



THE CREATIVE INDUSTRIES IN SCOTLAND: EMBRACING THE CIRCULAR ECONOMY



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CRNS Executive Summary

The creative industries in Scotland are an incredibly diverse sector with a global reputation. Contributing to the economy, employment, health, and wellbeing of Scotland, as a growth sector it has the potential to support the delivery of green recovery ambitions and align with, and progress, Scotland's wider environmental policy and strategy intentions.

Funded by **Creative Scotland** and delivered by **Community Resources Network Scotland**, this project considers the extent to which the creative industries are embracing the circular economy, moving away from a linear 'take, make, waste' model, towards a more resource efficient and environmentally sustainable way of operating. It also considers how the sector is using its creativity to educate, inform, inspire, and support others in making the transition towards more circular practices.

Through interviews with a range of stakeholders across the creative industries¹, a snapshot has been taken of the sector and a series of case studies developed. The challenges and barriers that the sector faces in making the transition have been identified, and whilst it is evident that many organisations appear to be at the start of the journey, there is a strong desire across the sector to support the principles of the circular economy and embed more circular practices. Examples of activities that organisations are delivering include: the development of reuse networks and opportunities to maximise the value of materials and resources already in use, and reduce overall consumption; use of creative learning opportunities to inform and educate; creative commissioning of exhibitions and programmes to promote creators adopting circular economy practices and also to promote positive messaging in relation to resource use to a wider audience; and, strategic development and collective commitment to implementing and delivering more sustainable consumption and resource usage and management.

Through this research a number of characteristics of the sector have been identified, which lend themselves well to facilitating transformational change. For example, the ability to present information in an unusual or interesting manner, through different mediums or from different perspectives, in essence the storytelling ability of the sector. This is a strength that can be exploited to help drive systemic change towards more sustainable

practices, well beyond the creative sector and into mainstream society. In addition, it is evident that the relationship with materials in the creative space can be more intimate and aligned, which lends itself to seeing inherent value in items which others may consider to be of little or no use. Those working in the creative industries also have an extensive bank of skills to draw upon, practical abilities associated with artistry and making, that can help support the development and implementation of more circular practices.

It is clear from the research that momentum towards better understanding of materials and resource use is starting to emerge which can be built upon and the challenge is to ensure the sector as a whole, with all its variations and diversity, is on the same journey. With this in mind, a number of steps have been proposed, as a call to action to stimulate change. These include addressing the biggest barriers to progress, specifically space scarcity and lack of sufficient understanding of actions that can be taken; raising minimum standards and prioritising environmental requirements to ensure that ambitions and expectations of the sector are high; ensuring that collaboration within and outside of the sector is maximised and opportunities to coordinate and align support are taken; and finally, ensure that needs are being met to deliver change, through a review of the support tools available and addressing any skills gaps.

In essence this report represents a celebration of a sample of creative organisations who have made progress in achieving or committing to more circular ways of operating, shining a light on their success, and incentivising those who have yet to start on this journey to consider the changes they could make to manage their resource use more effectively and protect the environment that they operate within and beyond.

¹Refer to Appendix 1 for a full list of those who took part in the interviews and contributed to the research.

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1 INTRODUCTION

1.1 The Creative Industries in Scotland

Passionate, innovative, resourceful, vital, committed; this is how stakeholders² engaged in the creative industries in Scotland see themselves, and for good reason. With more than 90,000 people³ from over 15,000 businesses plus a large number of freelancers and volunteers working in the creative industries in Scotland, generating more than £5 billion for the Scottish economy each year⁴ and estimated to support around £9 billion of activity within the wider Scottish economy⁵, the value of this sector to Scotland and beyond is not to be underestimated.

The sector is incredibly diverse (refer to figure 1) and with many internationally recognised organisations and events, in addition to multiple award-winning artists, creators, performers, designers, producers and makers, the creative scene in Scotland continues to ensure its presence is felt, not just locally but also globally.

Figure 1: Sub sectors within the creative industries⁶



Identified as one of Scotland's key growth sectors⁷ much focus has been on nurturing and supporting further development of the creative industries, recognising the role they can play in employment, economic prosperity, health, and wellbeing. However, in line with Scotland's ongoing

commitment to environmental protection and the efforts being made to transition to net-zero emissions in response to the climate emergency, successful growth of the sector cannot, and should not, be to the detriment of the environment.

²Based on interviews conducted with a sample of organisations engaged in the creative industries April – July 2021

³<https://www.scottish-enterprise.com/learning-zone/research-and-publications/components-folder/research-and-publications-listings/scotlands-creative-industries-facts>

⁴<https://www.gov.scot/policies/creative-industries/>

⁵<https://www.gov.scot/publications/policy-statement-creative-industries/pages/2/>

⁶As defined by the Scottish Government

1.2 Scotland's Commitment to the Circular Economy

“Circular economy plays a really key role in solving many problems around climate change, but what it also does is it builds a more resilient economy.”

Ellen MacArthur

As a nation Scotland has been clear in its **commitment to addressing climate change**, with a raft of legislation, policy and support, and carbon reduction measures and initiatives, including an ambitious target of net-zero emissions of all greenhouse gases by 2045. Transitioning from a linear ‘take, make, waste’ economy to a more circular system is seen as integral to reducing carbon emissions and reaching the milestones and targets.

Scotland's circular economy policy is set out in **‘Making Things Last’**, published in 2016 and one of the first national circular economy strategies in the world. The importance of this policy in providing an environment for circular economy to flourish was recognised by the World Economic Forum at their annual meeting in Davos in 2017, with the Scottish Government and partners receiving the public sector ‘Circulars’ award⁸ for their work on the circular economy.

Although the subsequent Circular Economy Bill has been postponed due to COVID, the latest update to Scotland's 2018-2032 Climate Change Plan⁹ has renewed impetus in building a fully circular economy in Scotland, **embedding circular economy principles in the wider green recovery**. Key priorities for business and industry include continuing to actively increase waste prevention as well as reuse and recovery rates.

Whilst not specifically targeted, the creative industries have a potentially important role to play in supporting and delivering green recovery, and ensuring their practices and operations align with Scotland's wider environmental policy and strategy

intentions. The creative industries are also well placed to tell the story of, and fly the flag for, the benefits of the circular economy to a much wider audience. It is also worth noting that Glasgow and Edinburgh, who have ambitions to achieve net zero by the earlier date of 2030, are where much of Scotland's cultural infrastructure and activity is based; the opportunity to secure the creative industries as part of the solution, rather than contributing to the challenges being faced, is too good to miss.

1.3 Purpose of the Research

Funded by Creative Scotland and delivered by Community Resources Network Scotland, this research considers the extent to which the creative industries are embracing the circular economy and successfully incorporating changes to their daily practices and operations.

Through interviews with a range of stakeholders across the creative industries¹⁰, a snapshot has been taken of the sector, looking at the approaches being adopted to deliver more resource efficient practices. In addition, specific challenges and barriers faced by the sector have been considered, and innovative actions and responses identified and presented in a series of case studies.

In essence this report represents a **celebration of a sample of creative organisations** who have made progress in achieving or committing to more circular ways of operating, shining a light on their success, and incentivising those who have yet to start on this journey, to consider the changes they could make to manage their resource use more effectively and protect the environment that they operate within and beyond.

⁷<https://www.gov.scot/publications/scotlands-economic-strategy/>

⁸<https://thecirculars.org/awards-program>

⁹Securing a green recovery on a path to net zero: climate change plan 2018–2032 – update, published 16 Dec 2020: <https://www.gov.scot/publications/securing-green-recovery-path-net-zero-update-climate-change-plan-20182032/pages/11/>

¹⁰Refer to Appendix 1 for a full list of those who took part in the interviews and contributed to the research.

“Artists, Designers, and Makers have a central role to play in the necessary paradigm shift towards a Circular Economy, with craft-based skills and an innovative, creative, understanding of materials and resources being key to making this transition possible.”

Mella Shaw, Artist, Maker and Freelance Curator

The Scottish Government Creative Industries Policy statement¹¹ supports “forward thinking and sustainable business models” and recognises that the creative industries will play “a key role in economic, social, cultural, technological and environmental transformations.” They go on to state that they “aim to create the conditions for the creative industries to grow sustainably and with resilience, recognising non-linear growth patterns and the triple bottom line of economic, social and cultural value.” **So how far has the sector come?**

2.1 Understanding the Environmental Challenges of the Sector

The diversity of the sector represents a significant challenge in itself, in terms of the wide spectrum of activities undertaken in the creative space.

The creative industries include multi-million-pound screen production companies, large scale producing theatres, touring companies, single artist studio's, festivals, community arts groups, freelance performers, curators, hosting venues, bands...the list of potential examples is extensive. From a circular economy perspective, as a collective body covering such a diverse range of activities, the potential **resource usage and material flow is significant**, despite the difficulties in fully quantifying the material footprint of the sector. The **range of resources** in the form of materials usage is also varied from hardwood in set production, textiles in costume design, electronics in digital, to specific material favoured by makers and creators in visual art, craft, and heritage, plus all the resources associated with a fully functioning business. The way in which materials are used can also present challenges for the sector. For example, in set design and production, scenery must be light and fulfil an aesthetic function, typically for a very short lifespan, and respond to time pressures at the start and end of a show, generally with limited thought given to what will happen to the material at the end of the production; the process as a whole does not lend itself readily to deconstruction

or dismantling without detailed planning or consideration during the early stages of commissioning. In addition, meeting the needs of audiences engaging with creative activities, in an efficient and cost-effective manner, whilst at the same time considering the resource footprint in doing so, can be challenging to say the least.

The **size, scale and focus of organisations** across the sector impacts on the extent of resource usage and also the ability to manage those resources effectively, as **time, skills and capacity to address environmental challenges** can be constrained by other pressures. Last minute demands placed on an organisation can test the most embedded environmental policies when urgency to respond and convenience take precedence.

For those organisations wanting to go further in ensuring their resource usage is sustainable, establishing **environmental provenance of materials** can be a challenge, with lack of access to appropriate data and information or confusion over what this data means and what alternative options are available.

It should also be noted that whilst not necessarily understanding the potential economic benefits from adopting more circular systems by eliminating waste and keeping products and materials in high value use, or perhaps not having the ability or capacity to act, **short term commercial pressures and availability of budgets** can often take precedence over longer-term environmental considerations.

