



Fox, S., & Macleod, A. (2021). Localizing the SDGs in Cities: Reflections from an action research project in Bristol, UK. *Urban Geography*, 1-21. Advance online publication. <https://doi.org/10.1080/02723638.2021.1953286>

Publisher's PDF, also known as Version of record

License (if available):
CC BY

Link to published version (if available):
[10.1080/02723638.2021.1953286](https://doi.org/10.1080/02723638.2021.1953286)

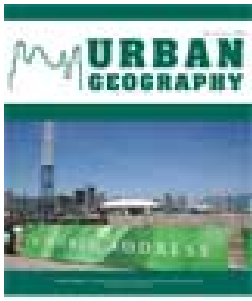
[Link to publication record on the Bristol Research Portal](#)
PDF-document

This is the final published version of the article (version of record). It first appeared online via Taylor and Francis at <https://doi.org/10.1080/02723638.2021.1953286> .Please refer to any applicable terms of use of the publisher.

University of Bristol – Bristol Research Portal

General rights

This document is made available in accordance with publisher policies. Please cite only the published version using the reference above. Full terms of use are available: <http://www.bristol.ac.uk/red/research-policy/pure/user-guides/brp-terms/>



Localizing the SDGs in cities: reflections from an action research project in Bristol, UK

Sean Fox & Allan Macleod

To cite this article: Sean Fox & Allan Macleod (2021): Localizing the SDGs in cities: reflections from an action research project in Bristol, UK, Urban Geography, DOI: [10.1080/02723638.2021.1953286](https://doi.org/10.1080/02723638.2021.1953286)

To link to this article: <https://doi.org/10.1080/02723638.2021.1953286>



© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 15 Jul 2021.



Submit your article to this journal [↗](#)



Article views: 191



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 1 View citing articles [↗](#)

Localizing the SDGs in cities: reflections from an action research project in Bristol, UK

Sean Fox^a and Allan Macleod^b

^aSchool of Geographical Sciences & Cabot Institute for the Environment, University of Bristol, Bristol, UK;

^bCabot Institute for the Environment, University of Bristol, , Bristol, UK

ABSTRACT

An increasing number of cities around the world are engaging with the UN Sustainable Development Goals (SDGs). How and why? We provide a critical reflection on SDG ‘localization’ derived from an action research project in the city of Bristol, UK. Through a research partnership with local government and non-governmental stakeholders we supported integration of the SDGs into local policy and urban monitoring efforts. Embedding the Goals in local policy making was largely a process of ‘translation’, which was achieved through a form of ‘embedded advocacy’ supported by a university-city partnership. We found that the Goals have local convening power, serve as a mechanism for building international city networks, and are instrumentalized by cities to signal global ambitions and progressive identities by embracing an internationally sanctioned policy agenda. New methods and frameworks for monitoring the SDGs are needed to fully realize the emerging ‘subnational turn’ in global policy.

ARTICLE HISTORY

Received 11 January 2021

Accepted 6 July 2021



KEYWORDS

Sustainable development goals; cities; localization; Bristol

1. The Bristol story of localizing the sustainable development goals

Global urbanization is driving the urbanization of global development policy. This is reflected in the United Nations Sustainable Development Goals (SDGs) with the inclusion of Goal 11 (Sustainable Cities and Communities), the New Urban Agenda (a related global sustainability adopted by governments at Habitat III in 2016), and in the growing chorus of observers and actors highlighting the significance of cities in tackling complex challenges such as climate change (e.g. Barber, 2013; UN High-level panel 2013; Acuto, 2016; Parnell, 2016; Klopp & Petretta, 2017; Katz & Nowak, 2018). The OECD claims that “105 of the 169 targets behind the 17 SDGs will not be reached without proper engagement of and coordination with local and regional governments” (OECD, 2020).

The recent surge of interest in supporting city-level actions to solve global problems like climate change has spawned a growing literature on SDG “localization” and inspired diverse localization initiatives in cities around the world. Many of these go far beyond Goal 11 in recognition of the fact that all 17 SDGs and many of the 169 targets relate directly to the responsibilities of local and regional governments (LRGs) (UCLG, 2018),

CONTACT Sean Fox  sean.fox@bristol.ac.uk  School of Geographical Sciences, University of Bristol, University Road, Bristol, BS8 1SS, United Kingdom

© 2021 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.

This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0/>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

and each goal contains at least one target that is relevant for subnational governments. The purpose of this paper is to review the literature on localization and reflect on localization processes from personal experience. Our reflections are informed by an action research project undertaken to support SDG localization in the city of Bristol, an early adopter of the goals in the United Kingdom (UK). Much of what we report here is therefore derived from participant observation: we were active participants in the localization process and directly involved in both civil society dialogs and city government processes related to the goals over the course of three years. It is a story of how a global policy agenda became embedded in the political discourse and local plans of a UK city told from the perspective of active agents in the process.

In many ways, Bristol's leadership in localization is surprising given the national context. The UK government has been slow to engage with and support the 2030 Agenda. A government report published in 2017 offered rhetorical support for the goals but provided "very little in the way of an overarching implementation strategy" (Valencia et al., 2019, p. 13). In 2019 the UK parliamentary International Development Committee (IDC) published a scathing report of UK performance as part of an assessment of the process leading up to the publication of the UK's first Voluntary National Review (VNR) of progress toward the goals. The IDC report noted that while the process "doubtless resulted in increased awareness of the SDGs in pockets across government departments" it was clear "that initially the bar was very, very low, with some departments having no knowledge of the agenda at all" (pg. 3). With regard to the VNR itself, the report claims that stakeholder consultation events were "ad hoc" and "largely superficial", and that the report was "ultimately disappointing". It is against this backdrop of national government neglect that Bristol emerged as a national leader in localization.

The broad contours of Bristol's story are simple. It began with a small but committed group of citizens working to raise awareness about the Goals among local businesses, nonprofit organizations and local government. From this, a partnership emerged between a stakeholder network, a local university and the city council, which led to the creation of something akin to an "SDG officer" role to directly support the city council with SDG expertise, and to coordinate the activities of interested local stakeholders outside of city government. Through a sustained period of "embedded advocacy", and with political buy-in from Bristol's elected Mayor, the SDGs came to be seen as a useful framework for engaging in local stakeholder dialogue around sustainability issues, as well as a valued mechanism for signaling the city's global ambitions and building relationships with like-minded leaders and technocrats in other cities around the world. Over the course of roughly two years, the SDGs transitioned from being largely unknown in UK local governance circles to becoming embedded in Bristol's spatial development plan and COVID recovery strategy, and recognized in a resolution at the UK Local Government Association in 2019 with a unanimous vote of support. While the overarching narrative of this story is superficially straightforward, the details offer significant insights into articulations between global policy agendas and local politics in the 21st century.

First, the process of "localization" is political and may not be driven by local and regional governments (LRGs), as generally assumed by international agencies such as the United Nations. While LRGs are key anchor stakeholders, they are more likely to be responsive to their constituents than distant global agencies. Second, we were confronted by the reality that the SDGs are fundamentally the product of global

technocrats and largely unknown among city officials and the general public – despite claims that they were developed through “an exhaustive and often highly participatory process by diverse stakeholder groups worldwide” (Valencia et al., 2019). Embedding them in “local” thinking and action involves “translation” that goes beyond mere “awareness raising”. In the case of Bristol this required dedicated resources and the “embedded advocacy” of an SDG expert in the city council. Third, the SDGs can serve as a mechanism for convening dialogs and addressing power imbalances between stakeholders with different (sometimes conflicting) priorities, particularly in a context of tensions between the “green” agenda (i.e. tackling climate change and ecological crises) and the “inclusion” agenda (i.e. tackling inequalities). Fourth, from a city government perspective, the SDGs provided a discourse with which to build inter-city networks internationally. These networks may enable direct city-to-city learning, although this potential has yet to be fulfilled. Finally, monitoring change at city level is fraught with conceptual and practical challenges. New approaches to local monitoring that can be scaled up for comparison and global evaluation are needed.

