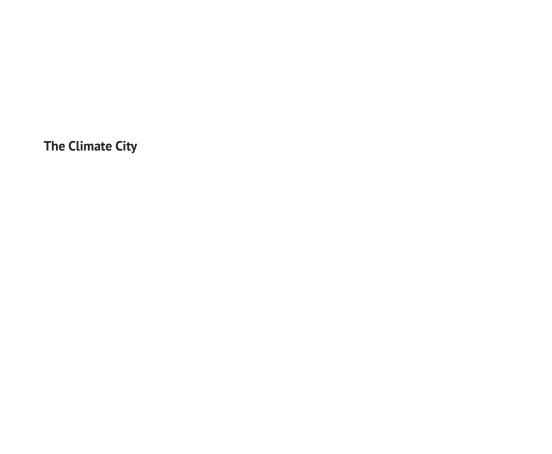
EDITED BY MARTIN POWELL

THE CLIMATE CITY





The Climate City

Edited by Martin Powell

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Authors Biographies



Peter Boyd

The Ambitious City – This chapter presents a case for combining high *ambition* with high *clarity* of definition for what we mean by "Net-Zero", highlighting the need to combine this high ambition with an appreciation and embrace of systems thinking, given the unique, complex, and intertwined nature of each city's challenges and opportunities.

Peter Boyd is Lecturer at the Yale School of the Environment, Lecturer in the Practice of Management at the School of Management, and Resident Fellow at the Center for Business and the Environment. Outside Yale, he is a director of REDD.plus, a digital platform to bring

UN-registered REDD + forest carbon credits to a new cross-sector world of purchasers who want to achieve Paris-Agreement-compliant carbon neutrality as they transition to net-zero. Working with these and other partners, he is Founder of Time4Good, helping leaders and teams connect purpose to maximum positive impact.

He is former COO of Sir Richard Branson's Carbon War Room; former Chair of the Energy Efficiency Deployment Office for the UK Department of Energy & Climate Change; and former Project Lead for the B Team's "Net-Zero" initiative, focused on busi-



ness encouragement, of an ambitious Paris Agreement at COP21. Following his first job with McKinsey & Co., his private-sector experience included over ten jobs in 12 years at the Virgin Group, including CEO of Virgin Mobile South Africa. Peter is originally from Edinburgh, Scotland; studied Philosophy, Politics and Economics at the University of Oxford; and now lives in Connecticut, where he serves as Chair of Sustainable Westport.

Martin Powell

The Civilized City – This chapter looks at the transformation of cities through time and how we can apply those learnings for a better future. Local solutions will tackle the global climate crisis.

Martin Powell was Environmental Advisor to the former Mayor of London, Boris Johnson, responsible for policy in water, waste, air quality, energy, climate change mitigation and adaptation, and biodiversity. He was also director for the design and delivery of the city's environmental programmes.

As Managing Director of Cambridge Management & Research, Martin worked for the Energy Saving Trust and the Institute for Sustainability and was Special Advisor to the C40 Cities Group chaired by Michael R. Bloomberg during his time as Mayor of New York. An engineer, he built his career working with organizations to structure their projects and programmes. Martin is also a trustee at Heart of the City, a charity that supports SMEs in London to tackle issues including climate action.

He has held several roles at Siemens including Global Head of Urban Development and is currently Head of Sustainability and Environmental Initiatives at Siemens Inc., with a focus on financing climate action.



Austin Williams

The Emerging City – Some countries don't need western lectures on sustainable development; they simply need to be allowed to develop. This chapter is about development without prefixes, full stop. This is Malawi's story.

Austin Williams is a senior lecturer in Professional Practice in Architecture at Kingston School of Art in London and Honorary Research Fellow at XJTLU University, Suzhou, China. He is director of the Future

Cities Project, and the author of China's Urban Revolution: Understanding Chinese Ecocities (Bloomsbury, 2017) and New Chinese Architecture: Twenty Women Building the Future (Thames and Hudson, 2019).

Austin founded the mantownhuman manifesto featured in Penguin Classics' 100 Artists' Manifestos. He has spoken at a wide range of conferences, from New York to Ningbo, from Hawaii to Hong Kong, and is a regular media commentator on development, environmentalism, and China. He has written for magazines as diverse as Nature, Wired, Top Gear, Wallpaper, Times Literary Supplement, and The Economist. He has directed over 200 short documentaries for NBS TV and authored and illustrated the Shortcuts design guides. For more information see WeChat/Twitter: Future_Cities andwww.futurecities.org.uk.



Patricia Holly Purcell

The Sustainable City – This chapter sets out the UN global frameworks for tackling climate change and the SDGs, how local governments feature in these international agendas, and the role of cities in advancing solutions to some of the greatest challenges of our time.

Patricia Holly Purcell has more than 15 years' experience in the public and private sectors leading global sustainability initiatives for multinational corporations and the UN. She is currently a private sector specialist for the United Nations Development Programme (UNDP), focused on unlocking and leveraging private sector engagement and investment to support increased ambition of countries' climate change goals and delivering opportunities to scale solutions across key sectors of the economy, including energy, ecosystems, health, and agriculture, among others.

Patricia is co-founder and Chair of the OECD Expert Group on Investing in the SDGs in Cities. Before joining UNDP, she served as Senior Strategic Advisor and Head of Partnerships to the UN Global Compact in New York. Previously, she was Senior Advisor to the UN Under Secretary-General and Executive Director of UN-Habitat, based in their Nairobi headquarters, where she led the Agency's strategic policy and programmatic initiatives, including creation of a global multilateral trust fund for sustainable development in conjunction with the World Bank. Prior to this, she served as Technical and Strategic Adviser to the Special Representative to the UN Secretary-General on Disaster Risk Reduction, based in Geneva.

