigation for planting.

The piece prompts its audiences to notice the small 'feral' planting that springs up organically around AC units across the city: the city's AC Ecologies.





Fig. 23

Key Learnings

Care and repair

The environmental practices at Alserkal Avenue align with the curatorial strategies which look to create work that is grounded in a principle of care. This means consideration of practices that promote the economics of repair. The landscaping in the area shows this through schemes such as the de-paving space to allow nature to grow. Similarly the art commissioning of *A Feral Commons* gave rise to the concept of ‘AC Ecologies’, which prompts a need to show care for something previously totally overlooked.

Questioning the approach

The representatives of Alserkal spoke of the importance of a non-western focus in their commissioning practice, noting that terms used to frame discussion such as ‘culture-led regeneration’ and ‘gentrification’ are western terms, originating in places like the UK and USA. One goal of Alserkal’s work is to widen the discussion and bring in practices that pose different questions, such as issues of decolonisation of botany, emphasising repair, and creating new forms of documentation of non-western approaches. Other approaches that critique societal structures include shifting from thinking about artwork in context of the anthropocene, which foregrounds human intellect and experience, to considering artwork through non-human and ecological lenses.

Complexity and resilience

The work *A Forgotten Place*, like the other *Feral Commons* commissions, underwent a series of developments and alternative approaches, changing as time passed and new challenges came to light. As the project was an outdoor, site-specific commission, there were a series of issues to consider such as site management, and liaison with local city planning officials. At one point, the municipality installed a new bicycle lane on the site that had been earmarked for the installation. The piece had to evolve and develop to accommodate these unexpected hurdles; it had to be resilient. The work necessarily had a strong interdisciplinary element, and was complex. The stakeholders involved were required to really believe in the worth of the project, and this belief was crucial to the strength of the final installation.

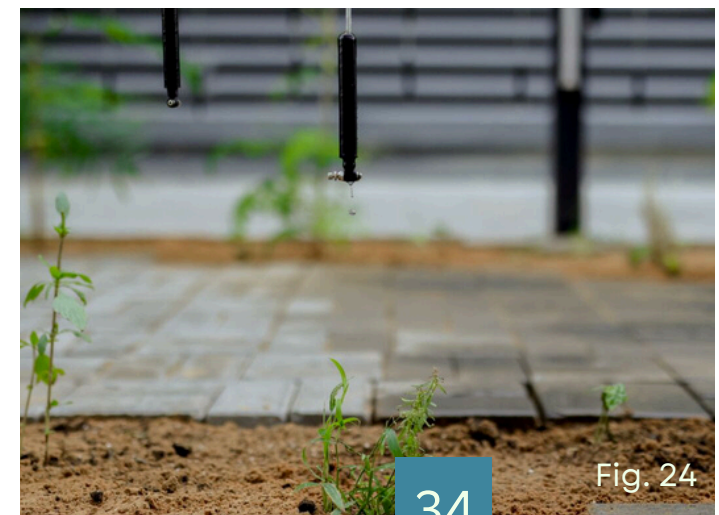
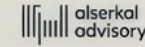


Fig. 24

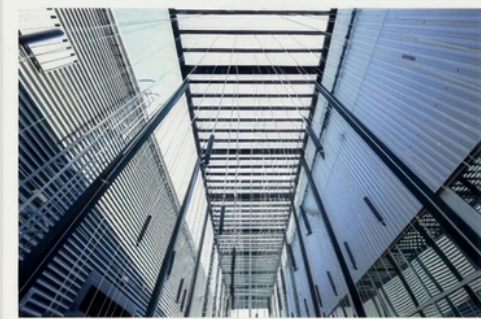
UAP's Artwork Ingredients List for *A Forgotten Place*



A Forgotten Place, 2024

Artist: Muhannad Shono

Client: Alserkal Avenue x Global Cultural Districts Network



Location: Alserkal Avenue, Dubai, UAE

AIL Calculation | Summary

Total tonnes of CO2e of project

19.815

General Details

Name of Project	Alserkal Advisory x GCDN 'A Feral Commons'
Carbon Accountant	Gilbert Guaring / Chris Roque
Project Manager	Nikoo Ghiasvand . G
Location of Installation	Alserkal Avenue
Hours Taken to Complete Audit	30

Carbon Summary

Materials	12.090
Waste	0.000
Transportation – Materials	0.066
Electricity – Direct	0.278
Fuel & Gas	0.041
Flights	7.540
Packaging	0.006
Transportation – Install Site	0.000
Life	0.000

A Forgotten Place, 2024

- A comprehensive understanding of the ingredients that went into the production of Muhannad Shono's artwork for Alserkal Avenue.
- The artwork is produced locally for the global co-commission project 'A Feral Commons.'
- The ingredient list was produced by UAP in collaboration with Alserkal Advisory project team

Ingredient Facts

1 Sculpture per planet

Structure weight ~3.315 metric tons

Amount per Sculpture

CO2e Emissions (metric tons) **19.815**

% of sculpture*

Flights **38.05%**

Team travel (site visit, planning and installation)

Materials used in Production **61.02%**

PVC pipes and fittings

Metal tubes S355 various dimensions

Enamel metal paint

Powder coat paint

Irrigation and condensation pumps

GRP water tank

Locally sourced sweet soil

Variety of local plants i.e. Chloris Gayana, Pumpkin, etc

Fuel and Gas used in Production **0.21%**

Electricity used in Production **1.40%**

Packaging, Transpo – Install, Waste **~0%**

*This represents the percentage of CO2e emissions from the artwork using the Artwork Ingredient List Tool. The tool provides estimates on materials, energy, packaging, transportation, and emissions. This informs decisions across the artwork's lifecycle.

Emissions Offset and Carbon Investments

All Process Reduced Potential Emissions by 30%

Waste minimization and use of recycled and reclaimed materials

Responsible material consumption and install process

Early discussion on artwork lifecycle

Fig. 25: This page shows the data for the Artwork Ingredients List information provided by UAP

VICTORIA YARDS, JOHANNESBURG



Fig. 26

Introduction

Victoria Yards (VY) is an organisation that operates a 20,000m² area in Johannesburg on the site of a historic laundry. VY has 52 tenants, which include a range of businesses and NGOs as well as community outreach organisations, charities, artists and craftspeople. There is, for example, a ‘people’s pantry’ scheme onsite, food gardens, and clinic.

The area is an ex-industrial site that has been repurposed, so it includes a number of light industrial sites and heritage buildings. The wider local area is close to residential zones including state-owned housing with many different communities including immigrants and refugees, and there is poverty in the area. The VY sees itself as a “lighthouse” organisation for its locality, and VY’s social sustainability approach involves linking with NGOs that are based on site.

The sustainability strategy for VY is not formalised, rather it is a set of grassroots initiatives from the businesses and organisations on site. For example, there is an initiative that maintains food gardens in the district. The vision for the area focuses on bringing stakeholders into the process of reuse of the brownfield sites in the area.

Artwork in Focus: *Ophidian’s Promise*

Ophidian’s Promise is an artwork by Io Makandal onsite in VY. It is a newly constructed wildlife bridge that crosses the Jukskei River culvert. The artwork integrates reuse and site-specific history using reclaimed bricks from VY. The work “sets out to foreground urban ecologies and wildlife as an integral part of the urbanity that depends on it”.

As a place-specific outdoor art commission that also had engineering and public realm elements, the commission was first of its kind in VY. The project used circular economy processes in its creation, with Io sourcing excavated brick from around VY for the construction of the bridge, linking the artwork to the history of the area through its built materiality and archaeology.

The carbon footprint of the materials used in the project were analysed through the partnership with UAP. The project is also a seed bank, with seeds sourced from the Soweto Highveld Grass biome that included endangered plant species: the river now becomes a self-seeding conduit.

Although there is a public art register in Johannesburg, and a percentage for art system, Makandal’s piece at VY was different to other public artworks in that it is a creative intervention that performs beyond aesthetics and communication. It is a habitat, and forms an “acupuncture” approach in its impact on the environment. It is reflective of the area’s history, and prompts the viewer to see the area differently. It was noted that younger people in the area were proud to have the art there and feel very lucky to have it.



Fig. 27

Key Learnings

“Preparing the ground”: the importance of the local authority

Any artwork that is created as a bespoke element in public space requires careful planning and detailed consideration of any processes that might be stipulated, from permits to technical design to stakeholder communications. These considerations are only heightened when dealing with a structural engineering project like a bridge. The project emphasized 'preparing the ground' metaphorically and literally for permits and advocacy.

This 'preparation' included the technical processes for building a bridge in an outdoor space such as water permits, environmental impact assessments, and structural advice, alongside other softer forms of influence such as building the connections required with staff at the local municipality. The project highlighted the importance of supportive local authority workers who can understand the work and its aims. This means they assist with ensuring the correct permits and processes are undertaken, whilst also advocating internally for the work which may be a new, unexpected, or challenging workload to deal with for most municipal workers. They can advise on how to protect local habitats. Given the complexity of working in public space, there is the need for a project manager with experience of this way of working.

