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Julie's Bicycle SUSTAINING CREATIVITY

COVER Yasmin Nupur, *Unity of the Untitled*, 2017, Whitworth Gallery Manchester,





Manchester Arts Sustainability Team (MAST) is a cross-sector network of cultural and arts organisations committed to working together to reduce their environmental impacts and foster a collaborative learning ethos which unites art forms, organisations, voluntary and civic bodies in a shared commitment to a sustainable and equitable future.

hese are choppy times; orthodoxies that have, more or less, underpinned our lives for the last fifty years are eroding rapidly as the consequences of exponential consumption reliant on a fossil-fuelled economy are felt. This is manifest most keenly as climate change: the causes, consequences and forecasts. This, in turn, is fuelling a cultural transition, a creative movement acting on climate change and its many, interconnected themes.

MAST is a pioneer within this movement. Committed to principles of distributed leadership, iterative learning and mutual respect, this network of 27 arts and cultural organisations working together since 2011, has become one of the city's, and indeed the country's, most successful demonstrations of the

role the sector can play in positive environmental change. And it has much to celebrate, notably:

- a 16% emissions reduction over three years;
- a broad range of practical environmental actions and employee and audience engagement: exhibitions exploring our relationship to nature theatre and television productions on climate change, employee beekeeping, community gardening, and much else besides, most MAST members have explored environmental themes in programming and learning and outreach activities;
- involvement in the city's ambitious new climate change strategy
 including through Climate Lab, an experimental programme inviting the
 people of Manchester to imagine a more sustainable city;
- a range of successful partnerships, from developing the city's
 Carbon Literacy training, to partnerships between individual members
 and organisations such as Transport for Greater Manchester and the
 National Trust, and:
- recognition of Manchester as a 'Good Practice City' under the EU's
 URBACT programme, based on the MAST model and its contribution to
 the city's climate change policies.

MAST's combination of participatory and collaborative working in a city which recognises the value of culture and is itself demonstrating climate change leadership has helped to make this programme so successful. It has been strengthened by Arts Council England's environmental programme which includes many MAST members.

Cities and policy-makers are beginning to recognise that the creative sector has a vital role in city life that has huge potential to support city priorities, such as the Paris Agreement and Sustainable Development Goals. With the Manchester Climate Change Strategy 2017-2050 in place and five years of experience to build on, now is the time for MAST to reflect on how it can:

- lead in working towards the city's climate change ambitions;
- grow its reach and influence across the arts and culture in Manchester and beyond, and;
- use this opportunity to grow an ethically driven creative economy new skills, jobs and opportunities for a sustainable Manchester

Key areas for MAST to focus on now are:

- defining a new set of commitments, targets and actions in line with the city's zero carbon, zero waste and climate resilience ambitions;
- supporting delivery of the engagement strand of the city's climate change strategy;
- developing skills, capacity and collaboration within the network to support a new level of ambition;
- growing and developing the MAST network;
- increasing MAST's profile, and;
- exploring funding options to enable MAST to build on its success.



"Manchester has a deeply embodied culture of community and resilience so it comes as no surprise that the city

has an ambitious approach to climate change. But is also a city that has creativity in its bones, and so it is – happily – predictable that the cultural community has come together to share, solve and scale environmentally focused initiatives. Initially focused on the nuts and bolts of doing, MAST activities have blossomed into a huge range of culture/environment practice, using creativity to engage communities and ensure culture shapes Manchester's ambitious new climate change strategy."

Alison Tickell, Founder and Director Julie's Bicycle





anchester Arts Sustainability Team (MAST) is a network of 27 arts and cultural organisations collaborating on a city-wide cultural response to sustainability, from community-based arts centres and iconic cultural venues to an internationally renowned festival and national broadcasters. Working together since 2011, it has become one of the city's, and indeed the country's, most successful examples of environmental collaboration, from achieving emissions reductions and engaging audiences, to supporting the city's climate change strategy. And cities are driving the transition. Home to over 50% of the world's population, they are driving the ambition and investment that will, ultimately, determine our future.

MAST's success is a result of a participatory and collaborative approach taking place in a city which both recognises the value of culture in its wider development and is demonstrating policy leadership through its climate change strategy. This has been reinforced on a national level by Arts Council England's environmental programme, launched in 2012, to support and inspire the arts to be more sustainable, including many MAST members. MAST already has considerable experience to build on and share, at a time of growing recognition amongst cities and policy-makers of the vital role the arts and cultural organisations have to play in enabling change, in particular in the context of the Paris Agreement and Sustainable Development Goals.