Before joining the UN, Patricia was the founding director of Commercial Sustainability for the London-based Willis Group, a global insurance broker covering 180 countries. She began her career as a London-based financial journalist with an emphasis on climate change, writing for The Economist, The Financial Times, The Times, and The Guardian. She holds a Master's degree in Public Policy and Management from the University of York with a focus on the nexus between climate change and inequality, and is currently pursuing a PhD. She is originally from New York City and presently lives in Barcelona.

Amanda Eichel and Kerem Yilmaz

The Vocal City - Recognizing cities and the voice of cities in the 2015 Paris Agreement was the culmination of a nearly 30-year effort from advocates, city networks, and cooperative initiatives. There are, however, limits to what cities and the community that supports them can do alone - the voice of cities must better connect with the capabilities, skills, and learnings from other levels of government, as well as outside perspectives, to deliver action that both is locally appropriate and ensures climate friendly outcomes.

Amanda Eichel was the former Executive Director of the Global Covenant of Mayors for Climate and Energy based in Brussels. Previously, Amanda led efforts to grow the C40 Cities Climate Leadership Group under the chairmanship of Michael Bloomberg, where she built regional and programmatic teams and directed research and knowledge management efforts. Before joining C40, Amanda worked for New York City Mayor Bloomberg's Office of Long-Term Planning and Sustainability and served as Climate Protection Advisor to the Mayor of Seattle, Washington under the administrations of Mayor Greg Nickels and Mayor Mike



McGinn. Prior to her work with city governments, Amanda held positions in the California State Assembly Speaker's Office and California State & Consumer Services Agency, where she led efforts to green state building investments, fleet management, and procurement.

Kerem Yilmaz has worked in a variety of capacities, from Fortune 500 companies and global philanthropic organizations, to small businesses, and start-up NGOs. Currently he is President of Sprout Solutions, a boutique consulting firm that specializes in helping organizations conceptualize and deliver on long-term, strategic sustainability initiatives. He also serves as Head of Strategy to The Resilience Shift, shaping the organization's direction to promote greater resilience through influencing policy, driving practice, and sharing key learnings. Previously, he served as Strategy and Operations Director for the Global Covenant of Mayors for Climate & Energy in Brussels, Belgium. Kerem received his Master of Public Policy from the University of Southern California and Bachelor of Arts from the University of California, Berkeley.



Bruce Katz and Luise Noring

The Governed City - Cities can tackle climate change if and only if they have institutions with the capacity, capital, and community standing necessary to get the job done. Capable governance and quality finance are essential, but often overlooked, elements of climate solutions.

Bruce Katz is the founding director of the Nowak

Metro Finance Lab at Drexel University in Philadelphia. Since its inception in 2018, the Nowak Lab has strived to help cities and regions design, finance, and deliver transformative initiatives to drive innovative, inclusive, and sustainable growth. Previously, Bruce served for 21 years at the Brookings Institution, including as vice president and founding director of Brooking's Metropolitan Policy Program and as the Institution's inaugural Centennial Scholar. He is a Visiting Professor in Practice at the London School of Economics, and previously served as chief of staff to Henry Cisneros, Secretary of the United States Department of Housing and Urban Development during the first term of the Clinton Administration and staff director of the United States Senate Subcommittee on Housing and Urban Affairs. In 2008/2009, he co-led the Obama Administration's housing and urban transition team. Bruce is co-author of The Metropolitan Revolution: How Cities and Metros Are Fixing our



Broken Politics and Fragile Economies (Brookings Institution Press, 2013) and The New Localism: How Cities Can Thrive in the Age of Populism (Brookings Institution Press, 2018). He is also the editor or co-editor of several books on urban and metropolitan issues, and a frequent media commentator.

Luise Noring is Research Director and Assistant Professor at Copenhagen Business School, where she also attained her PhD in supply chain partnerships. In 2016, she founded City Facilitators, which operates out of Copenhagen with clients across Europe and the US. City Facilitators offers niche consultancy specializing in urban governance and finance. Luise's work is captured in the City Solutions providing vehicles for deepening and accelerating urban problem-solving. The City Solutions offers a source of applied research on the most promising models of urban governance and finance that are emerging to tackle hard economic, social, and environmental challenges and fuel investments and value creation in cities. The City Solutions reveal new institutional models and finance mechanisms covering areas such as urban redevelopment of deindustrialized areas, infrastructure financing, affordable and social housing, devolved municipal power, pooling of municipal borrowing requirements, inclusive growth, climate investments, and pension funds, to name but a few. It aims to speed up the process by which solutions invented in one city are captured and codified and then adapted and adopted to other cities.

Leah Lazer and Nick Godfrey

The Decoupled City - Cities are a critical vehicle for delivering the emissions reductions needed to limit global warming. National governments can drive economic prosperity and address climate emergency by supporting sustainable, equitable cities.

Leah Lazer is passionate about just, sustainable cities. She serves as Research Analyst at the World Resources Institute, where she has authored numerous publications



on urban planning, sustainable transportation, climate justice, and the circular economy. With the Coalition for Urban Transitions, she worked as researcher and project manager for a major global initiative supporting national governments to secure economic prosperity and tackle the climate crisis by transforming cities, based on a partnership of more than 35 of the world's leading institutions and companies. Previously, Leah was part of Siemens' Urban Development team in London, and a food justice NGO in Philadelphia. She holds an MSc in Regional and Urban Planning Studies from the London School of Economics and Political Science, and a BA in Food System Studies from Tufts University, Massachusetts.