When it goes right, a project like this has the power to show local authority workers the benefit of public art, and pave the way for future commissions to have an environmental impact.

The symbolic bridge

The *Ophidian's Promise* bridge acts as a metaphoric and symbolic 'heart' of the area, and a source of local engagement. The artist was concerned with how the artwork would benefit the community and worked with local people in its creation, with outreach work such as workshopping concepts like 'green graffiti'. The community was engaged through workshops and participation in the construction. There were bricklaying and planting sessions, and the bridge is used in education programmes to learn about ecology, local wildlife, and to explain this through making.

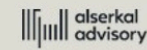
Environmental partnerships

The artwork included a collaboration with the NGO, Water for the Future, whose team is working on a long-term project to repair the river from 'source to mouth'. The programme was in progress for seven years when *Ophidian's Promise* was being built, in three major sections of the river. The collaboration was a key environmental partnership and communication tool. Water for the Future came to see the artwork as one means of communicating the project; and as a result now want to do more artwork along the river.



Fig. 28

UAP's Artwork Ingredients List for *Ophidian's Promise*



Ophidian's Promise, 2024

Artist: Io Makandal

Client: Victoria Yards x Alserkal Avenue x Global Cultural Districts Network



Location: Victoria Yards, 16 Viljoen Street, Lorentzville, Johannesburg, South Africa

AIL Calculation | Summary

Total tonnes of CO2e of project
8.480

General Details

Name of Project	Alserkal Advisory x GCDN 'A Feral Commons'
Carbon Accountant	Gilbert Guaring
Project Manager	Stephen Hobbs
Location of Installation	Victoria Yards
Hours Taken to Complete Audit	20

Carbon Summary

Materials	2.8351
Waste	0.0004
Transportation – Materials	0.0124
Electricity	0.6598
Fuel & Gas (Fabrication)	0.000
Flights	4.1935
Packaging	0.000
Transportation – Install Site	0.7790
Life	0.000

Ophidian's Promise, 2024

- A comprehensive understanding of the ingredients that went into the production of Io Makandal's artwork for Victoria Yards.
- The artwork is produced locally for the global co-commission project 'A Feral Commons.'
- The ingredient list was produced by UAP in collaboration with Victoria Yards project team

Ingredient Facts

1 Sculpture per planet	
Structure weight	~16.872 metric tons
Amount per Sculpture	
CO2e Emissions (metric tons)	8.480
	% of sculpture*
Flights	49.126%
Team travel (site visit, planning and installation)	
Materials used in Production	33.646%
Concrete	
Brick	
Construction sand and stone	
Construction FM steel	
Cable ties	
Plants	
Garden soil	
Construction wood	
Transportation - Materials	0.147%
Electricity used in Production	2.126%
Fuel and Gas used in Production	~0%
Packaging, Transpo – Install, Waste	9.245%

*This represents the percentage of CO2e emissions from the artwork using the Artwork Ingredient List Tool. The tool provides estimates on materials, energy, packaging, transportation, and emissions. This informs decisions across the artwork's lifecycle.

Emissions Offsets and Carbon Investments

All Process with the artist helped guide discussion on sustainable production

Waste minimization and use of materials that can be reused

Responsible material consumption and install process

Early discussion on artwork lifecycle

Fig. 29: This page shows the data for the Artwork Ingredients List information provided by UAP

KINGSTON CREATIVE, KINGSTON



Fig. 30

Introduction

Kingston Creative is a non-profit arts organisation located in the historic downtown area of Kingston, Jamaica. Downtown Kingston was historically the creative heart of the city, as the home of internationally-renowned musicians and artists. It is a historic harbour area of around 20 acres which includes a large number of heritage buildings and cultural sites. Over time, parts of the area were abandoned by residents, and the area had higher poverty and crime rates than other districts in the city. But things are changing: it is an area of great creativity, and now the district has a stage and communal spaces including green spaces, and closed roads.

The climate in Kingston is hot, and it is a coastal context with risks including flooding, heat and water shortages. The local environment also suffers from problems with littering. There is no 'top-down' sustainability strategy at Kingston Creative, with the approach instead being that action is undertaken locally at grassroots level.

Artwork in Focus: *Chain of Love: Rice and Peas Bush in Lower South Camp*

The artwork ***Chain of Love: Rice and Peas Bush in Lower South Camp*** by Camille Chedda comprises a transformation of a local park, the creation of a new arch, an installation that encourages the growth of a rice and peas bush, and a mural. The work brings the park back into public use, meaning that the community are now able to be with nature in a new Climate Art Park.

The site in Parade Gardens was originally a downtown park that was left wild, overgrown, and filled with junk and trash. It is owned by central government but had fell out of care; looked after by just one community elder as a citizen-maintained park but it was padlocked and inaccessible to the public.

Chedda became interested in both physical and spiritual access to the park. The curatorial vision for *A Feral Commons* meant considering an 'alternative view of the commons', which the park spoke to clearly. Another theme is the integration of human and non-human ecosystems, in which care, environmental resilience, and building a community for the future all play a part.

The rice and peas bush is seen locally as a weed and is a sign of abandonment, so the work raises the profile and perception of the bush, allowing us to see a future self. The planting is edible and medicinal as well as having wider cultural resonances that speak to the history of colonialism and land use in the area. The "Chain of Love" tunnel arch prompts a conversation about community, history and nature. Programming in the space allows for a sense of care from the residents, which can use the park to learn new skills, curate events, festivals, and host markets. The specific context of the co-commission meant that the work here was innovative; starting conversations about materials for example, with UAP guiding the process on issues such as waste.



Fig. 31



Fig. 32

Key Learnings

A 'bedding in' period

The park acts as a symbolic guide to the process of community-building and placemaking for people, plants and wildlife, in that the space requires a “bedding in” period, for both the local community and ecological growth. The people and the plants are all ‘growing in’ to the space, allowing for it to create a sense of place over time. This process of change over time operates more widely in Kingston Creative too, as people generate concerts and cultural activity, more infrastructure was built, and grassroots activity and activism led the way.

Community at the heart

The focus for the park was to have the community at its heart, a fitting state for the space which had been under the guardianship of a local person for many years. The community elder, Mr Manning, who had cared for the park, was honoured in the re-naming of the park. The construction work for the space was completed with aid of the community, the artwork itself created a space with a sense of community ownership, and these acts have meant that the area has a sense of local pride and use which means the area is now cared for communally, it is no longer somewhere that litter is left. The park is used, and the project is having an impact.

Seeing our future selves

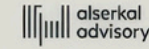
Chedda has stated that the artwork allows us to see a future self. This is a ‘regeneration’ project, not just in an economic and social sense but in an ecological sense.

Education has been a key part of the process, and local children supported the project, which gives an exciting sense of how the future may unfold. The piece was also concerned with changing the perception of the plant itself, the rice and peas bush, to shift perceptions of a weed as culturally and ecologically valuable: something part of nature, part of biodiversity, and showing the symbiotic nature of the sites’ planting and its community.

Global and local

One of the challenges of the commission was that the combination of local and global approaches meant navigating different cultures and contexts. The team at Kingston Creative stated that Jamaica’s complex history means that it has always existed at the intersection of local and global; this is a key part of Kingston’s history and identity. The language of the commission is loaded though; the word ‘feral’ has different connotations in each place. The team reflected on the term and its implications in a post-colonial context; and discussions were held about its meaning and potential interpretation by the local community. The diverse perspectives brought a new dimension to the work and fostered reflection on the large and small issues that can arise when leading a global co-commission but operating in a local context.