A successful model

MAST is rooted in the city, enabling members to meet face-to-face, share common challenges and opportunities and link directly to what is happening on a city level. Its approach is participatory and non-prescriptive, bringing together diverse organisations to develop a common understanding of environmental issues and take action. It fosters accountability to their shared mission, one another, and the communities they serve, including a measurable target linked to the city's 41% emissions reduction target by 2020. Annual reporting is in partnership with Julie's Bicycle, and includes practical actions, creative responses, programming, learning and outreach, engaging teams, audiences and local communities. And, last but not least, it is by and for its members, run by its members since 2013 and able to fund small projects and reporting through membership contributions.



The 2017 member's survey shows all respondents agreeing that MAST's purpose is clear and meaningful. They highlighted in particular the value of learning about others' experience and practice, developing joint initiatives and the opportunity to contribute to Manchester's climate change strategy. The survey also showed that members believe the network's diversity is a strength and that it makes a positive difference to the city.

In a city which values culture and is demonstrating its own climate change leadership

Culture is at the very heart of Manchester's identity. The arts and culture sector has a well-established and growing role in the city's economy and society, and a well-recognised part to play in contributing to all city priorities. MAST grew from Manchester Cultural Partnership's desire to explore how the city's arts and cultural organisations could contribute to the city's first climate change goals as defined in its 2009 strategy Manchester A Certain Future (MACF). On a broader level the sector is represented by the partnership in the Our Manchester Forum with oversight on development and delivery of Our Manchester Strategy 2016-25, including climate change and environmental priorities.

In 2015, MAST joined the steering group which oversees development and delivery of the Manchester Climate Change Strategy 2017-2050 setting out its ambition to become zero carbon by 2050. The implementation plan specifically identifies a role for arts and culture in finding new ways to engage people on

"MA people can come

"MAST is a great illustration of how people working across a broad sector can come together to share experiences,

successes and challenges. It not only has great potential to create change in arts and culture, but also stands as an example to other industries of what they can do if they get in a room together and start talking about sustainability. The challenge now is to take it to a much greater scale."

Richard Smith, Sustainable Production Manager

climate change. In 2017 Manchester was recognised as a 'Good Practice City' under the EU's URBACT programme, based on a submission by the Manchester Climate Change Agency presenting the MAST model and its contribution to the city's climate change policies.





""It has been fantastic to see the MAST network go from strength to strength. From their initial exploratory

discussions to now being recognised internationally as a best practice initiative, the group and its members are a true exemplar of how a sector can collaborate to tackle climate change. I am excited to see the group go onto the next stage of their journey, working to contribute to Manchester's aim become a zero carbon, climate resilient city by 2050. And providing leadership and inspiration for other sectors in Manchester to follow. Well done and keep up the excellent work."

Jonny Sadler, Programme Director, Manchester Climate Change Agency

Strengthened by Arts Council England's environmental leadership

The Arts Council's environmental programme, running since 2012, links to its 2010-20 goal of resilient, environmentally sustainable arts, museums and libraries. Regularly-funded organisations are required to report on their environmental impacts and have an environmental policy and action plan. Julie's Bicycle supports these organisations and the broader sector through a range of events, resources and advice. The programme covers the majority of MAST members. Not only has it reinforced MAST commitments on understanding impacts and reporting against its own emissions reduction target, but it also provides a range of support, events and inspiration for MAST members. 24 organisations have committed to developing their environmental leadership in their 2015-18 funding agreements, including a number of MAST members, with leadership support provided through the programme.

The Arts Council's capital grants programme is also aligned with its resilience and environmental sustainability goal. By integrating environmental sustainability in the funding process it has been an important driver for investment in more sustainable buildings, including a number of MAST members.

In the context of the Paris Agreement and Sustainable Development Goals (SDGs)

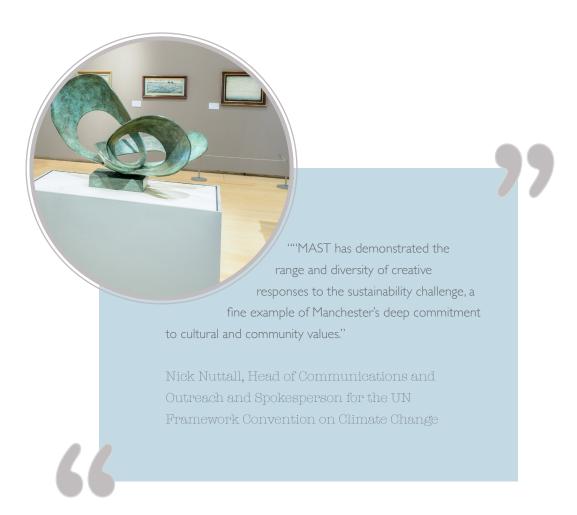
As we move towards 70% of the world's population living in urban areas by 2050, cities will increasingly be the places where the shift to a sustainable, low carbon



economy happens. The Paris Agreement and the SDGs clearly recognise the importance of cities in achieving this shift and set a clear mandate for them to act. We are now seeing a growing movement of cities which recognise the vital role the arts and culture have to play in city-level action, including international initiatives such as the C40 Cities Climate Change Leadership Group and the World Cities Culture Forum. And sector organisations, such as the Arts Council, IETM - the international network for contemporary performing arts - and the International Federation of Arts Council and Culture Agencies, are also making the case for the role of the arts and culture; both in terms of improving their operational practices and engaging audiences. With five years of experience and success to build on, MAST and Manchester already have a head start in this context.

