

Introduction

As part of the review for the next iteration of Cleaner Air for Scotland a set of sub groups were set up to investigate key policy areas that could contribute to improving air quality in Scotland. The original Cleaner Air for Scotland Strategy focused what changes could be made by the transport sector to improve air quality. It also recognised that Placemaking had a role to play but did not go into detail. The main deliverable for CAFS has therefore been Low emission Zones and modelling about air quality in the four main cities.

As part of the review of CAFS expert groups have been brought together. The expert group on Placemaking has only managed to meet once due to the tight timescale. However, there was a real consensus on the actions that require to be taken with regard to how good quality Placemaking can help to deliver improvements in air quality. It was also acknowledged that these were not quick fixes and that collaborative working was required between all communities of interest.

It's important to recognise that planning for great places has been an art form for over a hundred years. Sir Patrick Geddes, the Edinburgh based founding father of modern Urban Planning stated

“Town Planning is not mere place-planning, nor even work planning. If it is to be successful it must be folk planning. This means that its task is not to coerce people into new places against their associations, wishes, and interest, as we find bad schemes trying to do. Instead its task is to find the right places for each sort of people; place where they will really flourish”

[\(Report on the Towns in the Madras Presidency, 1915, Madura\)](#)

The fact that this was written in 1915 about an Indian City makes it no less relevant today. In modern terminology we'd probably refer to this as **Placemaking, Behavioural Change** and **Nature based Solutions**. It's about working collaboratively across professions and communities to identify the best place based solution for the issues that we face.

Taking a long-view, it is evident that many of the challenges we face in delivering air pollution improvements, especially in our towns and cities, result from the inertia and frictions of past economic geography, providing us with an inheritance of built environments and road and pavement layouts, dynamics, infrastructure and substructures and adjacencies. Much of that also shows the dominance over the last 120 years of the car, lorry and bus and the internal combustion engine driving them, though the place of horse and first generation tram may also be sometimes visible. These various inheritances can to a degree be adapted and improved but, especially if we must also address our heritage as well as costs, and the impacts of disruption, constraints abound and only with wholly new build do we have the opportunity more comprehensively to address improvements by designing them in. Unless effectively future-proofed, even these may prove short-lived successes. Our towns and cities are often very complex multi-layered past planning and design experiments.

Section 7 in the 2015 CAFS strategy set out some of the significance and dimensions of Placemaking, essentially the way we plan, design and manage our towns and cities. The role of greenspaces was clearly identified in and around new developments as resources, as buffers and spaces for recreation, active mobility and nature. It was seen as imperative that new developments be designed to better manage vehicles in our towns and cities, generating less traffic, linking to bus and walking and cycling routes and wherever possible prioritising active travellers over vehicles. Clearly we have opportunities to get this more right in all new developments but large challenges remain when it comes to adapting existing places to contemporary and future needs and priorities. If we get Placemaking right, we can tackle air pollution, create

better, more sustainable places and contribute to better, healthier lives and higher amenity and improved conditions for work, life and play. This in turn makes locations more attractive for business too.

From the 2015 Strategy, arguably, the main deliverable connecting transport emissions and place was the LEZ policy and modelling of air quality for the four main cities. There were limited deliverables around the Placemaking theme although some work has been piloted around the use of the PlaceStandard. This is described in a section below.

Placemaking Sub Group

The working group established to consider Placemaking and Spatial Planning issues was the most problematic to bring together and not only was it hard to engage appropriately senior players but members found it hard to give time to the work. There was, however, a consensus from their meeting that action was needed, that there were no “quick fixes” and that collaborative working between the various communities of interest was and would be needed. Place-based strategies and plans were, nonetheless, also clearly seen as important in delivering air quality improvements.

It's therefore worth providing some policy context to the recommendations that follow. There have been significant steps taken as a result of the introduction of the UN Sustainable Development Goals; research into Nature Based Solutions at a European Level and the introduction of both the PlaceStandard (www.placestandard.scot) and the Place Principal in Scotland. The following sections break down these key legislation and policy guidance that have informed the recommendations for the CAFS review around Placemaking.

National and International Planning Context

European Commission

In 2015 the European Commission stated that we are facing a broad range of challenges, such as unsustainable urbanization and related human health issues, degradation and loss of natural capital and the ecosystem services it provides (clean air, water and soil), climate change and an alarming increase of natural disaster risks. There is growing recognition and awareness that nature can help provide viable solutions that use and deploy the properties of natural ecosystems and the services that they provide in a smart, 'engineered' way. These nature-based solutions provide sustainable, cost-effective, multi-purpose and flexible alternatives for various objectives. Working with nature, rather than against it, can further pave the way towards a more resource efficient, competitive and greener economy. It can also help to create new jobs and economic growth, through the manufacture and delivery of new products and services, which enhance the natural capital rather than deplete it.