Nick Godfrey is a Senior Adviser for the Grantham Research Institute at LSE. He was formerly the co-founder and director of the Coalition for Urban Transitions, a special initiative of the New Climate Economy, and a major global initiative supporting national governments to secure economic prosperity and tackle the climate crisis by transforming cities based on a partnership of more than 35 of the world's leading institutions and companies.

The initiative is co-hosted by the World Resources Institute and C40 Climate Leadership Group. Before this. Nick was a member of the Executive Team and Head of Policy and Urban Development for the New Climate Economy, a major international initiative to examine how countries can achieve economic growth while dealing with climate risks led by a Global Commission of 26 former heads of state, finance ministers, CEOs, and thought leaders.





Justin Keeble and Molly Blatchly-Lewis

The Responsible City - A responsible city is guided by a compelling mission and purpose harnessing business to bring environmental and societal value.

Justin Keeble is Managing Director of Accenture's European Sustainability practice. He has spent 22 years working with companies to harness environmental and social pressures as drivers for business transformation, growth, and innovation. He has worked across consumer industries, financial services, high tech, energy and utili-

ties sectors, and the public sector including municipal and city administrations. He recently built an eco-house in south Oxfordshire where he lives with his wife and three daughters and has a penchant for amateur pugilism.



Molly Blatchly-Lewis is a Strategist within Accenture's Global Cities, Transport and Infrastructure Practice. She has worked with a wide range of government and private sector clients in the UK and internationally, specializing in sustainability, urban mobility, and emerging technologies such as 5G and digital twins. Her focus is on the role of systems thinking in tackling urban challenges, developing innovative, practical policies and

solutions for sustainable impact. Her experience includes working with the World Economic Forum to develop integrated solutions to decarbonize cities; shaping a clean mobility strategy with Transport for West Midlands; driving innovation across construction firms and infrastructure agencies to accelerate decarbonization and enhance communities; helping to grow an innovation ecosystem in East Asia and co-creating a leadership development framework for a global climate change NGO.



Pete Daw

The Energized City – The energized city thinks of energy as something that can be used more efficiently, optimized in the way we supply it, consume it, and plan for it.

Pete Daw is director of Global Urban Futures. advising public and private organizations on climate

change and sustainability. He recently supported the London Waste and Recycling Board in developing the case for their five-year business plan focused on driving down consumptionbased emissions and making the London circular economy. He is now on assignment with the Greater London Authority, heading the climate change mitigation and adaptation teams.

At Siemens he was director of Urban Development and Environment at the Global Centre for Cities, where he worked with cities globally to help them understand the role technology can play in tackling their challenges. He worked extensively on Siemens' smart city approach in China, India, Italy, and Saudi Arabia. He also headed the Siemens partnership with C40 Cities, where he produced thoughtful leadership pieces on topics ranging from connected

and autonomous vehicles to climate financing. He developed Johannesburg's first-ever greenhouse gas inventory as part of Siemens' work with C40 Cities.

Previously Pete worked in London government for 12 years. He was Policy & Programmes Manager for Climate Change Mitigation & Energy for the Greater London Authority between 2008 and 2013, where he led the development of the city's Climate Change Mitigation & Energy Strategy and its Air Quality Strategy. Prior to that he was Waste Policy manager at the London Development Agency, where he designed the concept and secured £24 million of funding for a waste infrastructure fund.

Julia Thayne DeMordaunt

The Agile City (Part I) - The chapter first takes a look back and then defines a path forward for how cities, people, and technology come together to deliver transportation systems that offer what people need when they need it.

An expert at the leading edge of systemic change for transportation and infrastructure policy, Julia Thayne DeMordaunt helps governments, private companies, and NGOs translate ambitious visions



into actionable plans that benefit the communities they impact. Julia is Principal of Urban Transformation at the Rocky Mountain Institute. Prior to this Julia developed mobility innovation programmes for the Los Angeles Mayor's Office, she worked as director of Urban Development at Siemens, consulting on initiatives for 35 cities across Asia, Europe, Latin America, and North America. She is also founder and board member of the public-private innovation hub Urban Movement Labs, and an educator at USC Sol Price School of Public Policy. Her work has been featured in publications including Fast Company, The Washington Post, CityLab, Vox, Bloomberg, Governing Magazine Quartz, Tech Crunch, and Curbed.

Jonathan Laski

The Agile City (Part II) - What is a city without the ability of citizens to move around safely, inexpensively, accessibly, and without fear of sickness from pollution?

Jonathan Laski is a sustainability professional and lawyer based in Toronto, Canada. His professional career began in the corporate/commercial practice group of a large independent law firm in Toronto, following which Jonathan transitioned to a career in sustainability. He has directed innovative city-level



research and impact programmes through roles with the C40 Cities Climate Leadership Group, World Green Building Council, and Waterfront Toronto. Highlights include managing the first of C40's peer-to-peer city networks on private sector building energy efficiency in 2012–2013 and launching WorldGBC's Advancing Net-Zero global initiative.

Following postings and education abroad, including time in London, Sydney, and Lund (Sweden), Jonathan is now firmly based in Toronto with his partner and two young daughters. At the time of writing, Jonathan is director of Sustainable Finance Solutions with Sustainalytics, one of the world's leading providers of ESG research and ratings. In this role he leads the delivery of "second-party opinions" for corporate and bank clients in the EMEA and Americas regions, looking to issue green, social, and sustainable debt to finance ESG projects which are aligned with the Paris Agreement and science-based targets initiative.