This report aims to tell the story of MAST, to celebrate its achievements and inform thinking on the future of MAST, to support it in building on its success over the coming five years. It is based on:

- consultation and scoping with MAST's chair;
- review and analysis of environmental reporting data from 16 MAST members;
- results of a member's survey carried out in 2017, and;
- interviews with the MCCA and a number of MAST members.







AST grew out of both the Manchester Cultural
Partnership's desire to explore how the arts and
cultural organisations could contribute the city's climate
change goals and the sector's desire to promote and
share good environmental practice, and the recognition
that working collaboratively can significantly enable good practice.

	MAST MILESTONES	EXTERNAL CONTEXT	KEY INFORMATION	
2011	First meeting of CEOs and Green Champions	Manchester A Certain Future - 2010-2020 climate change strategy	27 members 7 arts centres 2 theatres	
	Named Manchester Cultural Environmental Leaders Forum		3 museums 3 galleries 2 festivals 2 broadcasters I music venue I concert hall I production company I digital innovation company I recycling compancy I university I college City council	
2012	Ist annual report	Launch of Arts Council England's environmental reporting programme		
	Mission & joint commitments defined			
	Renamed Manchester Arts Sustainbility Team			
	Membership contributions introduced	Launch of Manchester's Carbon Literacy Project		
2013	MIF become first chair			
	2nd annual report		City Council	

	MAST MILESTONES	EXTERNAL CONTEXT	KEY INFORMATION	
	Green Apple Award for Carbon Reduction	Publication of the International Panel on		
2014	Royal Exchange takes on MAST chair from MIF	Climate Change 5th Assessment report laying ground for COP21 negotiations	I I Green Champion workshops 2 CEO meetings 12 members meetings 3 surveys 4 annual reports I toolkit Ist tailored carbon literacy training course for the cultural sector in Manchester	
	3rd annual report			
2015	MAST joins the city's climate change strategy steering committee	COP21 Paris Agreement and SDGs agreed		
	4th annual report			
	MAST members contribute to Climate Lab engaging people in developing the city's new climate change strategy	2015 reported as hottest year on record		
2016		Launch of Manchester Climate Change Strategy 2017-2050		

The first official meeting was held in March 2011, convened by Manchester International Festival (MIF) and MLA Renaissance North West (leading at the time on a Greener Museum's leadership programme) and led by Julie's Bicycle. It brought together 20 organisations, representing a broad range of cultural activity in the city: from the Ambassador Theatre Group, Band on the Wall, Contact and Cornerhouse to Manchester City Council, the Museum of Science and Industry, Royal Exchange and the Whitworth Gallery.

In its first two years, and with funding from MLA Renaissance North West, Julie's Bicycle led a series of green champion workshops and two sessions with CEOs to facilitate experience exchange and learning within the group. Julie's Bicycle also

supported the group in developing greenhouse gas (GHG) emissions reporting, identifying potential financial and carbon savings as well as targets and priority areas for future action, and by capturing progress in an annual report including an analysis of reporting data and emissions trends.

Initially named the Manchester Cultural Leaders Environmental Forum (MCLEF) in 2012, the group decided on the new name of MAST in 2013 and developed its own logo. By the end of the first two years, MAST had agreed a shared mission and joint commitments, including a target of an annual 7% reduction in energy use emissions in line with the MACF target of a 41% reduction by 2020.



MAST'S MISSION

- Reduce the environmental impacts of the arts and cultural sector across Manchester:
- Engage with employees and other relevant stakeholders on environmental issues and;
- Foster a collaborative learning ethos which unites art forms, organisations, voluntary and civic bodies across the city in a shared commitment to developing a sustainable and equitable future.

Since 2013, MAST has been run by its members. Chaired on a revolving, first by MIF and then by Royal Exchange, it holds quarterly meetings to exchange experience and learning and develop joint collaboration. In 2013 it also introduced membership contributions to fund small projects and annual reporting by Julie's Bicycle to enable it to track progess, in particular against its 7% emissions reduction target.

The network has evolved organically and continued to mature since 2011. In the earlier days the focus was very much on operational good practice. This has evolved to include a strong focus on employee and audience engagement and, more recently, closer collaboration with the city on its climate change strategy, both in terms of reducing emissions and audience engagement.

In 2015, MAST's chair joined the MACF steering committee and began more formal involvement in the development of the city's new climate change strategy 2017-2050, co-ordinated by the Manchester Climate Change Agency (MCCA). MAST continues its involvement in this group, now focusing on delivering the strategy, and is working with MCCA to explore options for engaging with people

in the city on climate change, as part of the education and engagement strand of the implementation plan.