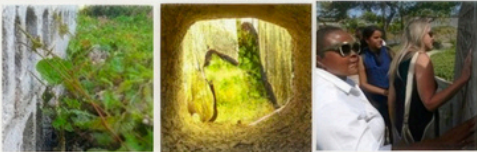
UAP's Artwork Ingredients List for *Chain of Love*



Chain of Love, 2024

Artist: Camille Chedda

Client: Kingston Creative x Alserkal Avenue x Global Cultural Districts Network



Location: South Camp Road, Kingston, Jamaica



AIL Calculation Summary	
Total tonnes of CO2e of project	
2.319	
General Details	
Name of Project	Alserkal Advisory x GCDN 'A Feral Commons'
Carbon Accountant	Gilbert Guaring
Project Manager	Susanne Fredricks
Location of Installation	South Camp Road
Hours Taken to Complete Audit	15
Carbon Summary	
Materials	1.101
Waste	0.000
Transportation – Materials	0.022
Electricity	0.047
Fuel & Gas (Fabrication)	0.000
Flights	1.149
Packaging	0.000
Transportation – Install Site	0.000
Life	0.000

Chain of Love, 2024

- A comprehensive understanding of the ingredients that went into the production of Camille Chedda's artwork for Kingston Creative.
- The artwork is produced locally for the global co-commission project 'A Feral Commons.'
- The ingredient list was produced by UAP in collaboration with Kingston Creative project team

Ingredient Facts

1 Sculpture per planet	
Structure weight	~0.925 metric tons
Amount per Sculpture	
CO2e Emissions (metric tons)	2.319
% of sculpture*	
Flights	49.54%
Team travel (site visit, planning and installation)	
Materials used in Production	47.45%
Cement, gravel and sand foundation	
Building blocks	
Construction adhesives	
Flat MS Steel and cross bracings	
Steel bendings	
Trellis nettings	
Mural paint	
Paint sealer	
Transportation - Materials	0.95%
Electricity used in Production	2.05%
Fuel and Gas used in Production	~0%
Packaging, Transpo – Install, Waste	~0%

*This represents the percentage of CO2e emissions from the artwork using the Artwork Ingredient List Tool. The tool provides estimates on materials, energy, packaging, transportation, and emissions. This informs decisions across the artwork's lifecycle.

Emissions Offsets and Carbon Investments

AIL Process with the artist helped guide discussion on sustainable production

Waste minimization and use of materials that can be reused

Responsible material consumption and install process

Early discussion on artwork lifecycle

Fig. 33: This page shows the data for the Artwork Ingredients List information provided by UAP

Fig. 34



Part 4

Cultural District-Scale

CASE STUDY CULTURAL DISTRICTS



THE BENTWAY, TORONTO



Introduction

The Bentway is a non-profit organisation based under the Gardiner Expressway in the centre of downtown Toronto. The area below this active highway was transformed into a 1km park through adaptive re-use, providing vital public space for the city. The Bentway is transforming underutilized land into a destination for recreational and cultural activities through the provision of new amenities. It caters to the growth of residential properties, turning an area that acted as a divider into a connector by providing pedestrianised routes to other parts of the city. Phase one opened in 2018 and an additional pilot space opened in 2023, with a desire to continue its expansion considerably in future years. The Bentway test sustainable initiatives within this environment, with a recent pilot using expressway rainwater runoff for watering the gardens.

Redefining public art

The Bentway is emerging as a leader of public art commissioners in the city due to its thoughtful, responsive approach which feels cutting-edge. Moving from traditional models of commissioning permanent monuments, it perceives public art to be an ever-evolving concept that responds to diverse communities within the changing city. Temporary, site-specific works are commissioned in media including performance, dance and sculpture. Public space is activated through themed ‘seasons’ across the year, which can attract over 100,000 people every season.

Sustainability is embedded into The Bentway’s strategy and threads through commissioning, planning, and operations. Unlike other organisations, the planning and design team are in-house, which creates an iterative, informed, process whereby programming and design teams can learn from each other and inform future work. This enables artworks to be used not just to animate space, but to also become a means of better understanding public space. Within their *Beyond Concrete* season for example, The Bentway team were able to combine their long-term study around resilient planting with the commissioned artists' desire to include shade and salt-tolerant plants in the artwork. This approach helps to inform the future of public space design, and makes artists key stakeholders in the process.

Responding to climate change

Canada is rapidly experiencing the impacts of climate change, with an increase in forest fires and a climate that is warming twice as fast as the global average [6]. Due to the elevated expressway acting as a canopy, The Bentway is therefore emerging as a valuable resource: during Toronto's increasing temperature spikes it provides one of the largest shaded public spaces in the city. Programming responds to this, with the *Sun/Shade* season exploring shade as an essential public resource.

Community engagement

The Bentway takes an intersectional approach to sustainability, with community involvement and outreach being central in catering to a diverse city. To increase access, they offer free and low-cost programming across the year. The programme connects urban communities with sustainability, and explores the co-existence between the natural and the built environment. In acknowledging the Canadian context and the longstanding environmental knowledge within local communities, the commissioning process includes building relationships, and consulting with, a diversity of stakeholders such as elders and young people from Indigenous groups who provide feedback on the project's framing, development and life-cycle.

Season Spotlight: *Beyond Concrete*

The *Beyond Concrete* season promoted an organisation-wide initiative to address sustainability through programming and operations. Philippines-based artist Leeroy New was commissioned to create the work *Balete Bulate Bituka*, which explored Toronto's relationship to waste, and also The Bentway's own history as a lake infill site built on city waste. Created with community, the work emphasized the importance of sustainable practice in our daily lives.

The project had significant social impact, helping communities to understand their own consumption and forging new partnerships with the diaspora from The Philippines. New worked with community stakeholders to source and shape materials and create a large-scale sculpture, constructed from 7,500 pounds of bamboo and discarded plastic from around the city. Sustainability was embedded into the afterlife of the project, with bamboo donated to a local farm.

The operations side involved working with the Centre for Sustainable Practices in The Arts and two fellows from the Public Space Fellowship to help understand impacts and consumption through an audit process. The study found that 87% of the materials used for the season's commissions were either recycled, reused or donated. Statistics gathered in this way are used as a benchmark for future seasons.

Changing practice

Sustainability is embedded through The Bentway's commissioning process and features in the early stages of contracting and decision-making. The team considers artist impacts, weighing up the cultural benefits of commissioning international artists against the environmental impact they may have. Rather than stopping international collaborations through travel altogether, the team instead explore ways to make engagement more authentic and sustainable, and as a means for achieving social value. They achieve this through concepts such as longer-term artists residencies that embed artists into communities and reduces the carbon footprint of travel. Longevity of temporary artworks and sustainable material use is also built into artists' contracts. Having an in-house production team, as well as an "afterlife plan" for the materials or artwork, helps artists to execute their ideas sustainably, source alternative materials, and find sustainable afterlife partnerships.

In programming, curators connect people with the climate emergency through both direct and indirect approaches, and they aim to bring joy and inspiration into sustainability messaging. An example includes a family-friendly eco-grief rave that was commissioned as part of *Beyond Concrete*. This occurred at the same time as some of the worst forest fires in Canada and so fostering collective reflection was a powerful way to bring the local community together.

Challenges

Limited funding and capacity is a key challenge for sustainable projects, with sustainability work relying on expanded roles and budget. Limited training was also a barrier, particularly when trialling new ways of working that were more sustainable. For example, at The Bentway, a project prioritised sustainable sourcing of local materials such as fallen trees to use as wood. However, the wood had to be treated to ensure it was not a fire risk. Despite this unforeseen added cost, the project materials could then have an afterlife as they were used in the development of a community centre. At a time of austerity in Canada with the arts facing cuts, there is concern over how to move forwards.

"There just isn't recognition of the role that public art can play in changing the conversation and the thought leadership that artists and arts organizations are developing around sustainable practices... it can't continue through just the goodwill of the people involved."

Anna Gallagher-Ross
Senior Manager, Programming



SOUTHBANK CENTRE, LONDON

Fig. 36

Introduction

The Southbank Centre is the UK's largest cultural centre. Based on the south bank of the River Thames in central London, the 11 acre site features the Royal Festival Hall, Hayward Gallery and The Queen Elisabeth Hall in addition to a number of outdoor public spaces along the riverside and a renowned skateboarding space. Every year the Southbank Centre welcomes an average of 24 million visitors a year from around the world, and holds 3,500 events each year. The programme involves 100,000 artists annually with 40% of programming being free of charge. The site is on lease from Arts Council England (ACE) which also funds a third of the Centre's operating budgets. A funding requirement from ACE is to report on carbon emissions, which is achieved by using the 'Gallery Climate Coalitions Calculator' [7].

Changing culture

The Southbank Centre team focus on the three pillars of sustainability within their strategy: environmental; social; and economic. The overall vision is to embed this approach into the core of decision-making across all departments. To achieve resilience, the Southbank Centre aims to create a culture of sustainability through continuously challenging staff and stakeholders to push initiatives further.

There is an acknowledgement that even seemingly small changes can lead to big impacts. Therefore, in each department there are specific sustainability targets which are addressed through both a top-down and bottom-up approach.

The top-down approach involves an environment-focused executive committee that brings different departments together to provide governance and high-level management. Within this, an environmental manager works with each department independently on their targets. Each department has 4-6 targets at one time, with aims such as a target for 50% carbon emissions reduction by 2025 and 80% by 2030.

This is complimented by a grassroots sustainability champions group, formed of self-nominated staff within departments. These people drive sustainable work culture and contribute to collective environmental action within areas such as waste management. The Southbank Centre team are proud to have an active group across the teams and departments who drive enthusiasm, determination and willingness around sustainable initiatives.

