

Global Goals, Global Cities

Achieving the SDGs through Collective Local Action

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Executive Summary

The United Nations' 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals (SDGs) provide “a shared blueprint for peace and prosperity for people and the planet.”

While the goals were designed to provide a nonbinding vision to guide policymaking at the national level, such a massive agenda requires that stakeholders at all levels of government and society, including cities, collaborate to achieve the intended outcomes. This participation is more urgent given that the UN Sustainable Development Solutions Network found that no country is on track to meeting all the goals by 2030.

Cities have a crucial role to play in translating the high-level, ambitious, and multidimensional vision of the SDGs into practice through local policies—that is, localization.

This report serves as a resource to help policymakers better understand the opportunities, challenges, and complexities facing cities and their strategic stakeholders in advancing the SDGs. The report:

- Outlines the unique strengths of cities in implementing the goals, given their administrative

flexibility, capacity to engage directly with citizens, access to city networks and collaborations, and an increasing amount of city-level guidance

- Highlights efforts to advance the SDGs through city diplomacy, public-private partnerships, and empowering youth and other local actors
- Recognizes the challenges cities need to overcome, such as insufficient fiscal capacity, ineffective governance, poorly regulated public-private partnerships, data-related issues, the need for complex physical infrastructure, and difficulty navigating global engagement
- Recommends that cities continue to stimulate progress by building smart capacity, embracing a comprehensive view of knowledge, and engaging and networking strategically

In an era of dire warnings and systemic crises, the SDGs are currently the best embodiment of global collective agreement about the urgency to move forward. Cities are essential to achieving results, and they need to build on the current momentum propelling their initiatives and strategies.

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Foreword

In October 2016, Quito, Ecuador, had the privilege of hosting HABITAT III, the largest United Nations Conference in history, with the participation of approximately 30,000 delegates including more than 500 mayors and regional leaders from around the world. As Host Mayor of this global event, I felt deeply moved by the fact that the *New Urban Agenda*, which marks the path for the world on urban sustainable development for the next 20 years, was unanimously adopted in my city.

It was a special moment. The “Spirit of Quito” was full of optimism, built upon the previous year’s approval of key milestones for global development: the Paris Agreement, the Sendai Framework, the Addis Ababa Action Agenda, and the 2030 Agenda for Sustainable Development and its 17 Sustainable Development Goals—the most ambitious set of policy actions ever designed for improving people’s lives.

Even though the SDGs were devised for nations to lead, cities play a critical role to achieve them. In fact, it is in cities where some of the world’s most pressing issues, like climate change and migration, will be defined. The SDGs constitute a planning, implementation, and evaluation policy framework that allows cities to address these challenges and their interconnection—for example, the liaison between climate change and migration—from a comprehensive perspective.

Cities around the world are proving their ability to respond to several SDGs simultaneously and effectively, from Kampala’s central role in establishing refugees’ rights to live, work, and start a business to Quito’s first Metro line, which not only tackles sustainable mobility targets but also boosts competitiveness and economic growth. However, there are serious obstacles—political, institutional, financial and technical—that prevent many cities from advancing the SDGs.

This report outlines great challenges but also immense opportunities for cities to become determinant players for fulfilling the 2030 Agenda and beyond. Despite the complexity of the task, there are reasons for optimism. Cities are becoming increasingly relevant actors in international decision-making processes, with city diplomacy as an instrument with enormous potential to become a vibrant engine for collective action. Fostering cities’ flexibility for change adaptation, willingness to innovate, and response capacity focusing on people rather than ideology will help keep the “Spirit of Quito” alive and strong.

Mauricio Rodas

Former Mayor of Quito, Ecuador

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Introduction

The 2030 Sustainable Development Goals (SDGs) are 17 explicit and interdependent ambitions that collectively compose a visionary framework for global development based on ecological sustainability, social justice, and related principles. Ratified by the United Nations (UN) General Assembly in September 2015, the SDGs were the culmination of a three-year ideation, negotiation, and drafting process in which 193 members of the United Nations addressed next steps following the expiration of the Millennium Development Goals (MDGs). As the effective successor to the MDGs, the SDGs outline action plans for the UN's "2030 Agenda for Sustainable Development"¹ and address a broad range of issues relevant to every major sector of society and function of government (see Figure 1). According to the United Nations, the SDGs provide "a shared blueprint for peace and prosperity for people and the planet, now and into the future."² To guide action and monitor progress, the SDGs include 169 guiding targets and 232 progress indicators.

The SDG agenda is supported by a vast architecture of financing structures, institutional collaborations and partnerships, action agendas and campaigns, and information and communication. For example, SDG 13 (climate action) has been the topic of numerous high-level meetings (e.g., the 2019 and 2018 Global Climate Action Summits), widely circulated scientific and policy reports (e.g., the Intergovernmental Panel on Climate Change special report *Global Warming of 1.5 °C*),³ and topical multilateral initiatives (e.g., the Paris Agreement). SDG 11 (sustainable cities and communities) was the core focus at Habitat III in 2016 and the 2018 World Urban Forum—events attended by thousands of policymakers, experts, and professionals. At a broader level, the Addis Ababa Action Agenda cuts across numerous SDGs—including 8, 9, and 12—in providing guidance on financing sustainable development.⁴

Many efforts track progress on SDG implementation. Various UN agencies have tool kits and committees for monitoring and reporting results. External platforms have been created as well. The nonprofit organization Our World in Data, for example, aims to make data about all 17 SDGs accessible and meaningful. Countries undertake Voluntary National Reviews (VNRs) as a self-monitoring mechanism, aiming "to facilitate the sharing of experiences, including successes, challenges and lessons learned . . . [and] seek to strengthen policies and institutions of governments and to mobilize multistakeholder support and partnerships."

The SDGs are ambitious, wide-ranging, and multidimensional, reflecting all aspects of livability and challenges of the world. Such a massive agenda requires that stakeholders at all levels of government and society, including cities, collaborate and play their part in achieving global peace and prosperity.

Est quidem vera lex recta ratio naturae congruens, diffusa in omnes, constans, sempiterna, quae vocet ad officium iubendo, vetando a fraude deterreat; quae tamen neque probos frustra iubet aut vetat nec improbos iubendo aut vetando movet.

— Marcus Tullius Cicero, *De Re Publica III, XXII*

There is some true law in accordance with the natural world, prevalent in all things, unchanging and infinite, that commands us to noble duty and discourages us from harmful indulgence; yet it does not matter whether it commands something or forbids something else, as the dishonorable among us will ignore it while the honorable heed it. (translation, Kris Hartley)

Figure 1

The Sustainable Development Goals



Source: United Nations

The Mandate to National Governments

The SDGs provide a nonbinding vision to guide policymaking at the national level to achieve the goals by 2030. They serve as a template and common language around which national governments can build political support for policy priorities and establish implementation plans.⁵

With the guidance of the SDGs and their targets and indicators, it is the prerogative of national governments to determine their own strategies and policies. Many countries have embraced this new mandate and opportunity. For example, Ireland launched an SDG implementation plan structured around four strategic priorities: awareness, participation, support, and policy alignment.⁶ (See “Case Study: Ireland’s National Implementation

Plan.”) Ireland’s priorities are an example of how engagement with the SDGs by governments is not limited to policy initiatives but also involves softer aspects of communication, education, and persuasion—recognizing that public attitude is crucial to achieving the societal transformation necessary to realize all 17 SDGs. Reflecting the type of implementation strategy undertaken by many other countries, Ireland’s efforts involve policy planning and action at the ministerial level, with the responsibility of each outlined in an “SDG Matrix” and “SDG Policy Map.”

But not all national governments have embraced, institutionalized, and coordinated the implementation of the SDGs with the same enthusiasm and momentum. A UN Sustainable Development

Ireland's National Implementation Plan

Ireland's government sees the political process, primarily via transparency and accountability, as playing a crucial role in building legitimacy for SDG implementation. Ireland's implementation plan includes explicit recognition of each of the 169 SDG targets. Each cabinet-level minister oversees aspects of SDG implementation that relate to their respective portfolios. Departments within ministries are assigned to relevant SDG targets. Overall responsibility for SDG implementation, including cross-government coordination and the development of frameworks for implementation and monitoring, belongs to the minister for communications of Climate Action and Environment. Furthermore, Ireland's government has held four national SDG forums between 2018 and 2019 intended to convene key stakeholders, including people from groups at risk of social exclusion or discrimination, and inform further implementation efforts.¹ At the local level, Ireland has implemented a Public Participation Network initiative to more closely connect the experience of residents with the development of local and national policy initiatives for SDG implementation.

¹ *Sustainable Development Goals (SDGs) National Stakeholder Forum: Terms of Reference*, Ireland Department of Communications, Climate Action and Environment, accessed on August 30, 2019, <https://www.dccae.gov.ie/documents/SDGs%20Stakeholder%20Forum%20ToR.pdf>.

Solutions Network (SDSN) 2019 survey found that “only two governments (Bangladesh and India) have conducted (or sponsored) an estimate of incremental financing needs to implement the SDGs” and that “no country is on track to meeting all the goals”⁷ (see Figure 2).