The group now includes a diverse range of 27 organisations, from BBC Salford Media City and ITV studios, to MadLab a grassroots digital innovation organisation focused on arts and culture and the Wonder Inn a creative wellness centre.

Member overview

14 Manchester Art Gallery

1	Band on the Wall	15	Manchester City Council
2	BBC Media City	16	Manchester International
3	Bridgewater Hall		Festival
4	Castlefield Gallery	17	Manchester Jewish Museum
5	Centre for Chinese	18	Manchester Museum
	Contemporary Art	19	Manchester Pride
6	Community Arts North West	20	Museum of Science and
7	Contact Theatre		Industry
8	Edge Theatre Company and	21	Royal Exchange Theatre
	Arts Centre	22	Royal Northern College of
9	The Hug Project		Music
10	HOME	23	The Whitworth Art Gallery
П	ITV	24	The Wonder Inn
12	The Lowry	25	University of Manchester
13	MadLab	26	Walk the Plank

Having made significant progress in its first five years, and with growing recognition of the success of the MAST model, in particular in the context of the city's new climate change strategy, MAST is now at a key moment in thinking in

27 7-arts

REDUCING EMISSIONS

AST is committed to working towards achieving an average annual 7% reduction in its energy use emissions, measured in CO2e, in line with city's 2009 target of a 41% reduction in emissions by 2020. A core group of 13 organisations achieved a reduction of 16% in energy use emissions between 2012/13 and 2015/16, saving 1400 tonnes CO2e. The annual average reduction was 5%, against MAST's 7% target. Savings are net i.e. taking both increases and decreases into account. Ten of 13 reduced emissions by 6% on average per year; two stabilised emissions and one increased.

	2012/13 TONNES CO2e	2015/15 TONNES CO2e	% CHANGE	% of 2015/16 FOOTPRINT
The Lowry Centre	3,134	2,704	-14%	37%
Museum of Science & Industry	1,836	1,691	-8%	23%
Manchester Art Gallery	1,419	918	-35%	12%
Royal Exchange Theatre	880	735	-16%	10%
Manchester Museum	819	678	-17%	9%
Z-Arts	249	222	-11%	3%

¹Greenhouse gas (GHG) emissions are a measure of climate change impact. There are seven main GHGs and different activities release different GHGs e.g. burning coal to generate electricity releases carbon dioxide (CO2). Each GHG has a different global warming potential. Carbon dioxide equivalent (CO2e) is used to express the climate impacts of an activity in a single measure. CO2e emissions are calculated by applying carbon conversion factors, published annually by the government, e.g. kg CO2e per kilowatt hour (kWh) of electricity.

	2012/13 TONNES CO2e	2015/15 TONNES CO2e	% CHANGE	% of 2015/16 FOOTPRINT
Contact Theatre	182	178	-2%	2%
Band on the Wall	105	103	-1%	1%
Centre for Chinese Contemporary Art	42	47	13%	1%
Manchester International Festival Office	44	40	11%	1%
Manchester Jewish Museum	20	18	9%	0.2%
Walk the Plank	12	9	-24%	0.1%
Community Arts North West	4	3	-29%	0.04%
	8,744	7,344		

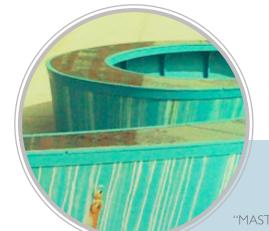
Total carbon saved 1400 % reduction over 3 years -16% % average annual reduction -5%



While all MAST members do at least some reporting, not all are included in the analysis. Newer members do not have sufficient data. Others have not provided data and the three largest - BBC, ITV and Manchester City Council - were excluded as their energy use is greater than all other MAST members combined. I 3 of I 6 organisations, in the network since its early days and reporting regularly, are included in the analysis. Home and the Whitworth were excluded as their buildings now are not comparable to their buildings in 2012/13. Also neither has yet been able to determine emissions avoided through on-site energy generation. Castlefield Gallery was excluded as it has been reporting from 2013/14. However it achieved a 9% reduction since then.

Even for organisations which have been reporting for a number of years, the process is still not always straightforward and issues with the extent to which data is really understood and used is not always evident. This is evidenced by responses to the 2017 survey, which identify environmental monitoring and measurement as the most important area where they would benefit from external support.

Overall emissions savings have resulted from a 19% reduction in electricity use and a 9% reduction in gas use². Energy savings have resulted in a £305,000³ cost saving, from a combined energy spend of £1.8 million on 2012/13 to £1.5 million in 2015/16. By taking action instead of continuing business as usual, MAST has avoided 2,800 tonnes CO_{2} e and £890,000.



