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CULTURE
& CLIMATE
CHANGE



14 World Cities Tackling Climate Change Through Culture

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Julie's Bicycle
SUSTAINING CREATIVITY

BOP
Consulting

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Foreword

Every city has its culture: the stories, songs, places and experiences that celebrate the diverse communities that inhabit them. Culture is not merely a reflection of the world around us, but also a provocation – a challenge to our norms and ideals, and a platform to express, share and shape our values. Every city needs culture to provide the inspiration and space to find new ways of co-existing – with each other and with our surroundings. Culture is a powerful tool in addressing environmental challenges.

The World Cities Culture Forum is a network of 38 global cities, convened by the Mayor of London. Its members share a belief in the vital role of culture in their future prosperity. The Forum is working in partnership with Julie's Bicycle to support its member cities to understand, connect and scale up their culture and climate change agenda.

Julie's Bicycle is the leading organisation working across the cultural community, developing research, data, resources and strategy to accelerate cultural action on climate change and environmental sustainability. The programme is influenced by C40 Cities Climate Leadership Group, which works with over 90 of the world's most influential cities to collaborate effectively, share knowledge and drive meaningful, measurable and sustainable action on climate change.

This report celebrates the good practices of 14 cities within the World Cities Culture Forum membership, highlighting their creative

climate initiatives across four thematic areas: policy and strategy; resources and support; partnerships and innovation; and creative programmes and campaigns. Each case study demonstrates the power of cultural urban policy to drive creative action on climate change and the environment – you can learn more about each city by reading their full Creative Climate City profile [here](#). This research has highlighted a number of good practice trends and opportunity areas that all cities could explore to translate their creative climate ambitions into practice.

This report builds on the [Culture and Climate Change Handbook](#)¹ – the first research report published by the World Cities Culture Forum, Julie's Bicycle and C40, which chronicles creative and cultural responses to climate change and environmental sustainability.

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Introduction

Our Current Climate

Across the world the effects of climate change and the destruction of nature are generating an unprecedented call to action. Two pivotal UN reports on climate change and nature have catalysed engagement and public protest. Greta Thunberg's school strike for climate action has now spread to 125 countries, calling for urgent action to address our planet's health and all our futures. Climate change is an issue of global concern and people in positions of influence – politicians, investors, corporate business and city leaders – are being called on to act.

In October 2018 the publication of the [Intergovernmental Panel on Climate Change](#) (IPCC)'s Special Report called for 'unprecedented changes' within the next 12 years in order to keep global warming to a maximum of 1.5 degrees. National, regional, city and local governments all over the world are committing to targets to address the twin challenges of climate and ecological breakdown. In May 2019 the UK parliament was the first national government to declare an [environment and climate emergency](#). In addition, more than [500 local governments](#) across the world, which represent over 45 million people, have also declared an environment and climate emergency. Breakthrough international agreements are addressing

further urgent environmental threats, such as plastic pollution, with almost all the world's countries agreeing on a [deal](#) to restrict shipments of hard-to-recycle plastic waste to poorer countries.

The importance of ambition and urgency to revitalise action cannot be underestimated – the stakes are very high. The consequences of climate change – extreme weather, extinctions, involuntary migration, conflict and suffering, are felt in many parts of the world. The continuation of unchecked global growth trajectories based on fossil fuel consumption threatens all aspects of life as we know it. If we continue to consume more of the world's resources than we conserve and restore, the interconnected combination of biodiversity loss and climate change risks our very existence. These twin challenges will not be solved by individual action alone; they are systemic issues which require systemic solutions – a radical shift in consumption and a clear and unwavering commitment to decarbonise the global economy.

Trends in Good Practice

Cities are on the front line of climate change, where both the causes and impacts of environmental degradation are experienced. However, this also means cities have enormous power and influence to enable environmental change. If all cities above 100,000 population adopted 1.5° C action plans², they could deliver around 40% of the carbon emission savings required to limit global temperature rises in line with the Paris Agreement³.

As this report demonstrates, culture is an essential tool for cities in generating environmental engagement, whilst supporting other interconnected policy agendas such as urban planning, social inclusion, health, commerce and regeneration. The cultural life of cities connects citizens to one another, and to their values, offering a critical platform to influence, inspire and lead public engagement on climate and the environment. When cultural and creative industries take greater care and responsibility for the global climate and environment, so do their communities and audiences.

Across the World Cities Culture Forum community, we are witnessing an infinitely rich and growing cultural movement acting on climate change that reflects both local identity and the diversity of environmental contexts. This latest survey across 14 World Cities Culture Forum members has provided many inspiring case studies of how city leaders are putting climate and the environment at the centre of their cultural ambitions. Through this diversity of good practice, key trends have emerged.

1. There is a growing body of cultural strategy connecting to climate and the environment

Cultural policy and strategy that supports more sustainable, intelligently-planned and resilient cities is increasing. For example, the City of New York's CreateNYC strategy explicitly connects culture and environmental sustainability, including a commitment to: 'Make the case for arts, culture, and science as essential components of a resilient and sustainable city'. In Edinburgh, organisations receiving regular grant funding from the Cultural Services division will be required to develop and submit a Carbon Management Plan. Creative Carbon Scotland is supporting the organisations in developing their carbon reduction objectives. Other cities have also embedded environmental sustainability within their cultural strategy, such as London with its ambition for 'A Greener, Cleaner City' and Melbourne, with its ninth goal 'to care for its environment'.

2. Collaboration between cultural and environmental departments is increasing

Collaboration between city departments is taking place everywhere, aligning diverse strategies, projects and engagement initiatives. To support Amsterdam's sustainability programme, the municipality hired a Project Manager to work with both cultural and environmental teams to develop sustainability support and training for some of Amsterdam's top cultural venues. In San Francisco, the Arts Commission has collaborated with the Department of the Environment on the EcoCenter, which showcases the latest energy-efficiency technologies and green building techniques, as well as providing a community centre, art gallery and performance venue.

² 1.5° C action plans are city commitments to limiting temperature increases beyond 1.5 degrees

³ Deadline 2020. C40 Cities and Arup Consulting (2016).http://www.c40.org/other/deadline_2020

3. Creative programming is growing in environmental ambition

More cities are exploring and embedding environmental themes in programming, learning and outreach activities, including artist commissions and residency programmes. The City of Austin's Artist-in-Residency programme, administered by the Office of Innovation, works to embed artists within City departments to help provide innovative solutions or new process improvements and engage communities in creative ways. During the 2019 European Green Capital, Oslo is hosting a multitude of cultural events that highlight and celebrate sustainability and the environment, including: Passion for Ocean Festival, Repurpose Festival and Oslo Rooftop Festival.

4. Creative and cultural responses reflect local contexts and communities

Each city has a diversity of cultural and creative responses to environmental sustainability which reflect local cultural contexts and communities. Cape Town's water crisis gripped headlines across the world, however artists used this crisis to inspire and educate, demonstrated by the 2018 International Public Art Festival: 'Nature doesn't need us, we need nature'. Following Taiwan's history of mass-manufacturing dating back to the 1950s, Taipei is now a world-leader in design-led sustainability and multifunctional eco-textiles, the 2017 Textile International Forum and Exhibition was titled: 'Intelligent Innovation and Green Circular Economy'. The 2019 Toronto Biennial of Art asks, 'What does it mean to be in relation?' Grounded in Indigenous, immigrant, and settler histories that have shaped what we now call Toronto, the inaugural Biennial asks us to re-examine the past to project alternative futures.

5. Cities are experimenting, designing and co-creating new sustainable urban models

Cities are critical places for experimentation and innovation – the 'urban laboratory' is increasingly striking a chord with policy and decision-makers. An example is Sydney's collaboration with C40 to create the [Making Sydney a Sustainable Destination Plan](#). Key projects in year one include: reduction of food waste; sustainable supply chains; data collection and reporting. Lagos Urban Development Initiative is an organisation that brings like-minded organisations and people together to advocate for a more inclusive, liveable and sustainable Lagos. Environmental-focused projects include the Linear Park Project (championed by Lagos State Parks and Garden Agency), which merges urban parks and gardens and non-motorised transportation.

6. Cities are recognising environmental sustainability as a driver for creative entrepreneurialism

Cities are increasingly recognising that action on environmental sustainability is an essential component of local resilience as well as a platform for new ideas, entrepreneurship and innovation. Dublin Maker is a celebration of Dublin's maker movement, where inventors and makers have an opportunity to showcase their creations, demonstrating creativity, ingenuity, resourcefulness and sustainability. In London, the Mayor's [Entrepreneur Award](#) engages university students on generating low-carbon and circular economy market opportunities, with two new awards focussed on technology and the creative industries.

Where Next?

Five Ideas for Cities

As well as inspiring case studies, this latest research also recognises the opportunities available to cities to accelerate their environmental ambitions and embed them within cultural practice. We have identified the following opportunities:

- **Research and Publish**
Research creative and cultural initiatives across your city which engage with environmental themes and practices. Publish an online resource to encourage new collaborations and good practice exchange and help build environmental knowledge, awareness and inspiration within the sector.
- **Regular Conversations**
Organise a regular meeting or working group to support ongoing collaboration between cultural and environmental departments. This will support the implementation of city strategy, progressing the goals of both departments as they relate to sustainable development. It will also encourage new ideas and partnerships, and identification of combined resource.
- **Join Policy Together**
Connect cultural and environmental policy and strategy so that they are mutually-reinforcing. Aligning cultural policy and targets to environmental ambitions – considering city, national and international policy frameworks (e.g. the Paris Agreement and Sustainable Development Goals)
– will support a resilient and efficient cultural infrastructure which can publicly champion climate and environmental action.
- **Smart Public Art**
Include environmental sustainability within public art frameworks as both a creative programming theme, and also as an operational commitment to environmental good practice. Develop guidelines on the environmental impacts of materials, sourcing, construction and transportation.
- **Get the Evidence**
Monitor and report the environmental impact data of cultural activity, improving environmental literacy and understanding of performance and improvement. Calculating the return on investment of low-carbon and energy-efficiency projects will evidence the benefits of environmental interventions and provide a business case for further investment.

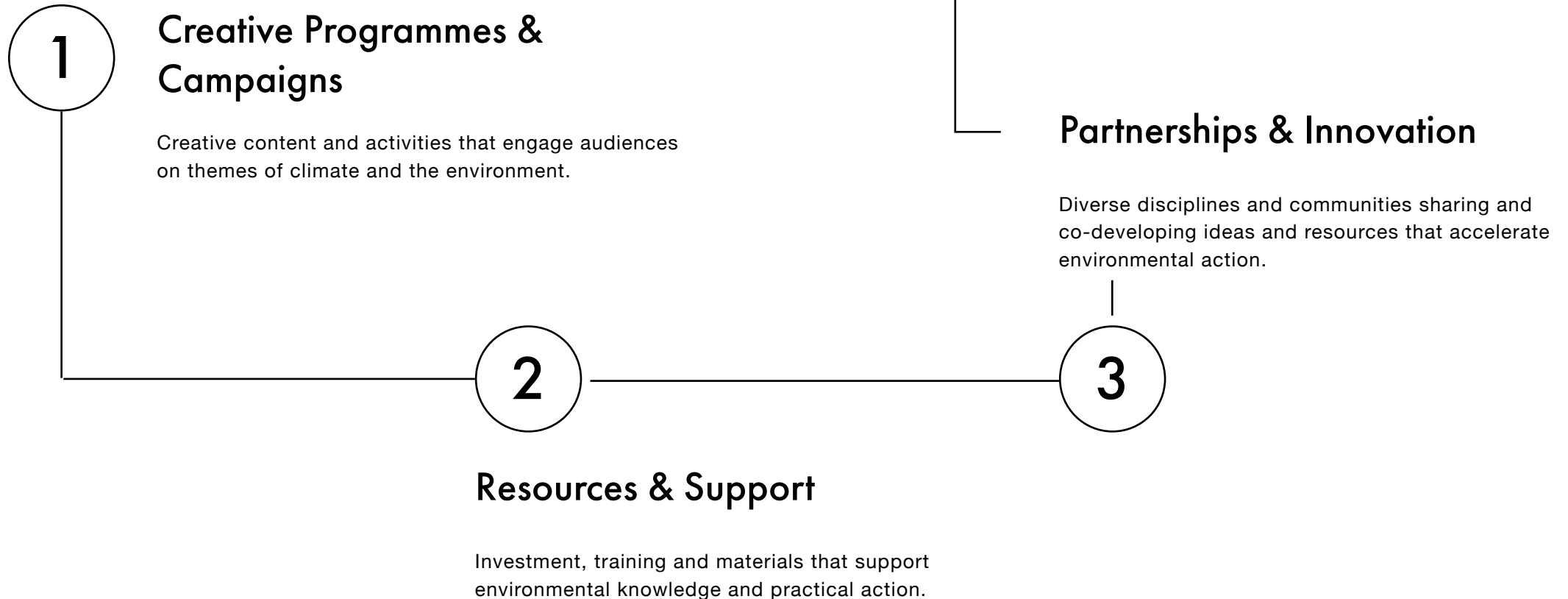
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Areas of Focus

This report celebrates the good practices of 14 cities within the World Cities Culture Forum membership, highlighting their creative climate initiatives across four thematic areas: **creative programmes and campaigns**; **resources and support**; **partnerships and innovation**; and **policy and strategy**. Each case study demonstrates the power of cultural urban policy to drive creative action on climate change and the environment.