¹¹<https://www.gov.scot/publications/policy-statement-creative-industries/pages/3/>

¹²CS_Group_Annual_Report_and_Accounts_1920.pdf (creativescotland.com)

¹³https://www.creativescotland.com/_data/assets/pdf_file/0012/25500/Creative-Scotland-10-Year-Plan-2014-2024-v1-2.pdf

2.2 Sector Support

Across Scotland, researchers, academics, sector leaders, networks and membership organisations, special interest groups, and private sector organisation, are all extensively involved in understanding the role and impact of the creative industries within a green economy and their contribution to achieving transformational change. Support is being delivered in a variety of areas including environmental monitoring; data management; carbon accounting; skills development; production of case studies and good practice exemplars; and development of strategic approaches to support cross sector working.

In terms of public bodies, **Creative Scotland**, has a significant role to play, providing support to the arts, screen, and the creative industries across all parts of Scotland. Responsible for distributing funding from the Scottish Government and The National Lottery, Creative Scotland has increasingly acknowledged the importance of environmental responsibility and the need for sustainable practices. They have statutory obligations in terms of the environment and further details of their specific legal role and responsibilities can be found in Appendix 2.

One of the connecting themes that runs through all aspects of Creative Scotland's work, is a commitment to operate in an environmentally sustainable manner and work to ensure that the individuals and organisations they support do the same¹².

A **10-year plan**¹³ is in place with the aim to see the arts, screen and the creative industries show their leadership in reducing their environmental impact and carbon footprint, benefiting from the additional cost reductions that this can often bring. In addition, the plan states how the work of Creative Scotland aligns with the Scottish Government's National Performance Framework (NPF), and how its ambitions will be assessed against, and help deliver, a number of outcomes that describe what the Government wants to achieve including: 'National Outcome 14 - We reduce the local and global environmental impact of our consumption and production'¹⁴.

It is also worth noting that the recent Annual Plan¹⁵ reconfirms the strategic priorities and highlights a range of activities supporting sustainable development. In addition, Creative Scotland is redeveloping its Environmental Action Plan, due to be complete in December 2021.

Internally, in terms of day-to-day operations, Creative Scotland has established a **Green Team** with representatives from all Directorates across the

organisation, to **promote sustainable behaviour and practices**, and waste minimisation and recycling is standard practice in Creative Scotland offices. An ICT strategy encourages reduced printing, and the intention is for procurement to be as environmentally sustainable as possible. Environmental risks are incorporated into the Risk Register and environmental activities are presented in Creative Scotland's annual reports.

Externally, Creative Scotland has recognised that their principal environmental impact comes from the work they fund rather than from their own direct emissions¹⁶. Therefore, there is a requirement in place for all **Regularly Funded Organisations** (RFO's), of which there are currently 121, to articulate their approach to the environment and to monitor and report their emissions annually.

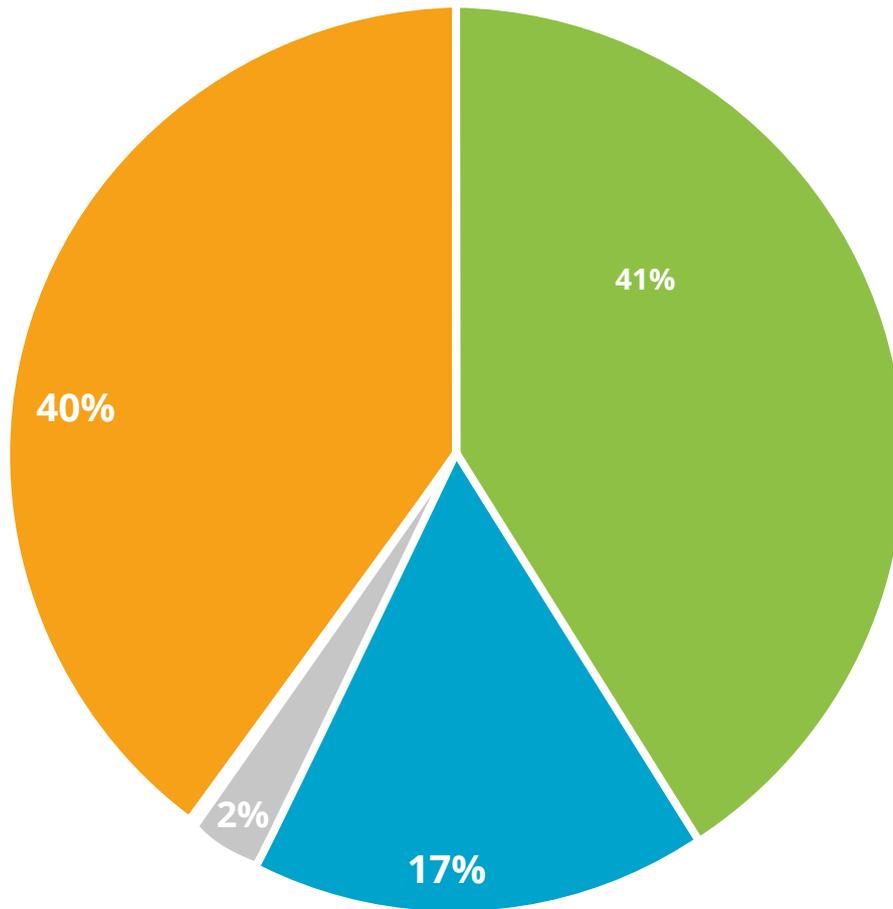
Funded over a three-year period, the RFOs provide data and information on a range of different environmental issues, including priority areas i.e., travel, energy, waste and resources, and the different activities they are incorporating to reduce their emissions¹⁶. The latest data for the period 2018-2020, showed that **waste and waste related concerns were a focus for 60% of RFO's surveyed**, with one or more projects over the three-year period focusing on reducing waste and improving resource management (refer to Figure 2). Activities include targeting single use items, reducing resource consumption through improved practices, increased recycling and diversion from landfill, greater reuse opportunities, and changes to procurement practices.

¹⁴https://www.creativescotland.com/_data/assets/pdf_file/0012/25500/Creative-Scotland-10-Year-Plan-2014-2024-v1-2.pdf

¹⁵https://www.creativescotland.com/_data/assets/pdf_file/0009/88128/Creative-Scotland-Annual-Plan-2021-22.pdf

¹⁶Annual-Review-2019_20.pdf (creativescotland.com)

Figure 2: RFO's focus on waste and waste related activities 2018-20



■ One waste related project
 ■ Two waste related projects
 ■ Three waste related projects
 ■ No waste related project

In addition to the support for RFO's, there is also potential to secure support from Creative Scotland for environmental initiatives through the open and targeted funding opportunities, although these funds are not specifically focused on developing or delivering circular economy.

It's also worth noting that funding programmes such as the Creative Scotland Culture Collective Fund¹⁷ can positively influence the circular economy space, depending of course on the intention and focus of the organisation in receipt of funds. One example is **CULTIVATE**, the programme being delivered by Creative Dundee as part of the Culture Collective, where 12 projects with a climate justice focus will be delivered over 18 months by creative practitioners working within the community. Empowering local

communities to adapt, respond and find their own solutions, using culture and creativity to help impact change, it is expected that improvements in resource use and management will feature in some aspect of the creative practitioner's work.

One key organisation that Creative Scotland supports is **Creative Carbon Scotland**, the national charity supporting the cultural sector's response to the climate emergency, exploring how creative practice can contribute to the transformational change to a sustainable Scotland. In their work with the arts, screen and the creative industries, Creative Carbon Scotland helps organisations to understand and reduce their carbon footprint and to find more environmental ways of working - including incorporating circular economy principles.

¹⁷<https://www.creativescotland.com/funding/archive/culture-collective>

¹⁸<https://www.creativecarbonscotland.com/wp-content/uploads/2021/05/GAI-report-2019.pdf>

¹⁹Not all members are taking action in each of the four areas, therefore it does not equate to 100%

Creative Carbon Scotland has been involved in research to support progress across the sector. For example, they were commissioned to consider how the screen production industries can become more sustainable, focusing on the changes they can make to reduce their environmental impact.

Creative Carbon Scotland also supports the RFOs (and other funded organisations) to develop their approaches to the environment and reduce their carbon footprint, including monitoring and reporting. In addition, they facilitate the **Green Arts Initiative**, a network of individuals, and professional and community cultural organisations across all art forms who are committed to reducing their impact on the environment and developing more sustainable practices. Currently, the Green Arts Initiative has around 330 members who each appoint a Green Champion and make a commitment to monitor and report climate emissions annually. In return they can use the Green Arts Initiative branding on their websites and at venues, receive quarterly newsletters, participate in meet-up events and workshops on different sustainability topics, attend an annual conference, and access a wide range of resources.