In the next section we define “localization” and survey the wide range of localization initiatives that have been undertaken by cities around the world. [Section 3](#) offers our reflections on how the localization process unfolded in Bristol. In [Section 4](#) we reflect on the value of SDG localization for cities. [Section 5](#) explores issues with monitoring progress based upon a survey of existing literature and a reflection on our experience grappling with the challenge in Bristol. [Section 6](#) concludes.

2. SDG localization in theory and practice

According to the Global Taskforce of Local And Regional Governments training documentation, localizing refers to the process of adapting, implementing and monitoring the SDGs at the local level (Global Taskforce of Local and Regional Governments, 2017, p. 6). It became key to the 2030 Agenda, which is articulated through the 17 SDGs and their associated Targets and Indicators, because of both the perceived failures of the Millennium Development Goals (MDGs) and the somewhat different aims of the SDGs.

Many of the achievements of the MDGs, which were a predecessor framework for global action that were pursued and monitored between 2000 and 2014, were measured with indicators representing country-level averages. But when these results were disaggregated it was discovered that many apparent MDG successes were concentrated in the wealthier members of society (World Health Organisation [WHO], 2016). This had raised the national averages, but there had been little or no impact on the poorest in society (WHO, 2016). The failure to impact the worst-off in society led to the SDGs explicitly embedding a “leave no one behind ethos” and effort to provide a more nuanced monitoring approach involving requiring the disaggregation of indicators by eight different variables – one being geography. This need for subnational indicators, and the realization that the SDGs will not be achieved only by nation states, meant that localization became an important part of the 2030 Agenda (UN Habitat, 2020; Parnell, 2016; United Nations High-level Panel, 2013). Additionally, the inclusion of a subnational unit is a first for a UN statistical reporting framework.

As such “localization” has become the process of taking into account subnational contexts in the achievement of the 2030 Agenda, from setting the Goals and targets to determining the means of implementation and using subnational indicators to monitor progress.

The UN Global Task force, United Cities and Local Governments (UCLG), Platforma, and UN Sustainable Development Solutions Network (UN SDSN) have produced a range of methodologies and examples to help cities understanding localization (Bardot et al., 2018; Global Taskforce of Local and Regional Governments, 2017; Kanuri et al., 2016; UCLG, 2017). Generally, these training guides focus on a four-step process of localization initiated by central, regional or local governments: awareness, advocacy, implementation and local monitoring.

The first step of awareness raising is to generate interest and broad stakeholder support for SDG activities. This is to be followed by advocacy for the goals, which involves working to better align local and national action by drawing from increased awareness of the goals to facilitate devolution of power and policy coherence across all levels of government. The third step involves the practical implementation of the SDGs into local and regional government (LRG) frameworks and strategies, as well the adoption of the goals by stakeholders across a region or city. Finally, LRGs are encouraged to measure success by developing a monitoring framework that is locally relevant. Broadly speaking, awareness raising and advocacy activities have proliferated quickly while verifiable implementation and monitoring lag somewhat behind.

There are now many examples of creative awareness raising and advocacy initiatives. For example, the city government in Valencia, Spain developed a Massive Open Online Course (MOOC) for citizens to use to help understand the SDGs and their relevance. In the Netherlands the city of Utrecht engaged citizens through a series of free SDGs-themed dance performances and launched the HeelUtrechtU campaign, which publicly celebrates citizens and organizations that contribute toward the SDGs (Utrecht 4 Global Goals, 2021).

Straddling the boundary between awareness raising and advocacy, the Association of Flemish Cities and Municipalities (VVSG, 2016) in Belgium produced a document for local councils to understand the SDGs and their relevance to cities. Alongside this they collated 50 examples of how Belgian cities had worked to increase awareness about the SDGs. The combination of these efforts has meant that Belgian cities can learn from their counterparts while also having support, direction and resource from a national organization.

A first step in implementation that many cities have adopted has been to map the SDGs onto existing city plans and initiatives. Although seemingly superficial, most cities are in effect already pursuing many of the SDGs but use a different vocabulary for articulating their goals. Mapping the SDGs onto existing city plans and activities can serve to harmonize vocabularies across operational units within city government and between city governments seeking to share learnings. It can also provide valuable opportunities for gap analysis (what aren’t we doing that we should?) and learning about the interdependencies and frictions associated with achieving multiple goals – issues discussed in greater detail below. For both New York City and Helsinki this was a key first step in their work to localize the SDGs (City of Helsinki, 2019, p.9, OneNYC, 2016).

An intermediate approach has been through the development of specific initiatives and policies designed to tackle the SDGs. Barcelona have developed an inclusive policy making approach that involves local government, universities, businesses and citizens to develop their new city strategy to 2027. This strategy which focuses on social inclusion is seen as Barcelona's roadmap to contributing to the SDGs (Barcelona City Council, 2018). Barcelona's approach has helped develop over 100 projects and has meant citizens have been specifically involved in the development and creation of SDG specific policies (EUROCITIES, 2018).

The most intensive approach to implementation involves formally institutionalizing the SDGs into planning and policy processes. Germany currently provides one of the best examples of this. At the national level, the State Secretaries Committee for Sustainable Development has overseen a revision to the National Sustainable Development Strategy to align it with the SDGs. It has also facilitated integration of SDG initiatives into the country's policies across all departments, including the department for regions and local government. Additionally, to ensure that sustainable development principles are embedded in every department, each department has a sustainable development lead (The Federal Government, 2021). This top-down approach has been complemented by bottom-up engagement through the German Municipal Charter for the future (Global Taskforce of Local and Regional Governments, 2017). The creation of this charter involved gathering inputs from local politicians around five key areas of local sustainable development meaning that the voices of city leaders are being represented in national debates; 73 local governments have signed the charter (UCLG, 2018). Other examples of intensive localization can be found in Mexico, South Africa (UN Habitat, 2020). However, this depth of implementation across national and subnational government institutions remains rare.

Monitoring progress toward the SDGs at a local level is arguably lagging furthest behind due to the challenges discussed in detail in [section 5](#) below. But efforts to overcome these challenges have spurred innovation. The key challenge is that the specific targets and quantitative indicators associated with the SDGs were conceptualized at national level and are therefore unavailable, inappropriate or inapplicable at local scales (Klopp & Petretta, 2017). Furthermore, the SDG indicator framework is yet to be fully implemented by any country, with many lacking the resources to even monitor indicators at the national level let alone begin working with local authorities and cities (Fukuda-Parr & McNeill, 2019). As a result of the lack of a local monitoring framework, a range of approaches have been developed or adapted to facilitate city-level monitoring. Generally speaking, these are either modified indicators sets or subnational adaptations of the Voluntary National Review (VNR) process, which is the primary mechanism through which countries report progress to the United Nations.

New York City led the way in monitoring innovation by adapting the VNR to the local level in the form of a Voluntary Local Review (VLR) (Mayor's Office for International Affairs, 2018). Using their international profile as the headquarters of the UN, New York City subsequently developed the VLR declaration, which has now been signed by over 200 local governments (Mayor's Office for International Affairs, 2020). In 2016, just two cities published VNRs, but the number has been doubling nearly every year (UN Habitat, 2020, pp. 210). By mid-2020 roughly 40 cities have published VNRs (ibid). This growing

momentum around subnational reporting has led to wider engagement from UN agencies with subnational governments (UN DESA, 2020).

While the “awareness, advocacy, implementation and monitoring framework” is useful, it nevertheless contains a contradiction: the top-down, linear, four-stage process outlined in the localization literature is at odds with the underlying ethos of localization. There is an unresolvable tension between the origin of the goals, which were crafted by a narrow community of global technocrats, and their advocacy for local prioritization and ownership. By providing a top-down agenda for LRGs to engage with, the very local voices and priorities that are advocated for are often missed out completely. However, our experience suggests that LRGs need not lead the localization process.