LONDON

Creative Climate Profile

Environmental Ambition

Over the last few years, the creative community has become increasingly engaged with sustainability, demonstrating its commitment and developing creative solutions, from design and innovation to civic engagement through the arts. These initiatives – alongside public concern about poor air quality, waste, and green space – are helping to position sustainability as a priority for the city's development.

The Mayor launched two new strategies in 2018, the Environment Strategy and the Culture Strategy. In the spirit of innovation and collaboration, a key commitment within London's new cultural strategy is to address – rather than simply reflect – the capital's social, economic and environmental challenges. Under the heading 'A Greener, Cleaner City', London's creative industries are celebrated as leaders in supporting a sustainable and circular economy that values resources and promotes material reuse and recycling over disposal.

1. Creative Programmes & Campaigns

Creative content and activities that engage audiences on themes of climate and the environment

- **Illuminated River** is a permanent art commission to light central London bridges along the river Thames. The newly lit riverside pathways will replace existing lighting with the latest energy-efficient lighting technologies, making them more environmentally sustainable and enhancing the safety of the area. London Wildlife Trust undertook a Breeding Bird Assessment covering 8.4 kilometres of the River Thames to ensure the project would not be a disturbance to breeding birds.
- The Mayor of London, the British Fashion Council and Dame Vivienne Westwood have joined forces for a **'Switch to Green'** campaign. It asks the fashion industry to take action by switching their premises to a green energy supplier or tariff by 2020. This campaign has been developed to align with the Mayor's vision to make **London a zero-carbon city by 2050**. At its launch, 'Switch to Green' was supported by major designers and retailers including Marks and Spencer, Selfridges and Stella McCartney.
- Film London, the Mayor's strategic agency for film, is partnering with Good Energy and the film industry to undertake a feasibility study and pilot project to supply renewable energy at specific bases for film and TV productions.
- The National Park City Festival in July 2019 will mark London's confirmation as the world's first National Park City. This will encourage Londoners to explore the outdoor environment through culture, sport and community activities. Partners include the National Theatre, Open City and the National Trust.

2. Resources & Support

Investment, training and materials that support environmental knowledge and practical action

- The **Mayor's Energy Efficiency Fund (MEEF)** provides small businesses and public buildings, including museums and libraries, the opportunity to become more energy efficient through a £500 million investment fund. MEEF provides flexible and competitive finance and offers a wide range of funding options to deliver new low-carbon technology or upgrade existing low-carbon infrastructure.
- The Mayor has created investment funds which aim to address several of its strategic goals simultaneously, for example, the **Good Growth Fund** is a £70 million regeneration programme to support growth, sustainability and community development in London. Many cultural and creative businesses are eligible and encouraged to apply for mayoral support which could make cultural venues more energy efficient, e.g. the **RE:FIT scheme** which is part of the wider £34 million **Energy for Londoners** programme.
- The Mayor's **Entrepreneur Award** engages university students on generating low-carbon and circular economy market opportunities. Funded by Citi Foundation, the Award invites students to compete for £20,000 by inventing and innovating products and services that positively impact the environment. In 2019, the Mayor will expand the programme to include three awards focussed on the environment, technology and the creative industries.

3. Partnerships & Innovation

Diverse disciplines and communities sharing and co-developing ideas and resources that accelerate environmental action

- London's Deputy Mayor for Culture and Creative Industries, Justine Simons OBE, chairs the [World Cities Culture Forum](#), a network of global cities committed to sharing best practice on cultural policy and practice. World Cities Culture Forum has selected 'culture and climate change' as a strategic priority to engage its membership and is working with Julie's Bicycle and C40 to provide resources (see the '[Culture and Climate Change Handbook](#)') and leadership through the Creative Climate Cities support programme. Under the Mayor's leadership, London also plays a leading role in the C40 Cities Climate Leadership Group, sharing learnings and best practice from its work to tackle climate change – including initiatives implemented within the culture sector.
- As part of World Cities Culture Forum's Leadership Exchange programme, London partnered with New York's Department of Cultural Affairs to visit the '[Materials for the Arts](#)' site and consider its replication within London. Materials for the Arts works with creative organisations and businesses to collect unwanted goods that are reused for free by not-for-profit creative and educational organisations.
- In partnership with Thames Water, the Mayor is installing over one hundred water fountains across London, reducing the need for single use plastic water bottles. The Mayor is encouraging cultural institutions to sign up to [Refill London](#) and offer free tap water to the public.

4. Policy & Strategy

Guiding policy and strategy frameworks that drive climate and environmental action, investment and accountability

- The Mayor of London has identified four priorities for the Culture Strategy, one of which is: 'Culture and Good Growth – supporting, saving and sustaining cultural places and spaces'. Within this priority sits 'A Greener, Cleaner City' – the strand which describes various interventions to support the creative industries in reducing their impacts and driving sustainable innovation; topics include renewable energy, nature, water, plastic, sustainable fashion and film.
- London's [Environment Strategy](#) Policy 5.1.2 commits to 'Protect, conserve, and enhance the landscape and cultural value of London's green infrastructure'. The strategy profiles prominent cultural venues and consortia, for example, [Lyric Hammersmith](#) and [London Theatre Consortium](#) which both develop and share good practice, including environmental initiatives.
- The Greater London Authority recognises its duty to demonstrate leadership in the field of event sustainability management by conducting its event related activities in line with its [Event Sustainability Policy](#). The priority areas identified within the Policy include: monitoring energy and waste; reducing carbon emissions, waste and environmental impact of transport use; and promoting energy efficiency, clean technology and sustainable food options. The Event Sustainability Policy is shared with the event production companies (which are required to implement and report on actions within the policy) and other stakeholders such as community groups, sponsors, and programme and media partners.



AMSTERDAM

Creative Climate Profile

Environmental Ambition

Amsterdam's commitment to combining innovation and preservation has created a perfect context for civic leadership on environmental sustainability. The city's ambition is to reduce greenhouse gas emissions by 55% by 2030 (compared to 1990 levels)⁴ and its energy and environmental strategy commits to a 20% increase in renewable energy production (per person, between 2013 and 2020).

It has already provided substantial investment in efficiency, low-carbon energy and circular economy projects through the Climate & Energy Fund and Sustainability Fund⁵, including specific funding for cultural buildings. This investment, alongside new policy for sustainable city events, is positioning Amsterdam's arts and cultural communities as leaders on environmental action.

4 Eurocities. <http://www.eurocities.eu/eurocities/news/Amsterdam-commits-to-55-CO2-emissions-reduction-by-2030-at-the-ChangeNOW-Summit-WSPO-B57GNT>

5 C40. https://www.c40.org/case_studies/c40-good-practice-guides-amsterdam-sustainability-fund-and-amsterdam-climate-energy-fund

1. Creative Programmes & Campaigns

Creative content and activities that engage audiences on themes of climate and the environment

- **Zone2Source** provides an opportunity for artists to work at the intersection of art, nature and technology and produce work inside and outside Amstelpark's glass pavilions. Through exhibitions, workshops, debates and performances, artists and audiences explore alternative engagements with the world, encouraging a radical shift in humanity's relationship with nature and technology.
- **De Ceuvel** is a city playground for innovation, experimentation and creativity where the aim is to make sustainability tangible, accessible and fun. De Ceuvel is the result of a group of architects who won a bid to create a 'regenerative urban oasis' in the old shipyard in the North of Amsterdam. The area now functions as an educational hub, a workspace for organisations motivated by sustainability, as well as a showcase for low-carbon technologies and circular economy approaches.

2. Resources & Support

Investment, training and materials that support environmental knowledge and practical action

- In order to support interdepartmental initiatives between environment and culture, the municipality hired a Project Manager to work with both departments to deliver the **sustainable cultural venue** agenda, which includes free energy advice, green finance opportunities and good practice case studies. The Project Manager has been delivering an environmental training and support programme to Amsterdam's cultural venues.
- The Department for Arts and Culture provides a grant programme of €500,000 for low-carbon energy and efficiency interventions for cultural venues (e.g. building fabric improvements, solar panels, double glazing).
- The Department for Arts and Culture provides a dedicated **website** with sustainability support for arts and cultural buildings in Amsterdam. The website includes topics like: sustainability and cultural monuments, applying for electric vehicle charging points, investing in solar panels, and examples of best practice from the sector. The website also communicates free services (e.g. energy audits) and finance opportunities for 'greening' cultural practice, such as subsidies for maintenance, green roofs and facades.

- **BREEAM-NL** was undertaken at eight museums in Amsterdam to determine their environmental performance, assessing activity across nine different sustainability criteria: management, health, energy, transport, water, materials, waste, land use and ecology, and pollution. The Rijksmuseum was the first to receive an ‘Excellent’ rated BREEAM-NL certificate and the Concertgebouw is the first concert hall in Europe with a BREEAM certificate.

3. Partnerships & Innovation

Diverse disciplines and communities sharing and co-developing ideas and resources that accelerate environmental action

- The Department for Arts and Culture has been working closely with the Environmental Department on a project to deliver environmental improvements to the city’s cultural infrastructure as part of the municipality’s target to achieve a 20% reduction in energy use per capita by 2020 and align itself to the Paris Agreement. All cultural institutions in Amsterdam are offered a free ‘energy scan’, including advice and recommendations on efficiency improvements, solar energy, and financing options.

- Twenty cultural venues have undertaken a comprehensive environmental audit focused on reducing energy and improving management of water, waste and catering. This was followed by a training programme to support the implementation of the audit’s recommendations. The data collected has been used to inform city-specific benchmarks for environmental performance.

4. Policy & Strategy

Guiding policy and strategy frameworks that drive climate and environmental action, investment and accountability

- The City of Amsterdam’s environmental policy includes arts and culture, focusing on cultural venues as sites of environmental improvement.
- The City of Amsterdam has produced a pioneering sustainable events policy for festivals. By 2020, all large events (more than 2,000 visitors) will have to be compliant with certain criteria covering energy, water, waste and mobility in order to qualify for an event permit. The sustainability criteria will be phased in between 2018 and 2020 – each year becoming more stringent and requiring greater environmental improvement.



NEW YORK

Creative Climate Profile

Environmental Ambition

New York City was the first city to publish a strategy aligning its emission reduction targets to the Paris Agreement and the ambition of limiting global temperature rise to 1.5°C. The city's financial, political and cultural power, reinforced by its civic identity, provides the leverage to lead action on climate and the environment. This is demonstrated by initiatives such as OneNYC and the decision to divest its pension funds from fossil fuels. In April 2019, Mayor Bill de Blasio announced NYC's **Green New Deal**, through which the City will target the largest source of emissions in New York by mandating all large existing buildings cut their emissions – a global first. The city now has the opportunity to position its world-famous arts and culture community as leaders for the transition towards sustainability.



1. Creative Programmes & Campaigns

Creative content and activities that engage audiences on themes of climate and the environment

The City of New York has funded and delivered a range of public art and engagement projects on environmental themes, directly or through partnerships, including:

- Education programmes across science-based organisations overseen by the Department of Cultural Affairs e.g. American Museum of Natural History, Wildlife Conservation Society, Bronx Zoo, Brooklyn Botanic Garden and New York Botanical Garden. Themes included urban ecology, gardening, environmental science and poetry.
- **Public Artists in Residence (PAIR)**, which places artists in City Agencies to creatively address civic challenges, overseen by the Department of Cultural Affairs (part-funded by the City of New York). Past PAIRs have included artist Mary Miss, who worked in the Department of Design and Construction to reimagine cities for the 21st century covering social, cultural and environmental sustainability.
- **Red Hook Public Art Project on Climate Change: Ark for the Arts** by Jeanine Bardo and Isabelle Garbani (2017-2018). This public art and community engagement project was funded through NYC Emergency Management, facilitated by the Percent for Art programme and delivered in partnership with the Mayor's Office of Recovery and Resiliency. It commemorated the fourth anniversary of Hurricane Sandy and drew attention to climate change and rising sea levels.
- **The Climate Museum**, which presented – in partnership with the Mayor's Office (Climate Policy and Programs) – Climate Signals, a multi-site outdoor installation by artist Justin Brice Guariglia. Climate Signals promoted understanding of the local impacts of climate change, their intersection with other urban challenges, the importance of climate action by cities and the roles we all can play.
- **Swale**, project by artist Mary Mattingly used a boat to create a public food garden and educational space, asking questions about how New York will feed itself in the future, how access to fresh food can be improved in the South Bronx and how the City can make better use of its public land. The project works closely with the New York City Parks Department.
- The global annual **Daylight Hour** campaign which the Department of Cultural Affairs and a number of cultural institutions on city-owned property participate in. The campaign highlights ongoing investment into energy efficiency in New York's cultural institutions and encourages the use of daylight instead of electric light.
- The Department of Cultural Affairs' annual #PoetweetNYC Twitter poetry contest held during National Poetry Month. The 2018 theme was environmental sustainability in honour of Earth Day and the 40th anniversary of the City's Materials for the Arts programme.