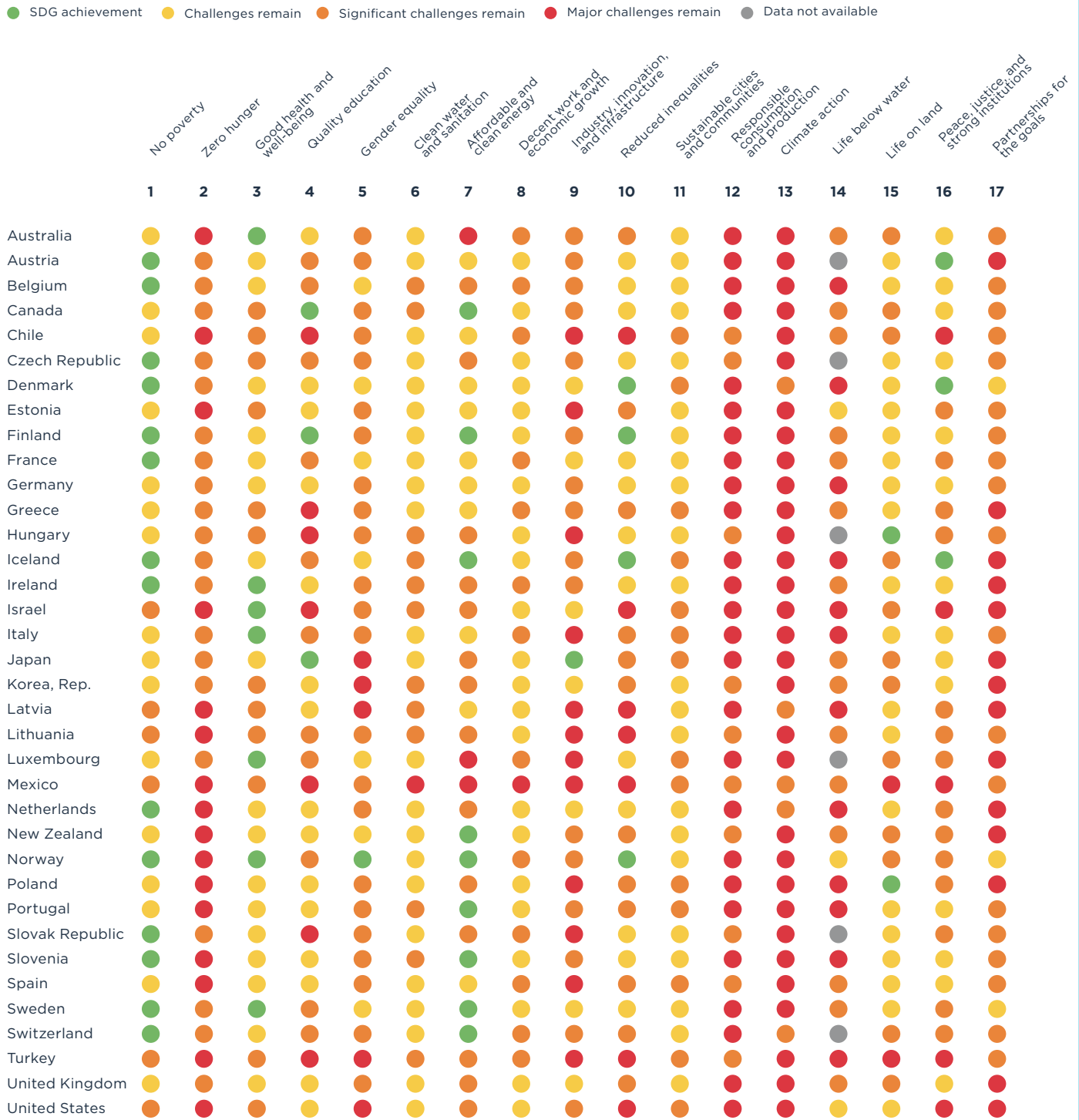
Resource constraints and the type of longer-term planning needed to achieve SDG goals can present substantial challenges. Academic literature has produced several studies on how national implementation of the SDGs varies in practice and concept. One such study provides a useful overview of 80 national-level scenario modelling tools for SDG implementation, finding that SDGs most commonly covered by models' thematic policy areas were SDG 8 (decent work and economic growth), SDG 7 (affordable and clean energy), SDG 13 (climate action), and SDG 17 (partnerships for the goals). By contrast, those with the least coverage were SDG 16 (peace, justice, and strong institutions), SDG 5 (gender equality), and SDG 14 (life below water).⁸ Indeed, national policy implementation tends to focus on topics of immediate political salience

and sensitivity—particularly when they impact government efforts to maintain legitimacy and deliver on basic needs driving political mandates.

Furthermore, the negotiated nature of the SDGs implies that their development process has been a fundamentally political effort. Particular sensitivities emerged in part around the use of multilateral commitments (e.g., the Global Compact for Migration and the Paris Agreement) that may appear to impose on the sovereignty of countries. Political sensitivities are common across many examples of global multilateral agreements. For example, Klaus and Singer, in describing the process of developing the UN *New Urban Agenda*, state “The politics of the international system, in every case, inevitably overwhelmed the perspectives, capacities, and concerns of cities.”⁹ Such situations emphasize the important role non-nations—including cities—play in delivering the SDGs in settings with less political contention. As one journalist pointed out, “go to the South Bronx . . . and you wouldn't know that the American government's commitment to sustainable development has wavered.”¹⁰

Figure 2

Sustainable Development Goal Dashboard for Organisation for Economic Co-operation and Development Countries



Source: Adapted from *Sustainable Development Report 2019*, Bertelsmann Stiftung and Sustainable Development Solutions Network, June 2019, <https://www.sdgindex.org/reports/sustainable-development-report-2019/>

Cities Step Up

The role of cities is increasingly crucial in translating the high-level visions of SDGs into practice through local policies informed by targets and indicators. Indeed, the Organisation for Economic Co-operation and Development (OECD) states that “an estimated 65% of the 169 targets behind the 17 SDGs will not be reached without engagement of local and regional governments.”¹¹ Nevertheless, aside from SDG 11, the SDGs were not designed specifically with cities or localization in mind; efforts to localize the SDGs have been a largely ground-up phenomenon. As sites for policy action, cities are at the forefront of challenges engendered by climate change and other global crises. New technologies and access to data have given cities sharper tools to make decisions. While ambitions related specifically to cities are only outlined in SDG 11 and in the UN’s *New Urban Agenda*,¹² it is increasingly clear that aspirations and implementation strategies to achieve all the SDGs have emerged in cities and other subnational jurisdictions—a phenomenon referred to throughout this report as “localization.”

Cities can play a crucial role as test beds for SDG implementation, lessons from which can be used to inform policies that are scaled at the national level. Many cities also have the political and administrative flexibility to interpret SDG targets in ways that would be more cumbersome or politically problematic at the national level. Cities are beholden to a lesser variety of political forces and administrative complexities. For example, Quito launched its Vision 2040 in 2018. The Vision was based on the SDG agenda, integrating each of the SDGs in long-term planning, as well as the principles of the New Urban Agenda, the Paris Agreement, the Sendai Framework, and the Addis Ababa Action Agenda. It was the result of a participatory process that lasted more than two years, incorporating inputs from grassroots organizations, academia, NGOs, and the private sector, among other citizens’ groups.

However, SDG localization presents challenges for city governments. The variety of SDG targets and limited local capacity force cities into a difficult reckoning about where to prioritize their policy efforts. Constraints include insufficient

fiscal capacity, ineffective governance, data-related challenges, the need for complex physical infrastructure, and difficulties around whether and how to participate in multistakeholder and international partnerships. Many mayors are confident in the ability of their cities to localize the SDGs but often need more money and information to implement and scale initiatives. They can also face opposition from residents and companies on initiatives that may inconvenience them. Given these and other constraints, variability in progress on and effectiveness of SDG localization can be expected, with lagging performance likely from cities in resource-constrained settings and those operating under repressive political systems or highly centralized administrative systems. According to researchers at The New School’s Milano School of International Affairs, Management, and Urban Policy, “data and evidence of the impacts of national policies [related to UN-Habitat II commitments] on cities are difficult to find.”¹³ The researchers argue that feedback loops between national and urban policy levels can facilitate monitoring, policy reform, and implementation.

Finally, cities cannot operate in isolation from national governments; indeed, they are constrained or enabled by the degree of autonomy conferred by central governments, variations in borrowing regulations and appropriated federal funding, and political tensions that manifest themselves in contrasting visions between local and national government. The latter is particularly salient in a setting where local and national governments are increasingly at odds about issues like migration, climate change, economic inequality, and other divisive issues—as in the United States.

The Purpose of this Report

To better understand the opportunities, challenges, and complexities facing cities and their strategic stakeholders in advancing the SDGs, the Chicago Council on Global Affairs hosted a workshop at the 2019 Pritzker Forum on Global Cities with leading experts and practitioners from around the world. This report was informed by that discussion and is designed to be a resource for city leaders around

the world interested in embracing and aligning their local strategies to the SDGs.

The report outlines the unique strengths of cities to implement the SDGs, as well as the impact of the political dissonance between cities and national governments on policy coherence. Then it provides an overview of collaborations and avenues for sharing knowledge and best practices, and local and global engagement, that are essential for increasing efficiencies and systematizing processes. Last, it addresses the many challenges that remain and what cities can do to improve outcomes and ensure peace and prosperity for people and the planet.

Why Localization?

Cities are increasingly willing to assert their policymaking autonomy in the face of resistant national governments. It is in this spirit that Benjamin Barber wrote “let cities, the most networked and interconnected of our political associations, defined above all by collaboration and pragmatism, by creativity and multiculturalism, do what states cannot.”¹⁴ Certain structural advantages make cities suitable for SDG localization, including administrative flexibility, capacity to engage directly with citizens, access to city networks and collaborations, and an increasing amount of guidance on implementation. Local leadership is particularly essential in nations where the federal government refuses to act—or will not act quickly enough.

Administrative Flexibility

In representative political systems, national governments must consider the interests of numerous constituencies. Serving heterogeneous populations leads to challenges such as long-running tensions between urban and rural areas, industry and agriculture, modern and traditional societies, developed and developing status, and even geography-based ethnic or historical rivalries.¹⁵ National policymaking can also often be hindered by institutional constraints, rigorous administrative and deliberative processes, and decades or more of process reforms. Indeed, national policymaking is no easy matter, nor is it known for being particularly rapid in adapting to exogenous change.

By contrast, cities can be more flexible and adaptable regarding policy change. While cities serve a diverse set of constituents, urban politics are at a smaller scale and face fewer administrative and political barriers. Additionally, the day-to-day challenges of urban policy such as law enforcement, waste management, or infrastructure maintenance are often more straightforwardly defined and solved; such issues are less likely to become gnarled in political ideology because of a clear and undebatable need to address them. City governments can then approach the SDGs through this language of practicality, rather than of ideology. According to Ian Klaus, senior fellow on global cities at the Chicago Council on Global Affairs, the relationship between governance and territory is increasingly fraught amid rising globalization.¹⁶ Against this backdrop, cities often offer a special combination of legitimacy, clear territorial space, and the ability to act in concrete terms.

Capacity to Engage Directly with Citizens

Cities have the advantage of engaging directly with their stakeholders: “Cities that are most committed to pursuing sustainability policies do tend to be more participatory places with respect to signing petitions, participating in demonstrations, belonging to local reform groups, and joining neighborhood associations.”¹⁷ Indeed, the power distance between the government and the governed is far shorter at the urban scale than at the national scale. This is especially relevant within the policymaking process; at all stages, from agenda setting to implementation and evaluation, the public has opportunities for input and involvement. Such engagement is crucial for building the legitimacy of policy initiatives, particularly for nationally politicized issues, such as climate change in the United States.¹⁸ Furthermore, city officials, who have a closer ear to the ground than national policymakers, can more readily and immediately incorporate public knowledge and feedback into policy.

Citizens can also play a crucial role in SDG implementation by crowdsourcing data. Crowdsourced data collection holds the advantage of improving both the representativeness of data and the speed at which data are collected. For example,

in Jakarta, Indonesia, collecting data on flooding is a community effort rather than a top-down process. A smartphone application allows residents to gather and share flood conditions in their area, in addition to receiving real-time updates from local

government.¹⁹ Just as important, institutionalizing the collection and use of data by citizens can aid in collective buy-in to the legitimacy of SDG-related initiatives. (See “Case Study: Aloha+ Challenge.”)

Case Study

Aloha+ Challenge

Launched in Hawaii in 2014, the Aloha+ Challenge is a statewide initiative that engages a wide range of local stakeholders to advance its goals. These groups include the state legislature, city mayors, public and private partnerships, and community organizations. Also involved is the Hawai‘i Green Growth UN Local2030 Island Hub—a partnership of governments, nongovernmental organizations, businesses, and academic leaders committed to developing Hawaii’s green and blue economy.