Olivia Nielsen

The Habitable City (Part I) - The chapter explores how cities can address one of their biggest challenges: housing a growing urban population in an affordable, sustainable, and climate-resilient way.

Olivia Nielsen is an Associate Principal at Miyamoto International, a global structural engineering and disaster-risk reduction firm, where she focuses on making housing affordable, sustainable, and resilient for all. From post-disaster Haiti to Papua New Guinea, she has developed and worked on critical housing programmes in over 35 countries for the World Bank, USAID, and Habitat for Humanity, among others. She has over a

decade of experience in housing policy, finance, housing public-private partnerships, post-disaster reconstruction, and green construction. Prior to joining Miyamoto, Olivia was a principal at the Affordable Housing Institute, where she developed housing policy and finance solutions in Haiti, Sub-Saharan Africa, and the South Pacific for the World Bank and USAID. Olivia also managed CEMEX's housing and infrastructure projects in Latin America and the Caribbean, where she focused on leading the cement company's reconstruction efforts after the devastating 2010 earthquake in Haiti.

Olivia is originally from Paris, France, has a Bachelor's degree in Anthropology from McGill University, a Master's in Sustainable Management from the United Nations Mandated University, and an Executive Master's in Management from the London School of Economics. Through her work, she seeks to ensure that all families around the world have access to affordable, sustainable, and resilient homes.

Nicky Gavron and Alex Denvir

The Habitable City (Part II) - We must design and build our future housing in a way that promotes density over sprawl and locks away carbon with greener, cleaner, and more circular methods.

The former Deputy Mayor of London, **Nicky Gavron AM**, has served on the assembly's Housing, Environment, and Planning committees since 2008. She is a member of the London Sustainable Development Commission. An elected politician since 1986, Nicky has been at the forefront of developing integrated land-use, housing, transport, and environmental policy at every level of government. Throughout the 1990s she led the Labour group

on the London Planning Advisory Committee (LPAC), becoming the chair in 1994. In this role she commissioned research and formulated strategies to create a more sustainable London, including on congestion charging and affordable housing. In the late 1990s she held positions on national committees and commissions. In 2000, she became London's first statutory Deputy Mayor, working closely with Mayor Livingstone to set up the Greater London Authority's working processes and policy frameworks. She led on the first London Plan, which set out the vision and long-term policies to make London an exemplary sustainable world city.



Leading London's response to climate change, Nicky introduced policies and programmes to

reduce CO₂ emissions across energy, water, waste, transport, and sustainable design and construction. Her initiatives include establishing the London Climate Change Agency and C40 Cities. She firmly believes that cities working collaboratively are pivotal in the battle against climate change. Nicky is internationally recognized for her work on urban planning and the environment and has and continues to advise cities and city networks. Her advisory roles have included Chief Project Advisor to the London School of Economics (LSE) Stern Cities Programme on the economics of green cities, a member of the Rotterdam International Advisory Board, and honorary adviser to the Joint US China Collaboration on Clean Energy (JUCCCE). Nicky has many passions including furthering the nature/climate nexus and its relationship to accelerating carbon-free construction – the subject of her chapter.

Alex Denvir is an experienced advisor and researcher who has worked with senior politicians at a national and local level in England and London primarily on housing, planning, and regeneration policy. He began working with developers and communities on large urban regeneration projects in London, before going on to work with a Shadow Minister in the House of Commons, advising on national planning policy and developing party positions. He has most recently worked with members of the London Assembly to shape affordable housing policy in the capital and to steer the cross-party response to the new draft London Plan through its many stages towards adoption.





Conor Riffle

The Resourceful City – This chapter looks at how to move our urban economies to circular economies that reduce reliance on landfill and prioritize conservation of resources. Old models of disposing of resources aren't compatible with Earth's urban future.

Conor Riffle is Senior Vice President of Smart Cities at Rubicon, a global technology company that provides waste and recycling solutions to businesses and government. In this role, he runs the company's software business for municipal governments, RUBICONSmartCityTM. RUBICONSmartCity has been deployed in more than 55 cities, including Atlanta, Baltimore, and Kansas City. In 2020, Conor was named a "40 Under 40" award winner by *Waste360* magazine.

Prior to Rubicon, Conor was based in London and served as the founding Director of Cities and Data Product Innovation at CDP, a global environmental organization. Under Conor's leadership, CDP's cities programme achieved global recognition as the de facto platform for city governments to report environmental data, growing to more than 500 global cities by 2016. More than 800 global cities now use CDP's platform annually. In 2013 and again in 2017, Bloomberg Philanthropies announced major investments in CDP's work with cities. Prior to his role at CDP, Conor served in various roles at the Clinton Foundation in New York. Conor graduated magna cum laude in History from Connecticut College and holds an MA in History of International Relations from the London School of Economics. Follow Conor on Twitter at @c_riffle. Jakob Geiger contributed essential research and support in preparation of this chapter.



Terry Tamminen and Peter Lobin

The Zero Waste City – Imagine a city without waste, where "trash" bins become sources of energy, fuels, and raw materials for products and buildings; and where we adopt exciting new technologies to cut our energy usage and bills in half, making the switch to renewables easier and faster.

