

Docharkheh, citizens are now favouring greener modes of 'soft' transportation, thus relieving environmental pollution, energy consumption and traffic congestion. In addition, smart waste collection e-applications are reshaping traditional methods of solid waste management through smart sorting, collection, control and disposal. By increasing the accessibility and connectivity of key services, social sustainability can be solidified, creating a more inclusive and equitable city. Encouraging the use of new technologies within local governments can thus be seen as highly beneficial to help generate innovative solutions to the challenges faced by individual city governments, understanding them as key tools to promote sustainable urbanization in line with the 2030 Agenda.

3. Improve governance resilience and crisis management capacity in the context of public health emergencies

With the increasingly structured smart city infrastructure, Tehran municipality is capable of effective COVID-19 containment. Six key tools have significantly improved governance in crisis: MyTehran citizen services platform; Shahr-Pay payment platform; a bicycle development plan to promote social distance; smart waste collection management; Behesht Zahra online funeral services; and open data for epidemic prevention and control. The outbreak of COVID-19 has accelerated the widespread use of technology in cities. Digital services are changing and adjusting citizen behaviour in multiple ways to improve living standards in the post COVID-19 pandemic era. This new era is full of hope in cities that apply smart technologies as the level of urban governance interventions has been greatly improved, supported and aided by increased levels of data sharing among citizens, businesses and the city management level.

Los Angeles, United States of America: Leveraging Partnerships and Open-source Technology to Drive Local Action on the SDGs

Case background

With a lack of commitment to international agreements on sustainable development at the national level in the

United States of America, Los Angeles (LA) took the initiative to become one of the first cities in the world to take action on the SDGs at the local level. Following Mayor Eric Garcetti's pledge of striving to meet SDG commitments (see Figure 6.11), LA council adopted the SDG framework in late 2017, through which the Goals have now become fully integrated into the city's sustainability plan (LA's Green New Deal) and other strategic documents. The city government also committed to an open data approach to increase the transparency and accountability of urban management, empowering citizens to participate in governance with a greater understanding and impact on the ground. Through such an open-source data approach, the city has sought to maximize the advancement of the 2030 Agenda, enable the identification of opportunities to identify successful initiatives, mobilize new initiatives, identify weak spots and those being left behind, whilst also expand connections with partners and practitioners locally and globally. Such an active approach has placed the city in a position to spearhead the global development agenda.



Source: City of Los Angeles. URL: <https://sdg.lamayor.org/about/sdgs-la> (Accessed: 03/06/2022)

Figure 6.11 Mayor Eric Garcetti positioned the city of Los Angeles to springboard action on the SDGs

LA council has approached SDG localization through three primary avenues: ① measure; ② mobilize; and ③ connect. Measuring includes the collection of data, the generation of SDG insights and the production of VLRs via data reporting. Mobilizing involves the establishment of new projects to advance SDG implementation, capacity building and activity mapping. And connecting refers to the development of linkages and synergies with partners, engaging stakeholders and disseminating urban best practices with local and global stakeholders.

The council subsequently pioneered two open-source tools to accelerate SDG localization action. Open SDG is an open-source SDG data reporting platform and SDG Activities Index is a living encyclopedia of people and organizations who are actively working to accelerate SDG implementation. As the tools are open-source they can be viewed publicly by other cities or entities, each containing their own Wikipedia pages. Guidelines were made available via the Open SDG Quick Start Guide to enable contextually adjusted platforms to be set-up quickly, and without the need of a programmer. Accordingly, the platform possesses codes which can be reused by other cities to build their own platforms. The tools help the city to measure, mobilize and connect SDG action at the sub-national level, and have helped the city to build partnerships and generate equitable, sustainable initiatives across economic, environmental and social dimensions.