3. The politics and practicalities of localization in Bristol

This City of Bristol in the UK has a population of approximately 459,000, while the wider city region has a population of around 1 million (ONS, 2017). It has a long history of environmental activism, hosts several national sustainability-focused organizations (e.g. the Environment Agency, the Soil Association, Sustrans), is home to a panoply of grassroots and community organizations, is widely seen as the UK’s “greenest” city, and was voted European Green Capital in 2015 (Ersoy & Hall, 2020). In 2019 it became one of the UK epicenters of the Extinction Rebellion movement and in 2020 hosted a visit from climate activist Greta Thunberg.

In 2007, long before the SDGs were agreed, a range of stakeholders from the business community, civil society and local government established the Bristol Green Capital Partnership to prepare a bid to become a European Green Capital, an award granted by the European Union to “promote and reward” the efforts of cities striving to become more sustainable. Bristol’s bid was successful, and the city was awarded the Green Capital status in 2015 (Macleod & Townsend, 2018).

An informal stakeholder network that became the Bristol SDG Alliance emerged at the end of Bristol’s Green Capital year following multiple events bringing interested individuals into discussion around how to make the SDGs locally relevant. Members of the alliance came to include working in nonprofit organizations, local government and those working in corporate social responsibility or sustainability within private firms. It was facilitated by the Bristol Green Capital Partnership (BGCP), a legacy organization from the Green Capital year that represents a network of over 1000 organizations in Bristol committed to creating “A sustainable Bristol with a high quality of life for all” (Macleod & Townsend, 2018). The Alliance itself currently consists of over 170 stakeholders, including individuals working for some of the city’s anchor institutions, including the city’s two universities and the City Council.

Unlike the BGCP, the Alliance is not a formal organization. It is a group of motivated individuals who meet on a regular basis to share information; scope opportunities for awareness raising, advocacy and implementation; and coordinate activities such as informal social media campaigns involving the organizations that members represent. It is an organic network of motivated citizens, many of whom hold positions within organizations that have shown interest in the SDGs.

Much of the Alliance's initial work was in advocacy and awareness raising against the backdrop of UK government neglect of the 2030 agenda. This occurred at both the local and the national level. Alliance members were active in the UK Stakeholders for Sustainable Development network (UKSSD). Much of the UK level action on the SDGs had occurred through this network which, similarly, worked to advocate for the adoption of the SDGs in the UK producing, a shadow Voluntary National Review in 2018 (UKSSD, 2018) and multiple letters and briefs to UK Prime Ministers (UKSSD, 2017, 2020a, 2020b). Alliance representatives were part of the UKSSD local advocacy calls and were active champions in ensuring this UK wide network recognized the importance of local activity to deliver the SDGs.

In 2017 the SDG Alliance, through the Bristol Green Capital Partnership (BGCP), commissioned a report into "the SDGs & Bristol" by graduate students at the University of Bristol (Carden-Noad et al., 2017). This initiated a dialogue that led to a successful funding bid in 2018 to scale-up the localization work through a formal partnership between the BGCP) and the Cabot Institute for the Environment at University of Bristol in the form of a part-time research associate. Over the following two years, funding to expand and extend the fixed-term, part-time post was ultimately secured from a range of sources, including the University of Bristol's strategic funds for research and civic impact, the UK Economic and Social Research Council, the British Council and (eventually) Bristol City Council.

This genesis story challenges the prevailing narrative in most of the practice-oriented localization literature and training documentation that LRGs are the natural institutions to drive the process at subnational scales (Akenji et al., 2018). While there is no doubt that LRGs are "anchor stakeholders" that play a pivotal role in shaping outcomes, in many ways they are unlikely *catalysts* for localization for practical and political reasons. Our experience points to an emergent SDG politics characterized by civil society initiative rather than government initiative.

The timing of BGCP/ Cabot Institute initiative in 2018 was also favorable. Inspired in part by the example of New York City, the city government in Bristol was embarking upon an ambitious effort to restructure local government and develop a strategic, long-term One City Plan. The research associate initially spent one day per week at the University of Bristol researching SDG localization, one day at the BGCP supporting the SDG Alliance, and one day a week at the City Council to help the staff working on the One City Plan think through how the SDGs might fit in. This form of "embedded advocacy" yielded quick results: the One City team embraced the SDGs and helped secure a letter from the Mayor of Bristol requesting that the research associate position be made full-time. The request was approved by the University in March of 2018, paving the way for increased collaboration and internal advocacy. Being physically present in City Hall, often three or four days per week, facilitated extensive networking, relationship-building and influence-mapping that would have been impossible otherwise. As with many cities, the planning process in Bristol is generally dominated by short to medium-term considerations and local interests with little reference to the global context. Situating a "local champion" (Valencia et al., 2019) for the Goals within the City Office resulted in the successful embedding of the SDGs into Bristol's One City Plan and opportunities to expand and deepen interest in the SDGs within city government.

Embedding the SDGs in the One City Plan involved a combination of internal advocacy (i.e. being in the room for both public and private meetings to draw attention to the SDGs) and translation (i.e. explaining the relevance of the SDGs to the stakeholders in the room). City officials were often resistant to the idea of engaging with the SDGs due to the perceived additionality of integrating them into city-level planning and monitoring process. The SDGs were widely seen as something extra or new that would consume valuable time and require extra financial resource – an unattractive prospect for a city council with a shrinking budget. This is true to an extent: without the resource to support an embedded researcher it is unlikely the SDGs would have been integrated into the One City Plan in Bristol. But much of our actual activity involved explaining how the Goals could be mapped onto existing activities and locally-defined objectives rather than providing a template for planning. In essence, we were helping to align local planning discourse with the global development discourse enshrined in the SDGs. This act of translation was central to the localization process.¹

In late 2018, the idea of producing a Voluntary Local Review (VLR) for Bristol was raised at an Alliance meeting. Funding was sought and secured by a range of sources in early 2019, including an Impact Acceleration grant from the UK Economic and Social Research Council, a grant from the British Council, and in-kind support provided by a local law firm (Burgess Salmon, which covered the design costs by engaging their in-house design team). With support from local stakeholders and the City Council, Bristol released the UK's first ever VLR in July 2019 (Fox & Macleod). This independent report was widely circulated through international city networks and served as an important mechanism for building inter-city relationships and sharing practical lessons. Since the production of this report discussions with multiple cities have begun to consider the feasibility of trialing Bristol innovations around the world (Period Friendly Places, 2020) and testing innovations from elsewhere in Bristol during the COVID-19 pandemic (Pipa and Bouchet, 2020a).

In 2020, with the onset of COVID-19, we shifted support to the city's response and recovery efforts. It was quickly recognized that the pandemic did not affect society equally and that the most marginalized were those who were worst affected. The pandemic also brought a recognition of the city's ability to respond to crises at pace. The City had already been working on tackling the Climate and Ecological Emergencies (One City Environment Board, 2020a, 2020b) both and Bristol saw an opportunity to focus delivery on these areas through its COVID-19 recovery planning. The City's Economy board recognized the need to ensure Bristol's recovery planning not only considered the need for economic recovery but also for environmental sustainability and social inclusion. Due to the prior awareness raising work on the SDGs in Bristol, many of the city's leaders wanted to use the SDG framework to deliver these ambitions. Consequently, the SDGs became a key element in both the recovery planning (One City Economy Board, 2020a) and recovery strategy for Bristol (One City Economy Board, 2020b). Alongside this, the council sought to embed the SDGs into the way it developed its spatial planning so that the future development of Bristol and the wider region would help deliver these same ambitions (Rees, 2020).

In 2021 a new programme of citizen engagement was initiated to improve awareness of the SDGs in the city. Members of the SDG Alliance are using community champions and street art murals, supported by Vanguard (a local Community Interest Company), to

“promote discussion and participation at the intersection of culture and sustainable action” in relation to the 17 SDGs (PR News, 2021). They are also creating a platform to demonstrate what organizations can do to adopt the SDGs and are working with the UK Office for National Statistics on a platform to facilitate Local Authority reporting on SDG progress.

Reflecting on this experience three key observations can be made. First, localization in Bristol has largely been driven by citizens and city stakeholders whose collective efforts and resources facilitated local government engagement with the goals. This experience is not unique. The city of Utrecht faced similar calls from stakeholders before it began to meaningfully engage with the SDGs as well (Keranidou et al., 2018). A similar process unfolded in the state of Ogun in Nigeria, where the Justice, Development and Peace Commission undertook a household baseline survey to raise awareness and scope implementation of the SDGs (JDPC, 2018). These examples all challenge the general assumption in localization toolkits that LRGs can and should lead the process.