Hawaii set six ambitious targets to reach by 2030: increase clean energy supply, double local food production, manage natural resources, reduce waste, build sustainable communities, and increase a local green workforce. An online open-data dashboard tracks progress, provides accountability, and ensures transparency on Hawaii’s sustainability goals through very specific and measurable indicators.¹

Hawaii’s leadership is committed to engaging all communities on the islands in the agenda, offering programs to prepare next-generation leaders in schools and mobilizing local community groups. The island of Kaua‘i launched its own challenge to record the number of individual households registered to contribute to the goals. Mayor Kirk Caldwell of Honolulu has pledged to uphold the Paris Agreement, signed the Chicago Climate Charter, committed to a goal of 100 percent renewable ground transportation by 2045 as well to “obtaining 35% canopy cover in urban areas by the year 2035.”² Community volunteerism, island-wide campaigns, and consistent projects to guide local action have helped create an ecosystem of collective buy-in for the SDGs at all levels of society.

1 “Aloha+ Challenge Dashboard: Measuring Hawai‘i’s Sustainability,” Hawai‘i Green Growth, accessed September 17, 2019, <https://www.hawaiigreengrowth.org/dashboard/>.

2 “Major Initiatives,” City and County of Honolulu Office of Climate Change, Sustainability and Resiliency, accessed September 17, 2019, <https://www.resilientoahu.org/major-initiatives>.

Access to City Networks and Collaborations

Cities can network with each other internationally without the diplomatic and administrative constraints of national-level international engagement. Not only can cities form bilateral relationships on matters such as information-sharing and commercial collaboration, they can also convene numerous global networks to address a variety of issues.²⁰ Climate action is a common focus of such networks; examples include the C40 Cities Climate Leadership Group, Cities for Climate Protection™, and the International Council for Local Environmental Initiatives. Cities within and outside of such networks represent thousands of test beds, many in comparable developmental, political, or ecological contexts to one another. According to Mauricio Rodas, former mayor of Quito, Ecuador, city networks can facilitate the use of cost-benefit schemes for sharing ideas. Amid differing economic realities, population sizes, and other factors across member cities, framing best practices in terms of outcome per dollar spent can be particularly useful for sharing experiences.

The advantages of city collaboration are well summarized in *Chicago's Global Strategy*:²¹

“Several modern challenges—population growth, terrorism, sustainability, urban violence, the stresses of immigration, and climate change—hit urban areas first and hardest. Chicago has the opportunity to increase its influence in shaping the dialogue around these issues, both by developing effective homegrown solutions and through increased collaboration with other cities and global organizations. Individual local actions can have a greater global impact when implemented in concert through a network of global cities. By establishing itself as a leader and laboratory on such issues, Chicago has the potential to not only improve the quality of life for its residents but also promote its international reputation as an innovative problem solver.”

An Increasing Amount of City-Level Guidance

As cities' willingness to embrace SDGs and advance their implementation grows, so too does the body of academic literature addressing localization and consulting reports offering advice on implementation and measurement. For example, the United Cities and Local Governments' third annual report, “Towards the Localization of the SDGs,” released ahead of the UN High-level Political Forum on Sustainable Development in July 2019, documents numerous local cases and analyzes global trends.²² The report also provides an overview of the extent to which local governments are involved in the development of their nations' VNRs and participate in national coordination mechanisms for SDGs.

In March 2019, the Sustainable Development Solutions Network published a guide for local and regional government leaders, along with practitioners and other interested parties, in implementation efforts, including ten steps to integrate SDG principles into planning.²³ This report is based on the case of New York City, which created the concept of the Voluntary Local Review (VLR, the localized version of a VNR) and was the first city in the world to present one directly to the United Nations. (See “Case Study: New York City's Voluntary Local Review.”)

Cities can network with each other internationally without the diplomatic and administrative constraints of national-level international engagement.

Case Study

New York City's Voluntary Local Review

In April 2015, the de Blasio administration launched OneNYC, a groundbreaking plan for economic growth, sustainability, resiliency, and equity across the five boroughs. Later that year, world leaders agreed to the SDGs. Realizing New York City's unique role as host to the United Nations and the world's largest diplomatic community, the NYC Mayor's Office for International Affairs created the Global Vision | Urban Action platform to highlight the connections between these two visions. The office also organizes site visits and UN events to showcase the global goals in action and to create opportunities for exchanges with cities and countries worldwide.

In 2018, New York City created the concept of the Voluntary Local Review (VLR) as an evolution of this work and became the first city in the world to present its report directly to the United Nations. The purpose of the VLR is to share the city's progress toward the SDGs and to identify good practices for addressing remaining challenges. Since the creation of the VLR, NYC has worked with UN leadership, mayors, and civil societies to encourage local and regional governments worldwide to also use this tool. In 2019, NYC submitted its second report, and cities including Bristol, Buenos Aires, Helsinki, and Los Angeles joined the VLR movement by submitting their own. Additionally, SDG icons were incorporated throughout the OneNYC 2050 strategy published in April 2019 to increase engagement with City agencies and global stakeholders. The next growth of New York City's work has been the development of a VLR declaration aimed at encouraging local and regional governments worldwide to formally commit to reporting on the SDGs, using existing resources to ensure a low barrier to entry.

Following New York City's creation of the VLR, local and regional governments around the world committed to conducting their own reviews, and think tanks such as the Brookings Institution began analyzing that process. According to Anthony Pipa of the Brookings Institution, "Putting together a robust VLR benefits from engagement with different internal offices and leadership, and serves as a useful tool to break down siloes and enable staff to assess the city's progress and come up with interlinked solutions."²⁴ Assembling a VLR also helps document best practices for sharing knowledge. The Sustainable Development Solutions Network guide, for one, is aimed at cities that have undertaken a sustainability-focused reform of long-term plans. The guide addresses issues related to management structures, financing, data collection, situational analysis, and stakeholder management, among others. It also provides overviews of cities that

have begun to incorporate SDG targets into their urban plans, including the US cities of Los Angeles, Orlando, and San José. (See "Case Study: Los Angeles Aligns SDGs to Its Green New Deal.")

Similarly, the OECD's territorial approach for SDG localization centers on three themes: measuring and benchmarking, facilitating collaboration and dialogue within multiple levels of government, and sharing best practices.²⁵ The program involves several pilot cities from around the world to address limitations in local-national coordination, the need to develop indicator frameworks, and efforts to adopt a comprehensive perspective for guiding individual policies.

Leading When National Governments Will Not

The role of cities in localizing the SDGs is made even more essential in contexts where the national

Case Study

Los Angeles Aligns SDGs to Its Green New Deal

The City of Los Angeles, led by Mayor Eric Garcetti, is committed to upholding the pivotal international agreements of our time, including the SDGs and the Paris Agreement. In 2017, the Conrad N. Hilton Foundation helped catalyze the city's implementation of the SDGs with funding to support an SDG fellow as part of the mayor's newly established Office of International Affairs. According to Erin Bromaghim, who serves as both the mayor's Director for Olympic and Paralympic Development and the Hilton SDG Fellow, the city's multiphased strategy includes the following actions:¹

- Localizing SDG indicators and reporting via an open-source data platform
- Attracting both local and global partnerships using the universal language of the SDGs to mobilize new initiatives and accelerate progress on the goals
- Working closely with regional academic partners to engage undergraduate, graduate, and even high school students in SDG implementation
- Learning from other cities that are advancing the SDGs locally

In April 2019, the city released its Green New Deal, an update to the 2015 Sustainable City pLAN that creates a global model for local action to protect the environment, strengthen the economy, and build a more equitable future. All chapters and initiatives within the Green New Deal are aligned to the SDGs. Los Angeles's first Voluntary Local Review, released in July 2019, includes an annex expanding this mapping to include Resilient L.A. and other city-wide initiatives.² As Mayor Garcetti has said, "Los Angeles can, should, and will lead in building the healthier and more prosperous world that we dream of for our children and grandchildren."

1 Erin Bromaghim, *Local Data Action Solutions Initiative, Revising National SDG Targets for the City of Los Angeles*, April 2019, https://static1.squarespace.com/static/5b4f63e14eddec374f416232/t/5cb64956085229a5fbac9b30/1555450202184/LDASI-USA-LA_April19.pdf.

2 *Los Angeles Sustainable Development Goals: A Voluntary Local Review of Progress in 2019*, City of Los Angeles, July 2019, https://sdg.lamayor.org/sites/g/files/wph1131f/LA%27s_Voluntary_Local_Review_of_SDGs_2019.pdf.

government has abdicated its accountability for the global agenda. Given the diverse political and administrative system types around the world, generalizing the relationship between local and national governments is quite difficult. Still, a few current examples in consequential parts of the world have political dissonance and governance structures that need to be understood. Unitary administrative states, such as China, have political systems monopolized by one party. In such states, the apparatus of government—from the central level through to provinces, prefectures, counties, townships, and neighborhoods and villages—exists

to seamlessly execute policy edicts issued at the highest relevant level. While these systems have room for local interpretation, matters of strategy and vision are largely undebatable.

At the other end of the spectrum are federalized systems, in which a central government shares power with subnational (e.g., state or regional) governments. Switzerland is an extreme example of such a system; the country's constitution declares adherence to subsidiarity—that is, handling matters at the lowest political level possible. The United States can be described as a federal republic or presidential republic—a structure that is largely

federal but with varying levels of subnational autonomy, depending on the policy domain. Given the country's combined size and historic culture of states' rights, the system is particularly fertile for tensions between and among levels of government—subtext for the country's famously interminable political and ideological debates. The states' rights movement has long been advocated by those wishing to push back against national policies. On one hand, this strategy has a deeply problematic history with respect to restricting the civil rights of minority groups; on the other, claims to local autonomy, including those embodied by the states' rights movement, can be agnostic to the political values embedded in particular issues. Thus, such a movement can be used for either progressive or conservative causes.