Implementation process

1. Applying a partnership-based approach to the SDGs

LA council's work to advance SDG alignment and reporting was largely initiated through a grant by the Conrad N. Hilton Foundation via the Mayors Fund for Los Angeles (MFLA). In February 2018, the city entered into partnership agreements with LA's Occidental College; a political economy institute through the John Parke Young Initiative, as well as the World Council on City Data for support on SDG work. Additional university partners including the Institute on Inequalities in Global Health at the University of Southern California; the Thunderbird School of Global Management at Arizona State University; the World Policy Analysis Centre at the University of California Los Angeles; and Pomona College, also provided

support to the initiative through the provision of a pipeline of students to work of the SDG data collection process. Accordingly, the city has engaged over 160 graduate and undergraduate students from these partner academic institutions who have helped support SDG work, including the completion of more than 22 research projects on individual SDG targets.

Efforts to advance SDG action were thus strongly rooted in strong, multi-stakeholder partnerships, in particular city-university collaborations, which specifically played a pivotal role in the delivery of the city's online SDG tools (see Figure 6.12). Such partnerships embedded LA as one of the eight hub cities globally to share SDG-related data collected through the development of locally contextualized SDG indicators. With SDG mapping and alignment as key priorities, LA council also sought to establish baseline measurements to track SDG progress by developing an inventory of existing city plans that align with the Goals. All city activities, plans, policies and data were mapped to the SDG framework which helped to identify any gaps in policy and/or operations as well as key stakeholder required to achieve progress. Where certain indicators were not directly applicable to the local level, a methodology was devised for the council to determine the applicability of specific SDG targets to the city, revising those that did not reflect the local context. The SDG mapping and alignment process



Source: Office of the Mayor of Los Angeles. URL: <https://unfoundation.org/blog/post/using-data-for-good-how-l-a-is-achieving-the-sdgs-through-gender-equity/> (Accessed: 04/06/2022)

Figure 6.12 LA council actively engaged students and youth members to advance progress on the SDGs



Source: City of Los Angeles. URL: <https://sdg.lamayor.org/about/sdgs-la> (Accessed: 03/06/2022)

Figure 6.13 Local departments in Los Angeles committed to adopting the SDGs

helped to compile an inventory of current activity through which stakeholders, policy gaps and trends in urban development could all be identified (see Figure 6.13). In addition, gap analysis helped to establish key partners to further advance SDG progress.

2. Developing a suite of open-source SDG reporting tools

With transparency as a central priority to LA council's SDG governance approach, two open-source reporting tools were developed to help organize city-related SDG data and information. Both tools are cloud hosted and maintained by the city's Information Technology Agency (ITA), whilst all work is recorded and maintained in a live wiki via GitHub.

An open-source, freely accessible platform for SDG related data and statistics, LA council's Open SDG platform went live in July 2019 and currently reports on 159 SDG indicators drawing data from local and national sources into a centralized database. Over 30 of the indicators allow for the generation of disaggregated datasets, enabling users to identify left behind populations with toggle features that enable filtered data (e.g. for specific demographic or geographic

information). The generation of disaggregated statistics has allowed the city to analyse development challenges with more granularity, especially relevant for tackling issues of poverty and hunger. The platform was designed to operate at the national level initially; however, through localized adjustment LA council adopted it for sub-national reporting with the support of the Centre for Open Data Enterprise; the city's ITA and MFLA. For larger jurisdictional levels (such as the county of LA and the state of California) associated data can also be reported in particular for policy-related and non-statistical indicators or those functions which reside outside that of the municipal authorities such as public health and education. The platform utilizes machine-readable data and data visualizations (see Figure 6.14), and is fully customizable with multi-lingual features, offering translation in the six United Nations languages. As the platform is not proprietary, no licensing costs were required and the project team ensures its continual maintenance with the support of students and academic partnerships.