The EU research entitled Nature-Based Solutions and Re-Naturing Cities in 2015 stated that the way to achieve sustainable development and green the economy was to embrace **Nature Based Solutions**. The report stated that

“Nature-based solutions aim to help societies address a variety of environmental, social and economic challenges in sustainable ways. They are actions which are inspired by, supported by or copied from nature. Some involve using and enhancing existing natural solutions to challenges, while others are exploring more novel solutions, for example mimicking how non-human organisms and communities cope with environmental extremes. Nature-based solutions use the features and complex system processes of nature, such as its ability to store carbon and regulate water flow, in order to achieve desired outcomes, such as reduced disaster risk, improved human well-being and socially inclusive green growth. Maintaining and

enhancing natural capital, therefore, is of crucial importance, as it forms the basis for implementing solutions. These nature-based solutions ideally are energy and resource-efficient, and resilient to change, but to be successful they must be adapted to local conditions.

<https://ec.europa.eu/research/environment/index.cfm?pg=nbs>

In its publication “Cities of tomorrow” the European Commission states that Cities are the key to sustainable development. More than two thirds of the European population lives in urban areas. Cities are places where both problems emerge and solutions are found. They are fertile ground for science and technology, for culture and innovation, for individual and collective creativity, and for mitigating the impact of climate change. However, cities are also places where problems such as unemployment, segregation and poverty are concentrated. The document set down a vision of a European city that is:

- a **place** of advanced social progress with a high degree of social cohesion, socially balanced housing as well as social, health and 'education for all' services;
- a platform for democracy, cultural dialogue and diversity;
- a **place** of green, ecological or environmental regeneration;
- a **place** of attraction and an engine of economic growth.

https://ec.europa.eu/regional_policy/sources/docgener/studies/pdf/citiesoftomorrow/citiesoftomorrow_final.pdf

UK Government / Scottish Government

Both the UK and Scottish Governments are committed to supporting the delivery of the UN Sustainable Development Goals



The Goals that are relevant to the use of Placemaking and Nature Based Solutions to deliver cleaner air are Goals 3, 7, 8, 9, 10, 11, 12, 13 and 16 in particular. The Scottish Government has now linked it's deliverables for the national Planning framework and Scottish Planning Policy to the UN SDG's