2. Resources & Support

Investment, training and materials that support environmental knowledge and practical action

- **Materials for the Arts** is a partnership between the departments of Cultural Affairs, Education, and Sanitation, promoting upcycling and reuse of materials. So far it has diverted nearly 1,000 tonnes of materials from landfill every year. Materials for the Arts collects materials and objects from businesses and makes them freely available to non-profit cultural organisations, other government agencies and schools through a warehouse space and online platform. In 2017, it redistributed nearly \$10 million worth of materials. It also runs educational workshops on creativity and re-use.
- The Department of City Wide Administrative Services distributes funding for energy efficiency projects on city property – a proportion of which is diverted by the Department of Cultural Affairs to arts and culture. Through this collaboration, cultural institutions have achieved significant improvements in energy management. The funding enabled the Metropolitan Museum of Art to convert over 4,000 light fixtures to LED lamps, leading to an estimated 876,829 kWh reduction in annual energy use, saving \$91,230. The New York Botanical Garden reduced energy use by 21% and emissions by 53% (per sq. ft.) over the last decade, saving approximately \$300,000 per year; initiatives included: upgrades to lighting and HVAC systems, clean fuel upgrades for fleet vehicles, and carbon sequestration through organic gardening practices and land management.

- The City of New York has created a new position to work specifically with cultural organisations to help them to reduce their greenhouse gas emissions and create a more sustainable city. This role will support the Department of Cultural Affairs' Capital Projects Unit so that capital budgets are directed towards energy reductions and other environmentally-focused projects.

3. Partnerships & Innovation

Diverse disciplines and communities sharing and co-developing ideas and resources that accelerate environmental action

- The **NYC Compost Project** is an education and outreach project on composting for residents and businesses. Founded in 1993, it runs workshops, drop-off sites for food waste, provides technical assistance and volunteer coordination. Staff are funded through the Department of Sanitation and hosted by seven partner organisations including Brooklyn Botanic Garden and Queens Botanical Garden.
- **Solar1** is a Green Energy Education Centre that manages Stuyvesant Cove Park as a haven for biodiversity and community events; runs education, workforce training, and public engagement programmes on energy efficiency and renewable energy technologies; and supports building owners and community energy groups to install solar power. It receives funding from a range of sources: the Cultural Development Fund (Department of Cultural Affairs), the NY Power Authority, the Governor's Office for Storm Recovery and the NYC Department of Education.

4. Policy & Strategy

Guiding policy and strategy frameworks that drive climate and environmental action, investment and accountability

- The **CreateNYC** cultural strategy explicitly connects culture and environmental sustainability, further supported by the Department of Cultural Affairs' remit to include science as a part of the city's cultural life. Objective 4, within 'Social and Economic Impact' is: 'Make the case for arts, culture, and science as essential components of a resilient and sustainable city'. This will be delivered through the following strategies:
 - Include arts and culture in resilience planning and preparedness; designate a City liaison to help coordinate the participation of artists and arts, cultural, and science communities in disaster preparation and response.
 - Hire an energy specialist who will work with cultural organisations to help them decrease their energy use and lower their environmental impact.
- **CreateNYC's** implementation strategy refers to the **OneNYC** goal to reduce greenhouse gas emissions by 80% by 2050, committing to: 'Work with cultural organisations to achieve the City's sustainability goals'

SAN FRANCISCO

Creative Climate Profile

Environmental Ambition

San Francisco prides itself on low-carbon innovation and enterprise and has reduced its emissions by 36% below 1990 levels while simultaneously seeing a 22% increase in population and 166% growth in GDP. Despite its urban character, the San Francisco Bay is one of California's most ecologically important habitats. For hundreds of thousands of years its moderate climate and geography have created a rich natural heritage, and recent successful conservation efforts have ensured the survival of precious species such as the Green Hairstreak butterfly, Sequoia trees and the Pacific Chorus Frog⁶. With its rich natural and cultural history, combined with its engaged and diverse citizenry, San Francisco is in prime position to become a global creative climate leader.

1. Creative Programmes & Campaigns

Creative content and activities that engage audiences on themes of climate and the environment

San Francisco's Arts Commission has a programme for public art projects inspired by environmental themes, for example:

- **SF Bay Guardians** is a series of six unique and temporary murals which depict a different animal common to San Francisco Bay guarding the storm drain and preventing trash and other pollutants from entering the bay.
- **Firefly** is a 12-story, wind-driven kinetic light sculpture by artist Ned Kahn installed on the San Francisco Public Utilities Commission building, one of San Francisco's greenest buildings. At night, the movement of the panels in the wind is converted into the flickering of tiny LED lights designed to mimic fireflies, highlighting their threatened species status.

Other initiatives supported by the City and County of San Francisco include:

- A mural by San Francisco artist **Cameron Moberg**. The mural brings attention to the illegal dumping in one of the City's neighbourhoods impacted by a range of environmental stressors. It was commissioned by **San Francisco's Department of the Environment** to engage and encourage citizens to be vigilant and report illegal dumping.
- **Trolley Dances**, a two-day, free public performance that pairs artists and ensembles with specific sites along San Francisco's

historic trolley routes. Artists create pieces in response to the physical environment, architecture and history of the area. The project has historically been supported by San Francisco's Municipal Transportation Agency, San Francisco Arts Commission and the San Francisco Department of the Environment as a unique opportunity to engage residents on using mass transit.

2. Resources & Support

Investment, training and materials that support environmental knowledge and practical action

The City and County of San Francisco's Department of the Environment:

- Provides approximately \$500,000 per year for Zero Waste and Carbon Mitigation/Sequestration projects, a portion of which is used to fund projects which benefit civil society, such as supporting arts and heritage. Over the last 20 years, grants have funded projects as diverse as:
 - **SCRAP**, a non-profit creative reuse materials depot and workshop space founded in 1976. It reduces landfill waste by annually diverting over 200 tonnes of creative materials, providing affordable supplies to teachers, artists, community organizations, and others in San Francisco and the Bay Area. It also employs local artists to lead workshops and school fieldtrips using its materials.

- **Tunnel Top Park**, a volunteer-driven community greening project, transforming a once vacant lot into a vibrant green space. Creative initiatives include three train-themed murals and a community gathering space for events, workshops and recreational activities.
- Supports the **Climate Music Project**, which educates, inspires and enables diverse audiences to engage with climate change through creating and performing music driven by climate change data. In April 2018, they performed live at an SF Jazz event on a bill with the popular scientist Bill Nye. They recently collaborated with the World Bank to bring the Climate Music musicians and scientists to an international resiliency conference in Mexico City.
- Supports the San Francisco **Green Film Festival**, which in September 2018 hosted new environmental films, discussions and special events with partner organisations to celebrate the Global Climate Action Summit.
- The **Bay Area Challenge** (supported by The Rockefeller Foundation) launched to develop innovative solutions that will strengthen the region's resilience to sea level rise, severe storms, flooding, and earthquakes. Ten Design Teams formed, made up of local and international architects, engineers, ecologists and other experts for a year-long collaborative design challenge.
- The Arts Commission has collaborated with **San Francisco's Public Utilities Commission** (SFPUC) to create public art that inspires communities to appreciate and respect common environmental resources. The two departments collaborated to commission a new design for SFPUC's new Sewer System Improvement Program's Westside Pump Station. Through a public selection process, Fog Lilies, a design by local artist **Jet Martinez**, was chosen for the facility.
- The multi-departmental collaboration, **Reinventing Cities** (initiated by the C40 Cities Climate Leadership Group) is a global competition to drive carbon neutral and resilient urban regeneration by developing underutilised spaces. C40 and participating cities are inviting architects, developers, environmentalists, neighbourhood groups, innovators and artists to build creative teams and compete for the opportunity to transform these sites into exemplars of sustainability and resilience. San Francisco teams will be proposing innovations in its historic **Civic Center** area.

3. Partnerships & Innovation

Diverse disciplines and communities sharing and co-developing ideas and resources that accelerate environmental action

- The Arts Commission has collaborated with the San Francisco Department of the Environment on the **EcoCenter**, the Department's LEED Platinum space. The site is a showcase for the latest materials and technologies in energy efficiency and green buildings, as well as a community centre, art gallery, film and performance venue.

- **Recology**, the City's waste hauler, launched an artist-in-residence programme that supports local artists who work with materials found at the dump. Recology uses the programme to encourage people to conserve resources and promote new ways of thinking about art and the environment. The programme has provided residencies to a diverse range of artists working in classical music, costume design, puppetry, photography and sculpture. The Department of the Environment maintains a permanent seat on the Board of Recology's artist-in-residence programme.

4. Policy & Strategy

Guiding policy and strategy frameworks that drive climate and environmental action, investment and accountability

Although there is currently no policy that explicitly connects arts and culture with climate and the environment, many of the creative initiatives supported by the City and County of San Francisco are guided by its **Climate Action Strategy**. The communications framework – '**0-80-100-Roots**' – engages residents, businesses, and other city departments in San Francisco's environmental programmes and contextualises the actions necessary to meet the challenges of climate change. It speaks to both operational 'greening' practices, as well as neighbourhood engagement and community building.

Leadership Initiatives

California hosted the **Global Climate Action Summit** in September 2018, a major international gathering of non-state actors led by Governor Jerry Brown. This high-profile event, based in San Francisco, attracted delegates from all over the globe in the run up to the critical COP 2020 deadline for peak global carbon emissions⁷.

More than 350 affiliate events took place across the city, including many artistic and cultural activities, for example: the **Climate Music Project**, **MOVEIUS Contemporary Ballet**, DKLA's 35-ft **polar bear** made from car hoods, Clifford Ross's **Digital Wave** series; and **ClimateKeys** – who worked in collaboration with **M2020** to arrange a series of concerts combining music, speech and conversation about climate change. In addition, the San Francisco Symphony performed Aaron Copland's *Appalachian Spring* in collaboration with the *Coal and Ice* art installation.

⁷ <https://globalclimateactions summit.org/>. The five themes are: Healthy energy Systems, Inclusive Economic Growth, Sustainable Communities, Land and Ocean Stewardship, Transformative Climate Investment.

CAPE TOWN

Creative Climate Profile

Environmental Ambition

Cape Town has a huge opportunity to lead the world in a transition toward sustainability, leapfrogging unsustainable development practices in the global North and promoting alternative perspectives on dealing with critical urban issues. Artists and creative practitioners across the city are already engaged with issues relevant to environmental sustainability – from aesthetics and materials, to activism and education – but would benefit from further support in connecting this work to a broader movement of change.

Promoting action on climate and the environment has often greater relevance and impact when connected to issues of social sustainability. ‘Ubuntu’ is an Nguni Bantu term meaning ‘humanity’ and has profound environmental implications; it speaks to human interconnectedness and the implications of our actions on the wider world⁸. For Cape Town, the context of ‘climate justice’ will highlight the interdependence of social justice and environmental sustainability – two key policy imperatives within South Africa’s agenda for sustainable development⁹.

8 Brief Meaning of African Word ‘UBUNTU’. Ubuntu Women Institute USA. January 24, 2012.

9 Towards a Regenerative Culture, 2018. The report was produced by researcher Sholeh Johnston in collaboration with the National Arts Council of South Africa and Vrystaat Arts Festival, and is an outcome of over four years partnership and exchange between these organisations and Julie’s Bicycle.

1. Creative Programmes & Campaigns

Creative content and activities that engage audiences on themes of climate and the environment

- Borderlands Public Arts Project is an ongoing initiative started in 2017 that brings together people from segregated communities and fosters collective ownership of shared public spaces. Diverse, inter-generational groups join artistic experiences in the 'borderlands' between communities: the many nature areas that make Cape Town so unique, but also play a role in social segregation. Workshops and camps bring youth into contact with the natural environment through experimental, participatory arts and inspire creative reflection on our ecological interdependence. The Project uses innovative strategies to get people talking, playing, creating, collaborating and learning about the complex ways in which social and environmental issues intersect.
- Cape Town's water crisis gripped headlines across the world with commentary often imbued with negativity, however one exhibition has shown how artists can use a disaster such as this to serve as both inspiration and education. **Baz-Art** decided to focus its theme around the topic and inspire artists to draw on the drought in their nine-day **International Public Art Festival** (2018) 'Nature doesn't need us, we need nature', supported by the City of Cape Town. The 2019 festival is titled 'Generation Next: Educate, Collaborate, Empower' representing a focus on the future and the responsibility of present and successive generations to create a better world for all.
- Designer Heath Nash began the Our Workshop initiative in 2013 to create a space which allowed people to come together in a

co-creative environment to upcycle trash into designer goods. In 2017, the workshop moved to Guga S'thebe, Langa, where it has grown into an innovation hub for young, aspiring creatives. Nash plans to expand this model to establish maker-spaces in a variety of new locations.