Where contextual adjustment was required for localized use of the platform, modifications were recorded in an open Wiki to ensure other cities and organizations



Source: City of Los Angeles. URL: <https://sdg.lamayor.org/our-work/data-reporting-platform> (Accessed: 04/06/2022)

Figure 6.14 The Open SDG data reporting platform dashboard, enabling easy visualization of key SDG data

could develop their own platform, reflecting their local reality. As a comprehensive page that seamlessly shares all information, this feature has generated a more transparent and inclusive approach towards data dissemination. Today, it serves as a prototyping trend analysis tool to help project quantitative data to 2030 and to help identify those indicators which require fast-tracking. The platform now engages around 250 users per month, and has been used to help promote equitable and sustainable urban initiatives that advance SDG localization. Recently, the cities of Barcelona in Spain, and Bristol and Liverpool in the United Kingdom of Great Britain and Northern Ireland have also utilized the platform, launching it via their own contexts.

A second tool, the SDG Activities Index, is a searchable and exportable crowd-sourced encyclopedia of all organizations driving SDG implementation in LA, directly established to build a shared capacity for

advancement of the SDGs. The index has helped LA council to build a network of key actors by facilitating SDG localization through their everyday work. The preliminary list of projects was correlated by a team of students with additional entries crowdsourced from the community. Accordingly, any organization performing work on the SDGs in the city can input their work into the database, which is growing over time through the aggregation of community-based activities on the platform. Currently, the index hosts over 160 local projects that are actively facilitating SDG implementation in LA, with over 1,000 users engaged since its launch.

3. Leading the way in SDG reporting

In addition to the use of online tools, LA council has been instrumental in pioneering the roll-out of VLRs, publishing its first in 2019 and second in 2021. VLRs have served as key platforms for the city to report on its progress on SDG localization, integrating locally

contextualized indicators and illustrating local urban policies and initiatives across all 17 Goals. These reviews illuminate the strengths and weaknesses of local progress, helping to guide the formulation of new sustainable and equitable development policies. Such efforts have again demonstrated the city's commitment in the fulfilment of the 2030 Agenda.

The promotion of gender equity has also been a high concern locally, resulting in the Mayor's Office developing its own gender equity toolkit. The city council has added a gender lens to much of its operational work and services with a tailored methodology used to launch, manage and monitor efforts on increasing gender equality. Aspects such as the integration of street lighting, for example, of corners with high rates of human trafficking; the promotion of subsidized female sports programmes into the city's recreations areas; and the creation of professional development programmes to provide leadership skills to women and girls to boost civic engagement have all been targeted. The aim to allocate at least 4 percent of contracting dollars to women-owned businesses has also been deployed.¹⁹ The Mayor's Office has increased the city's minimum wage to USD 15 an hour, providing a payrise for nearly 50 percent of the city's female workers.²⁰ Through a proactive approach; building SDG-focused partnerships; utilizing contextualized data; and promoting monitoring and reporting, LA has led the way globally in facilitating implementation of the SDGs and has showcased the city's commitment to fulfilling the 2030 Agenda.

Reference experiences

1. Align urban development strategies to the SDGs and understand the SDGs in the reality of the local urban context

For cities that plan to localize implementation of the SDGs, interpreting the 17 SDGs and their targets into actionable and measurable plans and indicators at

the sub-national level is the primary challenge. In practice, LA council has explored a methodology that broadly encompasses two principles: ① it is necessary to match existing urban strategies, plans and data resources with the SDGs framework and indicator system to generate an inventory of current activities. Conducting comparative analysis can help to identify gaps between cities and goals and key collaborators and stakeholders needed to make progress; and ② local adaptation of the SDGs is required. Indicators that are not suitable for cities should be revised or replaced on the premise of retaining the original intention of the goal. Development goals that are neglected in the global framework should be supplemented and more accurate goal-based strategies and indicator systems should be proposed based on multi-dimensional data classification such as population and geography. The goal interpretation by the way of practice breaks some constraints brought by the SDGs localization and can reflect the actual local situation more accurately, which can provide a reference for other cities around the globe.