The second observation relates to the way we conceptualize “the city” itself. When approaching localization in cities it has become clear that “the city” is not synonymous with its government. Other anchor stakeholders, such as universities and utility companies and hospitals and major employers, often have the power to drive urban agendas by applying their own resources or changing their own behaviors (e.g. procurement practices). We were surprised by the extent to which many large firms and organizations had already done considerable work on assessing the significance of the SDGs to their own work. Put simply, non-governmental organizations and large private sector firms have moved to substantively engage with the SDGs much more quickly than the national government and most local governments in the UK.

For example, Airbus, which is a major employer in greater Bristol, had surveyed all employees to understand which SDGs were considered most integral to the company’s work. Eight Goals were prioritized and key performance indicators were developed. Airbus is not alone: the Responsible Business Trends 2018 report found that 69% of corporate-brands stated they were integrating the SDGs into their business strategies (Ethical Corporation, 2018) and a survey in 2015 found that over 70% of businesses surveyed in Britain were engaging with the SDGs in their corporate social responsibility work (PwC, 2015) and internationally. In Bristol, a UN Global Compact event held in November of 2018 attracted representatives from almost 50 different businesses and led to an expansion of the SDG Alliance (UN Global Compact, 2018).

Beyond the private sector there are many other examples of SDGs-focused initiatives in Bristol. The University of the West of England worked to integrate the SDGs across the curriculum. Beyond these larger entities, small businesses, schools, neighborhood associations and civil society organizations can collectively have impacts on many goals articulated in the SDGs. Indeed, it is theoretically possible for localization to advance without any public intervention if a critical mass of non-governmental stakeholders independently act to embrace the SDGs.

This is not to discount the importance of seeking to embed the Goals in local government institutions and processes, and our third observation is about achieving this. Our approach relied on embedded advocacy. Despite the prior existence of the SDG Alliance and interest among some individuals working within city government, it is highly unlikely that the SDGs would have been embedded within the One City Plan, that

the city would have produced a VLR, or that the SDGs would have been integrated in the city's spatial development plan and post-COVID recovery strategy without this advocacy. The daily presence of an individual dedicated to figuring out how to integrate the SDGs within the context of competing priorities, organizational politics, and limited resources was essential. Our conclusion is that embedded advocacy is a powerful mechanism for integrating the SDGs into city government institutions and practices, but one that requires an injection of resources, such as funded staff.

This resource requirement is central to the politics of localization. Some large cities and wealthy regions (e.g. New York City, Los Angeles, Singapore) may have the capacity to direct financial and human resources to engaging with the SDGs (Greene & Meixell, 2017), but the majority of urban dwellers live in small and medium sized cities facing resource constraints – even in wealthy countries (see King et al., 2018; Simon et al., 2016; Teoh et al., 2018). Indeed, our project in Bristol coincided with a period of heavy financial pressure requiring extensive cuts to city services and personnel (BCC, 2018a). For many if not most city governments, investing in SDG localization means taking resources away from some other activity or locally defined priority.

This can complicate what is already a potentially challenging political context. In some cases, LRGs may have the political space to drive the 2030 Agenda (e.g. Malmö, Mannheim, Munster, Utrecht, Bonn, Barcelona), but in others the imposition of “Global Goals” that do not obviously relate to tangible local issues like fixing roads and keeping libraries open may be a political nonstarter. Finding additional resources – i.e. above and beyond existing resources – is therefore an important first step in minimizing political resistance to localization. In the UK, there has been no central government support for localization in the form of funding or guidance, and many cities around the world – particularly small and intermediate cities with limited budgets – have faced similar challenges. However, resources need to be accompanied by a compelling answer to the question of why cities should bother to embrace the SDGs at all.

4. What do the SDGs do for a city?

For those who consider themselves global citizens or engage with global institutions and agendas, the SDGs seem to be everywhere and obviously of broad relevance to policy and society. The SDG Alliance exists because Bristol has a prominent and wealthy cosmopolitan middle class with a global outlook. But this demographic is not representative of the city. Nearly 16% of the city's population live in neighborhoods that are among the 10% most deprived of areas in England, and the disparity in access to higher education is almost 80% between local government wards (BCC, 2018b). Outside of the self-selected local SDG-champions represented by the Alliance, we found a general lack of awareness or personal connection to the goals, and this isn't unique to Bristol. An OECD study of public awareness of the SDGs in Europe found that just 1 in 10 people were aware of the Goals (OECD, 2017). Demonstrating that the Goals are largely congruent with existing objectives and initiatives isn't sufficient to convince citizens and city officials that its worth embracing them. Indeed, we were implicitly confronted with the question: why bother? Advocates of the SDGs often answer this with reference to the urgency for action: the need to transition to more socially, economically and environmentally sustainable

ways of living. However, we identified more prosaic but still important answers to this question.

First, the SDGs have “convening potential” by offering a framework for dialogue between stakeholders with very different agendas, including environmental organizations and activists, private firms with commercial imperatives, and community groups and civil society organizations concerned with inequality and social justice. By conceptually integrating all three aspects of “sustainability” (environmental protection, growth and inclusion) the SDG discourse appeals to diverse stakeholders and political factions, which creates opportunities for conversations between individuals and groups that tend to avoid or oppose one another. This is particularly salient in Bristol where there are persistent tensions between environmental concern and activism and social justice (Ersoy & Hall, 2020).

The SDG Alliance became a forum for these conversations, which were not always comfortable. We observed many awkward exchanges between individuals using the shared language of “sustainable development” but meaning (and advocating for) very different things. At a UN Global Compact business event in Bristol, a large corporation with operations in the city was accused of “greenwashing” by talking about their contributions to the SDGs. For some in the SDG Alliance, SDG adoption meant a focus on delivering “green growth”, while for others they represented a means of elevating the issue of inequalities in the city. Indeed, the SDG Alliance has become a modest but increasingly inclusive mechanism for empowering small organizations by giving them a platform to input into strategic city processes. For example, the Alliance was invited to comment on a draft of the city’s COVID recovery strategy, providing an opportunity for activist groups like the African Voice Forum and Hearing-Impaired Support Services to bring to attention issues their members were facing. While there is certainly an element of depoliticization in the SDGs – “*everybody* is in favor of sustainability” (Gill et al., 2012, p. 512) – the micro-politics of stakeholder engagement around urban policy are real. Whether or not the convening potential of the SDGs (and the conversations this generates) stimulates genuine change is an open question.

Second, the SDGs can be used as a gap-analysis tool when preparing strategic plans and documents. For example, the One City Plan, the Economic Recovery Strategy, and the Council Corporate Strategy were all mapped against the Goals. In the case of the Economic Recovery Strategy this led to revisions to incorporate explicit reference to inclusion, gender equality and environmental sustainability. While there is little prospect of the Goals being adopted as the basis for plans and policies, which are inevitably driven by local context and politics, they are being used as a form of audit tool.

Third, adopting the SDGs and associated vocabulary provides a mechanism for city officials to connect with peers in other cities and share information. In some sense, adopting the SDGs discourse is a means of joining a global club whose members project a collective set of values and ambitions. This, in turn, creates opportunities to build relationships and networks among individuals working for cities around the world. In an interview, Bristol’s Mayor, Marvin Rees (Rees, M. 15 August 2018, Personal interview), said:

Often there’s just this thing at these gatherings where they [the mayors] just feel a connection because we’re just doing it. I think the SDGs . . . offer you language, images and targets around which we could rally as a global network of cities.

This common vocabulary provides a kind of “Rosetta Stone” for cities to translate their local activities into a global framework that others can connect with and relate to. In this way, the SDGs are clearly emerging as a form of discursive “connective tissue that constitutes cities as global-relational nodes” (McCann, 2011) and are increasingly touted as a means of accelerating dissemination of “innovative” policy solutions to common city problems.