- Cape Town Carnival 2018 was themed 'Mother City, Mother Nature', featuring close to 1,700 dancing, singing and instrument-playing performers and intricate floats.

2. Resources & Support

Investment, training and materials that support environmental knowledge and practical action

- Cape Town's '**Arts, Culture and Creative Industries Policy**' supports an integrated approach to arts, culture, heritage and creative industry development and seeks to evaluate the social, cultural, economic and environmental impacts of the sector so as to better allocate resources and support.
- The City of Cape Town is working with academia and other relevant research bodies to advance the collection and analysis of data to develop benchmarking indicators. Cape Town is currently participating in the FRACTAL (Future Resilience for African Cities and Lands) research programme, which is part of the broader Future Climate for Africa initiative. FRACTAL emphasises knowledge co-production and shared learning as innovative methods for bridging the gap between academia and local government.

- The **CDI** is a craft and design sector development agency which supports responsible creative enterprise and trade. It has several initiatives to improve the environmental sustainability of the craft and design sector, demonstrating that greater understanding will enable practitioners to recognise good design and appreciate their own environmental responsibilities.

3. Partnerships & Innovation

Diverse disciplines and communities sharing and co-developing ideas and resources that accelerate environmental action

- Cape Town was World Design Capital in 2014 with the successful bid '**Live Design. Transform Life**' which focussed on the role that design can play in social transformation in the city. Theme three was 'Today for Tomorrow: Sustainable solutions for people and planet.'
- In 2017, Cape Town became a member of the UNESCO Creative Cities Network as a Design City. It is the intention that the designation acts as a catalyst for achieving inclusive, urban, sustainable development.
- The **Ways of Knowing Urban Ecologies Project** engages multiple case studies in Cape Town and Stockholm to build a rich evidence base and increase public debate on the role of 'nature' as cultural discourse and material reality – 'In engaging community groups, civil servants and academics we bring in-depth case studies to inform and unsettle mainstream policy discourse to promote the reimagining of how just and sustainable forms of urbanisation might be made possible'.

4. Policy & Strategy

Guiding policy and strategy frameworks that drive climate and environmental action, investment and accountability

- Cape Town's Resilience Strategy (due to launch in 2019) is being adopted in the aftermath of the worst drought the city-region has confronted in recorded history. 'Resilient Cape Town' will offer a roadmap for a 21st century metropolis, working across government, business, community organisations, academia and households to build Cape Town's collective resilience. There are five pillars that form the core of Resilient Cape Town – the second being 'Connected, climate-adaptive city'. The City's Arts and Culture Department will be working with partners on various initiatives to increase social cohesion, peer-support and resilience in times of shock and stress.
- The **Environmental Strategy** incorporates heritage management and recognises the unique role that Cape Town's natural and cultural heritage play in creating a sense of place and belonging in the city.
- The **Climate Change Policy** emphasises the need for innovation and creative thinking in addressing the challenge of climate change, recognising that 'business as usual' needs to change in order for climate change to be effectively addressed. In developing a resilience strategy for Cape Town, linked to climate change adaptation, the City's preliminary assessment identified social cohesion as one of four key enabling areas for which cultural participation is critical.



MELBOURNE

Creative Climate Profile

Environmental Ambition

Melbourne is now taking a leadership role in civic action on environmental sustainability, embedding it as a basis of all future City of Melbourne goals, ensuring it speaks to social sustainability and the health and wellbeing agenda. The City of Melbourne recognises that creativity must be integrated into the fabric of city life and has consequently launched a new creative strategy which addresses societal challenges, such as environmental sustainability, through 'principles understood by Indigenous and ancient civilisations whereby art is not a product or a service but, rather, it informs how the world is and how to be in it'¹⁰.

1. Creative Programmes & Campaigns

Creative content and activities that engage audiences on themes of climate and the environment

- Wild City is a project from [ArtPlay New Ideas Lab](#), by artist [Kathy Holowko](#). Through sculpture, Holowko engaged with children, ecology experts and departments for Urban Sustainability and Parks to explore how humans could better share the urban environment with native animals. As part of the project, children fed into the Birrarung Marr Master Plan by looking at how to adapt real-life infrastructure in the park; the project concluded with a film and exhibition.
- [Performing Climates](#) is a public arts and cultural programme from the 2016 Performing Studies International Conference which explored the intersection of art and climate change.
- [Water Futures](#) is a multi-disciplinary event bringing together more than 120 artists and subject experts to consider the future of our water resources.
- The [Green Transfer](#) public art project is the winning artwork commission from a series of 11 proposals for a sustainability-themed public artwork (commissioned by the City of Melbourne, Positive Energy Places and Fort Knox Self Storage). Each day, The Green Transfer artwork displays a graphic that relates to energy efficiency with the intention to engage people in the environmental performance of the built environment.

2. Resources & Support

Investment, training and materials that support environmental knowledge and practical action

- All City of Melbourne grant applicants are required to respond to the Council's environmental goals. In addition, KPIs related to environmental outcomes are included in all funding agreements and in city events.
- The City of Melbourne offers free sustainability training courses that support and educate city staff on how to understand their opportunities for influence in supporting the city's sustainability goals.
- The City of Melbourne has managed several artist residencies related to sustainability themes and outcomes, such as [Lab-14](#).
- [Climart](#) was a 4-year multidisciplinary research project (which received funding over several years from the City of Melbourne) run by a team of international researchers in psychology, natural science and the arts. The project is led and housed at the Institute of Psychology at NTNU, Trondheim, Norway, and designed to collect data to inform the of fields of environmental psychology, visual arts, sustainability and climate.
- Several projects have successfully emerged with the support of the [Melbourne Accelerator Program](#) and the [Translating Research at Melbourne](#) program, such as the renewable energy technology company [Allume Energy](#).

3. Partnerships & Innovation

Diverse disciplines and communities sharing and co-developing ideas and resources that accelerate environmental action

- The **Creative Strategy** was designed to inspire a collaborative approach between cultural and environmental departments and creative organisations to address the city's goals as they relate to environmental sustainability and other key topics.
- Melbourne's Urban Sustainability team partnered with **ArtPlay** to offer free workshops for families to creatively engage with themes of sustainability. The workshops were co-delivered by two arts organisations engaged with sustainable art practices: **Trash Puppets**, which use only recycled materials, and **Baluk Arts**, which follows Aboriginal art making practices that only use natural materials.

4. Policy & Strategy

Guiding policy and strategy frameworks that drive climate and environmental action, investment and accountability

In 2018, the City of Melbourne released a new **Creative Strategy**, representing a shift in the way culture would operate within the city. The vision of this strategy is to tackle the nine goals Melburnians have set for their city – one being 'to care for its environment' – through

the lens of arts and culture, engaging creative practitioners to work with subject experts on managing transport, climate change, urban planning and other critical opportunities and challenges. This model does not focus on a project-by-project basis but a true integration of sustainability within the creative process, and creativity embedded within civic sustainability programmes.

At its core, the strategy aims to create new connections and bridge different disciplines across everything the city does, between public and private organisations, the city and its communities, and between creative practice and civic life. Through this approach, Melbourne intends to support the transformation of the city through 'bold, inspirational, sustainable creative thinking that draws on the remarkable, expansive expertise of our creative community'¹¹.

Future Initiatives

The Resilience Proposal will build on the success and proof-of-concept of the project **Refuge**, developing a strategic partnership with Emergency Services and the Red Cross. The programme will bridge a range of sectors – including the arts, community engagement, environmental organisations, local government and emergency management – and support Melbourne in its resilience to climate-related disasters.

TAIPEI

Creative Climate Profile

Environmental Ambition

Taipei is considered a hub for environmental innovation and has inspired many of Taiwan's environmental policies, for example, the banning of single-use plastics such as plastic bags and food containers. Environmental engagement and innovation is clearly present within Taipei's arts and culture communities; prior to the implementation of national environmental protections, artists had already started to address environmental issues within their work and as artist-activists¹². Both Taiwan and Taipei are focused on a sustainable future, committing to global climate change targets and policy such as the Paris Agreement.

12 Artists and Climate Change. <https://artistsandclimatechange.com/2018/01/29/the-10-most-pioneering-art-sustainability-initiatives-in-taiwan/>

1. Creative Programmes & Campaigns

Creative content and activities that engage audiences on themes of climate and the environment

- The Department of Cultural Affairs of the Taipei City Government has been working with young designers to research and develop new and inclusive play equipment for five neighbourhood parks, all designed, produced and manufactured in Taiwan. The 'Inclusive Park' projects integrate social inclusivity with public art projects and the protection of nature, such as the forest playground which contains trees of an age rarely seen in other neighbourhood parks.
- Taipei Biennial 2018 was themed 'Post-Nature—A Museum as an Ecosystem' and hosted by Taipei Fine Arts Museum (managed by the Department of Culture). Curated by Mali Wu and Francesco Manacorda, the exhibition investigated how systems theory can inform art-making and allow us to reflect on our natural environment and human dependence on natural systems.
- **Bamboo Curtain Studio** is an independent art space and artist residency founded in 1995. It is a place for artists, writers, curators, policymakers, citizens and environmentalists both in Taiwan and internationally who are addressing social and environmental issues through their work. Bamboo Curtain Studio is planning a circular economy conference, engaging with Taipei's Business Development Department and Department of Cultural Affairs.
- **Taipei Artist Village** in Taipei City, is located in a previously vacant space, repurposed for cultural activities in 2001 by the Department of Cultural Affairs. Taipei Artist Village, in collaboration with Bamboo Curtain Studio, co-hosted a workshop focussed on climate leadership within the arts, culminating in a public event to showcase international good practice. This event focussed on

how artists can adopt more ecological practices and influence audiences and public policy through their actions.

- **Zhishan Cultural and Ecological Garden** is a commission from the Department of Cultural Affairs to Taipei's Wild Bird Society. Zhishan is a listed heritage site (with evidence of prehistoric inhabitants) and the Cultural and Ecological Garden promotes environmental awareness and action to families and local citizens.
- The **Kishu An Forest of Literature** was launched by the Department of Cultural Affairs in an unprecedented attempt to dedicate a facility to literature and was inspired by Taipei's tree activist movement: protecting cultural assets such as historic houses by way of protecting the surrounding trees and landscape.

2. Resources & Support

Investment, training and materials that support environmental knowledge and practical action

- The Department of Culture Affairs is responsible for distributing public money granted by Taipei City Government to artists and arts organisations. A proportion of this money provides grants for environmental activities and investment in the sustainability of Taipei's cultural infrastructure and heritage. For example, cultural facilities such as the new Taipei Concert Hall and Public Library, have to acquire the **Green Building label** and achieve the highest 'diamond' rating. The Green Building label of Taiwan was developed based on Taiwan's subtropical climate of high temperature and high humidity and designed to meet requirements within ecology, energy saving, waste reduction, and health.

3. Partnerships & Innovation

Diverse disciplines and communities sharing and co-developing ideas and resources that accelerate environmental action

- Taipei won World Design Capital 2016 under the theme of **Adaptive City – Design in Motion**. One of the four programme strands was 'Design for Sustainable Cities', inspired by the concept of creating a sustainable city for the 21st century using creativity and innovation. Design professionals were invited to take part in policy-making discussions and the city government designed a **series of courses** in design-thinking for city officials.
- The **Inclusive Park** projects, which brought together inclusive play, public art and the protection of nature, were developed through a series of workshops to canvas opinions and engage with parents. Designers, artists, architects and playground apparatus manufacturers were invited to work together in dialogue with the public, the government, and NGOs.

4. Policy & Strategy

Guiding policy and strategy frameworks that drive climate and environmental action, investment and accountability

- In 2003, Taipei City Government created a new law to protect trees based on certain size and age criteria, which are deemed rare, or ecologically, biologically or geographically significant to the local community, history or culture. The Taipei City Tree Protection Act (Article 6) acknowledges access to trees as a civic right and the trees are protected by the Department of Culture as natural and cultural heritage. Pioneered in Taipei, the policy for tree protection has been taken up by other cities across Taiwan. Taipei City Government is the only city government which assigns tree protection to the Department of Culture.
- It is policy in Taipei for cultural institutions not to sell bottled water. Instead they are encouraged to provide water fountains for staff and audiences. This policy has inspired a cultural shift and the use of reusable water containers is now expected in public and administrative buildings.