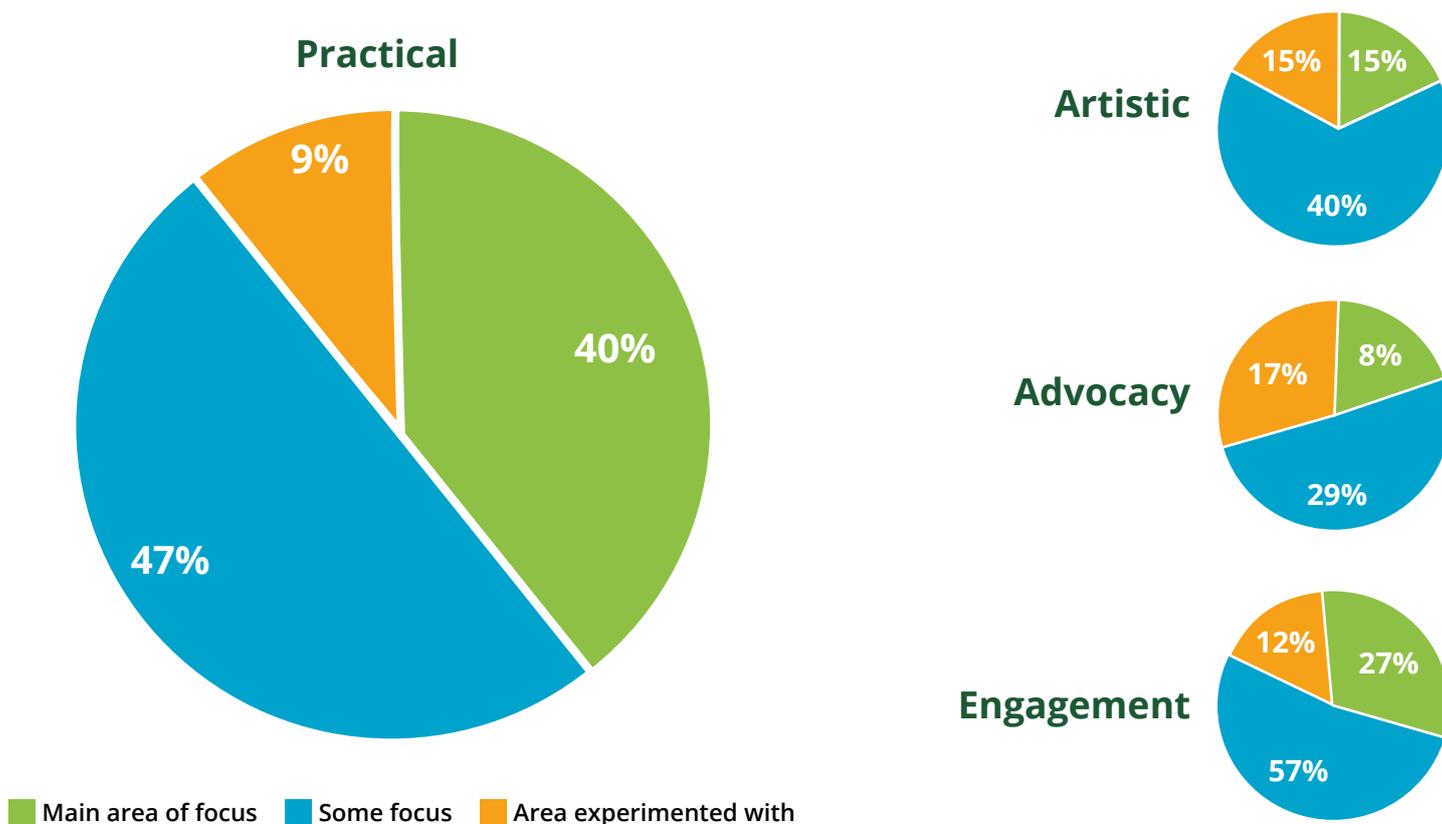
In terms of representation across the membership, theatre and performing arts (including dance) followed by visual arts and cinema make up the largest sub-sectors. However, membership continues to grow, and all sub-sectors are represented.

Reflecting on reported progress in 2019¹⁸ it's evident that members are addressing environmental issues in a range of different ways; a significant number have identified practical issues as their main area of focus, in terms of reducing the environmental impact of running their organisation (refer to Figure 3), such as installing LED lighting, serving vegetarian catering or purchasing in bulk to cut down on packaging. In addition, two of the five stated achievements for 2019 impact on measures to address consumption:

- resource usage and management specifically through avoiding single use items; and,
- improving recycling facilities and strategies.

Whilst a third stated achievement embraces the wider requirement to raise awareness and promote behaviour change through programming work.

Figure 3: Green Arts Initiative Members - Areas of Focus to address environmental issues (2019)¹⁹



“While there are different levels of knowledge within the cultural sector about the circular economy, more and more Green Arts Initiative members are becoming interested, developing their knowledge and gaining first-hand experience of implementing more circular practices.”

Amanda Grimm, Creative Carbon Scotland

2.3 Circular Economy Snapshot of the Sector

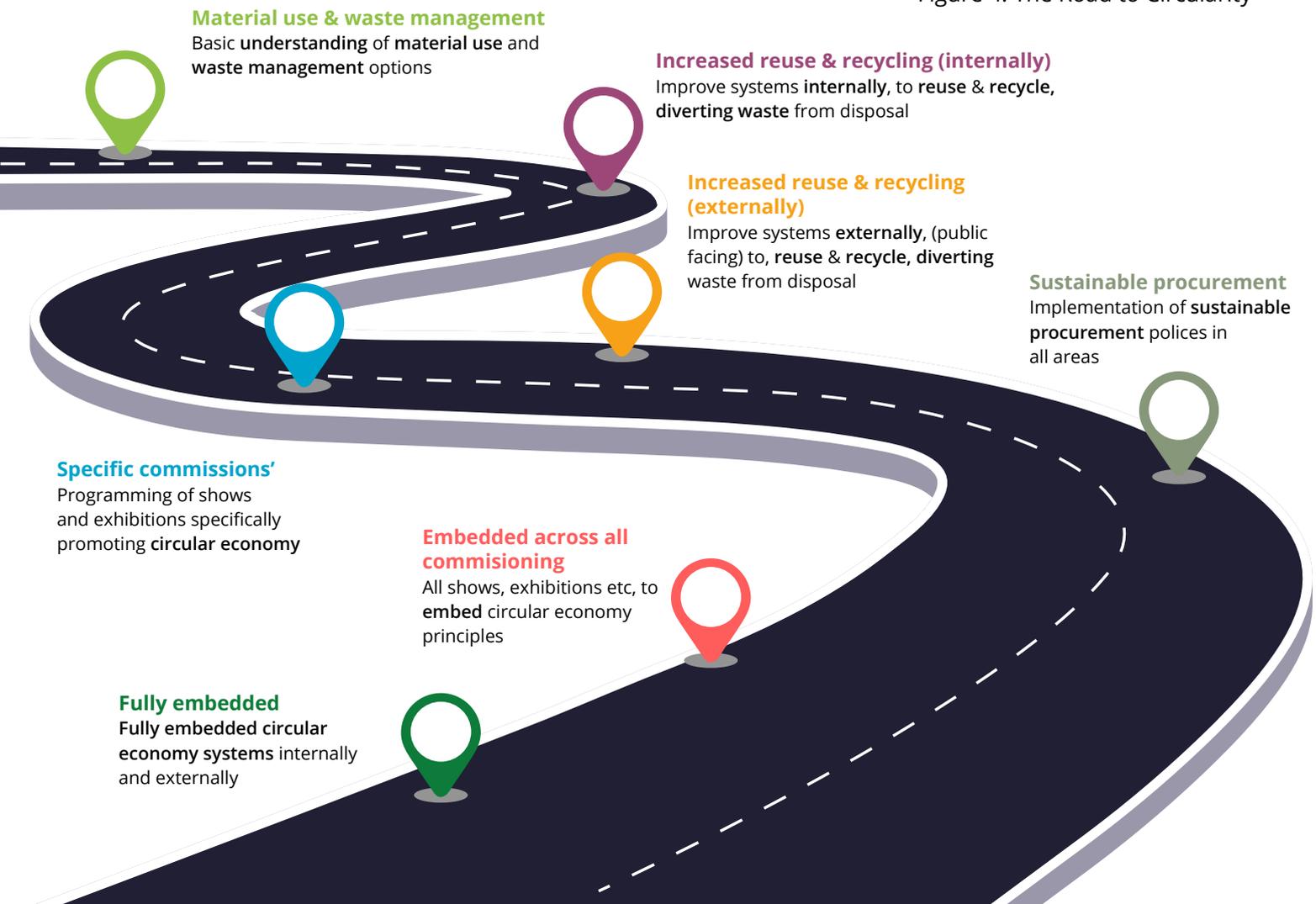
The ultimate goal of a circular economy is to use resources more efficiently, reducing demand for materials through smarter more sustainable consumerism, extending the useful life of products to maximise their value through re-using and repairing items in circulation, remanufacturing unwanted items to create new products, and finally recycling and reclaiming energy to maximise the value of any unwanted items.

Through a series of interviews, document reviews, and stakeholder engagement, a snapshot of the sector has been established, identifying the different ways that the circular economy is being incorporated across the creative industries.

2.3.1 Birds Eye View of the Sector

The desire and commitment to become more circular, is very evident across the sector, although what this means in practice varies significantly (refer to Figure 4).

Figure 4: The Road to Circularity



"I think the way the creative industries work is close to a circular economy; the financial challenges we face across the sector and the way in which we value resources does mean it's really not a huge jump to get there."

Mary Michel, Ostrero

“There is definitely an appetite for understanding more and wanting to learn more, as like many organisations we have artists who are engaged in environmental issues but are not as clear about the circular economy in terms of what it really means.”

Sara Johnstone, The Work Room

For some organisations this simply means **better internal waste management practices**, being aware of what resources are being used and ensuring that recycling systems are available for at least some material streams. The focus may be on office resources, controlling material coming in and out with a specific body of stakeholders, and communicating behaviour change required when focusing on a particular activity or aspect of the business is relatively straight forward.

For others the journey towards circularity may mean **further development of reuse opportunities**, **increasing recycling** of unavoidable waste, challenging resource usage, **moving away from single use items** and considering more **sustainable procurement** options. This stage may require more effort if changes involve multiple departments, stakeholders, and interest groups.

Some organisations have looked outside of their own internal practices and considered how they can support transformational change through their creativity, **proactively commissioning projects to address resource usage and consumption**.

The more encompassing the actions being taken are, the greater the need for communication and buy-in from all stakeholders for systems to be successfully implemented and adhered to.

As a snapshot of the sector, it's fair to say that whilst the current picture is rather varied, a significant number of organisations appear to be at the start of their circular journey, making changes to understand their resource usage and consumption patterns and considering what changes they could make to reduce their environmental impact.

There does appear to be a common desire across the sector to support the principles of the circular economy and embed more circular practices and potentially promote these practices wider; effectively market sustainable activities to audiences and third parties to increase the appeal of the work being produced.



“The arts, screen and the creative industries influence the wider public through their communication of ideas, emotions and values. Indeed, this influence is seen by many as the unique and distinctive contribution that these sectors make to addressing the troubling environmental changes taking place, and the risks we face.”

Creative Scotland²⁰

“Craft is a powerful storyteller and a lot of its stories are about reuse, repair and the value of material culture. Craft unlocks and invites an understanding of objects, and why people have made them by hand, over time, in a very intimate way.”

Catriona Duffy & Lucy McEachan, Panel

“Reuse, when approached creatively, can bring about significant health benefits simply looking at things differently, seeing their value. For example, for people with dementia, taking unwanted items to make memory boxes or memory rooms can bring joy and happiness.”

Joyce Harkness, Shax

“In the creative industries and visual arts, you have some of the most inventive, creative, makers with a huge skills base and with the right support could come up with innovative ways to solve the environmental problems we are facing.”

Simon Cook, ReSet Scenery

2.3.2 Strengths of the Sector

There are a number of characteristics of the sector, which lend themselves well to facilitating transformation change. For example, the ability to present information in an unusual or interesting manner, through different mediums or from different perspectives, in essence the **storytelling** ability of the sector.