Bristol’s engagement with the SDGs led to invitations to join meetings in Berlin with the German International Development network GIZ and Partners for Review; to participate and speak in discussions at the UN High Level Political Forum; and to present at a series of workshops with the UN Department for Economic and Social Affairs on sub-national SDG implementation. Bristol also became a member of the Brookings Institute SDG City Leadership Community of practice. This network brings cities that are leading in SDG adoption together to accelerate progress toward the goals and contains large international cities like Los Angeles, Mexico City, New York, Buenos Aires, Accra, Durban, Milan and Madrid amongst others. Bristol’s reputation for localization also led to the inclusion of the city in publications by the European Union, UCLG and UN documents, and the invitation to take a lead role in multiple UN DESA capacity building workshops (UN DESA, 2020; EUROCITIES, 2020; UCLG and UN Habitat, 2020).

Relationships established through these events have been maintained through private e-mails between individuals and WhatsApp groups, and there is a clear appetite for sharing. During the COVID-19 crisis there was a flurry of online meetings and exchanges to discuss impacts and responses. However, it is not clear that these exchanges yielded direct uptake of the ideas and innovations shared. While Bristol’s One City approach and Thrive programme to address mental health were both inspired by similar initiatives in New York, these were not SDG related. Indeed, despite participating in many international fora centered on the SDGs over two years, we cannot provide a concrete example of an initiative pioneered in another city and adopted in Bristol, apart from the Voluntary Local Review. In our experience the potential peer-to-peer learning benefit of engaging with the SDGs remains largely unrealized.

However, Bristol’s increased international connectivity due to engaging with the SDGs has contributed to the fourth perceived benefit of engaging with the Goals: global city branding. For a medium-sized city like Bristol, these opportunities for profiling are welcome and help to solidify the city’s identity as a sustainability pioneer. According to the Head of International Affairs at Bristol City Council

the profile Bristol has received for its work localising the SDGs has led to international interest which has in turn brought access to a network of global experts who share their experiences with our city and help us develop (C. Twigg, personal communication, 17 December 2020).

Cities seeking to attract investment and highly skilled workers need a strong global identity (McDearman et al., 2013). Bristol’s “green” reputation has been enhanced by embracing the SDGs, which allows the city to balance a pro-growth narrative with a clear message that environmental protection and social justice are guiding values for the city. For example, an article published online by Cratus (2020), p. – a company specializing in advising local governments in the UK – based upon a Q&A session with Bristol’s Mayor Rees noted the following:

The UN Sustainable Development Goals (SDGs) are now core to the work of the City and to the development of the Spatial Development Strategy for the West of England Combined Authority area ... Mayor Rees asked that developers and investors familiarise themselves with the SDGs ... and to come to the table with proactive assessment of proposed development projects, reflective of these priorities.

In the accompanying video, the Mayor says that alignment with the SDGs will become “increasingly attractive on the world stage to investors” and that “Bristol is seen as a global leader on the SDGs”. This is paradigmatic example of “policy boosterism” (McCann, 2013), serving to project an identity of Bristol as a global city aligned with global ambitions. Although it is difficult to draw direct links from city branding with the SDGs to investment, in 2019 Bristol bid for the European Capital of Innovation award, citing SDG localization as one of the ways the city was innovating. The city was awarded a runner up prize worth EUR 100,000. For a city facing acute budget constraints, this was a welcome injection of resources.

In sum, in Bristol the SDGs have proven to have convening potential and are increasingly employed by organizations as a gap-analysis tool. The city’s localization work has raised the profile of the city and spawned sustained relationships and dialogue with officials in other cities around the world. While these SDG-inspired networks are often touted as a means to cultivate peer-to-peer learning, there is (as yet) little concrete evidence that this is happening. There is, however, clear evidence that the SDGs are seen as a valuable branding tool that signals the city’s ambition to attract investment and talent from around the world.

5. Monitoring challenges

While we cannot provide a concrete example of peer-to-peer learning with regards to planning or policy, there has been extensive sharing and learning when it comes to monitoring the SDGs themselves, which all cities engaging with the SDGs have found challenging. Most cities are not prepared or able to effectively monitor SDG 11 or the broader suite of goals due to a) the inapplicability of the template indicators; b) lack of structures and capacity to collect data; and c) lack of resources to generate a customized framework congruent with the Goals. Moreover, the flows of resources, people and information that cities thrive on transgress local political jurisdictions rendering the measurement of city progress toward sustainability a uniquely complex challenge (Da Cruz et al., 2019; Fox & Macleod, 2019).

Much of the literature considering the SDGs at a city level has a focus on delivering SDG 11 (Klopp & Petretta, 2017; Parnell, 2016; Wendling et al., 2018), with some arguing that SDG 11 should be the sole focus of urban actors in terms of SDG delivery and monitoring (Barnett & Parnell, 2016). Conversely, others find that there are relevant targets in every SDGs, to the point that some find nearly 65% of the SDG to be relevant to cities (OECD, 2020). Increasingly, cities are looking to monitor all targets, not just those associated with Goal 11.

Some have tried to monitor the targets as they are; other have sought to customize them with reference to local context. The City of Los Angeles worked through the 169 national SDG targets, proposing revisions to the targets which maintained the intent but

considered their city's context (Bromaghim & Comer, 2019). We adopted a similar approach in Bristol (Fox & Macleod, 2019).

This customization is necessary if all goals and targets are to be monitored given that the SDG indicators were developed through the scalar lens of the nation state. This means that many of the indicators that are being used to assess progress are not measurable at a city scale, even if the target is relevant (Greene & Meixell, 2017). The challenges posed by this scalar mismatch are compounded by the fact that many cities lack the data monitoring capabilities that national governments have (Barnett & Parnell, 2016). In the UK, these challenges are further exacerbated by the shrinking fiscal capacity of local government.

Rather than work to customize the SDG indicators locally, many have turned to preexisting urban sustainability monitoring frameworks, many of which were developed before the SDGs. Frameworks like the WCCD ISO 37120 for sustainable cities have been mapped to show how their indicators can be used to measure the SDGs (WCCD, 2017). These indicator frameworks have proliferated in recent years, with many developed by private companies (e.g. Huawei, PwC). These frameworks vary in their approach and their priorities often using entirely different metrics (Hiremath et al., 2013; Lynch et al., 2011; Science for Environment Policy, 2018). The plethora of sustainability indices and their incomparability has resulted in a fragmented monitoring landscape, undermining city-to-city comparisons. From a global monitoring perspective, this lack of comparability is problematic. The Global City Indicators Program found that the 9 pilot cities it assessed there were over 1000 different indicators being collected and only three were common to all the cities (Bhada & Hoornweg, 2009).

However, for individual cities this lack of comparability is not necessarily seen as a problem, and many do not see a need to use an “apples to apples” comparison (Pipa & Bouchet, 2020b). Within Bristol there has been little discussion around the issue of comparability with cities in other countries, although cities within the UK have expressed a keen interest in have a shared framework domestically. This had led to new efforts working with the UK Office for National Statistics to bring about better integrated reporting (University of Bristol, 2020).

To date, the principle method of monitoring and sharing between cities internationally has been through Voluntary Local Reviews, which exhibit a grounding in local context. For example, the cities of Skimokawa, Toyama and Kitakyushu vary in greatly in size, with populations of 4,000, 400,000, and 1 million people respectively. The priorities highlighted in their VLRs reflect these contextual differences. As a small town, Skimokawa is focusing on sustainable forest management (Kataoka et al., 2018), Toyama has a focus on building a compact city through polycentric transport networks (Nakano et al., 2018), and Kitakyushu has focused on addressing the waste and pollution challenges that all larger cities face (Ota et al., 2018). The development of these local priorities alongside the international agenda of the SDGs demonstrate how monitoring and engagement can be locally rooted, while using the international frameworks and review processes.

In Bristol, we sought to present quantitative metrics for all goals and targets that were customized to the local context, as well as incorporate qualitative data gathered through an online survey of nearly hundred local organizations across sectors (Fox & Macleod,

2019). The goal was to capture both statistical trends, but also actions that may not be visible in the data. We encountered several key challenges.