OSLO

Creative Climate Profile

Environmental Ambition

Oslo's reputation as a green city is due to much more than its parks and surrounding forests. Citizens, urban planners, politicians and businesses of different kinds have worked hard to reduce the city's carbon footprint and support a more sustainable society.

Their efforts have been recognised and rewarded by the European Commission, which has named Oslo 'European Green Capital' for 2019. The award is given to a city that has a consistent record of achieving high environmental standards, is committed to ongoing and ambitious goals for further environmental improvement and sustainable development, and can act as a role model to inspire and promote best practice to other European cities¹³. The European Green Capital programme offers an exciting opportunity to showcase and develop the environmental initiatives of Oslo's leading arts and cultural community.



1. Creative Programmes & Campaigns

Creative content and activities that engage audiences on themes of climate and the environment

- During the 2019 European Green Capital, Oslo is hosting hundreds of different **events** that highlight and celebrate sustainability and the environment, from citywide festivals to small markets and children's workshops. Events include:
 - **Passion for Ocean Festival** which includes environmental awareness-raising with sailing yachts, divers, surfers, kite-surfers, paddlers, biologists, cooks and innovators, as well as music and other cultural activities.
 - **Repurpose Festival** at Norsk Folkemuseum, where audiences are invited to trade, reuse and repair items and see exhibits of vintage clothing.
 - **Oslo Rooftop Festival** is a programme of cultural activities which highlight the rooftop as a social meeting spot and a contributor to urban diversity, local food production and climate adjustments.
- As a result of their environmental commitments, some of Oslo's large annual events are forming part of the European Green Capital programme, for example, **Øya Festival** (well-known for its environmental credentials) and **International Dance Day** (established in 1982 by UNESCO and celebrated in more than 60 countries) which encourages citizens to 'take back the city' by filling the urban landscape with movement and dancing bodies.
- Oslo's Nobel Peace Centre is presenting **Klimalab**, a vibrant exhibition about climate, nature and people. The exhibition has been designed to be incomplete, and in asking visitors to help

finish it, it highlights that addressing climate change requires everyone to work together to find solutions (such as living without meat for 30 days and planning holidays that do not involve flights).

- The **Future Library project** (Norwegian: Framtidsbiblioteket) is a hundred year long public artwork commissioned by Bjørvika Utvikling and created by artist Katie Paterson, which will collect an original work by an author every year from 2014 to 2114; the manuscripts will be published in 2114. One thousand trees were specially planted for the project in the Nordmarka forest, providing the paper on which the books will be published¹⁴. The Manuscripts will be housed in a specially designed room in the new main library which is currently under construction.
- **Losæter** is a new cultural institution on a common along the waterfront in Bjørvika dedicated to a range of activities related to art, urban farming and local food production. This unconventional use of a common area was initiated by the art collective Futurefarmers, with Amy Franceschini as the lead artist.

2. Resources & Support

Investment, training and materials that support environmental knowledge and practical action

- In light of the city's status as European Green Capital, grants have been made available to the art and cultural sector through the municipality's grant mechanism to support the inclusion of environmentally friendly measures at cultural events. Funding has also been made available to create access points for green electricity at the sports and nature park Ekebersletta.

- The ‘Platform for City Government cooperation 2015-2019’ confirms the City Government will present sustainability goals in the annual budgets for the City of Oslo and make these the basis for policy development across departments, including climate budgets and emission ceilings by sector¹⁵.

3. Partnerships & Innovation

Diverse disciplines and communities sharing and co-developing ideas and resources that accelerate environmental action

- To embed culture across the city and to sustain many smaller cultural groups that do not receive large subsidies, the City aims to increase the use of municipal buildings, particularly schools and libraries, to provide space for out-of-hours cultural activity. Extending and optimising the usage of existing buildings also contributes to environmental good practice, where extended use offsets the need for developing new cultural venues and infrastructure. As a temporary solution, empty municipal buildings awaiting new use have been temporarily rented out as artists’ studios, further optimising the use of existing buildings.
- Sustainability has been a guiding principle of many of Oslo’s recent large-scale construction projects, including Vulkan, a former industrial site transformed into an environmentally-conscious neighbourhood. On the waterfront, the Tjuvholmen development – which houses the Astrup Fearnley Museum and

sculpture park – includes artificial reefs. These protect underwater wildlife by mimicking natural reef systems that provide material to encourage reef organism settlement.

- **FutureBuilt** is a ten-year collaborative¹⁶ programme supporting climate-friendly urban development in the Oslo region. The pilot projects aim to reduce greenhouse gas emissions by at least 50% from transport, energy and materials, with many located near major transport hubs to promote walking, cycling and safety. Pilot projects include a variety of public and private buildings, including cultural buildings¹⁷.

4. Policy & Strategy

Guiding policy and strategy frameworks that drive climate and environmental action, investment and accountability

- The National ‘Cultural Policy for the Future (2018-2019) includes a section called ‘Artists and environmental engagement’ referring to the Norwegian Writers’ Climate Campaign and the Norwegian Artists’ Climate Campaign. It also includes a section calling for ‘bold cultural policy’ – which describes how cultural policy impacts other areas of civic policy such as education, welfare and climate: ‘Cultural policy can thus play a positive role in the transformation of Norway’.

¹⁵ Platform for City Government cooperation 2015-2019

¹⁶ It is a collaboration that includes the municipalities of Oslo, Bærum, Asker and Drammen, the Ministry of Local Government and Modernisation, The Norwegian State Housing Bank, The Agency for Building Regulations, Green Building Alliance and the national Association of Norwegian architects.

¹⁷ FutureBuilt. <https://www.futurebuilt.no/English>

- In May 2019, the City Government approved a new event strategy for the City of Oslo, which aims to make Oslo a more event friendly city. The City will create a new events unit to guide and support event organisers, as well as developing measures for encouraging greener events. There is also a focus on increased and smarter use of public space and the need to connect green infrastructure to events – this could include access to points for electrical power, recycling and bike racks¹⁸.
- The ‘Action Plan for Increased City Life’ is encouraging a more environmentally friendly city by reducing cars and bringing people and life back onto the streets to create a more friendly and inclusive city. The Plan helps ensure culture plays an important role in the creation of new public spaces, prioritising pedestrianisation and traffic reduction through innovative design, and facilitating initiatives within arts and culture to creatively use the new spaces. These have included the creation of mobile stages for cultural performances with access to electricity (negating the need for air-polluting generators), and the installation of new street furniture and lighting.

TORONTO

Creative Climate Profile

Environmental Ambition

Toronto has 157 kilometers of Lake Ontario shoreline – the 14th largest lake in the world by surface area and home to many ecologically significant and rare ecosystems. Important species include the endangered shorebird, the Piping Plover, and Canada’s largest freshwater fish, the Lake Sturgeon¹⁹. As a result of the city’s large population, there is a requirement to manage substantial volumes of waste as well as hotspots of water and air pollution – however the City of Toronto is committed to reducing the environmental footprint of City operations and realise the vision of Toronto as a ‘clean, green and sustainable’ city. TransformTO is the Council-endorsed city-wide climate change action plan and is the overarching policy framework informing all environmental initiatives in the City of Toronto.

Arts and culture play a crucial role in civic engagement and building social capital; Toronto has the opportunity to ensure its social and environmental strategies are mutually-reinforcing, empowering its cultural community to lead on sustainable development.

1. Creative Programmes & Campaigns

Creative content and activities that engage audiences on themes of climate and the environment

- The City of Toronto's public art program has commissioned several works that address environmental themes, including the highly-acclaimed **Elevated Wetlands**, a set of sculptures by artist Noel Harding. The concept was to create a functioning sculpture that uses waste plastic as a soil substitute to mechanically filter water from the polluted Don River, performing the role of a wetland environment.
- The City's Museum and Heritage Services delivers a programme of environmental education events and activities within the ten municipal owned and operated museums, including:
 - **Harvest Festivals** which comprise **eco-summer camps** for children and weekly markets that sell organic fruits and vegetables, organic wine, cheese, bread etc.
 - Clean Toronto Together, an initiative for which volunteers join the annual city-wide clean-up of public spaces including cultural spaces, e.g. the **Fort York National Historic Site** (a 43 acre heritage property) where volunteers receive free admission to the museum as an incentive.
 - The annual **Jane's Walk** festival which the City's heritage staff provide guidance, promotion and deliver content for, is a free, citizen-led walking conversations inspired by journalist, author and activist Jane Jacobs. It encourages people to share stories about their neighbourhoods and discover unseen aspects of their communities and use walking as a way to connect with their neighbours.
- City Cider, an annual all-ages cider celebration, organised by Museum and Heritage Services and presented in partnership with **Not Far From The Tree**, a Toronto-based fruit picking project inspired by sharing, community, and environmentally sustainable living.
- The **Indigenous Arts Festival** is an annual celebration of traditional and contemporary Indigenous music, dance, theatre, storytelling, film, crafts and food. Traditional Pow Wows – sacred gathering of Indigenous peoples to honour the past, renew friendships and celebrate through culture – are held during the Summer Solstice.
- In July 2013, a storm brought down an aged silver maple tree in Toronto's Leslieville neighbourhood. This famed maple tree was the inspiration for the song 'Maple Leaf Forever' by Alexander Muir. The City of Toronto continues to preserve the historic legacy of this maple tree by working with Toronto's artisans, designers, and woodcraft workers to turn the salvaged wood into community art and cultural pieces that will be distributed to public, cultural and historic institutions across Canada.
- The City of Toronto's events team annually produces **Nuit Blanche**, an all-night contemporary art exhibition. In its 12-year history, the curators have often selected environmental themes for the curatorial vision. In partnership with the **Ontario Science Centre**, Nuit Blanche Toronto 2019 will feature Director X's 'Life of the Earth', exploring environmental destruction and climate change; the piece follows on from his 2016 Nuit Blanche monumental project 'Death of the Sun'.

- Supported by the City of Toronto, the [2019 Toronto Biennial of Art](#) takes up the question ‘What does it mean to be in relation?’ Grounded in the Indigenous, immigrant and settler histories that have shaped Toronto, the inaugural Biennial asks audiences to re-examine the past to project alternative futures, contemplating ‘relations’ (communion and ecosystems), as well as consider the ways in which we are out of relation.

2. Resources & Support

Investment, training and materials that support environmental knowledge and practical action

- The City’s Economic Development and Culture (EDC) Division has initiated an Urban Wood Initiative, Neighbourhood Wood, to encourage and support homeowners and commercial enterprises to salvage and reuse Toronto’s valued local trees. A directory links homeowners and commercial enterprises to the companies that can provide services and make products from the urban wood.
- EDC is set to collaborate with the City’s Solid Waste Management Services and the Environment and Energy Division on joint environmental initiatives to encourage waste reduction in the film and television industry.
- Sustainable Media Production Canada is creating a Green Resources Guide to list vendors in the Greater Toronto Area and Ontario who provide sustainable services to productions.

3. Partnerships & Innovation

Diverse disciplines and communities sharing and co-developing ideas and resources that accelerate environmental action

- Together with EDC’s Film and Entertainment Industries section, various members of the Toronto film and television industry are working on collecting best practices in greening the industry. They are working with Creative BC (a government economic development program in Vancouver) on intelligence gathering and meeting with local producers on how best to incorporate green initiatives that have proven positive in that Province²⁰.
- [Fashion Takes Action](#) (FTA), Canada’s only not for profit fashion industry organisation focused on sustainability, works with EDC as a member of the City’s Fashion Industry Advisory Panel. The City partners on FTA’s annual World Ethical Apparel Roundtable (WEAR) Conference. In addition, the City works together with FTA and other non-profit organisations to collaborate in diverting textile waste from industry and consumers with the goal to shift behaviour towards more positive social and environmental impacts.
- While still controversial, the work of Google’s [Sidewalk Labs](#) on Toronto’s waterfront aims to combine forward-thinking urban design, new digital technology and sustainability to create a people-centred neighbourhood that promotes affordability, mobility, and economic opportunity.

²⁰ This was recommended within ‘[Spotlight on Toronto](#)’, the Council-approved strategic action plan for the film, television and digital media industry.

- **Design Exchange** (DX) is a cultural institution that champions creative thinking, inspires problem solving, and celebrates innovative talent in Canada and around the world. In 2017, in partnership with the United Nations Development Program, DX presented the inaugural EDIT: Expo for Design, Innovation & Technology. The ten-day international festival, co-sponsored by the City of Toronto, presented an array of curated exhibits, workshops and installations for 35,000 visitors on how design thinking can help achieve sustainable development goals. Returning in 2020, EDIT will again challenge visitors and participants to consider how they too can participate in designing the future.
- EDC regularly collaborates with the Environment and Energy Division on cultural building management and maintenance (e.g. surveys and audits), and has started the process for contributing to the City's five-year energy demand and consumption plan.
- All cultural events that take place on municipal streets or on Nathan Phillips Square immediately in front of Toronto City Hall are required to provide a **waste management plan** that aligns with the City of Toronto's target to divert **70% of its waste**. In recognition of the landfill waste produced by plastic water bottles, a programme was implemented in 2012 which prohibits the sale and distribution of **bottled water** at all City facilities and civic squares, including city owned cultural sites and festivals.