It is evident, however, that localities are increasingly willing to push back against federal policy. And as cities grow, prosper, and diversify, their policy stances typically become more politically progressive. This dynamic is well illustrated in recent disagreements about immigration between the governments of large and diverse US cities, such as Chicago and San Francisco, and the current presidential administration. In particular, the concept of preemption, in which authorities at higher levels of government overrule those at lower levels, is common not only between US federal and state governments but also between state and local governments. Fracking, a matter of considerable environmental concern, has prompted numerous cases of preemption, particularly as politically conservative state governments seek to legally invalidate antifracking measures adopted at the local level.²⁶

Against this politically chaotic backdrop, efforts to institutionalize local policies such as those regarding climate change at the national level in the United States have faced substantial headwinds. For example, President Donald Trump declared in 2017 that the United States would withdraw from the Paris Agreement—a global commitment to climate-change policy efforts aimed at limiting global warming to less than 2°C above preindustrial levels—by 2020. Despite waning support for the agreement in the US federal government, many states and

localities, particularly those comprising a substantial portion of national economic output, have reiterated their independent commitment to comply with the agreement through climate action.²⁷ In addition, the 2019 Chicago Council on Global Affairs' survey of American public opinion found that “for the first time since the question was introduced in 2008, an overall majority of Americans (54%) consider climate change a critical threat.”²⁸ According to former Mayor Rodas faster movement by cities relative to national governments in adopting climate policies reflects both a more progressive vision and the degree to which climate change affects people's daily lives at the local level. In fact, more than a decade prior to the rollout of the SDGs, cities were taking initiative on climate action. As climate scholars Carolyn Kousky and Stephen Schneider pointed out in 2003, “in the United States, with the lack of national abatement policies, it is municipalities that are leading the way in beginning to implement mitigation strategies, even if only for initial reductions.”²⁹

Advancing the SDGs through Collaborations and Partnerships

City governments alone cannot deliver on the SDGs without multisector commitments and support from other urban actors. Collaborations, public-private partnerships (PPPs), and avenues for sharing knowledge and best practices through city diplomacy are essential for increasing efficiencies and systematizing processes. In summarizing the value of engaging all stakeholders in SDG localization, Pipa argues, “The SDGs offer a platform for new models of city governance, to enable coordination, partnerships, and new ways of working among multiple community stakeholders, including local businesses, civil society, and universities. This requires a shift in mind-set and a collaborative spirit, and can prove useful in overcoming the inherent fragmentation among different sectors within the city.”³⁰

Engaging in City Diplomacy

Cities are not alone in facing the challenges of SDG localization—in fact, localization presents an opportunity to strengthen existing global networks and forge new ones.³¹ Of course, the topical focus

(as largely aligned with individual SDGs) of urban networks varies. One study found that among Asian cities participating in such networks, leaders felt issues pertaining to the environment, health, education, and infrastructure were more applicable to urban policy than were issues pertaining to gender empowerment, poverty, housing, finance, and economic development.³²

Networks have indeed coalesced around particular issues. An example issue is the Intergovernmental Panel on Climate Change's *Global Warming of 1.5 °C* targets, for which "city-networks are operating at the interstices of urban and global governance, building bridges across national borders between city governments and a variety of other actors, and aiming to engender

coordinated actions that produce meaningful collective effects."³³ Likewise, the motives behind creating urban networks vary by city type. For instance, a study of European cities found that those with relatively more advanced economies, those that have transitioned from hard industry and toward knowledge and innovation-based economies, and those with relatively higher administrative autonomy are more likely to participate in sustainability-based urban networks.³⁴ With such a disparity, ensuring that urban networks for SDG localization do not resemble clubs for the privileged few emerges as an additional imperative. However, it is increasingly clear that city diplomacy is crucial to sharing knowledge and best practices. (See "Case Study: City Diplomacy Helps Helsinki Launch Its Voluntary Local Review.")

Case Study

City Diplomacy Helps Helsinki Launch Its Voluntary Local Review

After New York City created the process for conducting a local review of how a city is performing and implementing initiatives that support the SDGs, the Mayor of Helsinki quickly embraced the idea and led efforts for Helsinki to become the first city in Europe to conduct a VLR. Rather than develop its own processes for evaluation, Mayor Jan Vapaavuori's team worked closely with New York City's Mayor's Office for International Affairs to understand the VLR model and how to measure it against the Helsinki City Strategy. As Mayor Vapaavuori wrote, "the collaboration between New York and Helsinki has been crucial in making the review process possible in Helsinki."¹ This is the essence of city diplomacy.

In its efforts to become "the most functional city in the world," Helsinki prioritized this particular initiative for several reasons. It served as a signal to the world that the city takes global challenges very seriously and they wanted to be recognized as a leader with like-minded cities. It also served as a platform for highlighting which solutions are most effective in implementing the SDGs, and provided information for allocating resources and operations. And it helped the local government educate its residents about the SDGs and how a city can help advance them with localized strategies.

Now a global model for localization, Helsinki, New York City, and other cities that have conducted a VLR are sharing their knowledge and urging more cities to adopt the process and conduct reviews. "The cities' combined voice is now perhaps louder than ever," writes Mayor Vapaavuori in the Helsinki 2019 SDG report, "and its message is clear: achieving a permanent positive change requires that we all do more than our best."²

1 Jan Vapaavuori, "Local Action on the Global Agenda: Helsinki and NYC Lead with the Voluntary Local Review," *Medium*, April 12, 2019, <https://www.hel.fi/static/helsinki/julkaisut/SDG-VLR-Helsinki-2019-en.pdf>.

2 *From Agenda to Action: The Implementation of the UN Sustainable Development Goals in Helsinki 2019*, City of Helsinki, City Executive Office 2019, <https://www.hel.fi/static/helsinki/julkaisut/SDG-VLR-Helsinki-2019-en.pdf>.

Given cities' role in addressing climate change and other SDGs, the importance of city diplomacy will grow. According to former Mayor Rodas, the potential of city networks (as well as networks of networks) is vast. Indeed, opportunities for further progress can be found in extending existing networks, creating subnetworks within larger networks, and fostering partnerships between networks to address specific issues.³⁵

Harnessing Public-Private Partnerships

Local governments should also ensure that communication and collaboration channels remain

open and productive among civil servants, the private sector, and the general public. According to Catherine Sheehy, head of advisory solutions at UL Environment, business can also play a role engaging audiences by distilling complex sustainability concepts into digestible and compelling imagery that can be used to educate shareholders and the public. (See “Case Study: Driving Sustainable Cities in the Construction Industry.”)

To signal active corporate responsibility, more firms are embracing sustainability principles within their strategic plans. Many companies

Case Study

Driving Sustainable Cities in the Construction Industry

The private sector is playing a critical role in advancing sustainability practices to support the SDGs, with one particular focus area being SDG 12, responsible consumption and production. Buildings are the cornerstones of cities: they are currently responsible for at least 50 percent of a city's carbon emissions. And as the *Building Urban Futures* report points out, “global building square footage is projected to double between now and 2050.”¹ The good news is that many architects, designers, construction firms, and material manufacturers are advancing efforts to integrate sustainable construction goals. Through green building objectives, universal design guidelines, and circular sourcing, the private sector can create the smart, resilient, safe, and accessible urban environments of the future.

Numerous sustainable initiatives are underway across the building industry, from design to sourcing to building. Some of these include the following:

- Using green-building rating systems, such as LEED, BREEAM, ASHRAE Standard 189.1, Singapore's BCA Green Mark, and the International Green Construction Code®
- Using standards, such as UL 3600, (the first standard for Measuring and Reporting Circular Economy Aspects of Products, Sites and Organizations), and UL 2799 (the Landfill Waste Diversion Validation)
- Obtaining GREENGUARD certification, the largest low-emitting certification program on the planet that helps improve indoor air quality—especially important as buildings are increasingly insulated to conserve carbon
- Establishing preferential purchasing guidelines for circular designs

Cities will grow rapidly over the next few decades. Thus, the private sector will be a crucial partner in ensuring this growth is sustainable and has a reduced impact on the planet.

1 Karen Weigert, *Building Urban Futures: City Carbon Actions Anchored in Building Codes and Standards*, Chicago Council on Global Affairs, September 2018, <https://www.thechicagocouncil.org/publication/building-urban-futures-city-carbon-actions-anchored-building-codes-and-standards>.

are also leading efforts to advance a circular economy, which can be defined as “an economic system that replaces the ‘end-of-life’ concept with reducing, alternatively reusing, recycling and recovering materials in production/distribution and consumption processes.”³⁶ Circular economies stand in opposition to the long-standing linear model of production in which materials are extracted, processed into products, bought and consumed, and finally disposed. According to the *2019 Circular Economy Gap Report*, released at the 2019 World Economic Forum in Davos, the global economy is 9 percent circular, and key indicators show that the linear economy model remains institutionalized in the global production system.³⁷ But waste disposal presents enormous challenges for local governments to address, including finite space for landfills, emissions and byproducts of incineration, and the cost of sorting and processing recyclable materials. Private-sector efforts to cycle waste

materials back into production systems will help to arrest the linear model.

For public-private partnerships to thrive, local policymakers should help firms overcome obstacles to adoption, such as cultural, market, regulatory, and technological barriers. They can also help stimulate behaviors in the private sector by creating incentives and ensuring access to financing to support the transition.

Some cities have developed institutionalized interactions between local governments, industry representatives, and professional associations. However, city leaders must consider how these existing collaborative structures can be used specifically to advance SDG implementation. After all, public-private partnerships have not been fully activated to advance the New Urban Agenda. (See “Case Study: World Economic Forum on Public-Private Partnerships.”) Examples may include SDG-related working groups,

Case Study

World Economic Forum on Public-Private Partnerships

As the New Urban Agenda was being prepared in October 2016, the World Economic Forum (WEF) drew upon the expertise of its preeminent steering and advisory boards of the Shaping the Future of Urban Development and Services Initiative to produce a call to action captured in the report *Harnessing Public-Private Cooperation to Deliver the New Urban Agenda*.¹ Recognizing the interdependent synergies of the New Urban Agenda and the SDGs, WEF made clear that implementation would not be achieved without a comprehensive approach.

“It is no longer merely the province of national, regional and city governments to deliver urban infrastructure and services,” the report argues. “The private-sector contribution is increasingly required for all aspects of the urban value chain, including policy-making, planning, design, implementation, operation and maintenance, and monitoring, as well as the financing of urban service delivery.”

The report recommends that the public sector engage the private sector early, build on circular and sharing economy concepts, articulate clear policies for public-private cooperation, and develop the appropriate legal and regulatory framework to make the partnerships effective. It also calls on the private sector to proactively engage with local communities for long-term support.

WEF’s Alice Charles argues that, to date, not enough has been done to activate and harness the potential of public-private partnerships in advancing the New Urban Agenda and SDGs more broadly. The strategies are there. But now we need action and results.

¹ *Harnessing Public-Private Cooperation to Deliver the New Urban Agenda*, World Economic Forum, October 2016, <https://www.weforum.org/whitepapers/harnessing-public-private-cooperation-to-deliver-the-new-urban-agenda>.

cosponsorship of regularized monitoring, or industry progress reporting.

Empowering Local Organizations and Youth

Community groups, nongovernmental organizations (NGOs), and civil society organizations (CSOs) represent a crucial link between the perceptions of policymakers and the experiences of residents.³⁸ As such, it is vital to engage these groups not only to understand and monitor conditions but also to seek qualitative input, build support for program implementation, and establish knowledge feedback loops as programs progress and mature. NGOs and CSOs are especially integral for empowering people in traditionally marginalized communities—for whom the SDG-related issues such as poverty, education, public health, and environmental degradation are acute. This approach not only provides engagement across most SDGs but also directly addresses SDG 16 (peace, justice, and strong institutions).

Engaging such organizations in policymaking requires political will and must be institutionalized through participatory processes. According to a working paper published by the Instituto de Desarrollo Sostenible y Relaciones Internacionales, “emerging forms of collaboration between NGOs are a way to operationalize the integrated and universal nature of the SDGs. However, these collaborations will remain fragile if governments and the UN do not follow the example to overcome silos, and if some types of NGOs are not sufficiently included in national and international processes.”³⁹ According to former Mayor Rodas, the role of NGOs in supporting SDG implementation by secondary and tertiary cities in particular underscores the importance of not only developing tools to strengthen capacity in local governments but also tailoring mechanisms to foster technical and institutional competence among CSOs and other independent actors.