This is explored in more detail in the case studies but the strengths of creatively presenting and sharing information in a way that ensures audiences fully engage is invaluable, but generally underutilised outside of the sector. Environmental messaging can be challenging to absorb and retain, but through creative means such as storytelling there is the opportunity to interact with a wide audience and make progress in bringing about transformational change.

The storytelling ability of the creative industries should not be underestimated and is certainly a strength that can be exploited across various sectors to help drive systemic change towards more sustainable practices, well beyond the creative sector and into mainstream society. Storytelling can be used to inspire behaviours and actions, changing the way people view resources and the way they consume, shining a light on issues that can be challenging to address in a positive and non-judgemental manner.

The **relationship with materials** across the creative sector also tends to be more intimate and aligned, which lends itself to seeing inherent value in items which are considered to be of little or no use. This can include sourcing waste materials and using it creatively or seeing (and sharing) the value of items and resources with others. Reuse opportunities are extended where an item, product or material is seen to have a purpose; this purpose can be wide ranging when viewed through a creative lens and bring about benefits additional to economic savings from avoided consumption.

Those working in the creative industries also have an extensive bank of **skills** to draw upon, practical abilities associated with artistry and making, that can help support the development and implementation of more circular practices.

Skills can facilitate a more open relationship with materials, enabling opportunities to be realised in redesign, remanufacture and even recycling, as well as empowering innovative creative solutions to some of the challenges that resource management can bring.

Accessing and building on these skills is a strength that can be shared across other sectors; this can of course work both ways, with skills from other sectors being utilised and further developed across the creative industries.

²⁰https://www.creativescotland.com/_data/assets/pdf_file/0020/55712/CS-Environment-Action-Plan-v5.pdf

2.3.3 Variations across the Sector

There is no evidence of a particular sub sector leading the way whilst others are not engaging but there are some distinct variations across the sector that relate to size of organisations and scale of operations which need to be taken into consideration when thinking about the transformation that is required to bring about change.

Larger more resource intensive operations such as screen have recognised their environmental impacts and there are a range of efforts in place to address the specific challenges this sub sector faces including accreditation systems such as Bafta Albert. However, the number of stakeholders involved, and the behavioural change required remains a significant challenge and one that is not always being met, particularly when budgets are not restricted and time is the most precious resource on a production.

At the other end of the spectrum, visual arts and crafts for example tend to have a much more intimate relationship with resources and generally operate on a much smaller scale in terms of studio size and have a lesser collective impact.

For small organisations, their response can be nimbler, but equally they may not have the capacity to bring about fundamental change whereas large scale organisations perhaps have the time and the capacity to consider more resource efficient practices.

There are reported variations in whole organisational **attitudes** towards incorporating more circular practices, where in some cases individuals are fighting to get the circular economy on the agenda at a level high enough to deliver change, whereas others have fully embedded the principles across the organisation; generally, the smaller the team involved the easier it is to achieve whole scale commitment.

The reliance on **freelancers** and the more **transient nature** of teams also impacts on some sub sectors more than others; clearly the larger scale projects with bigger teams such as screen, theatre and performing arts, will feel the impact of these challenges the greatest as the movement of staff from one project to another can make it difficult to ensure systems are fully implemented and adhered to, and there is continuity in environmental actions.

“I was trained as a sculpture technician and outside of this I work as a metal sculptor, and have worked in foundries casting metal and fine art. I see waste plastics as another material that we are trying to bring back into meaningful use and whilst there is an expectation that recycling is a large scale manufacturing process, there is a role for creators before it goes down a more industrial route.”

Andy MacVicar, Green Hive

“Sharing knowledge and skills is helping to develop a community of makers, who in turn become the educators.”

Gillian Steel, Remode

“Different scales of operations require a different response or support, but there isn’t always recognition of this.”

Helen Voce, Make Works

“A real beauty of craft is that teams tend to be very small which does lend itself to making changes quicker.”

Jessica Bonehill, Creative Scotland

“Small companies really struggle; for example, it can be hard sourcing fabrics in the quantities they want let alone being clear where it’s come from and how sustainable it is.”

Katy Wood, Fashion Foundry

“Time scarcity is a real issue, it can make it difficult even for people who really care, to find the time to do things differently.”

Mairi Claire Bowser, Freelance Props Buyer and Set Decorator

“The nature of what we do is operating in small timescales and dealing with last minute changes, which can be a challenge when planning more efficient resource management.”

Amanda Airey, Edinburgh Art Festival

“A fundamental mind shift is needed, so that as soon anyone is thinking about a production, the circular economy needs to be at the forefront of everyone’s minds in the planning stages; afterwards is too late.”

Scott Donaldson, Creative Scotland

2.3.4 Common Challenges for the Sector

There are a range of common challenges including **funding** and availability of **support mechanisms**, ability to respond to **time pressures** and other capacity issues, and also **cultural differences** across the sub sectors within the creative industries.

Funding for the creative industries remains a wider perennial issue however seeking **funding for environmental initiatives generates it own challenges**. For example, some organisations have faced difficulties in meeting criteria designed for environmental projects when seeking environmental funding, but equally have found it difficult to secure creative funding for similar reasons; creative projects with an environmental focus can fall in a gap between two funding purposes or ideals. This can leave organisations stretched in terms of resources, meaning it is hard to implement new practices.

Some organisations may benefit from different types of **support** rather than financial, to help translate ambitions into practice. This may be linked to **strengthening capacity** or fostering **deeper understanding** of what can be done on a practical level. Several organisations have benefited from this in the past and there are different programmes in place to support this, for example incubator projects delivered by the Fashion Foundry are very much focused on bespoke support to facilitate business development. Funding is important but may not bring about the changes some organisations are hoping, and they may need different support mechanisms to get them to a place of transformation.

Many different organisations across the cultural sector share a sense of urgency when developing and delivering projects and its generally not standard practice to build in a significant window of time during postproduction phase; priorities tend to be focused on the next scheduled production or event.

Last minute creative challenges can also stymie even the most committed organisations; when Artists, Producers or Directors for example demand changes at the last minute, intentions to source sustainably and procure more efficiently may be sacrificed for a need to deliver a resource or material quickly within the timescales required.

Whilst the challenge that this poses is increasingly being recognised and there is some movement towards addressing this and **pre planning** or allowing sufficient time to process materials appropriately and maximise opportunities for reuse and value retention, time pressures can be a significant obstacle to bringing in different practices and processes.



For more circular initiatives to work effectively, and to ensure that resources are used effectively and efficiently, there needs to be **cooperation and collaboration** across sub sectors in the industry as well as cross sector working with organisations outside of the creative industries. One of the commonest responses to the challenge of working with others was the view that each sub sector/sector have their own way of doing things, their own formal and informal networks, and their perceptions of value around material and resources. Concerns around stepping into another organisations space and ways of operating can be a limiting factor when trying to implement more circular practices.

Fully understanding the practical solutions to resource usage can be a challenge, particularly when wanting to deliver more than effective waste management solutions and think about material input; knowing how to access **data and information** and understanding what it means when tracking material provenance and considering alternatives. In addition, even when equipped with the knowledge to make a change, some organisations can really struggle to have the purchasing power to make different choices.

2.3.5 Barriers for the Sector

The single biggest barrier raised by stakeholders relates to space, or rather lack of sufficient space to store materials, resources, products or items, in order to facilitate their reuse or repurposing in a timely fashion.

Space scarcity is identified as a major limiting factor for organisations of all sizes, scale and focus. It's a practical barrier that limits the intentions to adopt different solutions for materials or items at the end of their useful life. It goes further than having adequate storage space and relates to accessibility and visibility once in that space; resources can only be utilised effectively if the storage is convenient to access and items are electronically visible for speedy retrieval.

There are examples of organisations who have established good practice in storage of resources, such as CAMA in London, and the Circular Arts Network and ReSet Scenery are in the development stages of exploring the potential for regional shared storage resources operated by an experienced partner which would help address this significant barrier.

3 The Journey to Circularity

A series of case studies (refer to Table 1) have been developed to show case approaches being taken towards developing more circular economy practices. The case studies reflect variations in scale, focus, creative subsector, location, and stage of the journey to become more circular. Some of the organisations are part of Creative Scotland’s regularly funded network, some are members of the Green Arts Initiative; all have shown a commitment towards improving their relationship with materials and resources and contributing to the transformation from a linear ‘take, make, waste’ way of working towards a more sustainable, resource efficient, way of operating. These case studies provide an opportunity to reflect on the approaches being taken and share the stories of these organisations progress to date.

Table 1: Case Studies

Organisation	Creative focus	Location	CE Focus
Re-Set scenery	Theatre, Film, Exhibitions, Events	Glasgow – operate Scotland wide	Developing circular economy business models
Ostrero	Craft, Education, Design	Edinburgh – operate Scotland wide and beyond	Delivering creative learning
Music Broth	Music	Glasgow – operate Scotland wide	Delivering musical instrument/equipment reuse
Fife Contemporary	Visual art, Exhibitions, Craft	St Andrews - operate Scotland wide	Focusing on creative commissioning
PANEL	Craft, Makers, Design	Glasgow – operate Scotland wide	Providing a collective voice to lobby for change
Citizens Theatre	Theatre	Glasgow	Planning for the future
Creative Crieff & Remake Scotland	Music, Radio, Film	Crieff	Cross sector collaboration
Circular Arts Network	Visual Art, Craft, Makers, Designers, Theatre, Performance	Scotland wide	Delivering a sharing platform for reuse and revalue
Applied Arts Scotland	Craft	Scotland wide	Closed loop research and support
Remode Youth	Fashion, Textiles,	Paisley	Raising awareness through reuse, repair and redesign
Festivals Edinburgh	Festivals, Visual Art, Music, Exhibitions, Storytelling, Theatre	Edinburgh	Coordinating a strategic response

Creating Systems to Maximise Value



What began as a trial on Facebook in 2016 to raise the visibility and second life opportunities of set resources has grown into an established, strategic, not-for-profit enterprise, with big intentions to change the way sets, props and furniture for screen, theatre, and events are managed. It is difficult to quantify how much waste is generated within these sectors but there is a working assumption that due to the mixed nature of material postproduction coupled with limited opportunities and time restrictions, very little set material gets reused or recycled.