Evolving practice

The Southbank Centre is focused on making pre-existing initiatives more sustainable. A key example is their signature water fountains, which now use recycled water and have moved to solar power for the pumps,



Community outreach

In terms of programming, Southbank prioritises accessibility and engagement whereby staff work with the local council to create programmes that are accessible to local residents at highly discounted rates. The organisation also believes that transforming public space to become more sustainable and environmental has profound social impacts, such as lowering antisocial behaviour. This improves the space for communities. An example of this approach is the greening initiative the ‘pocket forest’, which provides vital green space within the urban centre of London.

Art commissioning & artist engagement

Changing the culture of traditional commissioning when working with artists is a key focus for the Southbank. The team highlight the need to balance advocating for the sustainability agenda as much as possible; without being antagonistic or prescriptive, in order to ensure the most success.

The aim of this approach is to encourage artists to alter behaviour themselves rather than impose targets. However, as a result, sometimes change is slower than a commissioner might like from a carbon footprint perspective. For example, artwork commissioners do not demand the artist take certain types of transport so their choices (e.g. high emission options such as a business class flight) would form part of the exhibition's carbon footprint.

Despite these limitations, sustainability is embedded into commissioning in a number of ways, from the first point of contact with the artist through the brief. The Southbank management communicate organisational sustainability targets and deliverables to share expectations, and artists are encouraged to explore touring and presentation in the most environmentally-sustainable way with the Southbank team acting as mentors to support. Learning works both ways, in an iterative manner, whereby centre staff learn alongside and from the artists as well as vice-versa. The team at the Southbank adopt practices from environmentally-advanced projects to present to other projects, enabling continual learning and greater sustainability.

Challenges

A major constraint to meeting sustainability targets is lack of funding, with limited grants available for sustainability-related measures. Another challenge is discussing the climate emergency through programming when negative and catastrophic themes can be off-putting if catering to vast audiences from different cultural backgrounds. This is overcome by looking at positive impacts and messaging.

The Southbank representative also highlighted the need to improve climate messaging for outdoor artworks. This would create an opportunity for different feedback gathering from audiences to understand impact better. Current approaches give anecdotal feedback only, and tend to come from a selection of the public that is informed on sustainability.

STAVROS NIARCHOS FOUNDATION CULTURAL CENTER, ATHENS



Fig. 38

Introduction

Stavros Niarchos Foundation Cultural Center (SNFCC) is a publicly-owned arts centre in Athens whose building was funded through grants from the Stavros Niarchos Foundation (SNF), and now is managed by the Greek state through public, charitable and commercial funding. The SNFCC hosts the Greek National Opera and the National Library of Greece, as well as public programmes and Stavros Niarchos Park, the largest public Mediterranean garden in the world. Among our case studies it is unusual in that it is an example of a built-from-scratch district that was constructed very recently, conceived as a ‘living organism’ and designed with sustainability embedded from the start.

The building is rated LEED platinum, the management undertake carbon footprint counting, there is solar power through 5,700 solar panels onsite, active transport is encouraged through bike rental, as well as more usual measures such as waste recycling programmes. The ‘sustainability strategy’ is a larger philosophy that encompasses the entirety of the complex and its operations. SNFCC embraces economic and social sustainability, with the vast majority of events free to attend, while staying true to its mission and aligning sustainability efforts through awareness raising and education, design and construction, and operations.

Artwork in Focus: *Return To Sender*

Return to Sender is created by The NEST Collective, a multidisciplinary collective based in Nairobi, Kenya. Originally created for Documenta 15 in Germany in 2022, *Return To Sender*’s second version was then commissioned by SNFCC and placed in their public space for all to experience between April to September 2023.

The artwork makes a powerful statement about the environmental impact of textile waste, highlighting how garments from across the world, particularly the Global North, are shipped to Africa and contribute significantly to major environmental problems there. It raises awareness through creating a striking intervention in public space that visualises the vast amounts of waste that affects African countries through bales of used clothing, referred to as “mitumba” in Swahili. The installation was accompanied by a film that explored in more detail how second-hand textile waste impacts Kenya and other areas of Africa. It encourages visitors to consider how fast fashion has a longstanding impact and urges them to consider the implications.

The intervention is visually striking in public space, it platforms cultures that are directly impacted by overconsumption, is a commission that involves other cultures and brings in new perspectives to audiences that might not have considered the impacts of their own consumer behaviours.



Key Learnings

Social impact

SNFCC has a mandate for social impact, going beyond environmental sustainability. The social aspect of this includes free-to-access programming, a large education programme which includes learning about the environment. The team have recently applied the Social Return on Investment (SROI) methodology to measure social impact of activities in financial terms.

Holistic landscape: commissioning a place

The landscape is integral to the design of SNFCC as a whole, with the Stavros Niarchos Park envisaged as a 'field of action'. There is a mission to animate the public space and the experience of lockdowns under Covid-19 demonstrated the importance of public spaces such as at SNFCC, and meant a greater push for outdoor public programming. The exhibition *Takis: Cosmos in Motion* saw many public sculptures animating the space and bringing people back together. Programming aims to showcase artists who are interested in creating a sense of belonging, for people to feel that this is their place, their neighbourhood.

SNFCC Green Weekend

SNFCC Green Weekend is a focus for programming related to sustainability each year. *Return to Sender* was the centre of the *SNFCC Green Weekend* and the main inspiration for the central thematic of the Festival: Sustainable Choices.

SNFCC Green Weekend considers how to engage audiences with climate issues, creating dialogues with communities and mixing conversations between experts and non-experts.

Audiences have been building over the three years the festival has run, and a new thematic approach is chosen each year, so this is a tradition in the making. The consideration of eco-anxiety is kept in mind; programming is thoughtful in being a platform for discussion of the environment and sustainable choices. The aim is to spur discussion, with no concrete answers.

Communications, education, and messaging

Communications and messaging about the environment and the climate crisis are important to programming at SNFCC. The organisation has an extensive school and education programme in which the environment is a focus, and students can explore the design of the centre itself to understand technical matters relating to sustainable design, renewable energy, and urban parks. Raising awareness of climate change issues is seen as a duty, with programming and SNFCC operations constantly looking to improve and adapt to the climate crisis, and effectively communicate with collaborators, audiences and stakeholders. Part of this duty is an appreciation that cultural organisations are incubators of skills in local communities, especially on climate-related topics.



Fig. 41

EL PERPETUO SOCORRO, MEDELLÍN



Introduction

El Perpetuo Socorro (EPS) is a cultural district in an industrial area of Medellín, located on flat land between two hills. Its geographical focus is a 62 hectare neighbourhood around a historic church and a large hospital. The climate is hot, dusty, and only 4% of the space is covered in greenery and planting.

There are a number of anchor institutions that kick-started the district when they moved to the area in 2008: Mattelsa (a clothing business that has sustainable policies such as cycling to work and housing a new public gallery and maker space); the Universidad Pontificia Bolivariana; and Comfama, a non-profit. Since then many more businesses have joined, with the number up to 47 in 2023. The development of the district has been led by the institutions, businesses and social enterprises in the area.

Artwork in Focus: Street Festivals

EPS organises annual festivals that take over the streets in the centre of the district by the cathedral. These are community gatherings that also mean traffic is halted and the spaces given over to people. The sustainability credentials of the festival include measures to ensure that there are no single-use plastics at the festivals, and it is required that 95% of food is plant-based.



Fig. 43

Key Learnings

'Care of the Common House'

Representatives of EPS described a forthcoming art project that is planned for the roof of the church on the theme of nature, entitled '*Care of the Common House*'. This title is a metaphor for the activity of the district, with the 'common house' being nature and the environment. One of the major priorities of the district is to improve the local environment. Currently there is less than 4% green cover in the district; EPS are working to create a green corridor to connect the two hills that are on either side of the district, and to include the metro and other transport in this route. The programme here is one of greening and building parks, to create a forest in the city.

Care for the environment relates not just to greening, but to practices that impact air quality and street life too. The aim is to shift streets' functions from providing for cars to providing for people, with streets being used for festivals, dining, and culture. There is a major project for a Transit Orientated Development (TOD) approach to the site, linking public transport and the site. There is leadership through Mayoral approval for the TOD, as well as smaller but complimentary tactical urbanist projects. Not only that: there are also major incentives for cycling. At Mattelsa, for example, 250 staff arrive by bicycle and staff are paid a small amount more to come to work via bike.