From his youth in Australia to career experiences in Europe, Africa, China, and across the US, **Terry Tamminen** has developed expertise in business, farming, education, non-profit, the environment, the arts, and government. Governor Arnold Schwarzenegger appointed him Secretary of the California Environmental Protection Agency and later

Cabinet Secretary, the Chief Policy Advisor to the Governor, where Terry was the architect of many ground-breaking sustainability policies, including California's landmark Global Warming Solutions Act of 2006, the Hydrogen Highway Network, and the Million Solar Roofs initiative. In 2010 Terry co-founded the R20 Regions of Climate Action, a new public–private partnership, bringing together subnational governments, businesses, financial markets, NGOs, and academia to implement measurable, large-scale, low-carbon, and climate-resilient economic development projects that can simultaneously solve the climate crisis and build a sustainable global economy.

Terry also provides advice through 7th Generation Advisors to Pegasus Capital Advisors, the Green Climate Fund, and numerous global businesses on sustainability and "green" investing, as well as assisting governments and philanthropists with climate solutions, including Fiji, India, Rockefeller Brothers Fund, and the Leonardo DiCaprio Foundation. An accomplished author, Terry's books include Cracking the Carbon Code: The Keys to Sustainable Profits in the New Economy" (Palgrave Macmillan, 2011). In 2011, Terry was one of six finalists for the Zayed Future Energy Prize, and *The Guardian* ranked Terry no. 1 in its "Top 50 People Who Can Save the Planet". For more information see https:// en.wikipedia.org/wiki/terry_tamminen.

Peter Lobin is a globally recognized expert in the waste and recycling sector, with a deep knowledge of the efficiencies, technologies, and human behaviour that drive sustainable economic growth. With a 30-year track record serving multiple waste and recycling firms, private equity investors, foundations, NGOs, and advocacy groups, he has developed innovative programmes that reduce cost, expand markets, create new opportunities, and increase revenues throughout North America, the Middle East, North Africa, Sub-Saharan Africa, South America, and Asia. Peter is currently Managing Director of ZeroWaste Global LLC (ZWG), an international management-consulting firm focused on zero waste solu-



tions; a partner at Scarab Technology, LLC, a disabled-veteran-owned waste service and recycling management consultancy focused on federal and state governments; and Managing Partner at Fiber Innovation Technologies, the leader in residual management for pulp and paper mills. He holds a BS and MA in International Relations from the University of Southern California and is proficient in Spanish, having lived in South America.

Sarah Wray and Richard Forster

The Resilient City – A resilient city is one that embraces a holistic strategy that puts resilience at the heart of investment.

Sarah Wray leads the editorial team at Cities Today and specializes in writing about the impact of technology on cities, particularly with regard to the use of data, digitalization, and transport innovation, with a focus on climate action, citizen engagement, and the delivery of equitable municipal services. She was previously part of the TM Forum team where she was the editor of *Inform*, a research and content hub for the telecom industry. She



was editor of Smart Cities World before joining Cities Today and has written for publications including Smart Cities Dive, Mobile World Live, Mobile Europe, and Computer Weekly, covering topics such as the Internet of Things, smart cities, 5 G, and blockchain.



Richard Forster has been an editor and journalist for over 20 years, having trained at Euromoney Institutional Investor PLC. He has written for the Financial Times. Euromonev. International Financial Law review (IFLR), and Project Finance Institute, and has launched publications for the Inter-American Development Bank, Asian Development Bank, and UN-Habitat. He is Editorin-Chief at PFD Publications, which launched

Cities Today in 2010 as the first global magazine for decision-makers in urban development. He has edited publications for UN-Habitat, United Cities and Local Governments Asia-Pacific, and the Latin American Federation of Cities, Municipalities and Associations of Local Governments. He is CEO of the Cities Today Institute, which provides training, forums, and research for a network of city leaders, focusing on digital transformation, transport, and sustainability.



John de Boer

The Fragile City - A fragile city recognizes growing inequalities in the face of extreme events and how it can build resilient systems to function and thrive.

John de Boer is a thought leader who combines experience in business, government, academia, and international organizations to develop solutions to some of the world's most pressing challenges. John is currently Senior Director at BlackBerry, a global leader in intelligent security solutions, where he leads Government Affairs

and Public Policy in Canada. Prior to joining BlackBerry, John was Principal at the SecDev Group, a digital risk consulting firm, where he advised large corporations, federal and municipal governments, and organizations including the UN and the World Bank on how to navigate digital risks. John has also served at the United Nations, where, as a Senior Policy Advisor, he helped establish the United Nations University, Centre for Policy Research. His work at the Canadian Government included responsibilities as Team Leader for Governance at the Afghanistan Task Force. He also served as programme leader at Canada's International Development Research Centre, where he spearheaded the institution's work on governance, justice, and security, and directed innovative research programmes on safe and inclusive cities.

John has published extensively on issues related to urban fragility, violence, and resilience. This includes co-editing volumes on Reducing Urban Violence in the Global South: Towards Safe and Inclusive Cities (Routledge, 2020) and Social Theories of Urban Violence in the Global South (Routledge, 2019), as well as two volumes on security-sector reform and citizen security in Latin America with Ubiquity Press and Siglo XXI. His work has been published in peer-reviewed journals including Environment and Urbanization and Stability: International Journal of Security & Development, and by the World Bank, International Federation of the Red Cross, United Nations University, World Economic Forum, Reuters, iPolitics, and the Guardian, to name a few. John has taught at, and received fellowships from, Stanford University and the University of California at Berkeley. He holds a PhD from the University of Tokyo.