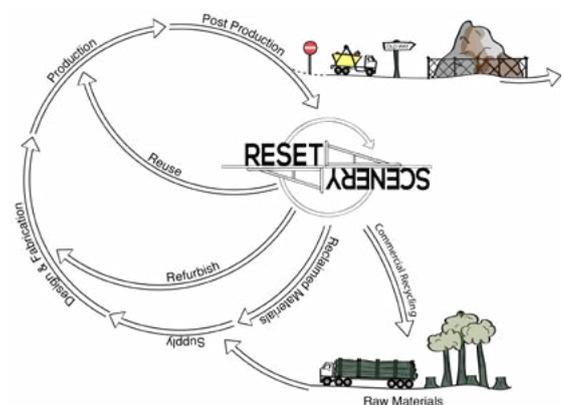
Based on the considerable fabrication and workshop experience of its founders, **ReSet scenery** has been developed to facilitate circularity, generating a critical mass of resources and stimulating a cultural rethink in the way that sets are constructed and designed, fostering sustainable creativity and reuse activity across practitioners. ReSet Scenery has as its core aims:

- creation of a circular marketplace unique to the Scottish creative industries helping them to retain valuable resources, whilst using the materials to the full extent of their lifespan
- creation of a more sustainable open loop system, significantly reducing the volume of waste going to landfill
- creation of a resource cascade of high-quality items, making them available to all levels of the Scottish Stage, Screen and Events sectors
- creation of a green resource hub accessible to all levels, from international screen companies to local community drama groups

Operating out of a **6,000 square foot warehouse space**, courtesy of the Bullwood Project, collection systems have been set up to reflect the different scale requirements of clients and all materials, which includes but is not limited to softwoods, hardwoods, plywood's, metals, plastics, composites boards, fabrics etc., are assessed, sorted, and allocated to reuse, deconstruction or recycling. At present there is recognition that whilst closed loop systems are the ultimate goal, the practical outcomes in the short term are to make sure the postproduction materials are being used for the full extent of their lifespan rather than high quality materials heading for disposal as they are aesthetically no longer required; it's about retaining and reusing for maximum value and minimal environmental impact. It is estimated that for every articulated lorry load of material that ReSet

scenery collects, around **45-60% is reusable, 30-45% is recoverable**, and **5-10% is for disposal**. This is a significant step change from usual practices where virtually all the material is destined for disposal. In addition, for those sourcing the material for reuse the costs work out around **45% cheaper** than having the items made new, therefore providing an obvious financial incentive for organisations to engage.

In terms of what's next, ReSet scenery have quickly outgrown the space they have available for storage which of course limits their reach and they are currently working on a number of different solutions including sourcing regional depots that can be scaled up as required, marrying up need with demand in terms of locations of studio's or theatres, geographical locations to give breadth of coverage, or further developing a more centralised model. In addition, ReSet Scenery is part of a working group with Circular Arts Network to explore the idea of collective storage and asset tracking, with a third-party company maintaining and organising access and several companies utilising the model; solving the storage issue could enable ReSet Scenery and others to fully realise reuse potential on a much larger scale.



“The rapid turnover of shows, expectations of audiences, and a move away from a repertory model to more freelance ways of working has meant maintaining scenery, props and furniture stores has become much harder; it started to feel like we are in effect ‘building for the skip’ when we could be operating in a much more cyclic manner, and that’s what we want to change.”

Simon Cook



The Power of Creative Learning

Set up in 2016, **Ostrero** aims to raise awareness and promote the practical benefits of implementing a circular economy in Scotland. This desire to showcase the economic and environmental impacts that better resource management can have, coupled with an understanding of the role that creativity can play in bringing about change, has led to the development of 'Making Circles'; a circular economy design workshop for schools, using creative learning to inform and educate.

Supported by a steering committee of teachers, makers and marketeers, and with financial support from Artemis Foundation, Edinburgh Trades Fund, Craft Scotland, and William Grant Foundation, the first pilots of 'Making Circles' were delivered in 2018, across 20 schools in Scotland.

The workshops are designed to last half a day and include an introduction to the circular economy, addressing the need for change from the 'take, make, waste' linear model of consumption. The positive attributes of more circular ways of working are presented and a professional designer-maker then introduces a set of materials, which are typically high-quality postproduction or end of line waste, sourced from Scrapstores or direct from manufacturers. The waste material tends to be very varied and is often unusual, for example neoprene discs, or rolls of colourful cable wire. The story behind the waste is presented to get the children to think about the material differently and the professional designer-maker then encourages creative design ideas which the children sketch and subsequently develop. As well as learning about the value of materials, creative skills are taught during the sessions, with the professional designer-maker providing support in the use of tools. Negotiation skills also come into play as material has to be shared throughout the design and creativity process.



The session is brought to a close with specific resource management actions the school could implement to bring about change.

Following the pilot in 2018, although COVID and the associated restrictions have meant that content has been online for virtually all of 2020 and 2021 to date, Ostrero have worked with over **1,100 children** from ages 6 to 15 years old, **across 30 schools**, and have showcased two displays of the outputs from the creative design at National Museums Scotland, significantly opening up the ideas and principles of the circular economy to a much larger audience.

Using creative learning to inform and educate children in the circular economy, with the support of teachers to ensure it is impactful and corresponds to learning outcomes from the Curriculum for Excellence, feedback has been extremely positive with the content considered to be impactful and well received.

Looking forward, Ostrero are keen to increase the number of school visits and are developing a CPD programme for teachers to facilitate delivery of the workshops themselves. In addition, Ostrero are looking to take this model of creative learning and apply it in business settings to reach an adult audience, promoting awareness and understanding with the intention of inspiring change.

"We hear a lot about climate anxiety and the focus on children, as the next generation, to solve it. With creative learning we want to empower children through big picture understanding coupled with small scale practical solutions which they have designed and created for themselves."

Mary Michel, Ostrero



A Lending Library with a Difference

The idea for **Music Broth** came about in 2017 as a means of giving a second life to a small number of musical instruments donated to one of the founders, and in 2018 the organisation became a Scottish Charitable Incorporated Organisation with the intention to advance arts within the community through a musical instrument and equipment library, and to advance education by delivering music learning based programmes.

All successful lending libraries need stock, in this case accessing unwanted instruments which traditionally are challenging to recycle and unless donated tend to be disposed of. To stimulate interest Music Broth ran an event over 9 days in the centre of Glasgow, timed with Zero Waste Scotland #PassItOnWeek, and as a result took in **85 unwanted musical instruments**. Fast forward to 2021 and the library currently houses over **1,800 instruments and items of equipment**, has a membership base of over **300** accessing the library, and is supported by **42 volunteers** who help run the library and work on repair and maintenance of the stock. The philosophy is simple in that unwanted items are given a second life and more people get the chance to be musically creative through an affordable and accessible system of hire and support.

Music Broth has a physical space people can visit and a secondary space that is currently mainly storage but plans are underway to host instrument maintenance and repair, and upcycle skill sessions there too. Adaptations due to COVID restrictions has seen the library catalogue move online, supported by a delivery service, thereby ensuring access has been maintained and the library continues functioning. In addition, free to access online tutorials covering a wide range of creative music making including

beatboxing, junkyard drumming, introduction to sampling and production, have been delivered, and guitar and ukulele drop-in sessions on zoom have been available. The audience for the online sessions has been diverse, and traditional barriers to access due to location have been removed, ensuring opportunities for all.

Members of the library, pay a monthly or annual fee, part of which contributes to creating subsidised and free memberships for others who can less afford. Various funding sources also provide financial support to ensure accessibility and opportunity for all is maintained.

In terms of those accessing the library, around 75% are from the wider Glasgow area and the rest are spread across Scotland. Music Broth also works directly with other community support organisations such as Refuweegee, Families Outside, and Barnardo's.

In terms of what's next, Music Broth are looking to expand, developing hubs across Scotland to ensure geographical accessibility and opportunities for all to get creative with music, supporting artists and bands with equipment to help getting back to playing live, and support the reuse and value retention of musical instruments and equipment across Scotland.

MUSIC BROTH

“Music is an intrinsic part of so many lives, and the idea of increasing opportunities for people to play, in an environmentally sustainable way, through a library of instruments, is at the heart of what we do.”

Jen O'Brien, Music Broth



Creative Commissioning

Fife Contemporary was established in 2006 and delivers a broad programme of activities for the public, including various exhibitions across Fife and mini residencies with community groups. They also offer a programme to support artists in Fife and beyond. They are unusual in that they are not venue based, but rather work in partnership with other venues and organisations to put on events and activities, bringing artists and the public together. In addition, they have a tradition of inviting other people from outside of the organisation to curate exhibitions, embracing fresh ideas and learning from others.

As a **member of the Green Arts Initiative** and a Regularly Funded Organisation with Creative Scotland, Fife Contemporary is used to examining its own green credentials, reporting annually on its carbon impact, reducing waste, recycling resources wherever possible and sourcing reused materials for workshops. They have a nominated green champion to communicate with all staff members and have a detailed environmental policy in place. However, it is the proactive stance they take as part of their commitment to put the climate emergency at the heart of their programming, commissioning exhibitions that address environmental concerns and raising awareness, that really showcases their intention to **drive environmental change through creativity**.

Their latest exhibition, 'REsolve; a Creative Approach to the Circular Economy' was scheduled to take place in 2021, but due to COVID related restrictions this will now run from February 2022. The exhibition provides a platform for the work of contemporary artists, designers, and makers to encourage new perspectives on resources, waste and how we live, supporting a transition away from the current 'take, make, waste' linear economy. Curated by experienced



curator-artist Mella Shaw, the exhibition presents an alternative and hopeful future through adoption of the themes of the circular economy, as well as celebrating the craftsmanship and creativity necessary for moving towards a sustainable, zero carbon future. Running alongside the exhibition and building on the online presence cultivated through the period of COVID related restrictions, small, illustrated talks based on circular economy themes within the exhibition, plus interviews with artists from the exhibition, will allow a deeper engagement and provide a lasting resource. In addition, craft pods featuring work by Sara Howard, who uses waste by-products to create new ceramics, will tour libraries, schools, museums and gallery spaces further linking to the REsolve exhibition.

The spotlight on developing more circular initiatives and improved resource has not stopped at commissioning, Fife Contemporary have also created an Artists' Environmental Resource, providing guidance and sources of further information and support. In addition, an online Artists' Environmental Sharespace has been set up, where artists are encouraged to share their environmental practices and provide support for others who may be finding it challenging to make progress.

"We showcase environmental issues in a positive or hopeful way, challenging expectations and presenting materials in an innovative and explorative manner so people become more attuned to the idea of reuse and fundamentally consuming less."