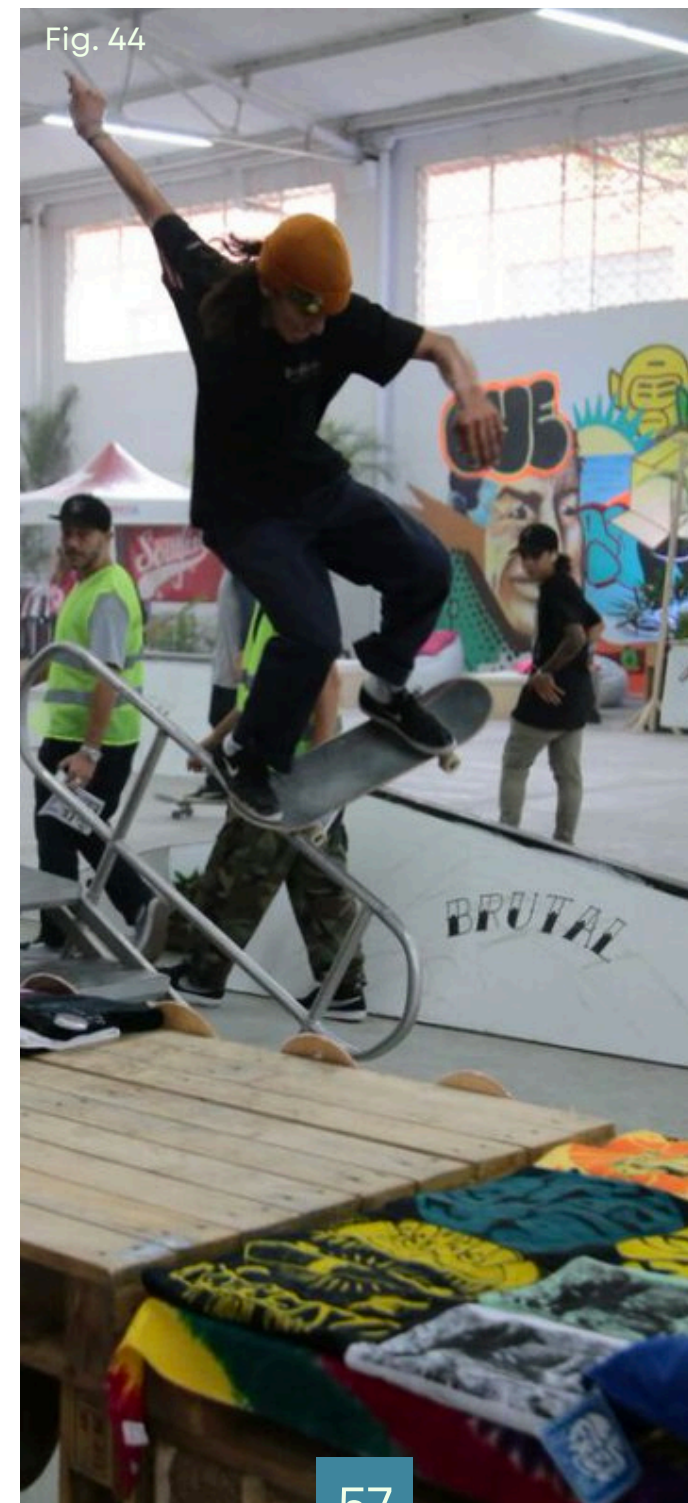
Create without destroying

One of the strategy goals of EPS is to 'Create Without Destroying'. This ambitious and radical approach means that management are empowered to say 'no' if needed. For example, the answer would be 'no' to companies that may want to locate in the district if they are not meeting the sustainable standards, or if they act against the purpose and values of EPS. The goals also mean measures such as promoting local purchasing, banning one-use plastic, and ensuring vending machines use plant-based milk.

Social sustainability

The district has social sustainability at its heart. The purpose of the district is to create a sustainable urban ecology for the creative and cultural economy. The commissioning of a mural of the community at the heart of the district, by the cathedral, shows this clearly: the artwork depicts local characters: a nurse, medic, sex worker, artist, singer, musician – all local people. There are many murals in the district, and it is not uncommon for them to often have community links and social themes. There is a context of social problems in the district, and EPS is looking to provide opportunities for local people. A new recording studio has been installed through a partnership with Spotify, which has meant an affordable service for the neighbourhood; with scholarships, accessibility of tech equipment and instruments. There are also new housing projects which entail eco-living in the city.

Fig. 44



Part 5

Artwork Scale



Artwork-Scale Examples: Introduction

This section of the report contains details about five individual art commissions from around the world.

During the research period for this study, certain artworks were considered that were not commissioned by the case study districts, but which nonetheless were immediately seen to embody the values that are being espoused through this report.

The artworks described here are inspiring; they can be considered if you are looking

for concrete examples that demonstrate how individual commissions can be both innovative and impactful.

One of the themes seen in a number of the cultural district case studies was a concern over climate messaging. The examples given in this part of the report clearly show environmental messaging that was forefront to the work, and that have been well-received by communities: it is possible.

The artworks represent innovative methods of incorporating sustainability into commissioning; and are described in a way that emphasises and foregrounds that method specifically.

The artworks highlighted in this way are:

- Art meets science, communicating data: the *Pollution Pods* by Michael Pinsky
- Working with the elements, sustainable fabrication: *Wind Tree* by Ned Khan
- Recycling, elevated: *Ouroboros* by Lindy Lee
- Starting from the material: *From the Thames to Eternity* by Matthew Barnett Howland, Oliver Wilton, and CSK Architects
- Innovating through tradition; cultivating nature-human relationships: *Onwha' Lumina* by Moment Factory & Tourisme Wendake



Fig. 46
Credit: Onwha'Lumina, Moment Factory

Art Meets Science, Communicating Data

Pollution Pods by Michael Pinsky



Fig. 47

Pollution Pods is an art installation created by UK artist Michael Pinsky, commissioned by the Norwegian University of Science and Technology and created as part of Climart, an initiative that explores the psychological impacts on perceptions of visual art.

The immersive installation merges data and art together to engage people with pollution. Five domes emulate pollution levels found in capital cities, including London, New Delhi and Beijing so that people can experience what levels of pollution feel like in each place. Being able to compare makes the experience of pollution more tangible.

Research conducted alongside the project found audiences' intentions to act increased after engaging with the art installation and this was impacted by emotions of sadness and anger [8]. This emphasises that art is a useful way to communicate environmental issues and is effective in encouraging personal responsibility.

The research highlights the value of a collaborative approach, in that working from both a psychology and arts perspective can help to further the impact of the artwork. It also suggests the need for a broader study to follow the audience journey after visiting artworks, to assess whether there is a direct correlation between intention and action. Whilst research is limited, these two pieces of research are significant in looking at the effectiveness of art in catalysing change or evoking reactions in audiences.

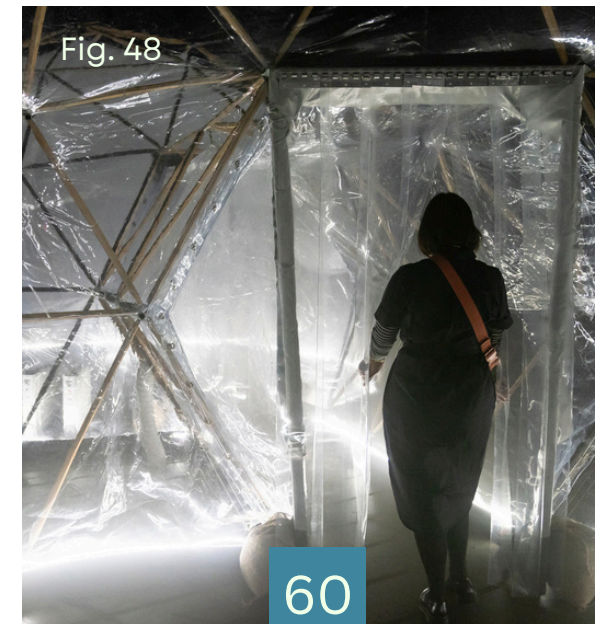


Fig. 48

Working with the Elements, Sustainable Fabrication

Wind Tree by Ned Khan

Wind Tree is an art installation created by environmental artist Ned Khan for Masdar City in Abu Dhabi. Khan collaborated with Masdar City to create a dynamic 7 metre-high installation that responds to the elements within the local environment. Wind comes to life through the tree, animating bioplastic panels that symbolise leaves as air passes through. It encourages active engagement, with more movement creating patterns and light changes. It also creates its own micro-environment that the public can walk through as light and temperature change.

Fabricated by UAP in China, the piece comprised of 22,000 polycarbonate panels which move with the wind, and vertical and horizontal stainless-steel tubes welded with wire screens. The smaller panels were able to change from stainless steel to being polycarbonate which significantly reduced the CO² emissions in production.