Seth Schultz and Eric Ast

The Data City - The chapter provides a vision for how cities can leverage the power of procurement to break the cycle of data dependence and lead the fight for a just, equitable, and safe future in a role that they play best: convener.

Seth Schultz is CEO of Resilience Rising, a new global non-profit consortium working together to accelerate a safe, resilient, and sustainable future for all. He has a long track record of building



consensus and initiating change in the field of sustainable development, and of raising international awareness on the role of cities in tackling climate change. He is a passionate advocate for a safe, resilient and sustainable future and the need for transformative decarbonisation and long term resilience.

Over the past two decades, Seth has worked with many of the most leading and innovative organisations in this space to turn theory into practice, including the Louis Berger Group, the US Green Building Council, the Clinton Foundation, C40 Cities Climate Leadership Group, the Global Covenant of Mayors, the Intergovernmental Panel on Climate Change (IPCC) and the Resilience Shift.

Seth shares his expertise through involvement with various boards and advisory councils, is a sought-after speaker and guest lecturer, and has authored numerous articles, reports, blogs and thought leadership pieces around the world.

Eric Ast is Chief Data Officer of East Data, where he works with mission-driven organizations to increase the strategic impact of data. He previously led the data and analytics practice at C40 Cities, where he oversaw enterprise intelligence work and co-authored research, including Climate Action in Megacities and Powering Climate Action: Cities as Global Changemakers. Eric previously served as Managing Energy Analyst for Bright Power, where he advised clients including HUD's Office of Affordable Housing Preservation (OAHP) and owners of affordable multifamily housing on portfolio energy and water efficiency strategies, and at Capital One where he developed credit pricing strategies during the Great



Recession. Eric holds a BS in Systems Engineering and Economics from the University of Virginia and an MS in Sustainable Technology from the KTH Royal Institute of Technology, Stockholm, Sweden. He currently lives in Portland, Oregon.

Patricia McCarney

The Measured City - The chapter advances the need for globally standardized measurement in cities and examines what global standards exist for city data that propel city sound leadership on the global stage and enable local success.



Patricia McCarney is President and CEO of the World Council on City Data (WCCD) and is Professor of Political Science at the University of Toronto, Canada. She has published widely in the fields of city governance, data governance, and the role of global cities in sustainable development planning.

Patricia received her PhD from MIT in 1987. Before joining the University of Toronto, between 1983 and 1994, she worked as a professional staff member in a number of international agencies, including the World Bank in Washington and UN-Habitat in Nairobi. She is Convenor of the Working Group on City Indicators in

the ISO Technical Committee 268 and was integral to the development of the ISO 37120 Series, including ISO 37120, the first International Standard on Indicators for Sustainable Cities; ISO 37122, Indicators for Smart Cities; and ISO 37123, Indicators for Resilient Cities.

Having founded the WCCD in 2014, Patricia is building a globally standardized data platform for cities worldwide, where cities report data in conformity with the ISO 37120 Series for WCCD ISO Certification. As host of this knowledge platform, the WCCD is the leading global city database with ISO-certified and globally comparable city data for a growing network of smart, resilient, and prosperous cities.



Noorie Rajvanshi

The Smart City – The chapter explores how technologies can drive climate action in cities based on learnings from over 40 cities worldwide.

Noorie Rajvanshi is the Director of Sustainability and Climate Strategy for Siemens USA with more than a decade of experience in the field of environmental sustainability, energy, and urban development. In her current role, Noorie is responsible for supporting the strategy and e xecution of the Siemens US region's decarbonization plan to achieve net-zero operations by 2030 and works across the Siemens ecosystem of business and corporate units to develop and execute strategies

based on data-driven insights. Noorie's previous work in urban development focused on

evaluating environmental and economic impacts of growing cities and collaborating with more than 15 cities across North America to identify technology and infrastructure solutions that would enable cities reach their economic and environmental targets.

Noorie served as a Research Fellow for Project Drawdown where she provided technical analysis that served as the foundation for three chapters in The New York Times bestselling book "Drawdown: The most comprehensive plan ever proposed to reverse global warming."

Noorie graduated from the University of Florida with a PhD in Mechanical Engineering and a minor in Environmental Engineering. She is an active member of several organizations including the Corporate Eco Forum (CEF) where she has been inducted into the CEFNext Community.

Hayley Moller

The Just City (Part I) - The chapter is an investigation into the environmental, human, and economic costs of urban air pollution, and what we can do about it.

Hayley Moller is a communicator, strategist and entrepreneur with more than a decade of experience tackling the complex issues of climate change, clean energy, smart cities, and a just transition for all. She has crafted sustainability strategy for organizations of all sizes, from lean start-ups to the United Nations to some of the world's most



well-known brands. A veteran advisor to the C40 Cities Climate Leadership Group, the Coalition for Urban Transitions, and the Global Covenant of Mayors for Climate & Energy, Hayley has delivered climate action campaigns on all seven continents.

An advocate for women and underrepresented groups, Hayley is passionate about making inclusivity the norm. She served several years on the board for the Women's Energy Network DC Chapter and co-founded a local reproductive rights advocacy group in Washington DC. Early in her career, Hayley researched global environmental issues at the Earth Policy Institute.

Hayley holds an MBA with distinction from INSEAD, where she led the school's Environment & Business Club, and graduated summa cum laude with a Bachelor's Degree in Environmental Science from UCLA. Always a Californian at heart, she currently lives in Paris.

Jane Burston and Matt Whitney

The Just City (Part II) - Air pollution is a hidden killer, causing millions of deaths each year and affecting almost every city on Earth. Creating a compelling case for change starts with data. This chapter reveals how emerging technologies promise a revolution in how we understand – and ultimately solve – the air pollution problem.