First, finding data was hard. It is remarkably difficult to find data at city scale, and even more so at sub-city scale, that matched the SDGs. When we were able to get spatially disaggregated data it often revealed (unsurprisingly) stark geographic inequalities. Moreover, some key data were inconsistent. For example, we found two credible sources of poverty data that revealed divergent trends (Fox & Macleod, 2019). Second, our report only covered the administrative area of the city of Bristol, which contains less than 50% of the functional area of city-region. Aligning reporting with *de facto* urban areas that have fragmented jurisdictions is problematic. Third, the interconnected nature of urban economies begs the question: where should we measure what? How should a city's carbon emissions be measured when most of the energy and materials consumed in the city are generated outside of its boundaries? If cities are to report on their contributions to the SDGs in a comparable way that can be scaled up to the global level, persistent data deficits and these critical conceptual challenges associated with geographies of measurement and responsibility must be confronted.

6. Reflections and conclusions

The story of SDG localization in Bristol began with collective ambition among a well-established network of local civil-society actors against a backdrop of UK government neglect and a general lack of public awareness of the 2030 Agenda. It progressed through a partnership between university actors (ourselves), these civil society actors and local government. Our key role was to raise financing to provide the human resource required to translate this global policy agenda into local action. We were not “experts” in the SDGs or localization when we began, but we became experts along the way and are now regularly consulted on localization processes both within the UK and internationally. Through our work the SDGs have become pivotal in discussions about Bristol's COVID-19 recovery planning as well as a common framework for discussing the need for social justice, environmental protection and a post-pandemic sustainable economy.

Stepping back from the mechanics of this process, it is clear that the key value of SDG localization for cities is not about using the Goals as a framework for plans and policies. While they can be usefully mobilized for gap-analysis, they are unlikely to define urban policy agendas in the UK given myriad fiscal, political, and administrative challenges. The best efforts of local champions cannot sweep away more immediate local priorities and citizen concerns. Resources are tight, and despite some progress through the One City initiative, Bristol's governing apparatus remains largely organized around sectoral siloes, which undermines the kind of collaboration need to address the SDGs in a comprehensive manner – a challenge shared with many cities (Valencia et al., 2019). However, the SDGs have strong convening power and can be instrumentalised by cities for branding and building international peer networks with the potential to facilitate the dissemination of policies or strategies for solving common urban challenges. This potential, however, remains unrealized. Our personal experience suggests that SDG discourse is particularly appealing to city governments juggling growth machine politics

with social justice politics and widespread concern about the future of the environment among urban residents.

Importantly, the enthusiasm with which a growing number of cities have embraced the SDGs reinforces the contemporary narrative about cities increasingly seeking to lead on confronting global challenges. Yet there are no substantive formal mechanisms to facilitate this beyond the proliferation of city networks, the impacts of which remain largely unknown (Davidson et al., 2019). It is also unclear whether there is sufficient global momentum for cities to make a substantive difference to delivery of global goals given the many challenges cities face in delivery. This begs the question of how cities and their citizens may contribute to the formulation and effective delivery of global policy beyond 2030. As noted by Croese et al. (2020), finding a way to balance “the implementation of global agendas with a bottom-up approach” may be key to encouraging wider city-level engagement with the SDGs and future iterations of global policy. Critically, cities cannot be left to fill the “action gap” (UN Habitat, 2020, p. 201) left by other powerful actors – particularly national governments.

Will this period of experimentation with localization be seen by future scholars as a transitional phase in global governance in which cities began to reassert their historic role as central actors in global processes? Or will a post-2030 global policy agenda retrench nation-state power? And how much do the answers to these questions hinge on contemporary urban scholarship and practice?

Note

1. The importance of translation has been noted in other cities as well. While many city officials in the ASEAN region are already working to address the SDGs in their normal jobs, there is little interest in articulating challenges and achievements through the SDG language unless they have been given guidance on how to translate the SDGs onto local initiatives (Teoh et al., 2018). Similarly, a report by PLATFORMA and the Council of European Municipalities and Regions (CEMR) found that a large number of European LRGs had awareness of the SDGs but don't know how to implement them. Many of the surveyed LRGs stated that the SDGs were too conceptual, and not concrete enough to be implemented on the ground (Bardot et al., 2018).

Acknowledgments

We thank Bristol Green Capital Partnership, Bristol City Council, and Burgess Salmon for facilitating this research. The views expressed in this paper are our own and do not reflect those of these organisations, the University of Bristol, or members of the Bristol SDG Alliance. We thank Michele Acuto, Enora Robin and three anonymous reviewers for helpful feedback on earlier drafts. All errors are our own.

Disclosure statement

No potential conflict of interest was reported by the author(s).

Funding

This work was supported by the British Council; Economic and Social Research Council; Bristol City Council; University of Bristol.

References

- Acuto, M. (2016). Give cities a seat at the top table. *Nature*, 537(7622), 611–613. <https://doi.org/10.1038/537611a>
- Akenji, L., Elder, M., Bengtsson, M., Olsen, S.H., & King, P. (2018) *Scoring the sustainable development goals: Pathways for Asia and the Pacific*. IGES Policy Report. <https://www.iges.or.jp/jp/pub/scoring-sustainable-development-goals-pathways/en>
- Barber, B. R. (2013). *If mayors ruled the world: Dysfunctional nations, rising cities*. Yale University Press.
- Barcelona City Council. (2018) *The strategy for inclusion and the reduction of social inequality in Barcelona 2017–2027*. Ajuntament de Barcelona. http://www.bcn.cat/barcelonainclusiva/ca/2018/6/strategy_inclusion_2017-2027_en.pdf
- Bardot, L., Bizarro, P., Licha, A., Stichelmans, T., & Marce, L. A. (2018) *Sustainable development goals: How Europe's towns and regions are taking the lead*. PLATFORMA & the Council of European Municipalities and Regions (CEMR). http://ccre.org/img/uploads/piecesjointe/file_name/PLATFORMA_CEMR_SDG_localisation_EN.pdf
- Barnett, C., & Parnell, S. (2016). Ideas, Implementation and Indicators: Epistemologies of the post-2015 urban agenda. *Environment and Urbanization*, 28(1), 87–98. <https://doi.org/10.1177/0956247815621473>
- BCC. (2018a) Bristol City Council sets budget focused on protecting essential services. BCC Newsroom. <https://news.bristol.gov.uk/news/bristol-city-council-sets-budget-focused-on-protecting-essential-services-4>
- BCC. (2018b) *The population of Bristol*. Bristol City Council. <https://www.bristol.gov.uk/documents/20182/33904/Population+of+Bristol+December+2018.pdf/e65be8b1-93a7-153d-da6d-62bfef265a04>
- Bhada, P., & Hoornweg, D., (2009) *The global city indicators program: A more credible voice for cities*. Urban Development Unit, The World Bank. <https://openknowledge.worldbank.org/bitstream/handle/10986/10244/491660BRI0City10Box338943B01PUBLIC1.pdf?sequence=1&isAllowed=y>
- Bromaghin, E., & Comer, D. (2019) *Revising national SDG targets for the city of Los Angeles. Thematic research network on data and statistics*. UN Sustainable Development Solutions Network. https://static1.squarespace.com/static/5b4f63e14eddec374f416232/t/5cb64956085229a5fbac9b30/1555450202184/LDASI-USA-LA_April19.pdf
- Carden-Noad, S., Macleod, A., Skidmore, T., & Turner, E. (2017) *Bristol and the UN sustainable development goals*. Bristol Green Capital Partnership. http://bristolgreencapital.org/wp-content/uploads/2017/07/UoB_SDGs-Bristol-report_final_20-Jul-2017.pdf
- City of Helsinki. (2019). *From agenda to action: The implementation of the UN sustainable development goals in Helsinki 2019*. <https://www.hel.fi/static/helsinki/julkaisut/SDG-VLR-Helsinki-2019-en.pdf>
- Cratus (2020). *Mayor marvin rees and cratus – In discussion and Q&A: 'Bristol, the City & The growth challenge'*. <https://cratus.co.uk/mayor-marvin-rees-and-cratus-in-discussion-and-q-a-bristol-the-city-the-growth-challenge>
- Croese, S., Green, C., & Morgan, G. (2020). Localizing the sustainable development goals through the lens of urban resilience: Lessons and learnings from 100 resilient cities and Cape Town. *Sustainability*, 12(2), 550. <https://doi.org/10.3390/su12020550>
- Da Cruz, N. F., Rode, P., & McQuarrie, M. (2019). New urban governance: A review of current themes and future priorities. *Journal of Urban Affairs*, 41(1), 1–19. <https://doi.org/10.1080/07352166.2018.1499416>