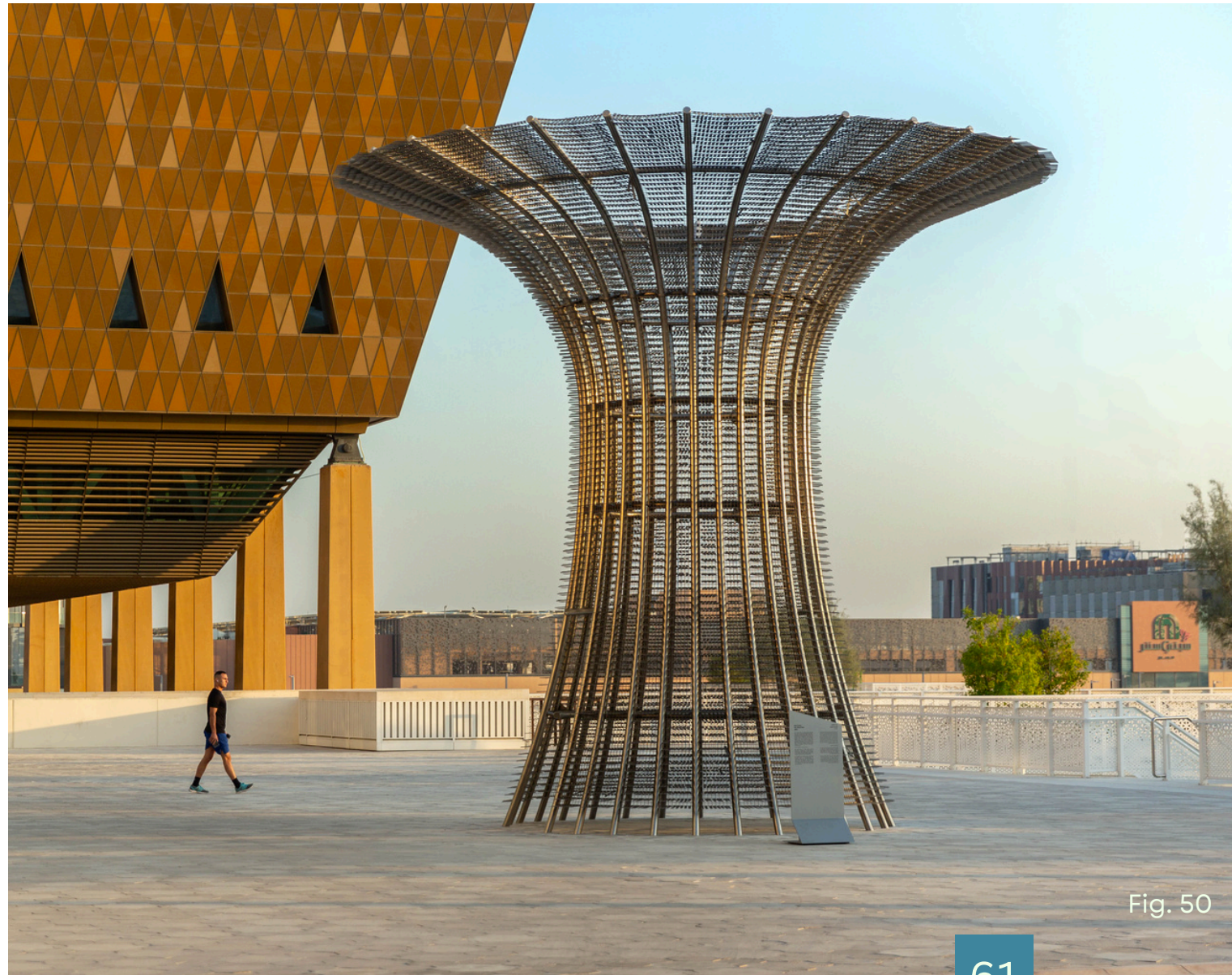


Fig. 50

Recycling, Elevated: *Ouroboros* by Lindy Lee

Ouroboros is a sustainable sculpture created by Lindy Lee and commissioned by the National Gallery of Australia in Canberra to celebrate its 40th anniversary. This artwork embodies sustainability, and was fabricated by UAP with the focus of using recycled materials and renewable energy to create it, along with measures to reduce its carbon footprint.

The free-to-access artwork was inspired by Taoism and Ch'an Buddhism explored in Lindy Lee's practice, and depicts ancient symbolism of a snake eating its own tail to represent the interconnection between humanity and nature. Similarly to *Return To Sender*, this artwork is interactive and visitors are able to enter into the mouth of the installation to experience the illuminated interior.

Fig. 49



Starting from the Material:

From The Thames To Eternity by Matthew Barnett Howland, Oliver Wilton, and CSK Architects

From The Thames to Eternity is an outdoor installation in the City of London, London's financial district, which creates domestic-scale outdoor 'living rooms' through careful placement of re-used stone. The stones are reminiscent of pre-historic stone circles, and reference the fallen stones that now form the ruins of ancient temples and gathering places. Whilst this is a sculptural installation, it is also highly practical, with the stones providing much-needed seating for visitors to the City.

The installation was commissioned by the City's transportation and public realm team when they were unexpectedly offered use of historic stone that had a fascinating past. The stone had been part of the Thames Embankment, the structure that holds up the riverwall along the Thames river.

A major infrastructure project to build a new sewer meant that some of the stone from this historic listed wall was taken down.

This put it at risk of being ground down for use in aggregate, losing both the benefits of the stone's heritage and their embedded carbon.

The closure of stone quarries in the UK meant that stone of this type is now very rare. So the commission started with the desire to save the stone, to reuse it, and to bring the stone back into the public imagination. The material came first.

From The Thames to Eternity has successfully rescued the historic stone, and the installation is now used as a means for communication about circular economy principles. Events are programmed as outreach in connection with the installation, which bring people together to consider their environment, how we must cherish materials, and strive for re-use within our everyday lives. The installation includes signage that describes the history of the stone, and the City have commissioned a podcast series by Kerbside that looks at the issue through different lenses: history; sound; geology; community; spirituality and more.



Fig. 51

Innovating through Tradition; Cultivating Nature-Human Relationships

Onwha' Lumina by Moment Factory & Tourisme Wendake

Onwha' Lumina is a collaboration between non-profit organisation Tourisme Wendake and multidisciplinary entertainment studio Moment Factory. This site-specific work in Wendake was co-created with the Wendat community who were involved throughout the project, co-creating a trail that explores the connections between humans and nature through songs and stories rooted in the community's traditions.

The experience takes audiences away from urban life and into an enchanted night walk deep within the forest. The work powerfully blends nature with immersive arts, fusing longstanding philosophies with future-facing technology. It focuses on the transmission of past and current culture around nature-human connection.

The audience takes a self-guided journey into nature which then comes to life through projection mapping, installations and sound.

The trail has a specific focus on Wendat embroidery and uses colours found within Wendat art, with particular reference to The Three Sisters, Wampum and the natural elements. This weaves a theme through the visual experience.

Showcasing this strong identity and philosophy enables the public to connect with the natural environment in new ways whilst learning about heritage and positive nature-human relationships that have long existed.

This multimedia experience is a powerful example of promoting social and environmental sustainability through co-creation and storytelling that reconnects people with the natural environment, while skillfully bringing audiences out into the nature it addresses. Though hard to measure, this immersion has the potential to shift perspectives around nature-human relationships and could influence attitudes around the environment, shifting beyond human-centred thinking.



Fig. 52

Credit: Onhwa'Lumina, Moment Factory



Part 6 - Conclusion:
A Call to Action

Conclusion

A Call to Action

by Kerbside Collective

Kerbside and GCDN recognise that sustainability initiatives within the cultural sector are not only a necessity, they are a significant opportunity.

Sustainable practices can increase audience engagement, nurture international partnerships, propel inclusive innovation and foster new and evermore creative forms of placemaking.

Although addressing sustainability may feel particularly difficult within current political and economic contexts, this is precisely why creative, critical thinking is needed now more than ever. As a sector, we can collectively push the role of cultural organisations as critical advocates for change needed within societies; being hubs for new ideas and voices to grow.

While cultural organisations face different contextual factors and barriers, we recognise that the core attributes of transparency, collaboration and experimentation are key in any organisation that wants to move to more sustainable futures.

We must lean into the unique ability of the arts as a means to imagine alternative ways of being, and to bring that very imagination into strategy as a tool to move beyond traditional forms of curation and programming that contribute to the ecological problems we face.

Our Recommendations

The next section gives tangible recommendations for future action. They draw on common barriers identified from organisations we interviewed, discussions within a GCDN-convened online workgroup, *Adapting to the Climate Crisis*, and our wider experience working internationally within the cultural sector. They focus on pushing for a bolder, more eco-conscious means for creating systemic change. They also circle back to two of the original research questions for this work: ‘what can we learn from all this?’ and, ‘how do movements gain enough momentum to make change?’. The recommendations are given in three formats:

There are three high-level approaches:

1. Shifting perspectives
2. Addressing gaps in knowledge
3. Changing practices

One toolkit:

Circular Processes for Artwork Commissioning

And one model:

Adapting to the Climate Crisis Work Group:
Network As Method

We envisage this Call to Action as a dynamic, changing platform, which can incorporate new ideas and processes over time, as we continue to learn from each other.