Jane Burston runs the Clean Air Fund, a global philanthropic initiative that supports organizations around the world working to combat outdoor air pollution, improve human health, accelerate decarbonization, and address climate change. The organization finds, funds, and scales projects that provide clean air for all. It

shares expertise, data, and best practice from across sectors and geographies to ensure that clean air can become a reality for everyone. Previously Jane worked as Head of Climate and Energy Science in the UK Government, responsible for the UK greenhouse gas inventory and a £45 million science programme. As Head of Energy and Environment at the National Physical Laboratory she managed a team of 150 scientists working in air quality, greenhouse gas measurement, and renewable energy. She has been named as a "Young Global Leader" of the World Economic Forum and as one of the "40 under 40 European Young Leaders" by Friends of Europe, and is a previous UK Social Entrepreneur of the year.

Matt Whitney is Portfolio Manager at the Clean Air Fund. Matt leads the strategy and programme development for the Fund's work on air quality data. Previously he was at the UK National Physical Laboratory, working with 150 scientists to increase the impact of its environmental science programme, which included air quality, greenhouse gas measurement, and renewable energy. Matt holds a Master's degree in Environmental Dynamics and Climate Change and an undergraduate degree in Physical Geography.



Jenny Bates

The Just City (Part III) – Will air pollution on a death certificate for the first time lead to a better London? London's air pollution problem has now risen up the agenda, and the solutions are clear - they just need implementing.

Jenny Bates is a campaigner with Friends of the Earth England, Wales and Northern Ireland, covering transport climate emissions and related air pollution issues. Jenny began her campaigning as co-ordinator of Greenwich Friends of the Earth voluntary group in East London while a professional photographer and photographic artist, and became a Friends of the Earth staff member in 2003, covering campaigning in London. Fighting proposed new road river crossings in East



London, Jenny realised how bad air pollution was in the capital, and this issue became a key area of concern and activity. Jenny got Friends of the Earth signed up as a founding member of the Heathy Air Campaign in 2011, which had started after the UK missed its legal targets for nitrogen dioxide in 2010. She liaised with Friends of the Earth's regional staff and local groups around the country on air pollution while working to persuade Friends of the Earth to run a major campaign on it. The Clean Air campaign started in 2016 and the issue is now incorporated within wider climate campaigning.

Colin le Duc

The Invested City - The invested city is the incubator for innovative and sustainable models to be tested and perfected into mainstream solutions.

Colin le Duc is a Founding Partner of Generation Investment Management. Generation is a dedicated sustainable investing firm with a mission to demonstrate the investment case for sustainability and advocate for sustainable capitalism. He is also a founding member of the Growth Equity strategy and a member of the Firm's Management & Investment Committees. He is head of the firm's San Francisco office. Prior to joining Generation, Colin worked for Sustainable Asset Management



in Zurich, Arthur D. Little in London, and Total in Paris. Colin sits on the boards of the NGOs NatureBridge and Ocean Conservancy. He lives in California with his family and has lived in nine countries across the world throughout his life.

James Close

The Financed City - Redirecting and scaling up investment to make cities fit for the future is a global priority. Mobilizing finance for low carbon, economically, environmentally, and socially viable cities will create better cities, reduce risk, and support livelihoods.

James Close has spent his career working at the interface of the public and private sectors, with a focus on mobilizing finance. He is now committed to working on some of the most challenging global issues focusing on sustainable development and climate change. He is currently the head of climate change at NatWest Group, supporting the implementation of the bank's purposeled strategy, which includes the role of principal sponsor of COP26. He is also a member of the Energy and



Natural Resources Advisory Group for the ICAEW and trustee for the Trust for Sustainable Living. Prior to this role, he was head of the circular economy programme for London, building an ecosystem for financing entrepreneurship and infrastructure.

Before returning to the UK, James spent five years in Washington, DC as Director for Climate Change at the World Bank. Prior to joining the World Bank, he was a partner in the Corporate Finance Practice of the accounting firm EY, and also worked for HM Treasury. James has a degree in Chemistry from the University of Durham and is a member of the Institute of Chartered Accountants of England and Wales.



Adam Freed

The Adapted City – The chapter offers a global tour of the devastating impacts climate change is having on cities today, how poor urban planning and design has increasing climate risks, the actions cities are taking to adapt, and the changes needed to accelerate this work.

Adam Freed has more than 20 years of experience working on local and global urban issues. Adam leads the Sustainability Practice at Bloomberg Associates, a non-profit consultancy, where he works with cities around the

world to craft and implement sustainability strategies covering a wide range of issues, including energy, greenhouse gas (GHG) mitigation, climate resilience, housing affordability, green infrastructure, air quality, solid waste management, and neighbourhood

revitalization.

Prior to joining Bloomberg Associates, Adam was the Deputy Managing Director of the Nature Conservancy's Global Water Programme, where he worked with cities in 33 countries to have safe, sustainable, and reliable water supplies and developed innovative financing strategies for natural infrastructure solutions. From 2008 to 2012, he served as Deputy and Acting Director of the New York City (NYC) Mayor's Office of Long-Term Planning and Sustainability, overseeing the implementation of PlaNYC and related sustainability initiatives and developing the city's first climate resilience programme. As part of PlaNYC, the city planted 1 million trees, created more than 240 new community playgrounds, enacted the nation's most aggressive green buildings legislation, achieved the cleanest air quality in over 50 years, launched a US\$2 billion green infrastructure programme, and lowered its GHG emissions by 12%.