"MAST is a great example of the way UK arts and culture is leading in the sector on an international scale concerning energy savings. The successes mentioned in this report show great insight into how sustainability practices can financially benefit future events and experiences. Feeding such practices into creative processes benefits organisations, audiences, and the environment, and we hope more organisations will take

Francis Runacres, Executive Director, Enterprise and Innovation. Arts Council England

inspiration from such a successful partnership."



² Based on weather normalised gas consumption i.e. gas consumption which has been adjusted for on outside weather conditions

³ Based on average tariff rates of 1 lp/kWh for electricity and 3p/kWh for gas



THE LOWRY

he Lowry reduced its energy use emissions by 14%, mainly as a result of an 18% reduction in electricity use and a range of measures including:

- introducing a security 'green patrol' to switch off and report on lights and equipment left on
- installing a small chiller to serve the galleries during the winter months enabling large chillers to be switched off
- a major LED lighting replacement scheme

At the end of 2015, the Lowry completed phase 1 of its 2020 Capital Project at the end of 2015 including a range of energy efficiency measures.

ROYAL EXCHANGE

oyal Exchange achieved a 16% reduction in energy use emissions over three years. While its gas use increased by 13%, it is a 26% decrease in electricity use which has enabled it to reduce its energy use emissions overall. This is largely as a result of a big switch to LED lighting, notably in its Great Hall and rehearsal and studio spaces, and the introduction of voltage optimisation. Overall Royal Exchange has actually halved its electricity use since 2006.



Continuing an average annual reduction of 5%, MAST will have achieved a 34% reduction overall between 2012/13 and 2019/20, saving 2957 tonnes CO2e. This is in line with the 36% reduction the city now expects by 2020. To achieve a 41% reduction by 2019/20, the 13 organisations would need to reduce 2015/16 emissions by 30%, an average annual reduction of 7.5%, and a total saving of 3750 tonnes $\mathrm{CO}_2\mathrm{e}$.



MANCHESTER ART GALLERY

anchester Art Gallery reduced its energy use emissions by a third, an impressive average annual reduction of 12%. This has resulted from a 40% reduction in electricity use and a 25% reduction in gas use and a range of actions:

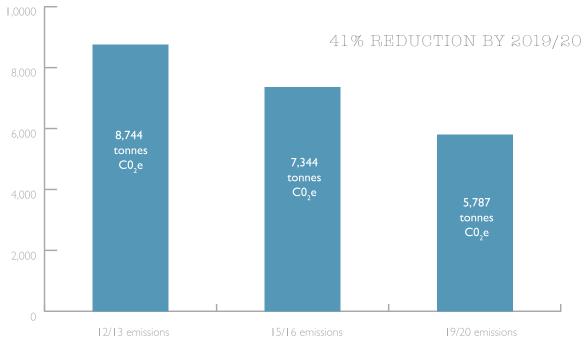
- installing low energy gallery lighting funded through Manchester City Council's 'Invest to Save' scheme moving from tighter to more flexible environmental controls for maintaining conditions for collections and exhibitions and turning off air-conditioning at night-time to reduce energy use
- moving away from air conditioning in back of house areas and encouraging staff to dress appropriately depending on the seasons
- exploring the psychology of behaviour change and how live energy monitoring data and digital technology could engage and empower users to change the way they behave in the workspace, under an EU-funded 'Save Energy' project with Manchester Digital Development Agency

The gallery's energy performance is very much dependent on incoming loans and exhibitions accepting its approach to environmental conditions. Initial evidence from 2016/17 suggests that two major incoming exhibitions which imposed very strict requirements on environmental conditions have resulted in increased energy use.

Based on reporting and survey responses covering 22 MAST organisations, over a third are already either generating or purchasing low or zero carbon energy:

- five organisations are generating low or zero carbon on-site
- three organisations are on green tariff electricity supply contracts
- one organisation is on a 100% renewable electricity supply contract





It has not yet been possible to estimate emissions savings resulting from low and zero carbon on-site energy generation, due to a lack of data on the how much energy is generated through these sources. And 'green' energy procurement is also not accounted for in MAST reporting, as under the UK's GHG accounting guidelines it is the generators and not the users which claim account for the emissions savings.



AST has a non-prescriptive, participatory approach.

While some organisations are just starting out and others demonstrating best practice, there is a discernible shift in the level and type of practice and action.

Of those which responded to the 2017 MAST member's survey, half consider themselves to be at least 'well on the way' with their environmental approach. Five describe themselves as 'just starting out' and two 'making initial progress'. Two organisations have formally committed to developing their environmental leadership in their Arts Council England funding agreements 2015-18 - Contact Theatre and Manchester Partnership (the Whitworth Gallery and Manchester Museum).

The majority have environmental policies and strategies or action plans. Some MAST organisations are developing a more integrated approach, for example, embedding environmental sustainability in governance, business and investment. Two thirds of member survey respondents have integrated environmental sustainability in their mission statements or business plans and defined some environmental roles and responsibilities. Two organisations have full-time environmental roles in place - the BBC and the University of Manchester.