4. Policy & Strategy

Guiding policy and strategy frameworks that drive climate and environmental action, investment and accountability

- The City Council has directed that all City Divisions support the implementation of the City's climate action strategy: **TransformTO**, for which EDC has been a consultation partner.
- EDC has identified the following action as part of the 2018-22 **Divisional Strategy** (within the 'Talent and Innovation' focus area): 'Champion business and culture's efforts to contribute to environmental sustainability and develop a green economy'.

DUBLIN

Creative Climate Profile

Environmental Ambition

Climate change is already impacting Dublin: Dublin Bay's average sea level has risen by twice the global average in the last 20 years – however the city is taking action, committing to a 40% reduction in the Council's greenhouse gas emissions by 2030. Dublin City Council's Climate Change Action Plan (2019-2024) identifies the city's main environmental impacts and lays out its framework for responding to and mitigating the risks of climate change, focussing on energy, the built environment, transport, resource management, resilience and nature-based solutions.

In addition, Dublin City Council Cultural Strategy (2016–2021) acknowledges that 'a sustainable City is based upon the foundations of, and the interactions between, Economic Development, Environmental Sustainability, Social Inclusion, and Culture'. Dublin has the opportunity to demonstrate how arts and culture can support the sustainability of the city – in line with its fourth strategic priority: 'We will honour our past and focus on our future'.



1. Creative Programmes & Campaigns

Creative content and activities that engage audiences on themes of climate and the environment

- Dublin City Council organises the annual St. Anne's Park **Rose Festival** which includes a farmers market, live music, a living history exhibition and the Big Bear Planetarium, alongside plant sellers, nurseries, garden centres and florists. It also includes the Biodiversity Hub which engages audiences on the environmental issues affecting the UNESCO **Biosphere** - for which St. Anne's plays an important role.
- The **National Botanic Gardens of Ireland**, located in Dublin, hosted 'Plant Power' as part of the Festival of Farming & Food Science Week. The programme includes local food producers showcasing locally-grown and sustainably-produced food as well as offering visitors the unique opportunity to visit the National Herbarium and the collection of preserved plant specimens from around the world.
- Dublin City Arts Office, based at the **LAB**, is a specialist service within Dublin City Council that represents a strategic investment in the arts by the City Council. As laid out in the **Arts Plan** (2014-2018), the City Arts Office developed an 'art and ecology' programme – managed by the Art & Ecology Project Co-ordinator to engage artists with scientists, botanists and ecologists in order to explore challenges relating to the natural environment. For example, the **Red Stables Summer School** (supported by Arts Council of Ireland) featured art and ecology events in St. Anne's Park, Dublin 3 and North Bull Island.
- **Common Ground** and Seoidin O'Sullivan's project **HARD/GRAFT** is a sustainable community orchard proposed for community sites across Dublin that is in tune with the seasons. It is funded and supported by the Arts Council Ireland, Dublin City Council Arts Office, and Creative Ireland Dublin City Programme (2018). Richmond Barracks Museum hosted a HARD/GRAFT panel discussion on the topic of sustainable cities, including: greening Dublin City, land access, food access and spaces of 'commoning'.
- The **Velo-City 2019** 'Cycling for the Ages' conference includes an **open-call** for creative practitioners, cultural organisations, collectives, communities and neighbourhoods to submit proposals to be part of Velo-City for performances, readings, workshops, showcase events (including photography and film), interactive art installations to maximise people's engagement with cycling.

2. Resources & Support

Investment, training and materials that support environmental knowledge and practical action

- Dublin City Council supports various **events** each year, including many which are arts and culture based, for example **Dublin Maker**. Dublin Maker is a celebration of the maker movement and takes the form of a show-and-tell experience where inventors and makers have an opportunity to showcase their creations in a carnival atmosphere. The event combines creativity, ingenuity, resourcefulness and sustainability.

- As part of Dublin City Council's Economic Development and Local Enterprise Office's event sponsorship application process, applicants (such as cultural organisations) are asked to provide information related to their event's sustainability measures e.g. use of recycled materials, waste reduction and management.
- The Local Enterprise Office encourages businesses to adopt sustainable working practices through programmes such as LEAN - a training programme that helps businesses increase productivity whilst reducing waste - and 'Profit with Purpose' events which help SMEs and micro enterprises embed the UN Sustainable Development Goals into their operations. The Local Enterprise Office also sponsors events which promote innovation and sustainability such as the Responsible Innovation Summit.

3. Partnerships & Innovation

Diverse disciplines and communities sharing and co-developing ideas and resources that accelerate environmental action

- The **Dublin Bay Biosphere Partnership** is working with schools, universities, community groups, NGOs and local businesses to inspire a positive future by connecting people and nature. The Dublin Bay Biosphere Partnership will oversee the collaborative planning, preparation and implementation of a Strategic Plan to fulfil the principles and aims of UNESCO's 'Man and the Biosphere' programme.
- Dublin City Council, in partnership with various stakeholders, developed **MODOS** – a pioneering circular economy business training programme. The programme includes participants working in cultural event management and is supporting them in embedding sustainability into their event operations.
- Dublin City Council, in partnership with Wexford County Council and Fingal County Council, initiated a research project in 2017 titled **An Urgent Enquiry** with funding from the Arts Council under the 'Invitation to Collaboration' scheme. Each local authority hosted a think tank for artists, scientists and biodiversity experts to present approaches to art, biodiversity and climate change. The resulting 'An Urgent Enquiry' Artists Residency Commission offered artists the opportunity to reside for three months in each county to explore the biodiversity of each area and the effects of climate change. The research will result in new work in autumn 2019.
- **Dublin City Council Culture Company** runs numerous cultural place-making projects each year. The National Neighbourhood programme builds cultural projects in community settings and often involves natural and cultural heritage initiatives, connecting artists, groups and villages with libraries, museums and creative places. Environmentally-themed projects include: **Sea Songs on the Shore** – songs composed and performed by children on the theme of environment and sea conservation; and **Willow Zen Garden** – a creative garden project in Fairview Park by the Ballybough Craft Group and the Marino Art Class, supported by the architect Evelyn D'Arcy and the Newgrange Willow Weavers.

- **Dublin** is a member of **UNESCO Creative Cities Network**, a network created in 2004 to promote cooperation within and between cities that have identified creativity as a strategic factor for sustainable urban development.

4. Policy & Strategy

Guiding policy and strategy frameworks that drive climate and environmental action, investment and accountability

- Dublin City Council's Cultural Strategy (2016–2021) explicitly recognises environment in the context of sustainable cities: 'a sustainable City is based upon the foundations of, and the interactions between, Economic Development, Environmental Sustainability, Social Inclusion, and Culture'. In addition, its fourth strategic priority offers much scope for environmental action: 'We will honour our past and focus on our future'.
- Dublin City's Culture and Creativity Strategy (2018-2022) prioritises cultural infrastructure and use of public space, including the provision of green space, committing to 'creating a positive energy in the City, through the development of green spaces, play spaces and seating areas throughout the City'.
- The Dublin City Development Plan (2016-2022) provides an integrated, coherent spatial framework to ensure Dublin thrives as a competitive, resilient, socially inclusive and sustainable city. Cultural and built heritage is recognised as an essential element of a sustainable approach to the future development of the city.
- Dublin Climate Change Action Plan (2019-2024) acknowledges the climate risks to natural and cultural heritage. Dublin's strategic approach to flood adaptation includes heritage, committing to the objective: 'protect, and enhance if possible, biodiversity and cultural heritage'.

SYDNEY

Creative Climate Profile

Environmental Ambition

Sydney's natural beauty, from unspoilt beaches to public gardens and landscapes are home to possums, kangaroos, wombats, flying foxes, and long-nosed bandicoot²¹. Sydney Harbour, the deepest natural harbour in the world, and Circular Quay port are hubs of human recreation and waterside life, with species such as green sea turtles, little penguins, Australian fur seal and humpback whales all gracing the local waters²². However these precious habitats are extremely vulnerable to the effects of global warming, including fires and rising sea levels; Australia's population is concentrated in coastal areas and its tourism industry depends on a healthy Great Barrier Reef and other fragile ecosystems. In November 2018 intense low pressure system delivered Sydney's wettest November – more than one month's worth of rain fell in just two hours across Sydney.

Lord Mayor Clover Moore – currently the longest serving Lord Mayor of Sydney – has committed to a target of net zero emissions by 2050 and launched the city's climate adaptation strategy. This strategy is part of a series of environmental strategies for the city – covering themes such as renewable energy, decentralised water, and sustainable waste management. Sydney now has the opportunity to make its diverse arts and cultural community a leader in its vision to be a 'green and resilient' city²³.



21 The Wildlife Diaries. <https://www.thewildlifediaries.com/sydney-animals-wildlife-in-sydney/>
22 Sydney Marine Park. <http://www.marine.org.au/sydney-s-marine-life.html>
23 C40. https://www.c40.org/blog_posts/lord-mayor-of-sydney-clover-moore-on-a-bold-new-plan-for-a-green-and-resilient-future

1. Creative Programmes & Campaigns

Creative content and activities that engage audiences on themes of climate and the environment

- Every year, the City of Sydney seeks expressions of interest to create new work as part of its Art & About public art programme. The opportunity is open to anyone with a big idea that will create a moment of surprise and delight in the urban space, including major installations, intimate exchanges, and thought-provoking exhibitions in unusual spaces. Projects inspired by environmental themes include:
 - **Wasteland** (2018) by Mundane Matters. Suspended from the ceiling of Customs House, 120 kg of ocean plastic rescued from the Great Barrier Reef was reimaged as 2,255 objects that resemble oranges. Wasteland addressed two significant environmental issues: plastic pollution and food waste; reminding viewers of three vital principles: reduce, reuse, and recycle.
 - **The Blue Trees** (2016): an environmental art installation drawing attention to global deforestation that used living trees painted bright blue using a biologically safe water-based colourant. Artist Konstantin Dimopoulos transformed the trees in Pirrama Park to create The Blue Trees in Sydney for the first time. Visitors were encouraged to share a selfie at The Blue Trees and include their thoughts on the environment.
- The **Creative Hoardings** program aims to transform the visual impact of construction sites and enliven surrounding streets, whilst providing opportunities for artists to showcase their work on large-scale visible locations. Construction sites in high-traffic areas must cover their hoardings in art by a living Australian artist, or historical images relevant to the area where the hoarding is located. Developers can commission their own artist, or they can use artworks licensed by the City of Sydney, free of charge. Work focused on environmental issues includes:
 - **Glacier** by Timothy Harland, a photographic exploration of the Perito Moreno glacier in Patagonia.
 - **Birds of Australia** by Egg Picnic (Camila De Gregorio and Christopher Macaluso), comprising illustrations of critically endangered, vulnerable and common native Australian bird.
- The **Australian Museum**, based in Sydney, is committed to raising awareness of climate change, recognising that: ‘climate change poses a serious environmental, economic and social threat to our current way of life and to the security of future generations across the globe’²⁴. With collections spanning both the natural and human worlds, the Museum is ideally placed to demonstrate climate change impacts on ecology and people through exhibitions, education programs, outreach in the wider community and online resources. The Australian Museum is a founding partner of the **Sustainable Destination Partnership** and is targeting **carbon neutrality** by 2020.

2. Resources & Support

Investment, training and materials that support environmental knowledge and practical action

- Sydney's Cultural Policy references the City's commitment to providing open forums for discussion and debate on future issues for Sydney. The open forums are organised across three strands: City Conversations, City Talks, and Design Excellence. They typically include international thought-leaders and local experts, and provide a mechanism for building community awareness and engagement on major social, cultural, environmental and economic issues that affect urban development throughout the world.
- The City of Sydney's Major Events and Festivals team strives to deliver the most sustainable events of their kind in the world. With a scope including Sydney New Year's Eve, Sydney Christmas, Sydney Lunar Festival and Art & About, the team is undertaking a range of initiatives to make City of Sydney events a demonstration of sustainability best practice. The City is also using this experience to build guidelines for the cultural organisations they sponsor or partner with.
- The City supports cross-departmental sustainability initiatives within the city. A new governance process has led to stronger interdepartmental collaborations that help ensure risks and resource implications (e.g. financial, environmental, etc.) across work areas are considered before a project is sent for approval.