Adam is also a Lecturer at Columbia University and a member of the NYC Water Board, which is responsible for setting NYC's water rates to fund the city's water and sewer system's operating and capital needs (approximately US\$3.8 billion annually). In addition, he serves on the Board of ioby, a national crowd-resourcing platform to support community-led improvement projects; is an External Advisor to Fannie Mae's Sustainable Communities Initiative; and is part of the Investor Advisory Group for the UN's Joint SDG Fund. He received his Master's in Urban Planning from New York University and was a Mel King Community Fellow at MIT.

Peter Bishop

The Open City – The open city celebrates its public spaces – its parks, squares, and streets. This is where the health of the city is judged. It needs to be protected, managed, and cared for. It is an essential ingredient of the richness and messiness of the twenty-first-century city.

Peter Bishop is a Professor of Urban Design at the Bartlett School of Architecture, University College London, and a partner of Bishop & Williams consultants. For 25 years he was a planning director at four different central London boroughs, and has worked on major projects at large and complex sites in the UK, including Canary Wharf, the BBC, and King's Cross.

In 2006 he was appointed as the first Director of Design for London, the Mayor's architecture and design studio, and in 2008 served as Deputy



Chief Executive at the London Development Agency. In 2011 he carried out a policy review on behalf of the government, "the Bishop Review", on ways in which the quality of design in the built environment might be improved. From 2011 to 2018, he was director at the architecture firm Allies and Morrison. Recent projects include master planning frameworks for Old Oak Common (High Speed 2 interchange), the Palace of Westminster, and Ansan City Centre (Korea). In 2018 he was commissioned by the Government Architect of New South Wales to carry out a comprehensive review of its policies and programmes.

Peter lectures and teaches extensively, and has been a design advisor to the mayors of London, Bucharest, Ansan, and Zhuhai. He was on the jury for the Sochi Winter Olympics Legacy, Jabal Omar development in Mecca, and central Dallas regeneration project. He is an honorary fellow of University College London and honorary fellow of the RIBA, holds an honorary doctorate from the University of Kingston, and in 2017 was Distinguished Visiting Scholar at UTS Sydney. He is currently leading a significant research project on the ways to foster strong communities in housing regeneration.

His book The Temporary City (Routledge, 2012) explores the origins of current thinking on temporary urbanism. He also examined the political processes behind major developments in Planning, Politics and City Making - A Case Study of King's Cross (RIBA Publishing, 2016).



Carlo Laurenzi

The Natural City - Imagine for a moment that cities were havens for wildlife, the interaction with humans was entirely positive, and the dynamics between the two were mutually beneficial. It is not a big step to make, but a brave one.

Carlo Laurenzi has 34 years' experience of the UK voluntary sector, twice as a CEO. He now works as a consultant, mostly in the not-for-profit

sector, and for the past several years has been an adviser to DEFRA on civil society matters. One of the founding trustees of Rewilding Britain and former CEO of the Wildlife Trust in London, he helped win the contract to create Europe's largest urban wetland scheme in 2015. He also volunteers in a small park near his home in north London.

Carlo has had short spells in government, as a Whitehall secondee and working for a local authority in London. He has sat on over 30 boards, quangos, and steering groups. A tutor and examiner for the Open University, he has co-authored one of the course books, The Manufacture of Disadvantage (Open University, 1990). He has edited two further short books on mental health. In 2000 he was awarded an OBE, and in the same year was runner-up in the Charity Times Awards for Director of the Year. He founded Hostage UK (now Hostage International) with Terry Waite in 2002. Currently he is its vice-president. He was awarded a Churchill scholarship for a six-nation study in northern Europe in 1989. He has enjoyed a lifetime of walking and cycling around this beautiful planet.

Mauricio Rodas

The Climate Resilient City – Cities are key to addressing the world's biggest challenges, but they lack proper access to finance. Reforms to the international financial system are needed, and the COVID-19 stimulus may yield that opportunity.

Mauricio Rodas is a Juris Doctor from Universidad Católica (Quito) and holds two Master's degrees in Government Administration and Political Science from the University of Pennsylvania (UPenn). He lived in Mexico, where he worked for the UN's ECLAC and as a policy consultant for the Mexican government. Later he founded and served as Executive Director of Ethos Public Policy Lab. In 2011, Mauricio returned to Ecuador and founded the SUMA political party. In 2013, he ran for President of Ecuador; the following year he was elected Mayor of Quito (2014-2019). During his term, he was the hosting mayor of the UN's Habitat III Conference. He played a leadership role in



city networks: two terms as world Co-President of UCLG, and as a member of the boards of C40, ICLEI, and the Global Covenant of Mayors. He was a Young Global Leader and member of the Global Future Council on Cities of the World Economic Forum. In 2019, he was named one of the 100 World's Most Influential People on Climate Action by Apolitical; he also received UPenn's World Urban Leadership Award.

He is a Visiting Scholar at UPenn, working on the Cities Climate-Resilient Infrastructure Financing Initiative. He is also a Distinguished Fellow on Global Cities at the Chicago Council on Global Affairs and a Senior Fellow of the Adrienne Arsht-Rockefeller Foundation Resilience Center at the Atlantic Council.

Sophie Hæstorp Andersen

The Green City - The chapter describes Copenhagen's journey to a green and sustainable city with cleaner air, less noise, smart buildings, and green transport. Working with stakeholders from idea to implementation ensures a fair and feasible transition.