Fig. 55

SHIFTING PERSPECTIVES

Evolving from 'desire' to 'action' through shifts in organisational and sector-wide mindset

Include nature as a stakeholder



Reframe 'community' to include nature as a stakeholder: make this a foundation from which all future decisions are made.

Acknowledge cultural districts as governors of place, and therefore environmental custodians. Implement inclusive placemaking and co-design with nature.

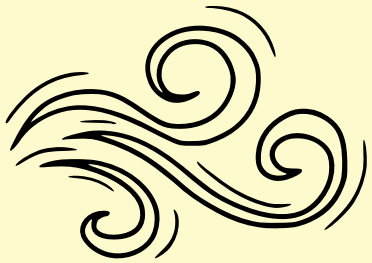
Enable cultural districts to advocate for nature's voice just as they would advocate for any marginalised community member.

Explore how art commissioning can collaborate with the environment rather than destroying it, and through this ultimately enhance our relationship with place.

Embrace the 'more-than-human' perspective that is grounded in the ancient knowledge that exists within many communities.

Enhance nature-human connection, improving wellbeing at a time of societal disconnect.

Experiment



Use cultural districts to push boundaries in thinking around the climate emergency, as a space to take risks and to test ideas in both programming and practice.

Implement a phased, trial-led process for implementation of new processes, to enable a feedback loop and continual learning:

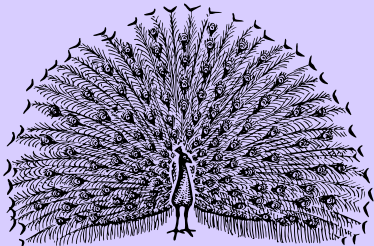
- **Imagine:** provide space for ideation, and embed co-creation with wider communities into this process.
- **Experiment/test:** enable the idea to turn into a tangible concept. Prototype, collect data, then understand and synthesise feedback.
- **Embed:** make a permanent part of the organisation.

Utilise cultural district sites as places for testing, measurement, learning; such as the Quartier des Spectacles district in Montreal, who have used their site to track the health of the vegetation they plant in order to build a database of species that thrive best in that specific urban environment.

SHIFTING PERSPECTIVES

Evolving from 'desire' to 'action' through shifts in organisational and sector-wide mindset

Be bold in messaging



Acknowledge that climate messaging can feel challenging to get right. Create a testbed to explore concerns, balancing being assertive with not wanting to fear-monger, or further induce eco-anxiety.

Be imaginative in developing climate change messaging, making what can seem overwhelming more accessible to more audiences.

Step further into responsibility as placemakers, using creative storytelling and narratives as a means to reconnect with our environments in a way that will improve local health and wellbeing.

Remember that communication starts with listening: to both people *and* to the surroundings. Involve local people who have pre-existing, deep knowledge of the land.

Localise issues so that people can connect more deeply with how their surroundings are impacted, and how their societies' impacts are affecting other cultures.

Improve messaging within programming so that the audience is part of the journey- connecting not only with outputs, but the sustainable process to achieve the artwork.

Collaborate



Work together with other districts within your global network to learn from each other's successes and failures. Embrace a connection that can be supportive of each other. Join forces to advocate for change on wider scales.

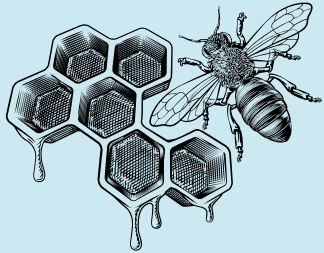
Take risks, acknowledging changes in our environments, collaborating, experimenting and supporting local communities and being transparent.

Experiment with new forms of joint commissioning that are more sustainable, and share findings from these experiments openly.

Example: the A Feral Commons global co-commission (pg. 26).

ADDRESSING GAPS IN KNOWLEDGE

Build frameworks + baseline data



Build impact evaluation metrics that take into account environmental and social value measures.

Consider digital emissions impact in carbon footprint calculations and environmental impact assessments.

Create a science-based data baseline as a framework for evaluation to guide informed creation of policies. These datasets can provide a strong foundation in the event that sustainability measures face competing interests.

Collaborate with other similar organisations to share data and learn from each other, make data accessible, and compare outputs.

Explore difficult or innovative areas of data collection such as metrics for embedded carbon and value of re-used materials. These types of data are often cited as complex or challenging: it is up to us to creatively imagine how to overcome challenges.

Understand the impact of financial mechanisms: such as investment principles, e.g. pensions investment policies.

Show value of process



Embrace the value in arts commissioning that emerges through its process, not just through its output.

Embed research alongside the artwork itself, communicate the findings, and use this to inform ways to improve.

Look for ways to build in levels of engagement with communities that create additional impact in social and environmental sustainability, through co-design and co-creation, partnership building and greater awareness.

Ensure inclusive design practices to remove barriers to participation.

Upskill staff, artists and communities in developing and using new methods of evaluation, for example through new emerging evaluation frameworks such as permaculture-based methods.

Give time and space for artist-driven innovation, which can emerge unexpectedly and only over time.

ADDRESSING GAPS IN KNOWLEDGE

Emerging Technologies



Consider digital environmental impact; a need now, in an age of AI, more than ever.

Research and raise awareness within organisations of the impacts of AI when integrating it into practice.

Implement mechanisms to understand digital footprint as a central part of data collection.

Cultivate awareness of the environmental impact of digital technologies within communities, to enable them to push for the right procedures and policies that are able to protect nature.

Work across sectors in an interdisciplinary effort. Engage with technologists and scientists on collaborative efforts to push for greater globalised thinking and inclusive innovation, as well as clearer communications of technological issues.



Fig. 56

CHANGING PRACTICES

Be authentic
to **process and**
to **place**



Commit to accountability in target setting and measuring, and therefore authenticity.

Embed transparency so that stakeholders can be invested in the sustainability process.

Work with partners that share the same values; whilst supporting development and change within other partners.

Ensure synchronicity in what cultural organisations project in public and how they act in practice, to ensure that environmental programming is not seen as greenwashing.

Consider that authenticity also relies on listening and being responsive to the location and people of the cultural district.

Think locally in terms of procurement and partnerships.

Procure
strategically



Work to gain greater understanding of the environmental and social impact of suppliers, including through partnerships that help suppliers on this journey.

Implement policies that mean procurement teams can prioritise sustainable practice over cost savings.

Be flexible, engaging and responsive to suppliers, who may have different definitions of sustainability. For some, sustainability might mean having a net zero emissions policy or total plastic ban, while others support local employment schemes or only buy locally.

Use your purchasing power as a form of demand that drives suppliers to change their practices.

Don't be afraid to say no, if a supplier or partner's values diverge clearly from your own aims.

CHANGING PRACTICES

Innovate creatively



Innovate outdated models of working.

Think creatively: creativity is an inherent part of innovation.

Reflect on practices that hold value, but may have a negative environmental impact. Innovate as a method for altering these practices.

Example: artist in residence models can move beyond traditional artist in residence approaches which are usually short-termist. Instead, create longer-term, embedded, engagement between international artists and local communities. The method also cuts down on transport emissions.

Introduce a 'reuse first' principal



Adopt a circular economy approach. This should govern all choices about materials use.

Plan all materials in an artwork commission in advance. If it is a temporary installation, include planning for what the materials' next life should be, and how they can benefit the wider community in their afterlife.

Put a materials re-use policy in place across the organisation, including artwork materials.

Prioritise use of locally-sourced, re-used materials in artwork installations.

Understand the embodied carbon you already have at your disposal and maximise it: your buildings, installations and structures are there to be re-used rather than replaced with new.

CHANGING PRACTICES

Challenge
status
stereotypes



Shift from prestige to care. A sense of prestige or expectation - including from artists and curators - can often be placed ahead of sustainability considerations in commissioning. This can lead to decision-making that impacts sustainability such as a choice of business class flying over economy (which can create 4x the carbon emissions).

Understand in advance the greenhouse gas emissions and environmental and social impact of decision-making on issues like materials choice and transportation.

Raise awareness among artists and curators so they bring sustainable knowledge and practices to their next institutions, creating a growing network of sustainable practice.

Build awareness of priorities and their rationale, to make it easier to stand by them and empower others to change their practice too.

Communicate policies (e.g. air travel policies) clearly to artists and curators at the beginning so that they can be a part of that process, and are themselves able to influence wider change within the sector on these matters.



Fig. 57

TOOLKIT: CIRCULAR PROCESSES FOR SUSTAINABLE ARTWORK COMMISSIONING

Continuous lifecycle for sustainable art commissioning: from conception to re-use.

Throughout the research, examples were cited of artworks that had made use of pre-existing materials.

The examples showed that a reuse and recycle approach is possible; however, it was also the case that interviewees described the process of adopting a circular economy model for artworks as highly challenging.