Cities typically also have a wealth of engagement capacity in educational institutions at all levels. Primary and secondary school students can be engaged through integration of SDG principles across curricula, from science and math to the arts to physical education. In South Africa, for example, a “covert curriculum” in primary

and secondary schools addresses social and environmental justice, democracy, and inclusivity along ethnic, class, and gender lines.⁴⁰ In the case of climate action, such engagement has strong potential as children are often climate aware and can relate such issues to their daily experiences and then take steps to address it by conserving water, growing food, or walking or cycling to school. The SDGs provide a unifying narrative that can animate class discussions and spark interest among students in being part of something that spans the local and global.

SDG implementation can also engage students in extracurricular activities offered by schools or community programs. These activities can include environmental cleanups, management of urban gardens, and other events that integrate education and participation. (See “Cohort 2030—Next-Generation Human Rights Activists.”) Interest among young people should not be underestimated; the phenomenal rise in global visibility of student climate activist Greta Thunberg and her current strike for climate provide easy role models.⁴¹

Additionally, the value of universities is evident in their research capacity and global engagement. Their student bodies are also sources of participants in ideation and outreach activities, of authors and researchers for monitoring reports, and of ambassadors for student-based delegations at international network events.

Standardizing Data and Knowledge Sharing

The development of indicators that correspond to targets within each of the SDGs is an effort to systematize the role of data and empirics. It is crucial to sharing knowledge across cities and

The SDGs provide a unifying narrative that can animate class discussions and spark interest among students in being part of something that spans the local and global.

Cohort 2030—Next-Generation Human Rights Activists

The inclusion of SDG 16 could lead to the most expansive and potentially meaningful collective response in decades to tackling inequality and injustice while advancing human rights. To take advantage of this opportunity, President Susan Reichle and Global Director Ashok Regmi at the International Youth Foundation have jointly embarked with Carnegie Mellon University’s Ambassador Sarah E. Mendelson on Cohort 2030—an initiative to foster the generation that will demand and deliver this agenda. This generation, born after 1980, has the most to gain or lose from SDG implementation, as well as the characteristics that make Cohort 2030 especially aligned with the SDGs: digital nativity, views on gender and LGBTQ inclusion, a focus on inequality and climate change, antipathy regarding corruption, and an interest in ethically sourced products.

To unleash the potential of Cohort 2030, the initiative takes a place-based and multistakeholder approach. This includes identifying and supporting youth-led efforts around the world to advance peaceful, just, and inclusive societies; working with educational institutions to teach and train the next generation of human-rights and social-justice activists; and working with mayors who recognize the value proposition of the SDGs to advance equity, reduce violence, and promote inclusivity. Amid cynicism regarding the idealism and ambition of the agenda, Cohort 2030 can show the world what is actually possible.

other stakeholders. While there have been efforts to strengthen data-informed monitoring systems to measure SDG progress at the national level, such efforts are less institutionalized at the local level.

The Current State of National Standardized Data

At the national level, the SDG Indicators Database has more than one million country-level data points, which are used for supporting the UN secretary-general’s annual report. The database is also publicly available for comparing data.⁴² The *Cape Town Global Action Plan for Sustainable Development Data* is an example of how such initiatives can be translated to the local level. The plan aims to provide “a framework for discussion on, and planning and implementation of statistical capacity building necessary to achieve the scope and intent of the 2030 Agenda.”⁴³

The Integrated SDG Model is an instructive instance of a data-informed initiative aimed at furthering policy coordination around the SDGs. The

model simulates performance on all SDGs under baseline and alternative scenarios—expanding measurement of SDGs from discrete targets to a more comprehensive view.⁴⁴ If mainstreamed and localized, such models can eventually lead to a universal template for comparisons of city-level progress on SDGs.

The Current State of Local Standardized Data

Meanwhile, there appears to be no standard for data at the local level. Further, many cities align their data-gathering efforts to elements of their own urban plans, in accordance with the resources they have long developed and appropriated. Some cities, such as Bristol in the United Kingdom, have compensated by developing partnerships with local universities to study publicly available data and measure progress on the SDGs. (See “Case Study: Bristol, UK, *One City Plan* Alignment with SDGs.”)

Nevertheless, several models exist for systematic data collection on local-level SDGs

Bristol, UK, One City Plan Alignment with SDGs

The city of Bristol, UK, provides publicly available data on the alignment of its city-wide urban plan with each of the 17 SDGs, making it one of the most ambitious cases of localization and progress measurement. Through its *One City Plan*, which charts anticipated growth toward its 2050 vision of Bristol as a fair, healthy, and sustainable city, Bristol's local government quantifies its own progress on each SDG and also commits itself to a timeline for achieving further progress on each SDG that corresponds to the length of the plan.¹ The level of detail, time frontier, and degree of direct alignment with SDGs is extensive and represents an ambitious mandate related to data gathering. In September 2019, Bristol was short-listed for the iCapital Awards—the European Commission European City of Innovation Awards—because of its One City Plan approach to joined-up local governance.² This demonstrates the European Commission's recognition of the importance of city-wide leadership in its cities.

The city's 2019 Voluntary Local Review (VLR) and related data annex are also models for how data and case studies can be used to measure local progress on SDGs through a university collaboration. The Cabot Institute for the Environment at the University of Bristol led the study in partnership with the Bristol City Council and the Bristol SDG Alliance.³ As data are compared by using percentage changes from initial years in which they were collected, the authors of the VLR highlight where data gaps exist—providing an implicit call for additional monitoring resources.

Notably, the authors acknowledge what is arguably a significant challenge for gathering local data: “The functional area of Bristol is much larger than the City of Bristol—the subject of this report. The difference between the de facto urban area and formal administrative boundaries creates challenges in both implementing and monitoring the goals at subnational level. There is a clear need for an indicator framework that is tailored to the urban scale.” This declaration highlights a long-running challenge in urban and metropolitan governance—efficiency in service delivery and coordination of economic development—that waves of governance amalgamation and city-county consolidation have attempted to resolve since the mid-20th century. Despite these efforts, the social, economic, and environmental impact of cities extend far beyond their jurisdictions, especially in cities that have undergone “metropolitanization” or “regionalization”—that is, merging with nearby jurisdictions to create a partnership with greater scale, influence, and financial resources. This phenomenon challenges existing models of collaboration and mandates new ones, and this challenge applies not only to issues concerning data collection but also to broader issues about policymaking and planning.

1 “One City Plan and the Sustainable Development Goals,” Bristol One City, accessed on September 3, 2019, <https://www.bristolonecity.com/wp-content/uploads/2019/02/One-City-Plan-Goals-and-the-UN-Sustainable-Development-Goals.pdf>.

2 “Bristol Is Shortlisted to be European City of Innovation 2019,” Bristol City Council, September 11, 2019, <https://news.bristol.gov.uk/news/bristol-is-shortlisted-to-be-european-city-of-innovation-2019>.

3 Sean Fox and Allan Macleod, *Bristol and the SDGs: A Voluntary Local Review of Progress 2019, University of Bristol ESRC Impact Acceleration Account*, 2019, <http://www.bristol.ac.uk/media-library/sites/cabot-institute-2018/documents/BRISTOL%20AND%20THE%20SDGS.pdf>.

progress. These include the US Cities Sustainable Development Goals Index (a version of the Comprehensive Assessment System for Built Environment Efficiency focused on cities⁴⁵) and a political economy framework focused on data-driven governance as applicable to SDG monitoring. Local governments also have a substantial role to play in collecting and using data for national-level monitoring of SDG implementation. According to the UN Human Settlements Programme (UN-Habitat),⁴⁶ the localization of Agenda 2030 must involve the development of localized indicators (that is, those suitable to a particular scale), institutionalization of the use of local data in national reports, involvement of local actors in reviews of those reports, and SDG-based metrics for the evaluation of local plans. The need for attention to local data gathering capacities is clear.

The Future of Local Standardized Data

There is further scope for introducing a universal and standardized SDG localization monitoring strategy for the purpose of facilitating comparison and nudging cities toward the integrated adoption of all SDGs. However, such an initiative faces practical constraints such as limited resources, political pushback, and bureaucratic concerns about centralized control. Furthermore, each city's unique context calls for the interpretation of SDG strategies around a variety of conditions and capabilities. Indeed, the term "localization" itself implies a degree of adjustment. Nevertheless, variability in how cities incorporate and implement the SDGs should not impede the potential usefulness of knowledge sharing through standardized processes. There is much to be learned from other cities' policies, regardless of differing circumstances and contexts, and this can be achieved with studies that go beyond comparisons of two cases at a time.

One such initiative is the UN Department of Economic and Social Affairs' online registry to share good practices, success stories, and lessons

learned regarding SDG implementation at both the national and local levels.⁴⁷ The searchable resource currently boasts more than 400 cases from around the world—all focused on the local level and addressing all SDGs. These cases include advancing social and affordable housing in Bahrain (SDG 11), implementing the Sendai Framework at the local level in European Union countries (SDGs 1, 11, 13, and 14), institutionalizing community participation in urban service delivery through "design, digital, and dialogue" in Helsinki (SDGs 11 and 16), New York City's VLR (all SDGs), and organic farming in a Turkish village (SDGs 1, 5, 12, and 15). Other examples of sharing initiatives are the "tools" and "discuss and engage" functions of the Localizing the SDGs platform—a joint effort of the UN Development Programme (UNDP), UN-Habitat, and the UN Global Taskforce of Local and Regional Governments (GTF).⁴⁸

New York City's Global Vision | Urban Action program, managed through the Mayor's Office for International Affairs, is an example of a unilateral effort to share best practices for other cities to consider modeling.⁴⁹ The program is executed through site visits, panel discussions, and UN events to highlight lessons about SDG localization from the world's most forward-thinking leaders. Through Global Vision | Urban Action, New York City created the concept of the VLR as an opportunity to align urban policies with SDGs and communicate progress in a language meaningful to cities embarking on similar efforts. In an open call for city-level collaboration, Penny Abeywardena, the city's commissioner for international affairs, argues that the program connects "New Yorkers to a global conversation through the shared language of the Sustainable Development Goals. The Voluntary Local Review reflects our commitment to the values of fairness, inclusion and cooperation, especially at this critical time when our national government and some others are retreating from this urgent dialogue."⁵⁰

Challenges to Overcome

Local governments of all sizes worldwide face numerous challenges in localizing the SDGs, but six main priorities stand out above the rest: insufficient fiscal capacity, ineffective governance, poorly regulated public-private partnerships, data-related issues, the need for complex infrastructure, and difficulty navigating global engagement. Intermediary cities—those that have neither the resources of developed cities nor the support systems of extremely underdeveloped cities—have particularly unique challenges to overcome. (See “Unique Challenges of Intermediary Cities.”)

