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Sustainable Urbanism in Digital Transitions From Low Carbon to Smart Sustainable Cities



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Preface

The idea of urban sustainability has experienced important transformations in the past decades. The emphasis on eco-cities and the low carbon agenda due to climatic challenges is increasingly combined with the rise of smart cities. Sustainable urbanism, thus, re-emerges in an upscaled fashion to engulf smart cities and innovative technical solutions embracing information and communication technology or ICT. The initial driver was to work towards service and resource use efficiency at a smaller scale, but the concept of the smart city has developed from this original ambition to one that applies to entire cities and urban areas, and no longer just the transportation system or buildings. Modern applications involve increasingly greater connectivity or integration, with the involvement of multiple stakeholders and city components. The smart city is based on automation and monitoring by sensors and Big Data collection, which are used to improve performance and to inform governance. This transformation, however, raises new critical questions, including whether smart sustainable cities become too technocratic in actual operation, but also with regard to citizen involvement in such a technologically automated environment. Moreover, problems that are associated with cybersecurity and the use of Big Data, including personal privacy—and ultimately democracy—need to be addressed. This brief reviews these important contemporary concerns. It also discusses the degree to which smart cities function to improve the quality of life for urban citizens and their role in enacting the ‘simple life’ concept for sustainable urban development.

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Contents

1	Introduction	1
1.1	The Rise of Smart Cities	2
1.2	Upscaling to the Smart City	4
1.3	Brief Aims	7
	References	8
2	Low Carbon Cities	9
2.1	Cities, Energy, and Climate	10
2.2	Eco-Cities	12
2.3	Governing Low Carbon Transitions	14
	References	17
3	Energy-Based Transitions	21
3.1	Urban Energy Infrastructure	22
3.2	The Built Environment	24
3.3	Spatial Planning, Urban Density, and Mobility	27
	References	31
4	Becoming Smart	35
4.1	Strategies Roster	39
4.2	Detailed Cases	41
4.3	Evaluation	44
	References	46
5	Sociotechnical Issues	49
5.1	Technology as a Solution	50
5.2	Social Issues	53
	References	55
6	Conclusion	59
	References	62
	Index	63

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