

5. Conclusions

This report highlights various building energy efficiency policies in cities around the world and aims to serve as a resource for city officials as they design new building energy efficiency policies or review existing ones. Its specific objectives are to illustrate the range of different policies, document information about the necessary conditions, opportunities and challenges of such policies, and analyse which approaches were successful and why.

Initial feedback from the city officials who participated in this research suggests that *Urban Efficiency* will help fill a gap in the literature on city-level building efficiency programmes (examples of online databases are shown in **Appendix 1**). By combining data from interviews with data from published documents, this research has provided insights that did not previously exist. In particular, information available online – mainly from city government websites – rarely mentions the inputs required for a building efficiency programme or the key success factors and challenges encountered. This critical information has now been captured and analysed for 10 cities. Moreover, the policy maps and the hyperlinked matrix of programmes in **Appendix 2** are new tools for cities to use, simplifying vast amounts of information about policies in 16 cities. It is hoped that these will serve as significant new resources for officials seeking a brief introduction into global policy approaches.

Urban Efficiency is not meant to be an exhaustive piece of research. Rather, it draws on readily available policies from a network of cities engaged in building energy efficiency initiatives. There is, admittedly, a significant focus on North American cities and their benchmarking and disclosure policies in this report. The policies reviewed have an emphasis on the commercial sector, and also on large buildings. Additionally, some information, namely regarding programme budgets, proved difficult to collect. This information is highly sensitive, and a specific budget was often not allocated for the programmes reviewed in this report. Finally, programme impacts were often difficult to identify, as so many of the policies were relatively new and had yet to generate significant, quantifiable results. For example, while cities could observe that the expanded local market for green buildings was associated with the city building energy efficiency programme, it has been difficult to prove or quantify the correlation or causation.

Urban Efficiency provides a foundation for additional research on building energy efficiency in cities, both in terms of the theoretical framework it sets out in the policy maps and in the programmes it has documented through the case studies. Future explorations of the topic

could expand on this research by increasing the number, range of programmes, and geographic scope of cities studied. City officials who participated in the research expressed a particular interest in learning more about tenant engagement and boosting public awareness on energy efficiency in buildings, especially for residential and small to medium sized buildings. Further research would also enable the theoretical framework of policy elements to be tested and refined. As mentioned above, evaluating the impact of programmes is an important but challenging area. This report could serve as an input into a more detailed investigation of how cities identify and calculate the impacts of their building energy efficiency policies. As a co-lead of the C40 Private Building Efficiency Network, the Tokyo Metropolitan Government looks forward to taking the lead in future research endeavors with C40, and to developing additional resources for peer cities and others in this important field.