Insufficient Fiscal Capacity

In discussions about implementation related to almost any policy domain, capacity is a crucial issue.⁵¹ In the era of post-WWII development and, more recently, of growth defined by the Washington Consensus, global multilateral organizations have launched efforts to close the wealth gap between rich and poor countries. They have done so by promoting reforms to build capacity, whether through fiscal efficiency, economic liberalization, or institution-making. Countries progressing on these and other measures saw mixed outcomes, with failures often attributed to their imperfect adaptation of developed country models to unique local context. Struggling local implementation of the SDGs can be explained in part through this capacity lens. According to a Brookings report, “City governments do not have sufficient resources and capacity to achieve their goals,” noting however that “SDG localization provides an opportunity to pull together contributions from multiple stakeholders in the city.”⁵²

Indeed, fiscal constraints are among the most commonly cited limitations on local government capacity. Limited financial resources can stymie SDG implementation from the outset. Thus, local governments may lack the analytical capability to fully understand causes of complex policy problems regarding homelessness, poverty,

economic stagnation, and other challenges commonly faced in developing countries—and even overlook solutions to them.

Aside from cities in the most developed countries and subnational regions, most local governments eventually face tradeoffs due to resource scarcity, such as limited cash and borrowing capacity. When not relying on fiscal transfers from national governments, local governments rely highly on local tax revenues—underscoring the importance of local economic development to create thriving local economies. On the expenditure side, local governments must maintain continuity and quality of public services, including infrastructure, social programs, and core administrative functions. This presents a substantial fiscal squeeze that local governments must continually manage through increased taxes as well as tightened budgets. Arguably, for many local governments in developing countries, simply maintaining basic functions is challenging enough without added expectations concerning long-term issues such as sustainability. This is where translating SDGs into locally meaningful terms, along with their alignment with basic functions, becomes essential.

Fiscal constraints are among the most commonly cited limitations on local government capacity.

Unique Challenges of Intermediary Cities

According to former Quito mayor Mauricio Rodas, secondary, tertiary, and intermediary cities—those not enjoying elite status globally or even within their own countries—encounter several unique challenges. These include inadequate resources to measure SDG progress, weak technical capacity for project-preparation and evidence-based policy development, and geographic isolation (such as distance from major research universities and corporations) that hinder the development of effective partnerships. A 2018 article published by the Organisation for Economic Co-operation and Development states, “[intermediary cities in developing countries] play a fundamental role in connecting both rural and urban areas to basic facilities and services. Driven by population growth and rural-urban migration, intermediary cities worldwide are projected to grow at almost twice the rate of megacities (those with more than 10 million inhabitants) between now and 2030. Of these, the fastest growing cities are in Africa and Asia.”¹ Given that the SDGs concern issues in both rural and urban areas, intermediary cities with close ties to surrounding hinterlands are a focal point for the rollout of SDG initiatives.

Intermediary cities have limited access to international networks and lack the professional capacity to make their voices heard. The UN Capital Development Fund has created an international municipal investment fund to support cities in the 47 least developed nations of the world as they pursue efforts to advance the SDGs, but a vast number of intermediary cities in developing countries are left out. Poor access to information and financing mechanisms delay cities’ implementation of programs and initiatives that address the SDGs. These cities need technical assistance, capacity building, project preparation skills, financing, and data. Additionally, the private sector may not see commercial value in partnering with intermediary cities in developing countries due to excessive regulation, extensive paperwork, and a weak business climate. As measuring SDG progress is challenging due to a lack of technology and infrastructure, and small steps toward achieving the SDGs fail to gain traction, cities can become unmotivated.

To address these obstacles, intermediary cities would benefit from international cooperation. Finding innovative ways to measure progress and praising small wins can motivate cities to achieve more, with better use of resources and guidance from champion cities around the world. If intermediary cities work collaboratively and focus on initiatives that address several SDGs concurrently, their efforts, resources, and future partnerships would be more valuable and could have a greater impact.

¹ Jeremy Gorelick, “Raising Capital for Intermediary Cities,” Organisation for Economic Co-operation and Development, September 2018, <https://oecd-development-matters.org/2018/09/10/raising-capital-for-intermediary-cities/>.

Some governance and institutional restructuring tools are available to alleviate fiscal stress. The UN Capital Development Fund has created an international municipal investment fund to support cities in the 47 least developed nations of the world as they pursue efforts to advance the SDGs. Jaffer Machano, the global program manager of the fund, argues “cities are the main implementing unit of the SDGs”—but they need the technical assistance, project preparation, and financing to be successful. (See “Case Study: UN Fund to Advance SDGs in Cities in Least Developed Countries.”)

Another useful approach to increasing fiscal capacity is metropolitanization; by combining the asset bases of multiple governments into a single body, a region’s borrowing capacity can be increased. In Auckland, several district councils amalgamated into a unified Auckland Council in 2010, enabling the newly chartered entity to use a much larger asset base as collateral in borrowing funds for investment in transit infrastructure. This is one model in which political contention between local and national governments (with the former often more politically progressive than the latter) can be bypassed in funding SDG-related infrastructure. If such reform is not feasible, metropolitan planning organizations (e.g., the Association of Bay Area Governments in San Francisco) and issue-specific bodies with metropolitan reach (e.g., the Bay Area Air Quality Management District) can be used to promote region-wide administrative buy-in on particular initiatives.

Ineffective Governance

In addition to fiscal constraints, local governments often face legal, regulatory, and institutional constraints that erode governance effectiveness and responsiveness. Two concepts exemplify these constraints. First, “rule-of-law” implies codified and institutionalized procedures for undertaking SDG policy development. In particular, clarity and consistency between local and national laws is essential in addressing SDG-related issues. Second, the “politics-administration divide” implies that administrative functions be independent of political interests and thus immune to political preferences. An example of a breakdown in

the politics-administration divide is the Trump administration’s removal of language about climate change from official government documents.⁵³ The challenge in addressing institutional constraints is that their pathologies are often deeply embedded in governance structures, political systems, and the society writ large; they elude simple legal or technocratic reform because they are reflections of interests, behaviors, and norms. The lure of fashionable policy ideas such as becoming a smart city often traps local governments into believing—falsely—in a path to improved economic and human development outcomes that bypasses the messy work of institutional reform.

Additionally, government agencies are often plagued by poor managerial capacity, whether due to mismatched leadership or associated organizational appropriation by corrupt or self-serving interests. This is the “bad governance” or “boss politics” explanation often deployed to explain the failure of development efforts amid robust reform prescriptions and fiscal aid programs.⁵⁴ Lagging political capabilities often relate to bureaucratic capture—that is, when public officials and agencies are beholden to interest groups rather than to the electorate.⁵⁵ This is seen most acutely in one-party and politically unitary states, which can exhibit declining policy responsiveness over time because of lacking representation and accountability mechanisms.

Finally, as a corollary to governance, political obstacles pose a significant challenge. According to former Mayor Rodas political factors—including relationships between mayors and national governments—are frequently the most difficult to overcome. The fraying of these relationships can limit cities’ ability to borrow from international financial institutions, as local governments lack national guarantees on debt and large asset bases as collateral. Rodas argues that it is necessary to redesign the architecture of international development finance with the goal of ensuring cities’ access to needed resources; examples are reforms to facilitate direct lending to cities and creative new institutions such as a multilateral development bank focused on cities. Reforms and policy initiatives

UN Fund to Advance SDGs in Cities in Least Developed Countries

The amount of annual capital investment needed to achieve the SDGs by 2030 has been calculated at \$5 trillion to \$7 trillion, yielding an annual financing gap of \$2.5 trillion. At the same time, the most recent OECD Development Assistance Committee report shows that in 2017, total Official Development Assistance to developing countries reached a peak of only \$146.6 billion. The amount of financing needed to make a difference in municipal investments in developing countries necessitates innovation to allow direct access to domestic and international capital markets.

The United Nations Capital Development Fund, the capital investment agency primarily focused on the world's 47 least developed countries, is developing an access frontier for appropriate infrastructure capital to municipalities in those countries. This frontier, the International Municipal Investment Fund (IMIF), is a fund targeted at \$250 million. The IMIF's main objective is to invest in SDG-oriented local government projects in the developing world and to stimulate the opening of capital markets to local governments. The fund will mostly focus on investment opportunities falling into one of four distinct categories: transportation, green economy, utilities, and food security infrastructure. The IMIF will further the objectives of the Malaga Coalition—led by the UN Capital Development Fund and United Cities and Local Governments (UCLG)—to promote a financial ecosystem for local governments to accelerate the implementation of the 2030 Agenda. The pipeline for the IMIF includes the opportunities identified through its partners, which include the African Development Bank, the C40 Cities Climate Leadership Group, the Global Fund for Cities Development, ICLEI—Local Governments for Sustainability, the Swiss Agency for Development and Cooperation, and UCLG.

can be based also on the successful experiences of Green Municipal Funds, Green Bonds, and Energy Efficiency Funds, among others. Additionally, according to Rodas, mayors should focus on building the political legitimacy of SDG initiatives through communications strategies targeting multiple constituencies.

Poorly Regulated Public-Private Partnerships

Engaging the private sector offers one approach to filling the capacity gaps of local governments in the pursuit of SDG implementation, through “hybridization of governance.”⁵⁶ Public-private partnerships (PPPs) have been deployed across numerous policy sectors relevant to SDG implementation, with infrastructure a common example. The sector's role in financing SDG

implementation is clear; as the *Financial Times* notes, “Since the SDGs were launched, the World Bank has estimated that it will take about \$4tn of annual investment to create the infrastructure needed to achieve the goals. Various UN bodies put the price tag at between \$5tn and \$7tn each year. However, the World Bank also reckons that western governments only provide an annual \$150bn of ‘overseas development assistance’—or aid. Even if you include multilateral funding from bodies such as the World Bank itself, the total comes only to about \$1tn. Thus the trillion-dollar question is: how will the UN plug that gap?”⁵⁷ The answer, it seems clear, is the private sector.

In addition to financing, the private sector often has the subject-level knowledge and expertise, risk absorption space, and project management

experience that the public sector lacks. According to the World Bank senior vice president for the 2030 Development Agenda, United Nations relations, and partnerships, “involving the private sector—well—can not only help increase the stock of infrastructure assets, but it can also strengthen their resilience, create more sustainable solutions, and improve access to infrastructure services.”⁵⁸

Yet PPPs are not without flaws. First, the use of PPPs to achieve public welfare targets may be met with ideological opposition by those who feel the private sector is not an appropriate service provider. This long-standing debate saw an increase in pushback after the “new public management” reforms of the 1980s.⁵⁹ Second, the private sector may not see commercial value in joining such partnerships; as such, PPP frameworks must be designed to ensure that SDG projects are attractive for private investment. A third challenge is the transaction cost related to monitoring contract terms, the incentives for public officials to enter into incomplete contracts,⁶⁰ and the specter of corruption (as has been observed in the privatization of state-owned enterprises in developing countries).⁶¹ Private firms can bid low on contracts and implement unexpected changes throughout project delivery, leading to budgetary overruns.