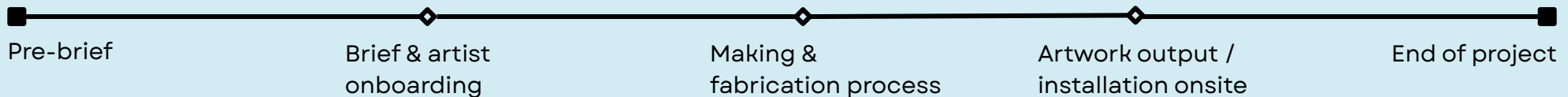
Challenges included:

- the higher cost of sourcing re-used materials;
- problems with making material safe, clean, or durable enough for re-use;
- the additional time it can take to adapt materials or source re-used materials;
- a lack of data to describe the carbon accounting impact of recycled or re-used materials;

Despite these and other challenges, a circular economy approach to making art installations is possible.

A key element to this is building re-use of materials into the process from the very beginning. Artists should be guided to understand and build in the post-installation legacy of the materials used in making artworks. This planning is crucial. In order to embed this type of planning, we have proposed a circular approach Toolkit for commissioners to follow as a guide.

The aim is to shift from a linear commissioning process (as seen in the diagram below) to a circular commissioning process, as outlined on the following page.



A linear commissioning process: the more traditional process for commissioning

CIRCULAR COMMISSIONING TOOLKIT

Brief & artist onboarding

- Seek out artists with a specific practice (and/or lived experience) that connects with the climate emergency
- Offer support to embed sustainability practices relevant to the commission within the brief
- Engage with artist around sustainability from the outset in a two-way conversation
- Share organisational sustainability strategies and targets
- Ensure environmental & social sustainability weighting is threaded through the appointment process

Pre-brief

- Internal discussions to continually update organisational sustainability strategies and targets
- Consideration of local issues that relate to 3 pillars of sustainability and SDGs
- Agree on definition of 'sustainability'
- Consideration of how an artwork could enhance your district's civic role in building social value and impact
- Create monitoring and evaluation processes for sustainability metrics for artworks
- Consider end / afterlife evaluation from the beginning

Ongoing throughout

- Reflection on process
- Transparent and supportive communication between artist, commissioner & community
- Data evaluation, measuring and monitoring
- Reflection on learning opportunities

Making & fabrication process

- Build carbon footprint counting into the making process (materials, transport, energy use etc.)
- Continuous review of lifecycle analysis of materials & review any potential changes to reduce emissions, upcycle, re-use materials
- Build in partnerships and plan for the next life of the artwork (or its materials) before making
- Consider wider local context: build in outreach and engagement and local authority partnerships
- Ensure funding is available for sustainability measures

Artwork output / installation onsite

- Consider audience interaction and impact on audiences of climate messaging
- Include messaging around process, showcasing sustainability
- Be mindful of issues around eco-anxiety for audiences and other associated risks
- Monitor energy & water use of installation (if relevant)
- Continual measuring of social value as well as environmental impact
- Plug-in biodiversity net gain

Next life

- Waste strategy to include re-use and zero-to-landfill principles
- For artwork/ materials re-use, ensure zero or low-carbon transportation strategies in this process
- If climate related, explore longerlasting impacts of artwork on society
- Reflect on ways to improve
- Use artwork as a benchmark for future work

MODEL: NETWORK AS METHOD

How can art commissioners utilise networks across the world in order to improve sustainability of artwork commissioning?

Adapting to the Climate Crisis Work Group: Network As Method

From October 2024 to April 2025 the GCDN convened an online platform for knowledge sharing: the **Adapting to the Climate Crisis Work Group**. This worked in an online, digital realm where group members could meet outside of the GCDN annual in-person convening.

The work group was a self-directed space for GCDN members to discuss initiatives within their districts that relate to urban design enhancements, resilience planning, artwork commissioning in the context of the climate crisis.

The group was facilitated by Kerbside Collective, and was structured in a non-hierarchical way, with the group agreeing at the outset how the sessions would be constituted. They met online once a month for a six-month period, with each session led by a different group member on a rotating basis.

The aim was to create a space that was collaborative, inclusive, and allowed for a diversity of perspectives.

The group members were:

- Exhibition Road Cultural Group, London
- Wilding X Why, New York
- Better Bankside, London
- The Bentway Conservancy, Toronto
- Kingston Creative, Kingston
- The Brooklyn Cultural District, New York
- Downtown Detroit Partnership, Michigan

Each month a different group member presented on initiatives in their district, giving members an opportunity to have a ‘deep-dive’ into the practices of other districts, and interrogate the issues and shared challenges that are faced. Each session therefore meant a period of time focused specifically on showcasing the work of the districts and their approaches to sustainability. In addition to the conversations, an online Padlet platform was used to share further information between the group outside the meetings, with content ranging from the presentations that were given, to relevant or interesting articles and other creative content solving.

Adapting to the Climate Crisis Work Group



GCDN
Global Cultural
Districts Network



KERBSIDE
COLLECTIVE

Group members expressed that a benefit of the group was the in-depth sharing about each districts’ practices, which meant they got to know each other well, and therefore enhanced their experience of being part of a global network.

The group expressed the real value of having a space to explore challenges, find common threads, and suggest ideas to each other. The group’s role therefore was not just knowledge-sharing and awareness-raising, but actively supporting each other’s initiatives, bringing new voices into the process of problem-solving. Conversations within the group ranged from: approaches to climate resilience and disaster preparedness; urban design and landscaping; the role of narratives, messaging, communications, and cultural output relating to climate change; methods for working with local communities, local partners, and those marginalized in societies; financial approaches and income challenges.

The Adapting to the Climate Crisis Work Group therefore functioned as a pilot for testing the idea of the network as a method for moving to more sustainable practice.

Adapting to the Climate Crisis Group

Fig. 58

The image displays a collection of digital content shared on a Padlet platform. The items include:

- Post 1 (top left):** A screenshot of a website or document titled 'Sustainable Development in Cultural Districts - GCDN', mentioning 'Kat and Helen' and 'Sustainable Cultural Districts'.
- Post 2 (top middle-left):** A post by user 'sh840' titled 'The Low Line' with a vibrant, colorful graphic and the URL 'lowline.london'.
- Post 3 (top middle-right):** A post by user 'tiva3' titled 'South Kensington Zero Emissions Nature Positive' featuring a large teal graphic with the text 'SOUTH KEN ZEN+' and the URL 'southkenzen.org'.
- Post 4 (top right):** A post by user 'sh840' titled 'Southwark Climate Collective - supporting SMEs to reduce emissions in south London', including a screenshot of the collective's website.
- Post 5 (middle right):** A post by user 'tiva3' titled 'South Ken ZEN Presentation N...', including a PDF document.
- Post 6 (middle left):** A post by user 'helen1003' titled 'UNDRR - Homepage' with a cityscape image and the URL 'undrr.org'.
- Post 7 (middle):** A post by user 'helen1003' titled 'What have we been listening to?' with a photo of a river and the URL '99percentinvisible.org'.
- Post 8 (middle right):** A post by user 'rmckaye' titled 'Gaming to support Climate Action' with a diagrammatic image and the URL 'onebillionresilient.org'.
- Post 9 (bottom right):** A post by user 'rmckaye' titled 'Public Art & Sustainability Initiative' with a photo of a public art installation.

Padlet used by the Work Group for sharing ideas and inspiration

Change in Sustainable Planning

Toronto's Under Gardiner Public Realm Plan

77
...rt-and-Sustainability-Initia
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Credits

Research Report created and designed by Helen Kearney and Kat Pegler of Kerbside Collective

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The Bentway, Toronto: Anna Gallagher-Ross

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References & image credits

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Fig. 29: Ophidian's Promise Artwork Ingredients List by UAP. Image courtesy of UAP | Urban Art Projects

Fig. 30: Kingston Creative Launch of Chain of Love, Image by Verrol Blake

Fig. 31: Community meeting in the park, Image by Kingston Creative

Fig. 32: Chain of Love, Image by Camille Chedda

Fig. 33: Chain of Love Artwork Ingredients List by UAP | Image courtesy of UAP | Urban Art Projects

Fig. 34: SNFCC Arch by Yiorgis Yerolympos

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Fig. 36: Southbank Centre Food Market. Image courtesy of Southbank Centre

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Fig. 39: SNFCC & EMST Athens, Return to Sender by Nikos Karanikolas

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Fig. 45: White Night Melbourne by Nicole Cleary Pollution Pods by Michael Pinsky

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Fig. 47: COP25 Madrid by Michael Pinsky

Fig. 48: Pollution Pods by Marla Aufmuth

Fig. 49: Lindy Lee, Ouroboros, 2021-24 installation view, National Gallery of Australia by Martin Ollman ©

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Fig. 53: Dima Srouji, This is not your grave. 2024. Courtesy of Alserkal Arts Foundation

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Fig. 57: GCDN Workgroup Padlet

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