THE WHITWORTH

Il gallery staff at the Whitworth havecommitted to two days sustainability work per year within the gallery environment, and the Whitworth is the only UK gallery to have created the dedicated posts of Cultural Park Keeper and Landscape and Sustainability Technician as part of its remit is to raise awareness, educate and inspire our many and diverse visitors in all

things 'green'.





While in its earlier days MAST members had very much a focus on operational good practice, the majority now combine both practical environmental action, leading by example and engaging employees, audiences and local communities in the process on the one hand with creative responses - productions, exhibitions, events etc. - to engage audiences on environmental themes, in the understanding that the two are mutually reinforcing. Home and the Whitworth Gallery's approach, as communicated on their websites, are an excellent demonstration of this combined approach.

Responses to the 2017 member's survey identified three priorities for MAST to focus on in developing joint collaboration:

- energy saving and efficiency;
- sustainable procurement, and;
- external stakeholder communication and engagement.

They also identified capital development and employee training and engagement as the key areas where members would benefit from external support.

Some examples from the network

- Water: Band on the Wall, the Lowry and Castlefield Gallery have a range of water-saving measures from dual flush toilets to flow restrictors on taps and showers and aerating taps.
- Waste: The Centre for Chinese Contemporary Arts contributes waste to community-led recycling and reuse schemes. Community Arts North West composts its food waste on tenants' allotments. All of Home's in-house catering waste is composted, recycled or converted into waste-to-energy biofuel. Its Visual Arts team reuse materials across exhibitions and recycles all wood and MDF and theatre productions source repurpose waste for stage sets.
- **Capital investment and sustainable buildings**: Home, the Whitworth and the Lowry have all undertaken major capital investments, including a new building for Home, with a strong focus on sustainability and improving energy and carbon performance.
- **Sustainable events:** Manchester City Council has developed a sustainable events policy for Manchester Day and is focusing action on waste minimisation and promoting sustainable transport.
- **Sustainable production**: both the BBC and ITV have established sustainable production programmes to reduce the impact of their productions.

- **Touring**: Contact Theatre is investing in an LED theatre lighting rig for its rural touring programme.
- **Procurement**: Castlefield Gallery uses sustainably sourced timber for all its exhibition-making. Community Arts North West purchases mainly Fairtrade and/or organic snacks and drinks from the Co-op or Oxfam, local shops within walking distance. Contact Theatre sources scenic materials from recycled sources where possible and prioritises materials from environmentally responsible suppliers
- and works with Transport for Greater Manchester) Travel Choices to advocate best practice. It also actively encourages long-distance and European travel by train. The Whitworth encourages staff and visitors to travel sustainably. Not having a car park helps. This includes promoting use of the improved cycle routes in the city, providing bikestands for visitors, supporting the University's Sustainability Team by organizing cycling events, offering staff a range of bicycle and public transport finance schemes, and banning domestic flights.
- **Transport**: the Whitworth works to share transport with other local museums and galleries, using part-loads and asking the transport companies they use to think sustainably. Its drivers have been trained in sustainable driving techniques.
- **Divestment**: the Hug Project, Madlab and Community Arts North West have all taken steps to divest from fossil fuels, notablyby switching to banks which do not invest in fossil fuels and refusing



"The cultural organisations in this city need to lead in their actions to limit the effects of climate change.

We need to harness our creative resources to respond to the challenges we face, engage our audiences and most of all we need to get on with dramatically reducing the carbon we produce, now."

Sarah Frankcom, Artistic Director, Royal Exchange



AST demonstrates the role the arts, culture and creativity can play in engaging people. Many MAST members are working to engage staff, visitors, audiences and local communities on environmental issues and make them meaningful and relevant, from the Manchester Art Gallery and the Whitworth Gallery's staff beekeeping initiatives and the Whitworth's Community Garden Hub to ITV's inclusion of a climate change theme in the Coronation Street storyline and Manchester Museum's numerous exhibitions encouraging visitors to explore their attitudes and values about nature. Most MAST members now address environmental themes in programming and learning and outreach activities.