According to a commentator at the World Bank, “One approach [to creating a competitive PPP tendering process] has been to adopt e-procurement platforms—often sponsored by [multilateral development banks] and development agencies—that ensure the playing field is leveled and that cash-strapped governments are not being milked by unscrupulous public and private sector players focused on profiteering.”⁶² Regulation of PPPs itself requires a certain level of governance capacity. As SDG localization moves forward in developing countries and in other places with weak or captured governance systems, collaborators and the global community must encourage practices that do not compromise the overall objectives of the SDGs. Former Mayor Rodas argues that confusing and complex PPP regulatory frameworks in many countries prevent cities from attracting private investment for SDG-related projects, particularly

infrastructure; the needed policy and legal reforms can be drafted based on international best practices.

Data-Related Issues

With local action on SDGs encompassing a variety of issues—from infrastructure and industrial production to social programs and institutional design—expertise and data provide a foundation for evidence-based policy solutions. Data are crucial in all elements of the policymaking process but have been used primarily for monitoring and evaluating SDGs. Data gathered at later stages of the policy process can be fed back into earlier stages, ensuring that the overall process is duly empiricized. However, cities face several data-related issues, including a lack of it, excessive focus on easily measurable indicators, and loss of data ownership to the private sector.

A Lack of Data

Because the ability to collect and analyze data is determined by a city’s resources, wealthier cities are expected to be leaders on information-based SDG localization. The concept of the smart city provides a marketable (if often substantively empty) banner under which to package the vast array of data-informed initiatives undertaken at the local level, and cities in wealthy countries are embracing the concept. In a global ranking of smart cities published by Eden Strategy Institute, cities in developed (and primarily Western) countries feature prominently (14 of the top 20; 30 of the top 50).⁶³ Only six in the top 20 are in Asia: Hong Kong, Seoul, Shanghai, Shenzhen, Singapore, and Taipei. In the top 50, only 18 percent were from developing countries (where, notably, 97 percent of the world’s population growth will occur between 2013 and 2030⁶⁴).

While the narrative about using information, data, and smart technology to address policy problems may be alluring to governments, the practical challenges of implementation are numerous: insufficient or nonexistent infrastructure, limited public and private sector expertise, lax oversight and management, and the absence of a clear political case for fiscal commitments. According to a UN-Habitat report, “Many local and regional

governments lack adequate mechanisms to gather information and data at territorial level and local data sets are often not consistent with national data collection systems.”⁶⁵

Excessive Focus on Easily Measurable Indicators

Beyond a lack of data, there is a more fundamental and systemic challenge facing cities in the digital age: the streetlight effect. This effect describes a phenomenon in which policy attention is focused primarily on those issues and problems that are

observed and measured. Growing interest in evidence-based policymaking and planning, along with an increasing fetish for metricizing targets, may compel city governments to appropriate resources toward targets for which progress can be indisputably measured. The timeworn business management adage applies in this case: “you cannot manage what you cannot measure.”

The mind-set of techno-rationalism embodied in this adage risks distracting city governments from the equally important but messier task of addressing “wicked problems.”⁶⁶ For a mayor to

Case Study

Bridging Research and Practice through Urban Science

The phrase “smart cities” has been applied to a generation of technologies designed to improve urban governance and service delivery. It has undoubtedly had substantial fortune in the early 2000s.¹ Amid this movement is a burgeoning coalition of scholars and practitioners exploring opportunities for cities to go beyond the *smart* paradigm, which values the information or data ecosystems underpinning the management of cities,² into a more reflective *informed cities* paradigm.³ This alternative approach takes a broader view of technology’s potential to solve urban problems. Data and smart technologies are not ends unto themselves—their value is also in their ability to facilitate interactions and practices that politically legitimize urban governance.

According to Michele Acuto, Karen Seto, and Susan Parnell—cochairs of the recent Nature Sustainability International Expert Panel on “Science and the Future of Cities,” urban research today is narrowly focused on specialized academic disciplines or studies of specific cities. Rather, it should be a comprehensive, interdisciplinary, and coherent “urban science” that connects “scientific ways of understanding cities and practical modes of setting policies to govern cities the world over.”⁴ If cities are serious about achieving SDGs, they need to institutionalize science–policy collaborations, establish a global monitoring mechanism for cities to harmonize metric design and data monitoring,⁵ and internationalize urban science-based research.⁶

1 Anthony M. Townsend, *Smart Cities: Big Data, Civic Hackers, and the Quest for a New Utopia* (New York: WW Norton, 2013).

2 Jessica Espey, “The Missing Ingredient for a Better World: Data,” *Nature* 571, no. 7765 (July 2019): 299, <https://doi.org/10.1038/d41586-019-02139-w>.

3 Michele Acuto, “Global Science for City Policy,” *Science* 359, no. 6372 (January 2018): 165–6, <https://doi.org/10.1126/science.aao2728>.

4 *Nature Sustainability Expert Panel on the “Science of Cities,”* Springer Nature, 2018, <https://www.nature.com/natsustain/expertpanels>.

5 Michele Acuto and Susan Parnell, “Leave No City Behind,” *Science Magazine* 352, no. 6288 (May 2016): 873, <https://doi.org/10.1126/science.aag1385>.

6 Timon McPhearson et al., “Scientists Must Have a Say in the Future of Cities,” *Nature* 538, (October 2016): 165–6, <https://doi.org/10.1038/538165a>.

improve governing legitimacy, he or she can use global rankings to illustrate progress; these may measure supply-side factors such as investment in transportation and infrastructure, or outcome-side factors such as scholastic achievement or commute times.⁶⁷ One example is crime: while a mayor may argue that additional investment in policing has led to a statistical decline in crime (both clearly measurable indicators), such a claim says little about efforts to address systemic determinants of crime (e.g., socioeconomic inequality, systemic bias in legal systems, and chronic neglect of schooling and neighborhood conditions). This is an example of how data-informed approaches risk luring city governments into the trap of myopic empiricism.

Loss of Data Ownership to the Private Sector

Finally, the use of data, and the more general incorporation of technology in urban governance, risks shifting influence over policy and governance from elected governments to the private sector. As companies possess the expertise to develop and scale data collection systems and smart-city technologies, the adoption or purchase of such capabilities by governments may be driven as much by the push-marketing strategies of for-profit companies as by the practical needs of governments. In some smart-city development initiatives, corporate interests can monopolize the planning and governing process from the earliest stages. A newly developed smart city in South Korea serves as an example:

“The power–knowledge nexus that legitimizes Songdo’s technocratic authority is a fundamental characteristic of the smart city idiom. It enlists corporations, transnational institutions, governments, nongovernmental organizations, research institutes, and academia to shape public policy by controlling its discourse; this process is actualized by the application of theoretical concepts such as collaborative, network, and joined-up governance. The tight relationship among corporations, organizations, and state actors—enabled largely

by neoliberal reforms—generates power and profit for smart city product and service providers.”⁶⁸

It is crucial, then, that public-private collaborations on such issues be designed to ensure fair negotiation and close collaboration on projects tailored to particular needs.

Need for Complex Physical Infrastructure

A report jointly commissioned by the GTF, UN-Habitat, and UNDP states “Local and regional governments should play a leading role in multi-stakeholder mechanisms, while respecting the independence of nongovernmental actors. This role could include ensuring a minimum infrastructure, setting agendas, proposing specific topics, distributing relevant materials, or even awarding grants for particular activities.”⁶⁹

Physical infrastructure plays an important role in facilitating social, economic, and environmental activity. However, the breadth of SDGs and related targets and indicators makes any analysis of infrastructure difficult to generalize. Moreover, the issue of infrastructure pertains not only to SDG 9 (industry, innovation, and infrastructure) but across all 17 SDGs as one among several factors enabling policy action. Nevertheless, certain issues shape infrastructure development across all sectors and infrastructure types—whether seawalls, social housing, recycling facilities, schools, hospitals, transportation, or any number of other hard assets that facilitate SDGs implementation. For example, the Intergovernmental Panel on Climate Change special report *Global Warming of 1.5 °C* states that “economic, institutional and socio-cultural barriers may inhibit . . . infrastructure system transitions, depending on national, regional and local circumstances, capabilities and the availability of capital.” Four of the most crucial issues for cities are long-term foresight and planning, the scope of infrastructure assessments, integration of new infrastructures with existing infrastructures, and intergovernmental collaboration.

Long-Term Foresight and Planning

The infrastructure planning process must embrace long-term foresight in anticipating project feasibility and impact. This perspective is crucial for sustainability-related infrastructure. But the degree of uncertainty around the impact of evolving phenomena (such as climate change, geopolitical tensions, disruptive technologies, human health, and biodiversity) is taxing. Given that these phenomena are difficult to model, and that physical infrastructure often requires analyses of impact and financial return on investment that extend decades and beyond, the planning process is fraught with ambiguity.

For example, the Hong Kong-Zhuhai-Macau bridge, completed in 2018, has an anticipated lifespan of 120 years⁷⁰—a bold declaration given the frequency and severity of typhoons and extreme weather events in the region and the likelihood of their increasing intensity due to climate change.⁷¹ When adding interoperability among related infrastructures into an assessment process that must already anticipate the impact of climate change, the complexity of infrastructure planning dramatically increases.⁷²

Scope of Infrastructure Assessments

Infrastructure planning must consider not only capital expenditures but also operating expenditures. The latter again depends on planners' ability to forecast demand, financing conditions, and exogenous stressors such as climate change. In the process of assessing and developing infrastructure, analyses of feasibility and impact have historically been narrow and focused on issues with costs and benefits that can be easily analyzed and forecast.

According to a recent article in *Urban Science* on infrastructure and resilience, "Most cities rely on the capital investment planning (CIP) process for allocating resources toward the maintenance and repair of existing municipal infrastructures and investing in new or expanded infrastructures, such as roads, energy distribution, and wastewater treatment."⁷³ A new set of key performance indicators are needed, including infrastructure's impact on a city's carbon footprint, environmental

and social assessments, and complementarity with prioritized SDG targets adopted in the city's plan. Additionally, it is crucial that planners take a life cycle view of infrastructure assessment that accounts for the ability of the asset to remain fit-for-purpose under multiple scenarios.

Integration of Old and New Infrastructure

Designing resilience into infrastructure projects is fundamental. Interoperability and collocation among assets, particularly amid external stressors such as climate change and the overburden of increased demand, mandate a holistic perspective in the infrastructure planning and assessment process. For example, planners must consider whether new infrastructure can overlay existing and aging assets without compromising the effectiveness of either.

The need for integration is illustrated through an example of a new water main or new pavement being placed over an aging bridge.⁷⁴ New infrastructure must be resilient—that is, it must not only resist the aforementioned stressors but also be adaptable for later refurbishment or rebuilding. In China, so-called sponge cities can be retrofitted with new infrastructure, such as permeable pavement and bioswales, to facilitate groundwater absorption and lessen the severity of urban flooding.⁷⁵ Uncertainty about whether infrastructure assets maintain their effectiveness in the long run, particularly amid evolving conditions, illustrates the substantial challenges inherent in the planning and foresight process.

