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# Editorial: The impact that local governments and ruling bodies can have on implementing sustainable changes and practices

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#### Editorial on the Research Topic

The impact that local governments and ruling bodies can have on implementing sustainable changes and practices

As the world continues to urbanize, with projections indicating that nearly 70% of the global population will reside in urban areas by 2050, the need for sustainable urban development has never been more pressing. Cities account for 75% of natural resource consumption and are responsible for 60–80% of global greenhouse gas emissions (UN-ESCAP, 2017). Thus, the UN Sustainable Development Goals (SDG), the Paris Agreement (2015) and other international protocols increasingly emphasize city-level actions, from mitigating near-term climate change impacts to achieving green transitions in the long run. Local governments play critical roles in this journey since most global objectives need to be executed at the local level, and city-scale actions, which are closest to people, may directly influence people's quality of life. Five articles in this Research Topic provide insights from the Global North and the South regarding the governance challenges in implementing sustainable changes and practices.

Local governments need to navigate complex regulatory landscapes, coordinate with multiple stakeholders, and ensure the efficient implementation of policies to address urban sustainability challenges. The SDG framework can be a powerful mechanism in this process. The SDG framework has two critical attributes: governance via goal formulation and synergy between goals (Chatterji, 2021). The normative objectives under the framework are intended to enable administrative monitoring of developmental outcomes and serve as a decision-making tool for policymakers. The indicators set under different SDGs are mutually interdependent and thus encourage policy integration horizontally and vertically between city-level government departments and agencies and those across different administrative hierarchies (Hansson et al., 2019). Thus, SDG localization can potentially bring transformative change in sustainability governance by breaking administrative silos and sectoral approaches.

However, significant operational challenges exist in implementing the SDGs at the municipal level. According to research by Perry et al., aligning sustainability objectives across sectoral agencies, parastatal bodies, and private entities requires substantial coordination across several levels of government. Local political arrangements, including

the degree of devolution of administrative and fiscal powers from the higher authorities, significantly influence the mechanisms of such tasks. Many cities lack the appropriate authority under centralized political systems to take on the additional responsibilities required to attain SDG objectives over and above their day-to-day functions.

The local government capacity challenges are, of course, more pronounced in the fast-urbanizing cities of the Global South, where deficits in formal institutional mechanisms are being met through informal arrangements. Case studies of two mid-sized Cambodian cities by Lord and Prior reveal that cities are growing spontaneously and unplanned. The local governments are illequipped to handle the additional population burden and cannot meet the basic infrastructure needs. Although there are wellintended city master plans and policy documents targeted to achieve sustainability outcomes, they are seldom implemented, as illustrated by Praharaj et al. (2018a,b). The emerging opportunities for solving urban problems with local government artificial intelligence (AI) technologies also present new and unique challenges to responsible and ethical urban innovation (Yigitcanlar et al., 2021). However, agile local leadership can make a difference through meaningful stakeholder engagements, communication clarity, and entrepreneurial collaborations that facilitate applying innovative practices and new technologies.

Similarly, Helmich and Chester's research also highlights the critical role of local leadership in improving the resiliency of city infrastructure systems against climate change-induced uncertainty. Leadership influences an infrastructure system's capacity to adapt to changing conditions. While infrastructure planning has traditionally relied upon past trends to make future projections, uncertainties surrounding climate change necessitate a more flexible and agile approach. They argue the need for enabling leadership to strike a balance between two divergent pathways: achieving higher efficiency within the existing governance frameworks vs. supporting innovative solutions, which may involve additional risks.

While green transition demands the decarbonisation of urban infrastructure systems, their ownership structure, delivery, operations, and management issues are increasingly becoming debatable from the standpoints of efficiency, accountability, transparency, and social equity. Although improving efficiency in urban services delivery through greater involvement of private actors has become a global trend with the spread of new liberal values since the 1980s, re-municipalisation concepts are gaining traction in other countries to achieve more social equality, public scrutiny, and citizen involvement. Herreras Martinez et al. wade into this debate through a case study of 16 Dutch cities implementing District Heating programmes. By mapping delivery configurations with public, private, and joint venture arrangements, they provide a nuanced discussion about the pros and cons of different models.

In contrast to the previous four papers, which discussed the roles of city governments as critical actors in urban sustainability governance, the article by Coulombe et al. focuses on understanding the usefulness of national-level city networks for capacity building of small and medium-sized cities through peer learning. City networks are voluntary associations which enable participating local governments to learn from each other's experiences and cooperate in addressing shared challenges. These networks have expanded substantially over the past three decades due to the growing importance of urban-centric issues in various international forums. By conducting case studies of six Danish municipalities, Coulombe et al. show that network participation helped them gain substantial knowledge through knowledge sharing between climate managers. It also helped mobilize internal political support within the municipal bodies on climate-centric agendas, accounting for greenhouse gas emissions, and project support. Most importantly, it led to the city climate managers gaining leadership skills in policy entrepreneurialism and becoming change agents.

The overarching message of the five articles in this Research Topic is empowerment, capacity building and organizational leadership. Although cities are key actors in the urban sustainability governance space, they are largely handicapped due to inadequate political, financial, and technical empowerment. Parallelly, it is necessary to strengthen city-level institutional arrangements to bring consensus between the stakeholders and promote participatory decision-making. Finally, organizational leadership is crucial to encourage innovative and entrepreneurial approaches to designing, implementing, and managing policies to achieve a sustainability transition.

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