3. Partnerships & Innovation

Diverse disciplines and communities sharing and co-developing ideas and resources that accelerate environmental action

- The integrated cultural evaluation framework recognises that all parts of the City of Sydney can have a critical impact on the viability of cultural activity in Sydney. The City ensures all council decisions identify cultural impacts and opportunities alongside social, economic and environmental issues. This allows new opportunities, competing issues, or policy conflicts to be appropriately identified and appraised.
- The City of Sydney collaborated with C40 to create the [Making Sydney a Sustainable Destination Plan](#), which incorporates actions for the cultural sector. A key programme to emerge from this is the [Sustainable Destination Partnership](#) which is using the collective impact model to drive improved environmental outcomes across Sydney's accommodation providers and cultural institutions.
- Green Square town centre has received national recognition as one of Australia's most sustainable communities. The town centre has been awarded a 6 Star rating from the Green Building Council of Australia – the highest possible rating that can be awarded. This represents 'world leadership' in the areas of governance, liveability, economic prosperity, environment and innovation.

4. Policy & Strategy

Guiding policy and strategy frameworks that drive climate and environmental action, investment and accountability

- Sydney's Cultural Policy is framed by eight Foundation Principles, one of which describes cultural and creative activity contributing to community concerns, covering economic, social, behavioural and environmental objectives. The City aims to catalyse civic participation and promote stewardship of place to preserve cultural heritage, explore the challenges of climate change and support economic development. The Cultural Policy sets the following strategic goal to embedding sustainability into its cultural infrastructure: '1.18 Develop coordinated, strategic placemaking plans for each village that integrate cultural, economic, social and environmental actions'.
- The City's Public Art Policy provides a framework of principles to support the City's commitment to public art in strategic planning, and the implementation of Sustainable Sydney 2030. The 'City Art Public Art Strategy' is the implementation plan for the Public Art Policy and includes eight guiding principles for public art across

the local government area. All eight principles are underpinned by the overarching vision for a sustainable city based on universal access for all. Each principle addresses sustainability through different lenses, including environmental, cultural, economic and social sustainability²⁵. In order to ensure an integrated approach to the creation and management of public art, the City Art Public Art Strategy has been developed to dovetail with current city-wide strategies including the Liveable Green Network – a plan to make the local area as green, global and connected as possible.

25 City of Sydney. https://www.cityofsydney.nsw.gov.au/__data/assets/pdf_file/0004/139810/Final-Version-City-Art-Public-Art-Strategy.pdf

EDINBURGH

Creative Climate Profile

Environmental Ambition

According to the Sustainable Cities Index 2018, Edinburgh is the third most sustainable city in the world²⁶. Its vision, articulated in Sustainable Edinburgh 2020, is for the city to be a 'low carbon, resource efficient city, delivering a resilient local economy and vibrant flourishing communities in a rich natural setting'. The city government aims to deliver this vision by balancing equitable access and sustainable management of natural resources, human development and prosperity, and an innovative and collaborative spirit.

In addition, a report approved by the City Council aims for Edinburgh to be carbon neutral, ideally by 2030, with a hard target of 2037²⁷. Edinburgh has a long history of engaging its arts and cultural communities in sustainability, frequently in partnership with Creative Carbon Scotland – the charity working to embed environmental action within the Scottish arts and cultural sector and to enable the sector to play its full part in Scotland's overall work addressing climate change. Edinburgh has the opportunity to use this leadership platform to inspire other cities and cultural communities across the world.



26 Arcadis. <https://www.arcadis.com/en/united-kingdom/our-perspectives/sustainable-cities-index-2018/united-kingdom/#>

27 The City of Edinburgh Council. http://www.edinburgh.gov.uk/download/meetings/id/60682/item_74_-_sustainability_approach

1. Creative Programmes & Campaigns

Creative content and activities that engage audiences on themes of climate and the environment

- Each year, artists at Edinburgh's selection of festivals use their events to explore issues of climate change, sustainability, and humanity's environmental impact. Recent examples of environmentally-focussed work include:
 - **Whales**, an interactive experience at the 2017 Edinburgh Festival Fringe, which invited the audience to take part and become either a whale rescuer or a stranded whale.
 - **Staffa**, presented at the 2017 Edinburgh International Festival, a work for full orchestra and large screens depicting three simultaneous visions of the uninhabited Hebridean island of Staffa created by filmmaker Gerry Fox and composer Ned Bigham.
- Year round, artists are creating numerous works which explore the natural world and climate change through a range of art forms, including:
 - Alice Cooper's **Puffin**, a theatre piece for children that deals with themes of profound change and loss due to climate change.
 - Coburg House Gallery's **Transform** exhibition which features Scottish-based artists and designers, presenting original and challenging work made from recycled and repurposed materials.
 - Cryptic's **Below the Blanket** that explores Scottish peatland and its role in climate change mitigation.
 - The **Royal Lyceum Theatre** and the **Festival Theatre** both have beehives on their rooftops.
 - **Out of the Blue** combines practical carbon reduction of its building and activities with creative programming. **Out of the Blue(print)** is a print studio specialising in RISO printing – an affordable, eco-friendly print process with a unique aesthetic.
 - In 2011, the Edinburgh Festivals came together with the Federation of Scottish Theatre and the Scottish Contemporary Art Network to establish Creative Carbon Scotland, now the main agency for sustainability in the arts in Scotland. Creative Carbon Scotland's **culture/SHIFT programme** brings together a range of projects exploring the connections between culture and climate change with arts and sustainability practitioners. Furthermore, the **Green Tease** programme offers regular informal opportunities for arts and sustainability practitioners to meet, share ideas and collaborate e.g. working with cycling organisations Sustrans on how public art can encourage sustainable travel.

2. Resources & Support

Investment, training and materials that support environmental knowledge and practical action

- In its first year, Creative Carbon Scotland worked with the Edinburgh Festivals to create a Green Venue Guide, aimed at Edinburgh venues participating in the festivals. The guide successively expanded its reach to other arts companies, individual artists, agencies and organisations – leading to the creation of the Scotland-wide **Green Arts Initiative (GAI)**²⁸ in 2013. Now, the Edinburgh Festival Fringe Society produces an annual and comprehensive **guide** to producing Fringe shows in a sustainable and environmentally positive way.
- Supported by Creative Carbon Scotland, the 121 organisations receiving Regular Funding from the funder Creative Scotland are also required to submit annual energy data and an annually updated Carbon Management Plan; this is used to track the progress of the sector in reducing its emissions.
- The Edinburgh Festivals jointly employ an Environmental Sustainability Officer to drive and support the Festivals in their ambitions to be the world's leading green festival city²⁹ and have a regular Environmental Sustainability Working Group.
- The recent Desire Lines consultation with the cultural sector recommended appointing a cultural champion to be a high-profile advocate for culture within the City. This role would lead a taskforce comprising of top professionals from key sectors such

28 There are already over 225 members across all regions of the country and range of artform: from large-scale producing theatres to independent art galleries, working on everything from carbon emissions to creating Green Teams within their staff. Read more in the World Cities Culture Forum Climate Change Handbook for City Leaders.

29 Edinburgh Festival City. <https://www.edinburghfestivalcity.com/news/513-8-green-things-about-the-edinburgh-festivals>

as health, education, environment, business and technology³⁰.

- Creative Carbon Scotland's annual **Green Arts Conference** took place in Edinburgh in October 2018 with 150 delegates discussing climate change mitigation, adaptation and Creative Carbon Scotland's **culture/SHIFT** programme.

3. Partnerships & Innovation

Diverse disciplines and communities sharing and co-developing ideas and resources that accelerate environmental action

- Conscious of the large amounts of paper used to promote their events each year, Edinburgh Festivals are increasingly working towards a paperless future. This includes offering a range of apps and mobile sites to enable festival fans to find out everything they need to know without needing a huge brochure or a bagful of flyers³¹.
- The City of Edinburgh is in the process of developing a 'City Centre Transformation' plan, to provide a more strategic and coordinated approach to how the City Centre is managed. This will be delivered via an action plan for a vibrant and people-focused capital city centre to improve community, economic and cultural life. The plan includes the development of baseline social, economic and environmental performance indicators, including reduced traffic, better cycle and public transport options and improved air quality.

30 Desire Lines. http://desirelines.scot/DesireLines_booklet_SCREEN.pdf

31 Edinburgh Festival City. <https://www.edinburghfestivalcity.com/news/513-8-green-things-about-the-edinburgh-festivals>

- The [Edinburgh Centre for Carbon Innovation](#), hosted by the University of Edinburgh, is a unique low-carbon hub for start-up and early-stage businesses, agencies and research organisations working in the low carbon and climate change field.

4. Policy & Strategy

Guiding policy and strategy frameworks that drive climate and environmental action, investment and accountability

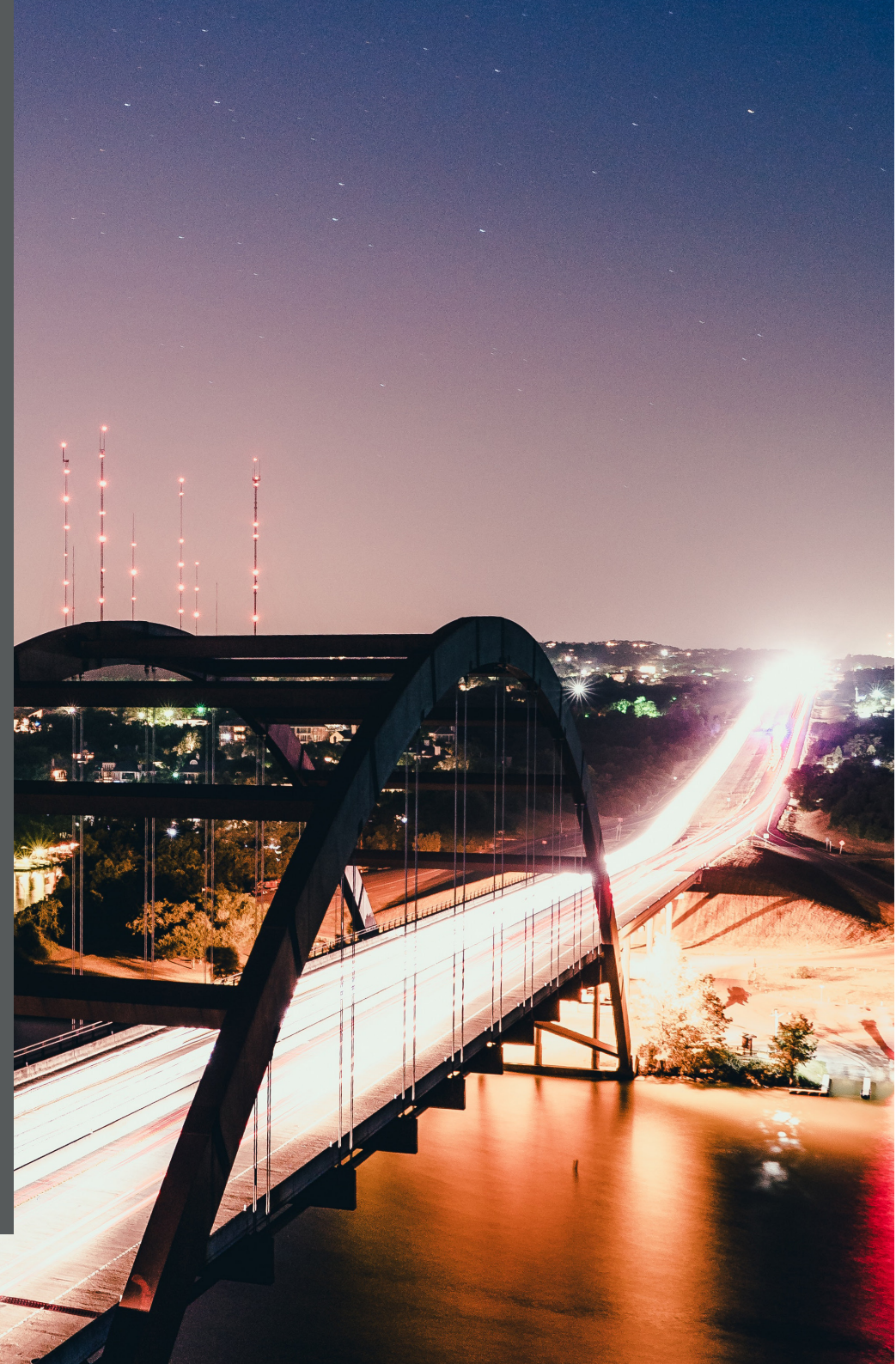
- [Sustainable Edinburgh 2020](#) aims to address social, economic and environmental issues in an integrated way, recognising and utilising all Edinburgh's strengths, including culture, citing: outdoor leisure, unique built and natural heritage, and world-famous festivals.
- From 2019 onwards, organisations receiving regular grant funding from the Cultural Services division of the City of Edinburgh Council will be required to develop and submit a Carbon Management Plan that sets out the aims and objectives to reduce each organisation's carbon emissions. Creative Carbon Scotland is supporting the organisations in developing their Carbon Management Plans and meeting their funding requirements.
- Edinburgh Festivals has environmental targets as part of its funding agreement, including hosting partnership events that highlight the contribution of the Festivals to an environmentally sustainable cultural sector. It also has to develop at least three resources e.g. guidelines and case studies for local, national and international cultural organisations that demonstrate the positive impact of environmental sustainability activities.