Intergovernmental Collaboration

Finally, the types of mega infrastructure assets that affect or support sustainability (e.g., for transport, water management, and hazard protection) increasingly transcend political boundaries in their scale and thus involve multiple governments. The Pearl River Delta in southern China provides one example. For the world's largest city-region, with nearly 50 million inhabitants across several major cities in close proximity, coordination on infrastructure is not only desirable but necessary. In addition to the Hong Kong-Zhuhai-Macau bridge,

the region's water supply is also dependent on region-wide planning for the extraction, transfer, storage, and delivery of water between watersheds and among municipalities. This requires a substantial degree of operational collaboration among local governments, with the “one country, two systems” arrangement between Hong Kong and the mainland representing a constantly evolving and potentially problematic political variable.⁷⁶

Difficulty Navigating Global Engagement

Given the array of global urban networks, even for individual issues such as climate action and migration,⁷⁷ cities with limited resources (including staff time) are faced with the prospect of strategically selecting which networks to join. As Ambassador Ivo Daalder, president of the Chicago Council on Global Affairs, wrote in the *Chicago Tribune*, “In all, there are now some 300 networks of cities to help coordinate collective action and influence international negotiations.”⁷⁸ With networks often overlapping in membership and theme, even the process of determining which networks would bring the greatest value to an individual city requires significant time and resources. The 2018 report *Toward City Diplomacy* surveyed the city halls of 27 global cities and their engagement in networks and found that in addition to the limitation of city leaders' time, “cities also acknowledged that traveling to attend meetings and conferences is difficult, their external engagement budgets are limited, there are too many networks and events competing for limited time and resources, and their city offices are short-staffed.”⁷⁹

Nevertheless, participation in networks is crucial for facilitating knowledge sharing on SDG implementation, as it is for every other major policy issue, but collective action on SDG-related initiatives need not be restricted only to networks; cities can signal their global engagement by also committing to collective goals as signatories on action agendas and joint declarations. Political commitment is needed from mayors based on their recognition that the benefits of network membership are largely proportional to the efforts contributed.

One example is the Chicago Climate Charter, whose signatories—after the 2017 North American

Climate Summit—collectively affirmed their commitment to pursuing targets on emissions, data tracking and reporting, community engagement, and incorporation of sustainability principles in formalized urban plans, among other items.⁸⁰

According to the accompanying report, “Recognizing that not every [charter-based] action makes sense for every city, and that different contexts, geographies, and other external factors determine the effectiveness of policies, some cities customized their commitment [to the Charter] regarding areas such as buildings, green spaces, mobility, reducing carbon emissions, and waste management.”⁸¹

Networks and multilateral agreements and commitments offer cities an opportunity to visibly affirm their commitment to the SDGs and related principles, institutionalize collaborations, exchange information, and strengthen the local and national domestic political legitimacy of their SDG implementation efforts. The challenge for under-resourced city governments is to meet the expectations to which they agree in such summits and agreements.

Recommendations for Action

There are numerous complicated, multidimensional, and expensive challenges cities need to overcome to help advance the SDGs. But their role and importance in this agenda are undeniable, and there is great momentum propelling these initiatives and strategies forward. Cities seeking to position themselves as partners in this global initiative may consider the following recommendations.

1) Build Smart Capacity

A discussion about SDG localization is difficult to do at a global scale, as the capacities of cities and their country contexts vary widely with respect to economic, social, and institutional development. The best-resourced cities—including many considered to be global cities⁸²—are likely to be among the early embracers of SDG localization, whether through newly conceived initiatives or the continuation and revision of long-standing initiatives related to sustainability mandates that predate the SDGs.

Many early accounts and lessons about SDG modernization (such as those within the first decade since the introduction of the SDGs) will likely reflect the experiences of cities with contexts that are not universally comparable. As such, there should be parallel discussions about capacity along differing developmental contexts. For well-resourced cities, pursuing innovative measures and deeper institutionalization in SDG localization is the next step after the introduction of discrete initiatives. These cities sit at the frontier of the horizon of sustainability possibilities, and their efforts will be crucial not only in generating outcomes but also in modeling steps for less fortunately situated cities as they develop and modernize. For under-resourced cities, governments should be strategic about sharpening capacity in areas of governance deficiency and reshape global best practices to suit unique local contexts and challenges.

2) Embrace a Comprehensive View of Knowledge

The proliferation of technology-enhanced data collection has lured political leaders, bureaucrats, and even drafters of sustainability declarations and agreements into a faithful reliance on the certitude of numbers. Data-informed assessment and monitoring play an undoubtedly crucial role: enabling the identification of connections between policy initiatives and outcomes, facilitating the comparison of performance across cases, and illustrating patterns of progress over time. Statistics about economic, demographic, and social issues underpin many policy frameworks.

However, the presence of wicked problems mandates that policymakers consider the unmeasurable as well as the measurable. Public perceptions about complex problems—such as inequality, racism, peace, and justice—are based as much on belief and ideology as they are on hard data. This is a political reality that many countries are only now beginning to experience, and painfully. Pragmatic policymakers need to understand why and how alternative ideologies congeal, simmer, then boil over. With some creative thought, political courage, and genuine civic engagement, developing this understanding may be possible without

legitimizing destructive ideologies that seem to have more visibility and political currency in the modern era.

Embracing a broader concept of knowledge requires recognizing that empirical rationality is not confined within a political vacuum. Rather, knowledge exists in a larger sociopolitical context that is messy and difficult to understand yet consequential to progress on the SDGs. This dynamic implies the need to understand pushback on the fringes of the political spectrum, including defensiveness against perceived assaults on traditional cultural identity and local sovereignty. It also requires acknowledging the manifestation of fringe ideologies in larger and highly consequential political movements (such as those resulting in the election of presidents) that are unlikely to fade with the passing of individual leaders. Additionally, this dynamic implies the need to acknowledge, particularly in developing contexts, the vast store of indigenous knowledge and “folk wisdom”—recognizing it as a valid political force without appropriating, romanticizing, or patronizing it.⁸³ Modern empiricism marginalizes these perspectives at its own peril, and the current political climate of many countries is evidence. In practical terms, this idea advocates for better integration and democratization of policy solutions from a wide array of sources.⁸⁴

3) Engage and Network—Strategically

Efforts to localize the SDGs coincide with a collective call to globalize the sustainability agenda through multilateralism, charters, collaborations, and city networks. Opportunities for cities to engage globally beyond bilateral ties are proliferating, and cities must decide which networking opportunities to embrace given limited resources. These decisions may come down to the particular elements of the SDGs a city has chosen to plan for, such as climate change, social justice, or green economy. Cities may also engage in networks in which members have similar circumstantial mandates, such as secondary cities, inland cities,⁸⁵ post-industrial cities, resource-based boomtowns, or cities with a disproportionate share of their national economies.⁸⁶

The number of networks in which a city can participate is likely limited because of the level of engagement needed to ensure meaningful participation. City governments should not measure the degree of their global engagement by the number of networks joined but by the qualitative value they add to and receive from other members of networks. Prioritizing a qualitative rather than quantitative approach can help cities benefit more

from their global outreach efforts. According to Jodi Allemeier, programme lead at the Western Cape Economic Development Partnership, cities should consider strategic foci and political agendas, alignment with interests and challenges of network members, determination of what constitutes successful or productive participation, and budgetary or resource concerns when joining networks.⁸⁷

Recommendations

Build Smart Capacity

For well-resourced cities:

- Deepen institutionalization of SDGs in urban plans.
- Integrate strategies across sectors.
- Monitor outcomes and analyze effectiveness of initiatives to share best practices.

For under-resourced cities:

- Build capacity in individuals (public servants), organizations (agencies), and the broader system (urban-national and urban-global relations).
- Focus capacity-building on analytical, managerial, and political competencies.
- Be receptive to lessons learned elsewhere while recognizing the need to adapt based on context.

Embrace a Comprehensive View of Knowledge

For all cities:

- Recognize the limits of empiricism by balancing data-informed knowledge with “other” (e.g., “outsider”) knowledges.
- Engage with and seek to understand antimodernist and antiprogressive political movements rather than marginalize them.
- Humanize empiricism by underscoring its relevance to understanding and improving the daily experiences of individuals.

Engage and Network—Strategically

For all cities:

- Resist the urge to oversubscribe to networks, which can lead to under-commitment.
- Balance network membership between those whose members face similar challenges and those whose members face different, yet potentially relevant, challenges.
- Approach membership as an opportunity to learn and share best practices rather than as an exercise in performative politics and city branding.

Conclusion

Quito, Ecuador, offers an example of how a simple initiative can bolster efforts to meet numerous SDG targets. According to former Mayor Rodas, the city's urban organic garden program checks multiple boxes on SDG themes: climate change, poverty, gender, food security, and health. This illustrates that SDG localization does not always need to be a grand gesture; smart and basic efforts to improve the quality of life at the neighborhood level can stimulate progress at the smallest scale. This is demonstrably the true spirit of the SDGs—to improve individual lives as well as society writ large by addressing systemic threats to sustainability in ways that are just, equitable, durable, and feasible.

That the world is at social, economic, and environmental crossroads has been robustly argued in both the practitioner and academic spheres. The dire warnings of climate scientists as well as populist flare-ups about social and economic conditions illustrate that the challenges of society are converging into a panoply of systemic crises and wicked problems that elude simple and technocratic policy solutions. As much as policies do not exist in a silo or vacuum, nor do cities; their fate and the actions they take to determine it are inextricably linked to those of their regional, national, and global contexts. Taking this as a situational imperative to address sustainability, many cities have embraced the SDGs as a visionary frame around which to strategically reorient plans and policies. Anthony Pipa writes, “For many cities, a key step in localizing the agenda is to align existing city strategies and plans against the SDGs, connecting their local vision to a global consensus.”⁸⁸ As an aspirational set of goals with both visionary breadth and practical detail, the SDGs are currently the best embodiment of global collective agreement about the urgency of issues such as climate change, social justice, economic inequality, and industrial restructuring—and the self-reinforcing interdependencies among them all.

This report has examined the opportunities and challenges of SDG localization, contemplating how the SDGs are defined and framed, how national political climates are a context for localization, and how both local and global engagement advances the cause. The report has also examined the role of knowledge and data in the measurement of progress, sharing of knowledge, and reinforcement of knowledge-based power structures as determinants of policy values. The report concludes by identifying three key challenges and related solutions: governance capacity, knowledge and data, and global engagement. This is not a comprehensive list of challenges and solutions, but it speaks to the most salient issues at this stage of the SDG localization effort. Moreover, recommendations have been framed for relevance to cities across development levels.

Roman politician and philosopher Cicero implied in his treatise *De Re Publica* that nature acts independently of the will of humanity. While debates rage about how to manage human affairs in the face of natural singularities and existential threats, institutions, practices, and values are emerging that cast the challenge as urgent and in need of collective attention. In Cicero's view, “orderly and respectable government was best achieved when all parties involved recognized the need to give a little on some occasions in order to gain on others.”⁸⁹ It is this essence of understanding, magnanimity, and mutuality that should connect the localization of SDGs with their globalization.

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