Diana Sykes, Fife Contemporary



Driving Change through Collective Commitment

Panel is an arts organisation and curatorial company that also produces projects, working predominantly with artists and designers to create commissions which are exhibited through events and publications. A not-for-profit Community Interest Company, Panel receives regular funding from Creative Scotland, and their focus is to create a cultural platform to tell the stories behind objects, often drawing upon alternative perceptions and perspectives from those commonly presented.



As an organisation that works in partnership and collaborates across many different sub sectors of the creative industries, Panel has been integral in nurturing and guiding the development of the Make Manifesto; a 9-point action plan for craft and craft makers, intended to positively influence the perception of craft in Scotland from the ground up. Launched in September 2018 through an event open to all makers across multiple disciplines in Scotland, the Make Manifesto sets out a series of intentions, motives, and perspectives on the sector, and represents a collective call for action. There are two specific points within the Manifesto which speak directly to the circular economy:

Point 8: We recognise craft as a leader in ethical, environmental, and sustainable business practice.

- 8.1:** We will advocate for the crucial role craft has in leading the way in sustainable and ethical best practice, to policy makers, funders, business, and cultural organisations.
- 8.2:** We will highlight examples of best practice, platforming Scotland's makers as innovative and relevant to wider conversations around sustainability at government level.
- 8.4:** We will recognise that traditional craft communities, which so often embody healthy relationships between people, place and living systems, can be important partners for learning and innovation as new economies emerge.

Point 9: We identify Makers as Entrepreneurs.

- 9.3:** We will present craft's important role in the 'slow' and 'maker' movements, as a crucial model in developing wider environmental policies in Scotland.

The Make Manifesto promotes wider considerations about the role of makers in resource management, thinking about what waste means and what makers are doing with material perceived as waste. It supports the need to engage with policy makers on issues around circularity through the commitments in the Make Manifesto and specific projects will be launched in the coming months to activate the commitments.

Although Panel currently care for and give the Make Manifesto a platform, they are currently leading on a research project to define a model for the Manifesto going forward, in order to afford greater agency to a committee of makers. This work is taking place over the next 12 months. Therefore, in terms of what's next, work around the manifesto is about building a long-term plan to secure collective commitment and a shared sense of direction.

"Craft makers action ideas within the circular economy in really interesting ways. Essentially craft makers' business models are defined by principles of the circular economy, and this, coupled with the understanding that craft and making can be a powerful way to tell stories, a lot of which are about reuse, repair and the value of an object, positions craft as a key exemplar for ethical and sustainable cultural business modelling."

Catriona Duffy & Lucy McEachan, PANEL



Planning for the Future

The Citizens Theatre, located in Glasgow, has a long and illustrious past in bringing theatre and performance to the local community.

As a producing theatre it typically occupies a large space, with offices, rehearsal rooms, workshops, stage, and performance areas, however it is currently undergoing significant repair and redevelopment of its premises. Due to be completed in the summer of 2022, the transformation of the building is intended to conserve its heritage but ensure its long-term viability as a theatre space for the community and beyond. As a Regularly Funded Organisation with Creative Scotland, the Citizens Theatre has an environmental policy in place which, amongst other things, makes direct reference to waste and resource management, focusing on reducing paper use, reusing sets, props, and scenery wherever possible, increasing recycling opportunities for a wide range of materials, and procuring sustainably. However, the redevelopment programme is giving the organisation the space and the time to review how it operates in a sustainable sense and consider what more can be done to develop circular practices.

Having had Green Champions in place for many years and recognising that specific barriers to incorporating more sustainable practices in the theatre are often related to staff commitment, time and resources, significant work is currently underway to develop a stronger, greener culture which can be embedded within all activities when the theatre reopens in 2022. Building on existing initiatives it is the intention that waste prevention, reuse, and environmental responsible procurement, will become embedded across all aspects of the theatre's practices.

To achieve this, the Citizens Theatre has taken a systematic approach, reviewing and consulting at each stage, and securing buy-in from the Board of Directors.

CITIZENS THEATRE

The development of green initiatives had been led by the General Manager and the Head of Production and recognising the need to get more stakeholders involved additional green champions have been recruited from the development department and stage management, resulting in a Green Team of four full time members of staff who share the same goal, to improve resource usage and limit or mitigate against environmental impact because of the organisations activities.

The intention is environmental impact will be a consideration in all decision making, not just in terms of internal practices in the offices, but incorporating commissioning, developing and launching performances, in much the same way that Health and Safety is a constant consideration.

A working group has been set up and workshops are underway, with regular meetings considering short, medium and long-term initiatives and actions that can be put in place to ensure better resource use and management. In the short-term potential actions such as paperless ticketing and overall reduction in paper use, single use plastics ban in the bar area, requirement to reuse sets and props as a default, and green procurement policy in all areas of the organisation, are all being considered within a broader environmental strategy and guidelines for staff and audiences. In addition, the inclusion of environmental requirements within contracts is under consideration, with the expectation that everyone has responsibility for and a role to play in operating more sustainably and incorporating more circular practices. The current renovation is being viewed as an opportunity to build on environmental practices already in place and normalise good practice across all areas of the theatre.

"At the Citizens Theatre we have a great opportunity to rewrite the rules on resources and sustainability; it's a time for change and for working together, something we are embracing as we plan for our future."

Lesley Davidson



Collaboration & Cooperation

Community relationships can be a significant resource in providing support for creative organisations who are seeking to incorporate, deliver or promote circular economy as part of their broader remit. The relationship between **Remake Scotland** and **Creative Crieff** is one such example, it demonstrates how collaboration can help both organisations drive forward environmental and creative agendas.

Remake Scotland is a community reuse charity which promotes environmental sustainability across Perth and Kinross. It was founded in 2011 and over time has built up a strong and diverse network of contacts, establishing itself on a range of informal and formal forums reflecting different priorities and areas of interest in the community. As a reuse charity, many individual makers, artists, and larger commercial organisations from across the creative sector have accessed and provided resources, and have worked with Remake Scotland to engage with, share and promote good practice in more sustainable ways of operating, through leasing, reuse, repair and recycling.

Remake Scotland has established a relationship at board and operational level with Creative Crieff, a local charity focused on using arts and culture to improve wellbeing, aspiration, and employment. Creative Crieff came into being in November 2019, and as a member of the Green Arts Initiative, the organisation is very conscious of incorporating more circular strategies into its own operations, including day to day procurement decisions, reducing waste and maximising reuse in its regular practices. It is currently committed to developing a local community hub in a disused



hotel and has commissioned Environment Design Consultants to support plans to develop the building as a community asset, utilising the conservation area in the best way and promoting sustainable living as much as possible.

The relationship with Remake Scotland has proved itself to be an important one, providing resources for the charity to generate a revenue to underpin its creative work in the community, specifically donated vinyl records that Creative Crieff has developed a second market for alongside its focus on digital music and film creativity. In addition, in their capacity as a COVID hub organisation distributing lottery funds to other groups and organisations, Remake Scotland has provided financial support to enable Creative Crieff to set up Radio Earn, a community radio station, with a broad remit including increasing local community awareness of environmental initiatives and sustainability projects in the area, with a view to making these activities more mainstream. The radio station, currently available online, was launched at the end of May, and there is the intention for volunteer journalists to report back on local sustainable good practice across Perth and Kinross and to showcase those making progress in this space.

**“How can we make a more systemic change?
Well, it’s just about connecting the right people together.”**

Cathy Philips Brady



Platform for Change

Circular Arts Network (CAN), which formally launched in September 2020, is a circular economy tool specifically to support access to arts related resources.

It is designed to provide an online means to retain the value of existing materials and resources through redistribution and reuse, reducing waste and encouraging more sustainable practices. Developed and administered by the Sculpture Placement Group and the Scottish Contemporary Art Network, research into the need for, and specific role of CAN started in 2019. Funding was secured from Creative Scotland, and support was provided from Scottish Contemporary Art Network, Santander, the Glasgow Chapter of the Awesome Foundation, and the Circular Arts Network Friends Scheme.

CAN is an online resource where users can list surplus or unwanted items and shareable resources such as skills, expertise, and transport, on a searchable platform. It is designed to facilitate pathways for individuals, companies, and organisations, to make available and to access, arts related materials and resources.

Launching during a period of COVID related restrictions was no mean feat, and whilst progress in the first 6 months or so has been slower than previously anticipated (largely because of working practices being limited), there are currently **592 registered users**, in excess of **5,000 site visitors** and more than **200 transactions** have taken place.

The need for a specific platform came about in response to the inability of existing generic sites to facilitate quick and easy targeting of resources required by those involved in the arts related community; the unwieldy nature of existing sites made it a challenge to readily pass on material



or access resources required. CAN provides an opportunity for resources to be shared which would otherwise be regarded as waste, retaining value, reducing new material requirements, and avoiding waste. It is also designed to facilitate cross sector working and develop networks within the creative industries at sub sector level.

CAN is designed to operate across Scotland and beyond, but this does depend on increasing users and ensuring that geographical spread is reflected in items being made available. Currently Glasgow and Edinburgh are most represented in terms of users and availability of items, but the site is not geographically limited in terms of its growth and development.

In terms of what's next, key to the platform's success is to ensure awareness and use of the site is promoted to as wide an audience as possible, and funding and support is secured for its ongoing development and curation. In addition, recognising that insufficient access to storage can limit the viability of the site in terms of pressure to redirect items advertised, CAN is working with other partners, including ReSet Scenery to investigate the potential for regional collective storage hubs.

“The cultural sector is focused on trying to think how it can operate more sustainably, there is a real commitment to doing things better, and we see the Circular Arts Network as part of a series of solutions to bring about change. It may not be suitable for every organisation, all of the time, but it's a good tool to have amongst others in the drive to become more circular.”

Kate V Robertson



Closing the Loop

Applied Arts Scotland is a charitable membership-based organisation, led by Makers for Makers, working very much at the grassroots level. Membership currently sits at around 150, and a programme of projects, collaborations, workshops, and opportunities for sharing knowledge and support, is delivered throughout the year.

There is a general view that members tend to operate in a fairly sustainable manner, partly as a result of their relationship to and connection with the materials that they use to create, and partly due to a need for frugality that many organisations across the creative industries share, but which is very apparent for micro producers which dominate the membership base. However, it is also recognised that whilst there is interest and desire to incorporate more circular ways of practising, there are challenges in fully understanding the impact of material choices on the environment, and there can be confusion around data and information needed to support changes in practices.