National Planning Framework 3

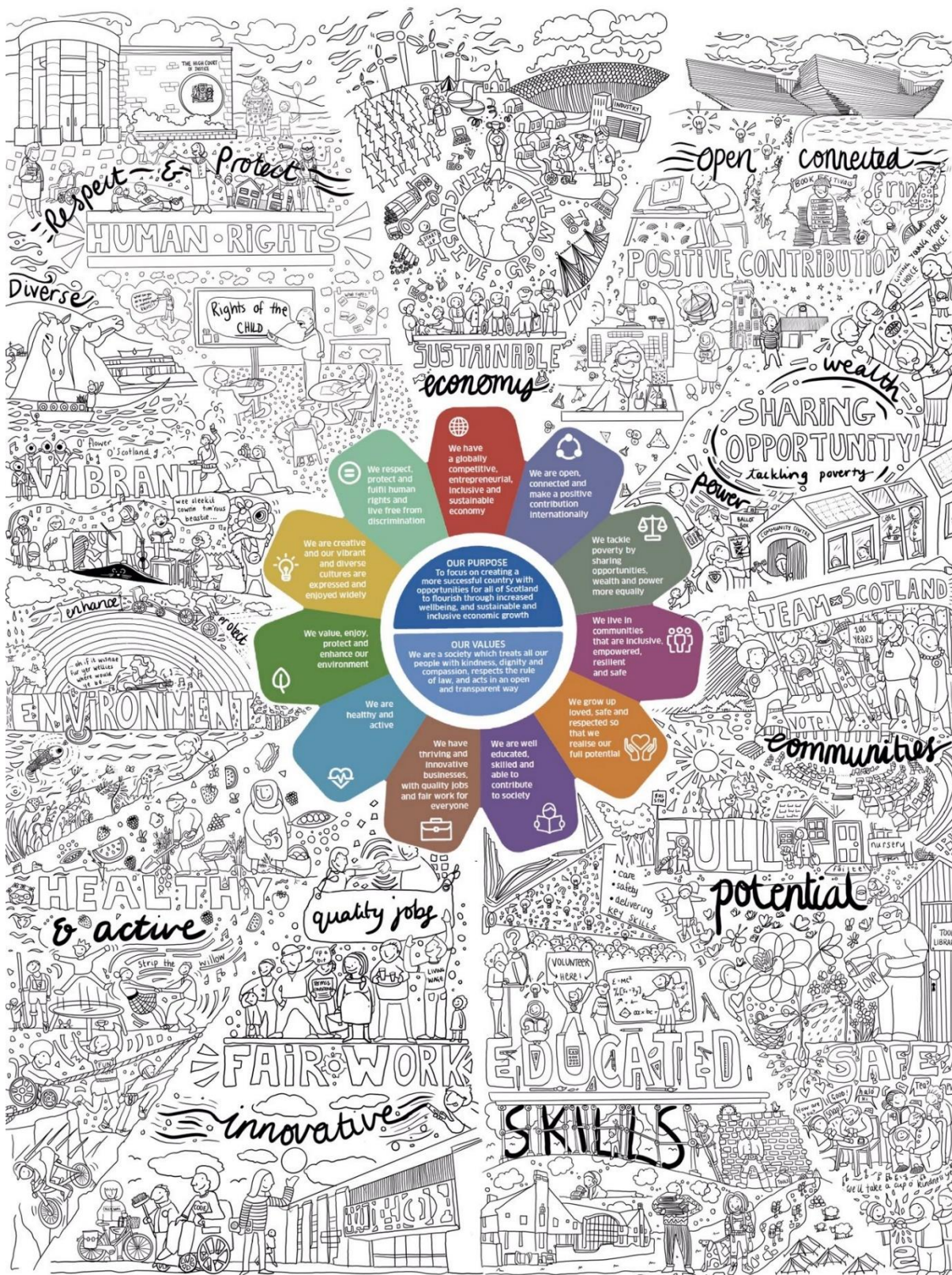
<https://www.gov.scot/binaries/content/documents/govscot/publications/advice-and-guidance/2014/06/national-planning-framework-3/documents/00453683-pdf/00453683-pdf/govscot%3Adocument/00453683.pdf>

SG Purpose	To focus government and public services on creating a more successful country, with opportunities for all to flourish, through increasing sustainable economic growth.																
SG National Outcomes	The planning system and service contribute to all 16 National Outcomes																
SG National Plans, Policies & Strategies	Government Economic Strategy																
	Infrastructure Investment Plan																
	Scotland's Digital Future	Electricity & Heat Generation Policy Statements	2020 Challenge for Scotland's Biodiversity	Scottish Historic Environment Strategy and Policy	Housing Strategy	National Planning Framework & Scottish Planning Policy	Land Use Strategy	Low Carbon Scotland: Report of Proposals and Policies	National Marine Plan	Regeneration Strategy	National Transport Strategy						
Planning Vision	We live in a Scotland with a growing, low carbon economy with progressively narrowing disparities in well-being and opportunity. It is growth that can be achieved whilst reducing emissions and which respects the quality of environment, place and life which makes our country so special. It is growth which increases solidarity – reducing inequalities between our regions. We live in sustainable, well-designed places and homes which meet our needs. We enjoy excellent transport and digital connections, internally and with the rest of the world.																
Planning Outcomes	Planning makes Scotland a successful, sustainable place – supporting sustainable economic growth and regeneration, and the creation of well-designed places.			Planning makes Scotland a low carbon place – reducing our carbon emissions and adapting to climate change.		Planning makes Scotland a natural, resilient place – helping to protect and enhance our natural and cultural assets, and facilitating their sustainable use.			Planning makes Scotland a connected place – supporting better transport and digital connectivity.								
National Planning	Scottish Planning Policy (SPP)					National Planning Framework (NPF)											
	Principal Policies																
	Sustainability		Placemaking														
	Subject Policies																
	Town Centres	Heat and Electricity	Natural Environment		Travel							Cities and Towns Rural Areas Coast and Islands National Developments					
	Rural Development		Green Infrastructure														
	Homes	Zero Waste	Aquacultural		Digital Connectivity												
	Business & Employment		Minerals														
	Historic Environment		Flooding & Drainage														
COMMUNITY PLANNING																	
Strategic	Strategic Development Plans																
Local	Local Development Plans																
Site	Master Plans																

National Planning Framework 3 (NPF3) re-emphasises the importance of place by stating that it's vision in terms of place:

- a successful, sustainable place
- a low carbon place
- a natural, resilient place
- a connected place

The connections are illustrated really well in the diagram below by Linda Hunter an internal consultant at the Scottish Government.