AUSTIN

Creative Climate Profile

Environmental Ambition

According to the National Climate Assessment's fourth **report** in 2018, the Southern Great Plains – which includes Texas, Kansas, and Oklahoma – will be hit particularly hard by climate change, however Austin's Climate Program is leading efforts towards net-zero emissions by 2050. Austin has also achieved high acclaim being one of five cities to win the Bloomberg American Cities Climate Challenge. It was awarded resources and technical support to help achieve its ambitious climate goals. Austin now has the opportunity to leverage its world-famous arts, culture and innovation to accelerate its shift to a sustainable and socially-equitable city.



1. Creative Programmes & Campaigns

Creative content and activities that engage audiences on themes of climate and the environment

- Austin's [Art in Public Places](#) programme collaborates with local and national artists to celebrate Austin's identity and has featured many artists and artworks engaging with environmental themes, including:
 - [Cyclical Interplay](#), by Andrew Bellatti Green and Adam Pyrek, is a kinetic sculpture inspired by the cyclical nature of our climate at different time scales. Every evening at dusk, the sculpture comes to life, spinning in a complex dance and resting in a position to reflect current climate conditions.
 - [The BELOW Project](#), created by Jacob Villanueva and Jeff Clarke in 2014, was a temporary installation that used maps from the City of Austin translated into a vivid display of LEDs in the shape of the Boggy Creek Watershed. The work was intended to engage and bring awareness to the impact of local neighborhoods on ecosystems.
- The [Mueller SunFlowers](#) is a work of art with a purpose: returning electricity to the city's power grid. Artists Mags Harries and Lajos Heder merged the artistic elements of light, colour and shadow with the science of energy and sustainability to create SunFlowers.
- [Waller Creek Conservancy](#) is a non-profit whose mission is to create and maintain a chain of extraordinary urban parks around a restored Waller Creek, in partnership with the City of Austin. It engages its communities through outreach, education, cultural events, and the arts. In 2017 and 2018, Waller Creek Conservancy partnered with The Contemporary Austin to temporarily install Ai WeiWei's [Forever Bicycles](#), commenting on transportation and social mobility
- Fusebox is a non-profit arts organization in Austin which provides a series of performances, talks and events throughout the year and direct resources to artists. [Fusebox Festival 2019](#) included a variety of environmental programming:
 - [Estado Vegetal \(Vegetative State\)](#), a play based on the revolutionary thinking of plant philosopher Michael Marder and plant neurobiologist Stefano Mancuso. It explored the ways in which new concepts such as plant intelligence, vegetative soul, or plant communication can transform our creative practice.
 - [Not Every Mountain](#) was a mellow meditation on change, permanence and our place in the natural world. It was a presentation of the life cycle of mountains and the processes by which they are born and eventually laid to rest, a legacy of tectonic force and geologic time.

2. Resources & Support

Investment, training and materials that support environmental knowledge and practical action

- The City of Austin's **Artist-in-Residency** programme, administered by the Cultural Arts Division and supported by the Office of Innovation, works to embed artists within City departments to help provide innovative solutions or new process improvements and engage communities in creative ways. It supports various City initiatives and efforts, including the Music and Creative Ecosystem Omnibus Resolution, Imagine Austin Comprehensive Plan, and the City's newly launched Equity Assessment Tool.
- Artist **Rehab Elsadek** was the first Artist-In-Residence with the City of Austin, working with the city's Watershed Department to highlight their work for citizens. She distilled and presented her research through a pop-up of photographs, text, and 2D artwork.
- **Austin Creative Reuse**'s mission is to foster conservation and reuse through creativity and education, building a community that chooses reuse as a first choice, consuming consciously and basing purchasing decisions on the whole lifecycle of the object. As well as collecting, distributing, and selling reusable materials donated from industry and individuals, the material hub also educates its communities on waste management and hosts a range of events and activities promoting conscious consumption, sustainability, and art.

3. Partnerships & Innovation

Diverse disciplines and communities sharing and co-developing ideas and resources that accelerate environmental action

- Austin's Art in Public Places team collaborates with a variety of city departments on a regular basis, including the Parks and Recreation Department on placement of public art; Austin Energy, to provide art for their new **"chiller" buildings**, working with local artist Beili Liu; and with Watershed Protection, regarding artworks inspired by flooding, climate change, and water.
- The **One Water Summit 2019**, to be hosted by Austin in September 2019, will include an arts and culture track throughout the Summit: 'One Water isn't just about breaking down the silos in the water sector—it's about re-conceptualizing water management in an inclusive and innovative way. Arts and culture can be essential tools to address water challenges'³². The focus on arts and culture will draw from the report **'Advancing One Water through Arts and Culture: A Blueprint for Action'** – a collaboration between US Water Alliance and ArtPlace America.
- **[Re]Verse Pitch** is an event series for Social Entrepreneurs encouraging principles of the circular economy. The [Re]Verse Pitch Competition helps turn valuable raw materials that are currently leaving local organisations as waste into the raw materials for new or expanding social enterprises. 2019 winners were **'Polymart'**, by Anjali Sridharan, who repurposed polycarbonate plastic die-cut sheets into eyewear; and **'3D Printing from Trash'** by **re:3D**, repurposing polycarbonate plastic die-cut sheets into 3D printed furniture, art, and other items.

32 US Water Alliance One Water Summit. <http://uswateralliance.org/summit/one-water-summit>

4. Policy & Strategy

Guiding policy and strategy frameworks that drive climate and environmental action, investment and accountability

- The City of Austin was the first municipality in Texas to make a commitment to include works of art in construction projects. By ordinance, 2% of eligible capital improvement project budgets are allocated to [commission or purchase art for that site](#).
- The [CreateAustin Cultural Master Plan](#) recognises that Austin's cultural sector includes cross-discipline communities such as 'green art'. The CreateAustin Cultural Master Plan identifies the opportunity of integrating culture with other key planning and community development efforts, noting that urban and community planning around the world is increasingly integrating sustainability principles: 'Austin has the opportunity to build upon "green" arts and sustainability linkages [...] to play a leading role in integrating these frameworks in the U.S.'
- Based on the [Imagine Austin Comprehensive Plan](#), the Austin City Council adopted a strategic direction on March 8, 2018, guiding the City of Austin for the next three to five years. [Austin Strategic Direction 2023](#) outlines a shared vision stating that together we strive to create a complete community where every Austinite has choices at every stage of life to experience and contribute to six priority Strategic Outcomes, including enjoying a sustainable environment and a healthy life, physically and mentally; and being enriched by Austin's unique civic, cultural, ethnic, and learning opportunities.

LAGOS

Creative Climate Profile

Environmental Ambition

Climate change is already impacting Lagos, increasing the intensity of droughts, heavy rains and thunderstorms. Waste management and availability of clean water are also prevalent environmental issues across the city. Taking a more dynamic and holistic approach to environmental protection, Lagos State Government has adopted several new strategies and agencies to tackle environmental challenges, for example: the Cleaner Lagos Initiative which is focussed on revitalising the entire Solid Waste Management sector.

The State Government is also investing in carbon emissions reduction, commissioning the Lagos Solar Project to power public institutions and rural schools through solar PV systems. It has also planted 7.5m trees in the previous 11 years to protect against extremes of climate and pollution and improve the biodiversity of the area³³.

The Lagos State Government **now** has the opportunity to leverage the power of its distinguished creative industries to lead action on climate change. Through encouraging their uptake of environmental actions, Lagos will support a healthier, greener and cleaner city.



1. Creative Programmes & Campaigns

Creative content and activities that engage audiences on themes of climate and the environment

- **Lagos Biennial 2019**, 'A Song for Lagos', is endorsed by the Lagos State Ministry of Tourism, Arts and Culture and will investigate how contemporary artists and designers are responding to environmental challenges and possibilities. The theme was inspired by the impact of urbanisation on ideas of citizenship, as well as the sustainability of natural resources, and socio-economic equality.
- Art X Lagos (2018), West Africa's first international art fair, included **Gerald Chukwuma**, one of Nigeria's fastest rising contemporary artists living and working in Lagos, whose work engages with environmental themes. The figures in Chukwuma's carvings are fleshed out with scraps of tin cans – the artist describes the link between his art as a form of environmental awareness, and as a means of recycling the past so that it speaks the present.
- **Lagos Photo Festival**, organised by African Artists' Foundation, featured **Drowning World** which explores the effects of climate change. The photographs takes audiences beyond faceless statistics and into the individual experiences of the victims – a sequence of 'Submerged Portraits' is the heart of the project.
- Jelili Atiku, born in Lagos, is a Nigerian multimedia artist concerned by human rights and justice. Atiku's work is inspired by

the psychosocial and emotional effects of events such violence, war, poverty, corruption and climate change.

- On a national level, **Arts for SDGs Nigeria** will select artists and poets to produce work based on the framework of the Sustainable Development Goals. The key focus for 'Arts for SDGs 2019' will be on Climate Change (SDG 13) and Mental Health (SDG 3).

2. Resources & Support

Investment, training and materials that support environmental knowledge and practical action

- Based in Lagos, the **Five Cowries Arts Education Initiative** (launched in 2017) offers more inclusive pathways into education by integrating the arts into teaching to improve learning outcomes. Five Cowries delivers programmes that engage children with social and environmental issues, including conservation, pollution, citizenship, health, migration and technology. It is supported by Lagos State Waterways Authority and collaborates with the Ministry of Transport.
- **Lagos State Parks and Garden Agency** (a subsidiary of the Ministry of Environment) is tasked with greening Lagos and has called on artists across the State to be part of an open-air art gallery, launched in 2017 in Muri Okunola Park, Victoria Island.

- The Ministry of Environment supports [Wecyclers](#), a social enterprise which promotes environmental sustainability, socio-economic development and community health by providing recycling services in densely-populated urban neighborhoods in Lagos.
- The Ministry of Tourism supports the [Nigerian Conservation Foundation](#), a Non-Governmental Organisation (NGO) dedicated to nature conservation and sustainable development in Nigeria. The Foundation established the Lekki Conservation Centre in Lagos which is considered an iconic site for nature conservation and ecotourism, comprising 78 hectares of mangroves, secondary forest, savanna grassland and the world's second-longest canopy walkway⁷. In addition, the Oso-Lekki breakwater (located at Lekki Peninsula, Lagos) is the site for the state fishing and cultural festival. The Lagos State Government has recognised Lekki Conservation Centre within the 'listed sites' for the preservation, protection and restoration of historical properties and cultural heritage in Lagos State.

3. Partnerships & Innovation

Diverse disciplines and communities sharing and co-developing ideas and resources that accelerate environmental action

- [Lagos Urban Development Initiative](#) is an organisation that brings like-minded organisations and people together to advocate for a more inclusive, liveable and sustainable Lagos. Environmental-focused projects include the [Linear Park Project](#) (championed by Lagos State Parks and Garden Agency) which connects urban parks and gardens and non-motorised transportation: 'it seeks to sustainably connect and conserve wetlands in Lagos whilst promoting biking and bikeability and climate smart agriculture thus making the city more resilient and inclusive'.
- [Playable City Lagos](#) was delivered in collaboration with [Future Lagos](#) and the British Council. In March 2016, Playable City Lagos produced a residential lab that brought together creative practitioners from Lagos and the UK to explore playful interventions inspired by themes of mobility and engagement with the local environment.
- [Lagos Smart City](#) workshops brought together architects, urban planners, artists, computer scientists, and university students to explore the smart city concept for Lagos, particularly regarding smart and sustainable mobility.
- [The United Nations Information Centre Lagos](#) is the body aiming to implement the Sustainable Development Goals (SDGs) in an inclusive way, adapting the SDGs into the Lagos State Development Plan.

4. Policy & Strategy

Guiding policy and strategy frameworks that drive climate and environmental action, investment and accountability

- The [Lagos State Development Plan](#) 2012-2025 is a policy document that harmonises all existing high level policy documents operational in the State. It identifies 'four development pillars' from which the state and the private sector can together advance: economic growth, infrastructure development, social development and security; and sustainable environment. This presents a key opportunity for encouraging collaboration between cultural and environmental representatives and stakeholders.
- Nigeria's [Economic Recovery and Growth Plan](#) (2017 - 2020) aims to 'place the economy on a path of growth that is diversified, inclusive and most importantly sustainable and resilient'.
- Nigeria's Ministry of Information, Culture and Tourism has been investing in eco-tourism. The Nigeria [Tourism Development Master Plan](#) was developed to strengthen capacity and promote sustainable development – connecting preservation of both natural and cultural heritage: 'tourism, when properly developed and managed, can serve as a mechanism for protecting natural environments; preserving historical, archaeological and religious monuments; and, stimulating the practice of local cultures, folklore, traditions, arts and crafts, and cuisine'.

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