NETWORK EXAMPLES

- HOME's Birthday Weekend hosting of a unique family-friendly theatre production that ran on pedal-power alone
- Z-Arts 'Rubbish', a play about waste for children
- The Museum of Science and Industry's collaborations with Cape Farewell on 'Evaporation' a new installation by internationally acclaimed artist Tania Kovats exploring the significance of our relationship with water and the world's seas and oceans and part of the 2015 Manchester Science Festival and ArtCOP21.
- Manchester Art Gallery's 2014 pop-up Wild Orchard inviting visitors to plant their own bee-friendly trees
- The Whitworth's 2015 textiles exhibition responding to environmental issues, its Community Garden Hub to encourage neighbours to engage with horticulture
- Manchester International Festival's organic urban farming partnership with the Biospheric Foundation in 2014 engaging thousands of community volunteers



- Contact Young Company's 2016 show 'Climate of Fear' exploring the
 emotion of anger through themes of climate justice, social inequality,
 memory and the body and hosting of the 'Our City, Our Planet'
 event for young people to explore the issue of climate
 change and the future they want for the city
- Manchester Museum's wide range of permanent and temporary exhibitions including: the Living Worlds Gallery which encourages visitors to explore the natural world and their relationship to nature; 'After the Bees' and 'Extinction or Survival' which explore themes of loss and the impact of humans on the natural environment; an exhibition about the relationship between people and trees in Manchester, in partnership with the British Ecological Society; the 'Nature and Me' project, a series of films of local people with a wide variety of connections to nature, and; themed 'Big Saturday' events for families on a range of nature themes.
- Contact Theatre partnered with Transport for Greater Manchester (TfGM) to support their work on sustainable travel. From travel planning to creating a digital toolkit, a trial of TfGM's Free Loan Bike Scheme to funding for an all-electric van.
- Band on the Wall, which has an extensive recycling programme, has
 developed a partnership with local business Gumdrop, a closed loop
 recycling process which recycles chewing gum into a new polymer
 used to manufacture bins.

HOME MANCHESTER

OME advocates for climate change awareness and action among its employees, both at work and in their day-to-day lives. Between September 2016 and April 2017, HOME undertook training workshops,

e-learning sessions and film screenings, all certified by the Carbon Literacy Project, delivered in partnership with Manchester Metropolitan University, and authorised by Cooler. They are now proud to be the first arts and cultural venue to have trained all their employees in Carbon Literacy. Manchester's Climate Change Strategy 2017-50.





"As a result of our participation in the Carbon Literacy project we have incorporated carbon literacy into

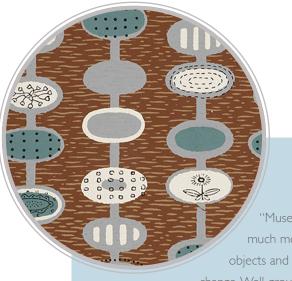
our induction policy, ensuring that all new members of staff will be trained within six months of starting their new role with us. We have appointed four dedicated in-house trainers who will deliver all future training workshops, ensuring that HOME is a true advocate for climate change awareness and a leading instigator of low carbon practices. Training has already proven to have had a positive impact, with increased staff confidence in communicating environmental and sustainability issues with peers, family, friends and visitors."

Debbie Bell, Building Manager, HOME Manchester

A key demonstration of the sector's role in engaging people has been the success of culture-based activities in Climate Lab, an experimental programme to test different ways to engage Manchester stakeholders' in developing the city's climate change strategy. The programme ran in 2016 as part of Manchester's European City of Science activities, with over 30 partners and coordinated by Manchester Climate Change Agency (MCCA). Combining a range of non-traditional means of engagement, alongside some of the more tried-and-tested techniques, the programme reached approximately 100,000 people from March to October 2016. Arts and culture-based activities, including a number carried out by MAST members, were particularly popular.

Analysis of the Climate Lab programme will be complete in 2017 and used to underpin the development of Manchester's climate change engagement programmes for 2018. MAST and its members are now working with MCCA to explore options for it to contribute to developing a new programme of arts and culture-based activities to engage and involve Manchester stakeholders in the delivery of the city's climate change strategy, as part of the education and engagement strand of the strategy's implementation plan.





"Museums and galleries can do much more than simply present objects and information relating to climate change. Well-grounded creative experiences can be transformational - not only for people as individuals, but for our collective future."

ne of the Climate Lab highlights was Manchester Museum's Climate Control a six-month long series of exhibitions and events exploring what kind of future people hope for and how to make it a reality, including opportunities to rebuild a model Manchester. Climate Control was carried out in partnership with the Tyndall Centre, the Global Development Institute and MCCA. Over





AST started out with a focus on promoting and sharing good practice amongst its members. This has grown to encompass the development of joint initiatives amongst members, from joint procurement of smart energy monitors and rechargeable battery packs to Carbon Literacy Training. A range of local collaborations and partnerships have also been developed.



NETWORK EXAMPLES

- The Hug Project, a Community Interest Company which works with community organisations in Greater Manchester to source and provide reclaim waste materials and recycled products, including a many community arts organisations, has helped to deliver a programme at the Lowry Centre for its 'You Can Community Club'
- Manchester Art Gallery's The Lost Gardens of Manchester, was developed in partnership with the National Trust. A team led by the National Trust's Gardener-in-Residence and 30 volunteers used 10 tonnes of compost and 500 flowers and plants.
- The Whitworth Gallery's partnership with City of Trees has helped to involved volunteers in planting 200 whips of different native trees.
- The BBC's long-established sustainable production programme, evolved into a shared approach for the broader sector, through the BAFTA Albert Consortium, a group supporting the screen art industry's transition to an environmentally sustainable future, including ITV, Sky and Creative Skillset.