Place and health

The quality and design of places has been shown to significantly influence the ability of individuals and communities to live in healthy, sustainable ways. Issues such as wellbeing and quality of life, physical and mental health, and social and cultural life are all influenced by the quality of the environment. Evidence behind this is held within:

- Good Places Better Health (the Scottish Government, launched 2008)
- The Report on the Future Delivery of Public Services by the Commission chaired by Dr. Campbell Christie, 'The Christie Commission', Published on 29 June 2011.

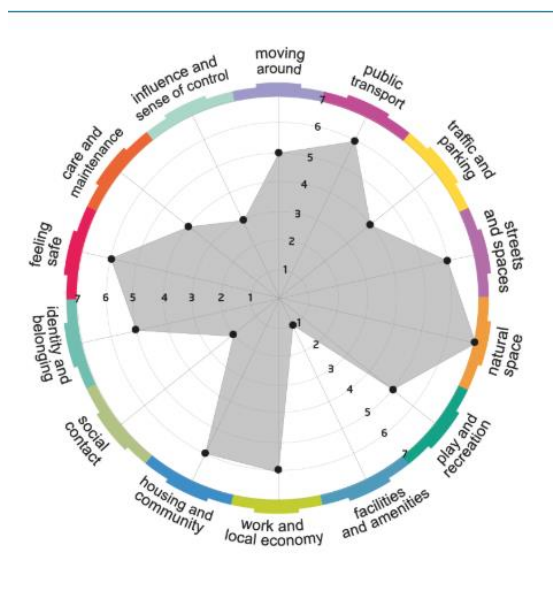
Creating Places is the Scottish Government's policy statement on architecture and place, published in 2013. It contains a commitment to develop the place standard assessment tool, which will be the hallmark of well-designed places.

The purpose of the Place Standard is to maximize the potential of the physical and social environment to support health, wellbeing and a high quality of life. In order to achieve this, it provides a framework for:

- evaluation and improvement of new and existing places;
- structured conversations through which communities, the public sector, private sector and third sector work together to deliver high quality places;
- consistency across Scotland in the delivery of high quality, sustainable places that promote community wellbeing, and more positive environmental impacts;
- maximization of the contribution of place to reducing health inequalities; and
- consideration of social aspects of place alongside physical infrastructure.

<https://www.placestandard.scot/guide/full>

As part of the original Placemaking workstream for CAFS the use of the PlaceStandard to initiate conversations around air quality was piloted in Glasgow, Edinburgh and Crieff. The pilot was led by Planning Aid Scotland and a full report of the findings is available. However in summary an air quality technical version of the PlaceStandard tool was created by shifting the main focus to "improving air quality". The prompt questions that sit under each of the tools questions, see diagram below, were adjusted to bring air quality and health to the fore. The intention was to enable better conversations between communities of interest that would lead to the identification of solutions that went beyond the normal Environmental Health or transport solutions. The pilot recommended that the PlaceStandard was a good tool for starting conversations about air quality and is showed how thinking about place can result in a more holistic conversation. The review of the PlaceStandard, which is currently on going, will take on-board the recommendation in the report.



Place Principal

The Scottish Government and COSLA have agreed, in April 2019, to adopt the **Place Principle** to help overcome organisational and sectoral boundaries, to encourage better collaboration and community involvement, and improve the impact of combined energy, resources and investment in Scotland's regions, cities, towns, and neighbourhoods. The agreement is as follows:

“A principle for taking a place-based approach

We recognise that: Place is where people, location and resources combine to create a sense of identity and purpose, and are at the heart of addressing the needs and realising the full potential of communities. Places are shaped by the way resources, services and assets are directed and used by the people who live in and invest in them. A more joined-up, collaborative, and participative approach to services, land and buildings, across all sectors within a place, enables better outcomes for everyone and increased opportunities for people and communities to shape their own lives. The principle requests that: All those responsible for providing services and looking after assets in a place need to work and plan together, and with local communities, to improve the lives of people, support inclusive growth and create more successful places.

We commit to taking: A collaborative, place based approach with a shared purpose to support a clear way forward for all services, assets and investments which will maximise the impact of their combined resources.”