In response, Applied Arts Scotland have been involved in key projects that specifically address sustainability and environmental responsibility in relation to materials choice for makers. In 2016, working with Interface, an organisation that brings together businesses and academics to work collaboratively to address challenging issues, the Smart Plastics project was launched, bringing together a group of makers to work alongside chemists from the Green Materials Laboratory (formerly the University of Edinburgh, now University of Manchester) to explore biodegradable and plant-based plastics. Working collaboratively allowed the makers to understand the challenges in scaling up production of new plastics and to appreciate that recyclability or biodegradability of a material is just one consideration when looking at



material use in a more circular system. For the chemists involved in the project, they saw the opportunity for makers to tell the story of plastics in a different way, using creative means to inform, educate and raise awareness across different sectors.

A series of dissemination events took place to share the findings and outcomes, and in January 2020 this culminated in the Think Plastic: Materials and Making exhibition at the Royal Botanical Garden Edinburgh where the public were invited to consider their own relationship with plastic, value it as a precious resource rather than something to be thrown away, and to make a pledge to rethink the sustainability of their own habits. In addition, working in partnership with Creative Informatics, further dissemination activities took place including Data for Green Making and Tools for Greener Making, designed to provide further insight and foster deeper understanding in relation to material data. The project and exhibition have informed a third project 'Closing the Loop', which is a maker-led research group of around 14 makers from across Scotland, focused on exploring gaps in current materials knowledge and application of sustainability tools and responsible practices in the studio.

The work of the research group supports their ethos in providing a voice to change behaviours both as makers and promoting behaviour change in others. The group promotes good practice and for the makers who are part of the project they provide each other with peer-to-peer support. In terms of what's next, opportunities to share the findings of the group to a much wider audience through different means and through development of support tools, are currently being considered.

“As makers and creators, we want to be proactive and work together to protect our environment, but there can be real difficulty in accessing the info we need to make informed choices about material use; our Closing the Loop research group has emerged from a number of activities we have invested in to address challenges we face, allowing us to exchange ideas and share deliverable solutions to be more circular in our practices.”

Carol Sinclair



Rethinking Fashion at the Community Level

Remode is a grassroots, Community Interest Company with big ambitions to change the way people relate to fashion and textiles. Focused on raising awareness of the environmental impacts of the fashion and textiles industry, Remode works with local communities in Renfrewshire to deliver practical solutions in a positive and inclusive manner.

Operating out of a shop in Paisley, with 4 part time members of staff who all have strong creative backgrounds, supported by 30 dedicated volunteers, Remode showcases reusable and redesigned clothing in a very contemporary manner. The shop houses a make space where designers, creators and volunteers work on clothing and material accessed in the shop and refashion items for their own use or for resale. Regular drop in and workshop sessions are run by Remode to enable the local community to come along, learn new skills and develop a deeper understanding of the environmental challenges that fast fashion in particular poses. Some sessions focus on looking at a particular material or fibre, thinking about its source, its properties etc. whilst other sessions focus on making a particular item of clothing or learning a specific skill.

In terms of measurable impacts, from April 2019 - Mar 2021 **1,429 kg donations of discarded clothing** and textile waste were received, and of those **1,375kg have been reused** via shop sales, swaps (swish events), direct donations (e.g. to local refugee groups), or in upcycling workshops and events.

More difficult to measure but central to its aim is to work with the community to develop a closer relationship with materials and products and change perspectives, acknowledging clothing and textiles as valuable items to retain, repair, redesign, and reuse.



Through various creative projects Remode brings people together to stimulate and empower them to do things differently. For example, Remode recently launched The Change Room project, a collection of creative activities and volunteering opportunities aimed at 13 to 25 year olds, all set around the core theme of promoting and understanding sustainable clothing. Activities include: 'ReCycle or Dye' workshops in re-design, mending and upcycling of garments led by professional designers and creative practitioners; 'Reverb' soundtrack & music production workshops; 'Digimode' digital imaging, film making & animation workshops; 'ReMotivators' action forum for young creative motivators to help plan and devise activities, including the Think & Inspire programme of guest speakers plus trips to events and projects exploring identity, sustainability and positive climate action. The diversity of the offer, whilst focusing on the central theme of sustainable clothing, aims to appeal to as wide a group of individuals as possible.

In terms of what's next, Remode is focusing on its core programme to present an alternative view of fashion and textiles, and to develop a community of makers, who they hope in turn will become educators. As far as capacity allows, they will continue to respond to community requests to deliver workshops and support and looking forward Remode hopes to secure funding to bring in more Makers, Designers, Creators to share their skills and expertise to inspire and empower.

"Fashion might be our focus, but we are more than that, we are about informing, empowering, and connecting people, developing relationships to make change happen."

Gillian Steele, Remode



Strategic Coordination

Festivals Edinburgh is the umbrella organisation formed by the 11 festivals that traditionally take place in Edinburgh from April through December each year.

Internationally renowned, the Festivals typically deliver **3,000 plus events**, featuring in excess of **25,000 performers**, with **4.5 million attendees** from **70 countries worldwide**²¹; the economic, cultural, social and environmental impact is considerable.

Having co-founded Creative Carbon Scotland and the Green Arts Initiative, the Festivals are committed to coordinating actions to reduce their environmental impacts on Edinburgh and beyond. In addition, they use their programming platforms to stimulate environmental conversations, raise awareness and empower audiences to make changes or get involved with environmental initiatives.

The challenge of coordinating 11 very different festivals with varying environmental impacts and resource demands, all at different stages of the journey in terms of implementing more sustainable practices, has been met by taking a very strategic approach.

A cross-festival working group - the Environmental Sustainability Working Group [ESWG] - is organised through Festivals Edinburgh, with two representatives from each festival: the Green Champion of each festival plus a member of Senior Management Team, reflecting the strategic importance placed on environmental action.

The ESGW has put in place an overarching environmental strategy for all Festivals, which clearly sets out the intention in relation to carbon reduction plans and targets and identifies specific areas for innovation with regard to waste and resource management.



Edinburgh
Festival
City.com

A carbon reduction route map sets out different pathways for Festivals to follow, with a common aim to reduce emissions and improve environmental practices. Specific measures to address material and resource use within the route map include sustainable procurement, increased reuse and incorporation of more circular models such as leasing and lending, and maximising recycling, composting and recovery routes in preference to disposal.

Specific projects of common interest are identified and taken forward, and individual festivals volunteer to lead on or participate in projects that are most relevant to them. For example, the reusable cup project involved a number of different festivals working with Zero Waste Scotland, to consider alternative options to single use plastic bottles and cups. A trial was due to take place in April 2020 however this was postponed due to COVID and will potentially be rescheduled for 2022.

All festivals monitor and report their carbon reduction progress, with the collective operation through Festivals Edinburgh identifying areas for prioritisation and support.

In terms of what's next, the Festivals will work individually on implementing their carbon reduction plans, while collaborative work will continue to find new technologies and tactics to make carbon reduction easier. Ongoing review and adaptation of the strategy will be necessary in order to generate the transformational change required.

“There is so much variety in what the festivals offer that they face different challenges to sustainability, but working together through their own collaborative company, Festivals Edinburgh, there is a collective commitment and responsibility to climate and the environment.”

Amanda Grimm

²¹<https://www.edinburghfestivalcity.com/the-city>



SAVE

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4 Moving the Sector Forward

As illustrated in the case studies, the experiences are varied in terms of progress towards more circular ways of operating, with many examples showing organisations at the start of the journey. However, it is apparent that as a growth sector of significant economic value to Scotland and beyond, if the creative industries can transition from a linear 'take, make, waste' model of resource consumption, and deliver more circular ways of working, the sector can evolve from being part of the problem, and support Scotland in delivering its climate change targets and priorities.

4.1 Building on Momentum

"We need to get to the space where we have a critical mass engaged in delivery of circular economy practices; we are not there yet but, we need to build on those who are making progress."

Helen Voce, Make Works

There are many different types of organisations working in the creative industries, some of whom have a greater environmental footprint than others, and some of whom are more equipped and ready to deliver the changes required. The challenge is to bring everyone in the sector along on the same journey.

The sector as a whole appears to be **open and willing to embrace more circular principles**, and whilst full transformation is a long way off for most, there is evidence of real commitment to having better environmental practices. There is an opportunity to build upon the momentum which is starting to emerge and address some of the challenges and barriers which are slowing progress.

The examples given in this report aim to showcase and also inspire others to take action, and whilst the sector is incredibly diverse, regardless of the challenges that this brings it should be recognised that transformational change cannot be achieved by organisations working alone; the potential for the creative industries to have a collective voice in how they can better work together and what is it they need to bring about change, is powerful, and existing routes that enable this such as networks, membership organisations and funders should continue to reach out and represent. There is evidence of progress being made to generate that voice across some sub sectors and create a movement whereby expectations and practices become standardised, but more can and should be done to build on pockets of good practice

and coordinate progress into a broader more collective voice.

It is also recognised that there are challenges in working outside of sub sectors but **sharing skills, resources, and knowledge** to support all creative endeavours in delivering more circular practices will help deliver progress and should be a priority moving forward. There is the chance to learn from each other, to share ideas and work together to reduce the overall environmental footprint of the sector and take the lead in delivering more sustainable practices for the benefit of Scotland and beyond.

Taking a more strategic approach and planning effectively is crucial, whether this is planning for sourcing more sustainable material, planning for how it's going to be used and options for material no longer needed or planning for reduced consumption and maximising reuse; planning allows for systems to be put in place. Effective systems, such as sustainable suppliers' guides, reuse options, recycling bins and postproduction plans, will ensure that the potential for time pressures to impact on resource management are mitigated against. Some work has started in this area, but again, this needs to be built upon, expanded and formalised to ensure systems are accessible for all and associated benefits can be more broadly realised.

There is no reason for any organisation in the creative industries to adopt a business-as-usual approach to its resource and material use, change is happening, and increasingly public facing organisations are being held to account. Those who are proactive in this space are not only contributing to their own organisational sustainability but are also using their voice and their creativity to take others on the journey with them.

4.2 Next Steps: A Call to Action

“As an organisation we believe culture, creativity and arts are catalysts for positive change...we want to change the world we live, learn, work and play in, make things better, and we think that these are the perfect tools to help do that.”