The Carbon Literacy Project, was founded in Manchester as a direct response to Manchester: A Certain Future's aims of a 41% cut in CO2 emissions by 2020 and the creation of a 'low carbon culture'. It offers every individual in the city, and beyond, a day's worth of certified Carbon Literacy learning that encompasses climate change science, context and action.

MAST members have undertaken Carbon Literacy training to help them understand climate change, how it relates to their organisations' and individuals' day-to-day activities, and ways in which they can take practical action to make a positive contribution. Some members have gone on to deliver organisation/department-wide training, including the Coronation Street team, the BBC, Manchester Museum and HOME. In 2016, a number of MAST members, including HOME, the Royal Exchange and Contact Theatre carried out a Carbon Literacy training pilot in collaboration with Manchester Metropolitan University and Cooler, which co-ordinates the programme overall, and developed a version of the training specifically for the arts and culture sector.





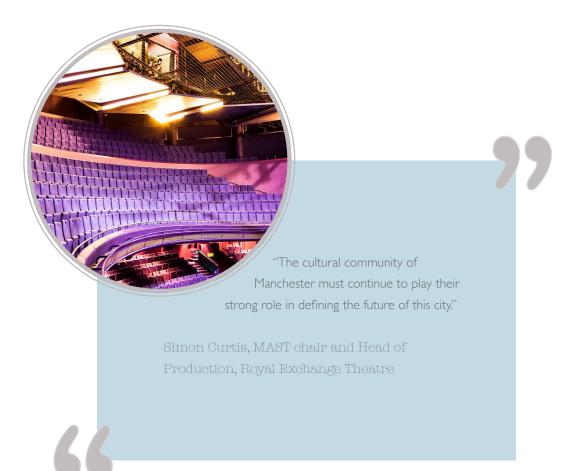


Manchester Climate Change Strategy in place, now is a good moment for MAST to reflect on its priorities for the next five years, how it can lead in working towards the city's zero carbon ambition, and use this an opportunity to grow an ethically driven creative economy - new skills, jobs and opportunities for a sustainable Manchester.

Key areas for MAST to consider for its next five years are:

- **growing its network**, from Manchester to Salford to the Greater Manchester and involving more commercial organisations,
- exploring options for developing different levels of membership and involvement, e.g. a core group actively pursuing joint commitments, projects and leadership and a broader group for information and experience exchange
- increasing its profile through
 - * more visible CEO engagement e.g. holding bi-annual CEO sessionsjoint MAST communications name, logo, comms, website, display commitments/MAST membership in buildings
 - developing joint MAST marketing and communications and providing members with opportunities to promote the network e.g. a MAST pledge or statement which can be displayed in venues and on websites
 - * sharing its model and results with the Greater Manchester Combined Authority (GMCA), the new metropolitan mayor and cultural and environmental leads across GMCA
 - * sharing its model internationally MAST and MCCA have already been invited to make a contribution at COP23 and, as an URBACT 'Good Practice City', will be applying for funding for a transfer network
- exploring how it can work towards the city's zero carbon ambition and track its progress along the way
 - * developing a new set of commitments and priorities for its journey to zero carbon in line with the city's zero carbon ambition and five year implementation plan looking at what has been learnt already through members investment
 - * developing a new reporting baseline and indicators from 2017/18 build

- identifying priorities for joint collaboration, for example on clean energy procurement and investmentencourage more members to report, respond to surveys, etc.
- building on the success of the Carbon Literacy training and developing skills and capacity on energy management, monitoring and measurement
- supporting delivery of the engagement strand of the city's climate change strategy
 - * collaborating with MCCA in building on the success of Climate Lab to develop a new programme of arts and culture-based activities to engage and involve city stakeholders on climate changeencourage more members to report, respond to surveys, etc.
 - bringing together environmentally-themed events and activities planned across MAST in a 2018 arts and culture environmental programme
- developing understanding of leadership and best practice and a more consistent framework for tracking MAST's progress against this
- exploring opportunities to build environmental leadership skills in the network
- exploring funding options to enable MAST to build on its success.





ABOUT JULIE'S BICYCLE

Julie's Bicycle is a London based charity that supports the creative community to act on climate change and environmental sustainability. We believe that the creative community is uniquely placed to transform the conversation around our environment and translate it into action.

We provide the creative community with the skills and ambition to act, using their creativity to in influence one another, audiences and the wider movement. We run a rich programme of events, consultancy, certification, free resources, research, network development, mentoring and advocacy.

Julie's Bicycle is helping to shift cultural policy and investment so that sustainability and ethical decisions about our shared world are built into the fabric of culture-making.

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