It should also be noted that poor air quality and the ability to deal with it as a community may well be an equalities issue and it would be worth interrogating the existing SIMD data to see if there is a clear evidence link between socially deprived communities and air quality. We suspect that if the main form of transport in these communities is bus based then as the move to have newer buses within City centres pushes forward then older buses may be used within peripheral areas. There is some 2018 research from Glasgow University that looks at how economic development and urban planning decisions can both increase the links between social deprivation and poor air quality, but can also lead to improvement. We need to be aware going forward that we don't embed environmental injustice into our proposed solutions

<http://eprints.gla.ac.uk/159742/7/159742.pdf>

Glasgow's Connectivity Commission and H2020 Connecting Nature

Finally it's worth noting that the first iteration of CAFS sought to deliver a Low Emission Zone within one of the main Cities by December 2018. Glasgow was identified as the preferred location. In the midst of the delivery work for the low emissions zone a connectivity commission was set up in the City led by Prof David Begg. The commission noted that major cities are cities of contradictions. They may be really good at some things, for instance in Glasgow's case having the largest suburban rail network out with London, but as passenger numbers have grown the network has struggled to cope. In contrast in a city with below average car ownership levels major road construction projects such as the M74 continue to be greenlighted. The report states;

“Along with other successful major cities, Glasgow is facing the key urban challenge of our times – how to repurpose transport networks built for the unsustainable, high carbon economy in order to prioritise pedestrians and create attractive, people-centred places supporting thriving populations in a clean and healthy city centre environment.”

<https://www.glasgow.gov.uk/CHttpHandler.ashx?id=45064&p=0>

The city continues to view its Open Spaces – the blue, grey and green as key assets that can help create a cleaner more human scale environment that can help to support and instigate modal shifts in transport choices and behavioural change. Work is ongoing in the city on innovation around the use of Open Space and this is supported by the H2020 Connecting Nature Project (www.connectingnature.eu) that is looking to introduce more nature based solutions to some of the climate adaption / mitigation challenges that the city faces.

In particular some of the recommendations and deliverables that are coming from Glasgow's Connectivity Commission and its role as a front runner city in the H2020 Connecting Nature project can provide inspiration for the way forward to identify actions that are place based; that can improve air quality and shift the focus from transport and Environmental Health engineered or technological solutions.

Recommendations

The group's recommendations centred on a necessary focus on further research and developmental effort to increase planners' awareness of the pressures and impacts of air pollution and how these could be mitigated and reframed in future.

The recommendations are as follows:

Overarching Placemaking theme

- Describe the Place Principal and how it aligns with CAFS
- Understand how the PlaceStandard can help guide conversations about air quality
- Try to understand how much different profession understand about CAF and Air Quality and the opportunities for working partnership
- Identify actions that relate to air quality that are nature based solutions, Green infrastructure, Placemaking etc.
- Look at outcomes from the test of the pilot placestandard for air quality

Integration

- Analysis how legislation around air quality is embedded in policy at a national, regional and local level
- Analysis the linkages between the embedded policy at national level i.e.: NPPF, National transport strategy; Place Principals

Skills

- Investigate how well the pilot air quality training for planners has been received and should it be rolled out to other partners and the community.
- Investigate whether Officers within local, national and regional government got the skills to land SMART air quality policies within plans and strategies.

Plans

- Investigate how many councils have air quality policies within their Development Plan or other statutory documents
- Investigate how many City deals have air quality initiatives and what are they? Do they impact on regional policies?

Decision Making

- Analysis how existing air quality spatial policies are being implemented and can we find examples. Understand how policies that haven't worked have failed.

Nature Based Solutions

- Create a database of possible Nature based solutions.
 - Social
 - Environmental
 - Economic

Behavioural Change

- Investigate how behavioural change is currently influenced and by whom.
 - Data
 - Evidence
 - Understanding
- Understand how we currently use data, evidence and understanding to influence investment in alternative air quality measures.
- Confirm whether we understand the public health priorities.

Cost / Benefit Analysis

- Investigate whether we have an understanding of how non-technical solutions are put through cost benefit analysis. Do we know if this links to natural capital accounting and do we have examples of how this could be done?

Indicators & Monitoring

- Do we understand what impact we are currently making on behavioural change with our existing policies?
- Identify what behaviour we are trying to influence and change.
- Ensure that a communications strategy is developed to tell the public that we need to do all this work and what is in it for them.

Evidence Gaps and Priorities for action

- Identify who we want to influence about air quality.
- Identify who are our audiences and whether they require different messages.
- Provide evidence of how much communities really know about air quality and what activities are making it better or worse.
- Identify ways for communities to influence air quality.
- Investigate how does air quality and Placemaking fit into community engagement.
- Develop a narrative that explains the role of Placemaking as it relates to air quality that includes value and impact.
- Map out which actions have to happen at the same time. I.e.: mobility planning; LEZ, Development plan etc.
- Investigate how we show that this is an equalities issue that disproportionately impacts on SIMD communities.

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May 2019