Claire Dufour, Creative Climate Producer, Creative Dundee

Whilst making progress and stimulating positive environmental change may be challenging for the sector, there are number of steps that can be taken to drive progress forward. The following action points are recommended:

- **Deliver quick wins: deal with the biggest barriers to progress**

Support for projects and initiatives which address the barriers to progress should be prioritised. For example, the Circular Arts Network and partners including ReSet Scenery are in the development stages of exploring the potential for regional shared storage resources to be operated by an experienced partner. This would help address space scarcity and potentially change the landscape for reuse and support the delivery of a more circular marketplace. Creative Scotland and other potential partners/support organisations are well placed to advise, support, and work collectively to facilitate this proposal further and remove a significant barrier to change.

Addressing confusion and uncertainty over what constitutes more circular practises is also something that can be supported quickly to overcome the barrier to progress that this poses. Ensuring access to appropriate information and guidance in relation to what the circular economy means, with practical examples of how to achieve improvements in resource use and management, should be a key consideration. Again, those well placed who are already providing support should consider the different routes that could be taken to disseminate clear, easy to access information on what action organisations in the creative space could take to improve their operations.

- **Set high expectations: raise minimum standards & prioritise environmental requirements**

The sector as a whole needs to start making real progress in considering and addressing

resource use and consumption. It's not enough for environmentally minded individuals to be leading the way in specific organisations or within individual sub sectors, there needs to be a whole scale shift towards embedding circular practices across the creative industries. Every day decision making needs to consider circular economy principles and practices, in much the same way that health and safety policy and practices are an ongoing consideration for all organisations. Funders such as Creative Scotland are well placed to reconsider minimum standards required for those receiving support and review expectations and requirements of projects and programmes in order to drive progress.

- **Collaborate more effectively: coordinate and align support and facilitate cross sector working**

In terms of potential support routes for those working within the creative space there are a range options. In conceptual terms it is rather like a jigsaw that has yet to be completed; many pieces are present but not necessarily regarded in an ordered fashion. If the various initiatives and programmes are not viewed collectively, it can mean that opportunities are not maximised and the impact of any support or resource are not fully realised. Creative Scotland, as a funder and support organisation, who have over the years increased their focus on environmental issues, are well placed to lead and drive forward any action to coordinate support and ensure alignment between different stakeholders and organisations, specifically where environmental goals can be supported.



In addition, collaborations and partnerships can facilitate change and also ensure systems are in place to underpin more circular practices. For example, reuse networks will need to be in place to support any targets or goals attached to the sector to deliver reuse activities. Also, supporting activities such as collaborative lending models, mentoring programmes, and artists in residence opportunities, all have the potential to underpin more circular ways of operating. Signposting and facilitating those relationships with the creative industries is crucial. There are organisations already active in this space, however further support or directing may be required to maximise the opportunities that these relationships can bring.

- **Ensure needs are met to deliver change: review support tools available and address skills gap**

A range of support tools in addition to funding routes are considered to be vital for the sectors progress. Most if not all sub sectors do provide different means of support for example mentoring, knowledge transfer opportunities, networks with paid membership benefits etc. The challenge is ensuring all those across the creative sector are aware of what is available and what can be accessed through any particular route. It may also be the case that funders consider making available other means of support aside from financial aid.

Opportunities to develop skills which facilitate repair, redesign, repurposing, and remanufacture etc. need to be signposted and more work needs to be done to address skills shortages and make connections to creative training opportunities across the sector. The potential to look at other manufacturing sectors to meet skills gaps should be

explored and investment in new areas of research and development (and the skills needed to deliver this), should be considered.

The lack of vocational training around reuse and repair has been highlighted by a number of organisations and training opportunities with schools, community groups and creative partners are identified as areas of interest.

Bringing skills that the creative sector has into other areas should also be maximised. For example, film making, curating, sculpture, performance art within the resource and material management space could be effective tools to support their work and raise awareness and understanding.



Appendix 1: Stakeholders Interviewed

Creative Scotland and CRNS would like to thank all those who gave their time and support to this project.

Name of Contact	Organisation
Carol Sinclair	Applied Arts Scotland
Elisa de Waal	Arts and Business Scotland
Mella Shaw	Artist, Maker & Freelance Curator
Kate V Robertson	Circular Arts Network / Sculpture Placement Group
Lesley Davidson	Citizens Theatre
Amanda Grimm	Creative Carbon Scotland
Cathy Phillips Brady	Creative Crieff
Claire Dufour	Creative Dundee
Jackie Stewart	Creative Scotland
Jessica Bonehill	Creative Scotland
Morgan Petrie	Creative Scotland
Scott Donaldson	Creative Scotland
Amanda Airey	Edinburgh Art Festival
Toni Dickson	Edinburgh Scrapstore
Katy Wood	Fashion Foundry
Amanda Grimm	Festivals Edinburgh
Diana Sykes	Fife Contemporary
Mairi Claire Bowser	Freelance Props Buyer & Set Decorator
Peter Lavelle	Glasgow Wood Recycling
Andy MacVicar	Green Hive
Helen Voce	Make Works
Phil Mills	Moray Waste Busters
James Bajgar	Music Broth
Jen O'Brien	Music Broth
Mary Michel	Ostrero
Catriona Duffy	Panel
Lucy McEachan	Panel
Seona Anderson	Remake Scotland
Gillian Steel	Remode
Jane Dixon	Remode
Simon Cook	Reset Scenery
Joyce Harkness	Shax
Billie Dunleviewood	Shrub Coop
Sarah Cameron	Social Enterprise Network Scotland
Sarah Johnstone	The Work Room
Jaki Love	UKFT/Textiles Scotland

Appendix 2: Creative Scotland - Statutory Obligations and Legal Responsibilities

Creative Scotland is a non-departmental public body (NDPB) distributing funds from the Scottish Government and the National Lottery to support Scotland's arts, screen and creative industries, and to support wide and inclusive participation in creative and cultural activities. Its core functions are set out in section 37²² of the Public Services Reform (Scotland) Act 2010.

As a public body, Creative Scotland also has a statutory duty under the Climate Change (Scotland) Act 2009²³ to act in the way best calculated to contribute to delivery of the Act's emissions reduction targets and in a way that it considers most sustainable. It is required to address climate change through mitigation, adaptation and acting sustainably and to report on its progress annually.

In April 2019 the Scottish Government declared a climate emergency; since then, a significant number of Scotland's local authorities have made similar declarations. In November 2019, the Scottish Government's commitment to emissions reductions were increased considerably through the Climate Change (Emissions Reduction Targets) (Scotland) Act 2019²⁴, which set targets to reduce Scotland's emissions to net-zero by 2045 at the latest, with interim targets for reductions of at least 56% by 2020, 75% by 2030, and 90% by 2040. Achieving net zero and the interim targets will be immensely challenging for the arts, screen and creative industries, especially in Glasgow and Edinburgh, where both cities have committed themselves to achieving net zero by 2030.

Secondary legislation, The Climate Change (Duties of Public Bodies: Reporting Requirements) (Scotland) Amendment Order 2020²⁵, was passed in September 2020, expanding public bodies' reporting requirements, effective from 2021. The new reporting framework will ask public bodies to:

- set their own targets for reaching net zero emissions, including setting staged targets;
- detail how public bodies use their resources to achieve targets;
- account for their contribution to delivering the Scottish Climate Change Action Programme; and,
- make reports publicly accessible.

Creative Scotland published its Environment Policy²⁶ in 2013 and its Environment Action Plan²⁷ in 2018. The organisation recognised from the beginning that its principal contribution to climate change came less from its own emissions (largely from its two offices and business travel) but rather from the organisations and activities it funds. Therefore, in addition to addressing its own emissions, it sought to encourage emissions reductions in funded activities, as well as promoting a wider engagement in sustainability across the arts, screen and creative industries. The first major mitigation initiative was to require all 'Regularly Funded Organisations' (RFOs) to report their emissions from 2015 onwards and, from 2018, to develop carbon management plans to reduce those emissions.

Since 2011, Creative Scotland has also supported Creative Carbon Scotland²⁸, which supports the mitigation work of RFOs and other creative organisations and individuals; engages with policy development and policy influencers; works with creative practitioners to increase their understanding of how sustainability relates to their work; and brings together actors from cultural and climate change sectors in collaborative projects.

²²<https://www.legislation.gov.uk/asp/2010/8/section/37>

²³<https://www.gov.scot/publications/climate-change-legislation/>

²⁴<https://www.legislation.gov.uk/asp/2019/15/contents/enacted>

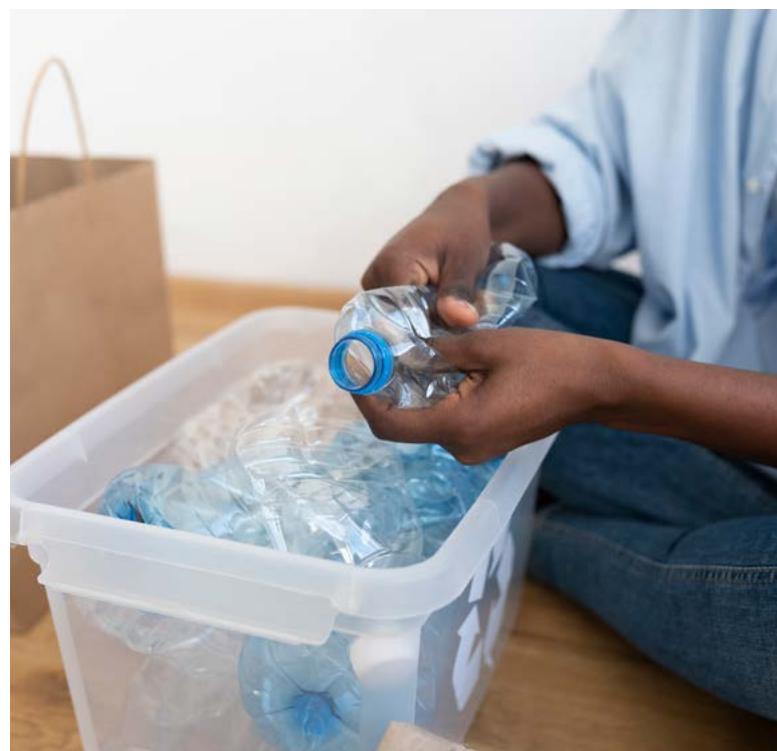
²⁵<https://www.legislation.gov.uk/ssi/2020/281/introduction/made>

²⁶<https://www.creativescotland.com/resources/our-publications/policies/environment-policy>

²⁷https://www.creativescotland.com/_data/assets/pdf_file/0020/55712/CS-Environment-Action-Plan-v5.pdf

²⁸<https://www.creativecarbonscotland.com/>







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To find out more about CRNS

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