2. Create diversified and stable partnerships to accelerate SDG action

Driving SDG action at the local level relies on the mobilization of new partnerships with a range of internal and external stakeholders whereby focused partnerships have been crucial in enabling LA to advance the SDG localization process. The case of LA shows that the effective advancement of the project is based on the extensive mobilization of internal and external stakeholders, and the project itself is the product of multi-sectoral cooperation among governments, the private sector, academic institutions and non-profit social organizations. Among them, the close cooperation between cities and universities is of unique value. The deep involvement of students and scholars in SDGs can bring expertise and innovative solutions to cities. Throughout the project, more young talent came to know and understand about the 2030 Agenda and devoted themselves to

19 City of Los Angeles. URL: https://docs.google.com/presentation/d/1wszqpmZnHMNe62AQSSi1omS2AMLcOy6nsAI9W7kzw_g/edit#slide=id.p1 (Accessed: 07/06/2022).

20 Altman. M. J.. URL: <https://unfoundation.org/blog/post/using-data-for-good-how-l-a-is-achieving-the-sdgs-through-gender-equity/> (2021) (Accessed: 07/06/2022).

the localization practice. In LA, for example, more than 160 undergraduate and graduate students from multiple academic institutions participated in the SDGs, completing extensive data collection and over 22 research projects. Given the lack of youth representation in decision-making and action in many cities, city-university cooperation provides students with the opportunity of more diverse perspectives on SDGs strategies at the local level. In-depth cooperation between the two can also cultivate more future champions of sustainable development and give young people opportunities to take the lead in promoting inclusive responses to the SDGs in the city.

3. Capitalize on open-source tools to strengthen local initiatives on the SDGs

The open-source platform developed by LA council throughout the SDGs localization can be flexibly applied at the sub-national level providing a clear path for deepening the SDGs framework globally. Open-source platforms can bring together projects in the public, private and non-profit sectors and effectively link them to the post-interpretation SDGs of cities. Based on the monitoring and evaluation of the progress of SDGs in a real-time manner, the platform assists cities in formulating more targeted policies to successfully meet the goals of addressing local challenges, improving the living standard of community residents and promoting sustainable development. Both open SDG and SDG activities index platforms have been equipped with the hypertext-based system of cooperative multiplayer which is built by open-source code with low technical thresholds and can be used by other cities for free. On the premise of technology sharing, the open-source platform enables cities around the world to carry out localized applications according to local needs and feedback on the latest practices and data. This move also helps to build a network of inter-city partnerships and redefine the new role of cities in the global development agenda. However, it should be noted that the application of open-source platforms such as Open SDGs is not enough. The introduction of innovative measures and the improvement of government capacity are still of great significance to the practice of the SDGs.

Policy Suggestions

Seek Localized Sustainable Solutions to Urban and Community Problems and Institutionalize Them through the Preparation and Implementation of Community Plans

The positive impact brought by the implementation of the Grandview-Woodland Community project on sustainable urban development is gradually emerging, especially its outstanding and symbolic contribution to creating an inclusive city. For cities and communities with marginalized groups, it is critical to make sure that their voices are heard and their needs are considered in the urban governance process. Only in this way can we build more equitable and inclusive urban communities that leave no one behind. For ordinary urban communities of different sizes, populations, environments and cultures there is also a universal reference value in focusing on maintaining the diversity of community housing, transportation, facilities, land use and economic opportunities including sustainable approaches to urban development from an economic, social, environmental and cultural perspective. At the urban level, community planning should be promoted and institutionalized to achieve the following objectives: ① More effort should be made in the supply, management and renewal of various types of housing in communities to meet the diversified housing needs; ② Strengthening community economies through a range of retail and commercial activities is necessary; ③ Multi-modal and sustainable green transport solutions should be developed to improve the safety and capacity of cities; ④ Green building design and renovation should be adopted to support energy savings and optimal environmental performance for all new buildings; and ⑤ Historical issues should be addressed to drive forward positive urban change. Only in this way can inclusive, resilient and sustainable governance be actualized.