- Davidson, K., Coenen, L., Acuto, M., & Gleeson, B. (2019). Reconfiguring urban governance in an age of rising city networks: A research agenda. *Urban Studies*, 56(16), 3540–3555. <https://doi.org/10.1177/0042098018816010>
- Ersoy, A., & Hall, S. (2020). The Bristol green capital partnership: An exemplar of reflexive governance for sustainable urban development? *Town Planning Review*, 91(4), 397–413. <https://doi.org/10.3828/tpr.2020.23>
- Ethical Corporation. (2018) *The responsible business trends report 2018*. The Ethical Corporation. <http://www.ethicalcorp.com/just-published-responsible-business-trends-report-2018>
- EUROCITIES. (2018) *EUROCITIES social affairs forum in utrecht on 7–8 March 2018*. EUROCITIES.
- EUROCITIES. (2020) *Paving the way for sustainable cities: EUROCITIES report on the implementation of sustainable development goals at the local level*. EUROCITIES. https://eurocities.eu/wp-content/uploads/2020/08/EUROCITIES_SDG_report_2020.pdf
- Fox, S., & Macleod, A. (2019). *Bristol and the SDGs: A voluntary local review of progress 2019*. cabot institute for the environment, University of Bristol. <https://core.ac.uk/download/pdf/237413698.pdf>
- Fukuda-Parr, S., & McNeill, D. (2019). Knowledge and politics in setting and measuring the SDGs: Introduction to special issue. *Global Policy*, 10(S1), 5–15. <https://doi.org/10.1111/1758-5899.12604>
- Gill, N., Johnstone, P., & Williams, A. (2012). Towards a geography of tolerance: Post-politics and political forms of toleration. *Political Geography*, 31(8), 509–518. <https://doi.org/10.1016/j.polgeo.2012.10.008>
- Global Taskforce of Local and Regional Governments (2017) *Roadmap for localising the SDGs: Implementation and Monitoring at the subnational level*. UN Habitat. https://sustainabledevelopment.un.org/content/documents/commitments/818_11195_commitment_ROADMAP%20LOCALIZING%20SDGS.pdf
- Greene, S., & Meixell, B. (2017). *Hacking the sustainable development goals*. Urban Institute. <https://www.urban.org/sites/default/files/publication/92946/2001490-hacking-the-sustainable-development-goals-corrected.pdf>
- Hiremath, R. B., Balachandra, P., Kumar, B., Bansode, S. S., & Murali, J. (2013). Indicator-based urban sustainability—A review. *Energy for Sustainable Development*, 17(6), 555–563. <https://doi.org/10.1016/j.esd.2013.08.004>
- International Development Committee. (2019). *UK progress on the sustainable development review* (HC 2017–19, 1732).
- JDPC. (2018) . *Citizen's voices for a better state: A report on household baseline survey on SDGs*. Justice Development and Peace Commission.
- Kanuri, C., Revi, A., Espey, J., & Kuhle, H. (2016). *Getting started with the SDGs in cities*. UN Sustainable Development Solutions Network. <http://unsdsn.org/wp-content/uploads/2016/07/9.1.8.-Cities-SDG-Guide.pdf>
- Kataoka, Y., Asakawa, K., & Fujino, J. (2018) *Shimokawa town the sustainable development goals (SDGs) report*. Institute for Global Environmental Strategies. <https://pub.iges.or.jp/pub/shimokawa-town-sustainable-development-goals>
- Katz, B., & Nowak, J. (2018). *The new localism: How cities can thrive in the age of populism*. Brookings Institution Press.
- Keranidou, D., van Laarhoven, M., Sakkers, H., & Van de Ven, D. (2018). *Utrecht: A global goals city, Utrecht's Approach to Localising the UN Sustainable Development Goals*. Department of European and International Affairs, City of Utrecht. <https://www.local2030.org/library/view/447>
- King, P., Teoh, S., Maeda, T., & Elder, M. (2018). Transformation fo Asian cities towards sustainability. In M. Elder & P. King (Eds.), *Realising the transformative potential of the SDGs. Institute for global environmental strategies* (pp. 81–106). Institute for Global Environmental Strategies (IGES).

- Klopp, J. M., & Petretta, D. L. (2017). The urban sustainable development goal: Indicators, complexity and the politics of measuring cities. *Cities*, 63, 92–97. <https://doi.org/10.1016/j.cities.2016.12.019>
- Lynch, A. J., Andreason, S., Eisenman, T., Robinson, J., Steif, K., & Birch, E. J. (2011). *Sustainable urban development indicators for the United States, report to the office of international and philanthropic innovation, office of policy development and research, US department of housing and urban development*. Penn Institute for Urban Research.
- Macleod, A., & Townsend, I. (2018) *Bristol method+ driving the sustainable development goals agenda at the city level in Bristol*. Bristol Green Capital Partnership. http://bristolgreencapital.org/wp-content/uploads/2018/07/Bristol-Method_Driving-the-SDGs-agenda-at-city-level-in-Bristol_17-Jul-2018.pdf
- Mayor's Office for International Affairs. (2018) *Global vision | urban action: Voluntary local review. New York City's implementation of the 2030 Agenda for sustainable development*. OneNYC. https://www1.nyc.gov/assets/international/downloads/pdf/NYC_VLR_2018_FINAL.pdf
- Mayor's Office for International Affairs. (2020). *International affairs commissioner abeywardena announces major milestone for NYC declaration on the voluntary local review*. OneNYC. <https://www1.nyc.gov/assets/international/downloads/pdf/vlr-press-release-may-2020-for-final.pdf>
- McCann, E. (2011). Urban policy mobilities and global circuits of knowledge: Toward a research agenda. *Annals of the Association of American Geographers*, 101(1), 107–130. <https://doi.org/10.1080/00045608.2010.520219>
- McCann, E. (2013). Policy boosterism, policy mobilities, and the extrospective city. *Urban Geography*, 34(1), 5–29. <https://doi.org/10.1080/02723638.2013.778627>
- McDearman, B., Clark, G., & Parilla, J. (2013). *The 10 traits of globally fluent metro areas*. Brookings Institution.
- Nakano, R., Fujino, J., & Kataoka, Y. (2018) *Toyama city the sustainable development goals report - Compact city planning based on polycentric transport networks*. Institute for Global Environmental Strategies. <https://pub.iges.or.jp/pub/toyama-city-sustainable-development-goals-2>
- OECD. (2020). *A territorial approach to the sustainable development goals: Synthesis report*. OECD Urban Policy Reviews.
- OECD Development Communications Network. (2017). *What people know and think about the sustainable development goals*. OECD. https://www.oecd.org/development/pgd/International_Survey_Data_DevCom_June%202017.pdf
- One City Economy Board. (2020a). *A one city economic renewal statement of intent*. Bristol One City. <https://www.bristolonecity.com/wp-content/uploads/2020/06/One-City-Economic-Recovery-Statement-of-Intent.pdf>
- One City Economy Board. (2020b). *A one city economic recovery and renewal strategy*. Bristol One City. <https://www.bristolonecity.com/wp-content/uploads/2020/10/One-City-Economic-Recovery-Plan.pdf>
- One City Environment Board. (2020a). *One city climate strategy: A strategy for a carbon neutral, climate resilient Bristol by 2030*. Bristol One City. <https://www.bristolonecity.com/wp-content/uploads/2020/02/one-city-climate-strategy.pdf>
- One City Environment Board. (2020b). *One city ecological emergency strategy: A strategy for an ecologically resilient, wildlife rich Bristol by 2030*. Bristol One City. <https://www.bristolonecity.com/wp-content/uploads/2020/09/One-City-Ecological-Emergency-Strategy-28.09.20.pdf>
- OneNYC. (2016). *New York City, global vision | urban action*. <https://view.publitas.com/nyc-mayors-office/a-city-with-global-goals-parts-i-and-ii-for-download/page/1>
- ONS. (2017). *Population estimates for the UK, England and Wales, Scotland and Northern Ireland: Mid-2017*. Office for National Statistics. <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationestimates/bulletins/annualmidyearpopulationestimates/mid2017/previous/v1>
- Ota, J., Hosoda, K., Hayashi, S., Fujino, J., & Kataoka, Y. (2018). *Kitakyushu city the sustainable development goals report*. Institute for Global Environmental Strategies. <https://pub.iges.or.jp/pub/kitakyushu-city-sustainable-development-goals>

- Parnell, S. (2016). Defining a global urban development agenda. *World Development*, 78, 529–540. <https://doi.org/10.1016/j.worlddev.2015.10.028>
- Period Friendly Places. (2020). *Charity | period friendly places*. <https://www.periodfriendlyplaces.org/>
- Pipa, T., & Bouchet, M. (2020a). *Leadership at the local level: How can cities drive a sustainable recovery?* Brookings Institute. <https://www.brookings.edu/research/leadership-at-the-local-level-how-can-cities-drive-a-sustainable-recovery/>
- Pipa, T. F., & Bouchet, M. (2020b). *Next generation urban planning Enabling sustainable development at the local level through voluntary local reviews (VLRs)*. Brookings Institute. https://www.brookings.edu/wp-content/uploads/2020/02/Next-generation-urban-planning_final.pdf
- PR News. (2021). Bristol's pivotal role in global street art examined in new exhibition. *PR News Blog*. 21 June 2021. <https://www.prnewsblog.com/news/1884/bristols-pivotal-role-in-global-street-art-examined-in-new-exhibition/>
- PwC. (2015). *Make it your business: Engaging with the sustainable development goals*. PwC SDGs. https://www.pwc.com/gx/en/sustainability/SDG/SDG%20Research_FINAL.pdf
- Rees, M. (2020) *Spatial development strategy*. *The mayor of bristol blog*. Bristol City Council. <https://thebristolmayor.com/2020/05/15/spatial-development-strategy/>
- Science for Environment Policy. (2018). Indicators for sustainable cities. In-depth Report 12. Produced for the European Commission DG Environment by the Science Communication Unit. UWE. <http://ec.europa.eu/science-environment-policy>
- Simon, D., Arvidsson, H., Anand, G., Bazaz, A., Fenna, G., Foster, K., . . . Nyambuga, C. (2016). Developing and testing the urban sustainable development goal's targets and indicators—a five-city study. *Environment and Urbanization*, 28(1), 49–63. <https://doi.org/10.1177/0956247815619865>
- Teoh, S., Olsen, S.H., & Gilby, S. (2018). *Early views of ASEAN's 'frontrunner cities' on the sustainable development goals (SDGs) and local data management*. Institute for Global Environmental Strategies. https://pub.iges.or.jp/pub_file/iges-policy-brief-asean-cities-early-0/download
- The Federal Government. (2021) *Structures of sustainability policy*. Sustainability - The Federal Government. <https://www.bundesregierung.de/breg-en/issues/sustainability/structures-of-sustainability-policy-214556>
- UCLG. (2017). *German municipalities begin to localize the SDGs*. <https://www.uclg.org/en/media/news/insight-german-municipalities-begin-localize-sdgs>
- UCLG. (2018). *How UCLG contributes towards the SDGs: Fostering accomplishment of the 2030 agenda from the bottom up*. https://www.uclg.org/sites/default/files/uclg_y_los_sdg-web.pdf
- UCLG and UN Habitat. (2020). *Guidelines for voluntary local reviews*. UCLG - United Cities and Local Governments. https://unhabitat.org/sites/default/files/2020/07/uclg_vlrlab_guidelines_july_2020_final.pdf
- UKSSD. (2017). *Sustainable Development is good for UK Business*. UK Stakeholders for Sustainable Development. https://static.wixstatic.com/media/30312f_b827f58848874e1f8e74b887e45e8f5e~mv2.png
- UKSSD. (2018). *Measuring Up: How the UK is performing on the UN Sustainable Development Goals*. UK Stakeholders for Sustainable Development. https://7593a251-ce64-48ce-ada7-0d0b99945b7c.filesusr.com/ugd/30312f_61bb4e30058c4d849d644a8ff8cc039f.pdf
- UKSSD. (2020a). *UKSSD's brief to Prime Minister Boris Johnson*. UK Stakeholders for Sustainable Development. https://unhabitat.org/sites/default/files/2020/07/uclg_vlrlab_guidelines_july_2020_final.pdf
- UKSSD. (2020b). *Building a better future through the COVID-19 recovery programmes*. UK Stakeholders for Sustainable Development & UN Global Compact Network UK. Available at: https://7593a251-ce64-48ce-ada7-0d0b99945b7c.filesusr.com/ugd/30312f_e3e182553dd2408c95a6786cfe795363.pdf
- UN DESA. (2020). *Voluntary local review series: Stakeholder engagement*. UN Department for Economic and Social Affairs. <https://sdgs.un.org/events/voluntary-local-review-series-stakeholder-engagement-24874>

- UN Global Compact. (2018). *SDG roadshow for the UK. Making global goals local business - bristol event report*. <https://www.unglobalcompact.org.uk/wp-content/uploads/2018/11/Event-Report-SDG-Roadshow-2018-Bristol-1.pdf>
- UN Habitat. (2020). *World cities report 2020*. United Nations Human Settlements Programme.
- United Nations High-level Panel. (2013). *A new global partnership: Eradicate poverty and transform economies through sustainable development*. The Report of the High-Level of Eminent Persons on the Post-2015 Development Agenda. <http://www.post2015hlp.org/the-report/>
- University of Bristol. (2020). *Bristol working with the office for national statistics to aid local UN sustainable development goals data reporting across the UK*. <https://www.bristol.ac.uk/cabot/news/2020/sdg-ons.html>
- Utrecht 4 Global Goals. (2021). *U-award*. Utrecht 4 Global Goals. <https://utrecht4globalgoals.nl/u-award-2/>
- Valencia, S. C., Simon, D., Croese, S., Nordqvist, J., Oloko, M., Sharma, T., Taylor Buck, N., & Versace, I. (2019). Adapting the sustainable development goals and the new urban agenda to the city level: Initial reflections from a comparative research project. *International Journal of Urban Sustainable Development*, 11(1), 4–23. <https://doi.org/10.1080/19463138.2019.1573172>
- VVSG. (2016). *SDGs in your municipality: 50 practical awareness raising examples*. VVSG International. <http://www.vvsg.be/sites/sdgs/Documents/praktijkvoorbeelden%20sensibilisering%20EN%20FINAAL.pdf>
- WCCD. (2017). *WCCD city data for the united nations sustainable development goals*. <http://www.dataforcities.org/publications/>
- Wendling, L.A., Huovila, A., zu Castell-Rüdenhausen, M., Hukkalainen, M., & Airaksinen, M. (2018). Benchmarking nature-based solution and smart city assessment schemes against the sustainable development goal indicator framework. *Frontiers in Environmental Science*, 6(6), 1–18. <https://doi.org/10.3389/fenvs.2018.00069>
- Wollnik, T., & Oosterhof, P. (2019). *Voluntary National Reviews submitted to the 2019 High-level Political Forum for Sustainable Development – a Comparative Analysis*. Partners for Review / Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH. <http://sdghelpdesk.unescap.org/sites/default/files/2019-11/P4R-Analysis-VNRs-2019.pdf>
- World Health Organisation. (2016). *Health in 2015: from MDGs, Millennium Development Goals to SDGs, Sustainable Development Goals*. World Health Organization. <http://www.who.int/gho/publications/mdgs-sdgs/en/>