

EDITED BY ANDREW JONES,
PATRIK STRÖM, BRITA HERMELIN
AND GRETE RUSTEN

SERVICES AND THE GREEN ECONOMY



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Andrew Jones • Patrik Ström • Brita Hermelin • Grete Rusten
Editors

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Editors

Andrew Jones
School of Arts & Social Sciences
City University London
London, United Kingdom

Patrik Ström
Department of Business Administration
University of Gothenburg
Göteborg, Sweden

Brita Hermelin
Centre for Municipality Studies
Linköping University
Sweden

Grete Rusten
Department of Geography
University of Bergen
Bergen, Norway

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List of Editors and Contributors

Editors

Andrew Jones Professor in Economic Geography, School of Social Science and Arts, City University London, UK

Patrik Ström Associate Professor, Centre for International Business Studies/Economic Geography, University of Gothenburg, Sweden

Brita Hermelin Professor in Human Geography, Centre for Municipality Studies, Linköping University, Sweden

Grete Rusten Professor in Economic Geography, Department of Geography, University of Bergen, Norway

Contributors

Andrew Berry Research Consultant, United Nations Economic Commission for Latin America and the Caribbean (ECLAC), Santiago, Chile

Johanna Dichtl Research Assistant, Department of Geography/Economic Geography, Catholic University of Eichstätt-Ingolstadt, Germany

Havard Haarstad Senior Researcher, Department of Geography, University of Bergen, Norway

Britta Klagge Professor, Department of Geography, Bonn University, Bonn, Germany

Mitsutaka Matsumoto Senior Researcher, Human Informatics Research Institute, National Institute of Advanced Industrial Science and Technology (AIST), Japan

Masaaki Mochimaru Director, Human Informatics Research Institute, National Institute of Advanced Industrial Science and Technology (AIST), Ibaraki, Japan

Nanno Mulder Chief, International Trade Unit, United Nations Economic Commission for Latin America and the Caribbean (ECLAC), Santiago, Chile

Nabil Nasr Associate Provost and Director of the Golisano Institute for Sustainability, Rochester Institute of Technology, Rochester, NY, USA

Ximena Olmos Research Consultant, United Nations Economic Commission for Latin America and the Caribbean (ECLAC), Santiago, Chile

Bérénice Preller PhD candidate, Institute of Geography and Spatial Planning, University of Luxembourg, Esch-sur-Alzette, Luxembourg

Sebastian Reimer PhD candidate, Department of Geography, Bonn University, Bonn, Germany

Christian Schulz Professor, Institute of Geography and Spatial Planning, University of Luxembourg, Esch-sur-Alzette, Luxembourg

Yoshiki Shimomura Professor, Department of System Design, Tokyo Metropolitan University, Tokyo, Japan

Helge Lea Tvedt PhD candidate in Economic Geography, Department of Geography, University of Bergen, Bergen, Norway

Kentaro Watanabe Research Scientist, Service Design Research Group, Human Informatics Research Institute, National Institute of Advanced Industrial Science and Technology (AIST), Tokyo, Japan

Xiangxuan Xu PhD candidate, Centre for International Business Studies/Economic Geography, University of Gothenburg, Gothenburg, Sweden

Hans-Martin Zademach Professor in Economic Geography, Department of Geography, Catholic University of Eichstätt-Ingolstadt, Eichstätt, Germany

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Introduction: Services and the Green Economy

Andrew Jones, Patrik Ström, Brita Hermelin
and Grete Rusten

The debate about the emergence of an environmentally sustainable global economy has become more substantial and diverse in the last decade, and at times arguably more controversial. Early concepts of the ‘green economy’ in the 1990s (e.g., Jacobs 1996) have been superseded by a variety of different concepts of how economic activity might become environmentally sustainable (Bina 2013), what it constitutes (Dryzek 2005), how it should be measured and a plethora of critiques levelled at competing popular and policy manifestations of the idea of a green

A. Jones (✉)

School of Social Science and Arts, City University London, London, UK

P. Ström

Centre for International Business Studies/Economic Geography,
University of Gothenburg, Gothenburg, Sweden

B. Hermelin

Centre for Municipality Studies, Linköping University, Linköping, Sweden

G. Rusten

Department of Geography, University of Bergen, Bergen, Norway

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economy (e.g., Le Blanc 2011; Caprotti and Bailey 2014). Yet, equally, the concept of a green economy has gained much wider currency as a policy paradigm and acceptance within state and in international policy discourses (UNEP 2011). A key aspect of this conceptual evolution is the way that the green economy has been reframed as a combined response to meet economic, climatic and environmental challenges, although acknowledging in this that enormous challenges around both the commitment of actors and practical implementation remain (Newton and Cantarello 2014).

One of the key axes of debate within the social scientific literature in recent years has been the feasibility and nature of a sustainable transition in economic activity, and in particular the need for a low carbon economy in the context of the ongoing (and increasingly pressing) challenge of human-induced climate change in the twenty-first century (cf. Schulz and Bailey 2014) as well as sustainable development that addresses resource use and management of ecosystems (Bina 2013). An enormous literature now exists across this debate about the mechanisms through which such a transition might be achieved and the respective role of different actors including governments, firms (Porter and Kramer 2011), non-governmental organisations (NGOs) and consumers to name but a few (e.g., Mulaney and Robbins 2011; Atkinson and Klausen 2011). However, within these debates the breadth of different industries considered as key agents of intransigence or change has been relatively limited. Much has been written about the energy sector, focusing on the historical path-dependent economic development of fossil fuel energy (Simmie 2012), and there is a burgeoning literature concerning the role of transport, construction, agriculture and manufacturing—at least within certain specific framings of environmental sustainability such as reducing carbon emissions or recycling materials throughout product lives (e.g., Cooper 2010). However, with the exception of finance (although, again, in a particular and perhaps narrow way) (e.g., Labatt and White 2011; Carraro et al. 2012), debate about the nature and role of service industries in the transition to a green economy has been very limited indeed.

The entry point for this book is to develop and make the case for an emerging field of work from within the sub-disciplinary area of environmental economic geography, which adopts a service-based

perspective on the transition to a green global economy. The book is premised on the proposition that there has not been significant engagement with the nature of the role of service industry involvement for the contemporary green economic transition. It develops a theoretical and conceptual approach that takes service activity as its primary focus. We argue throughout this book that the lack of direct engagement with the role of services represents a significant limitation on the capacity of social science theories to understand the nature of how a greener economy might come about. This introductory chapter therefore seeks to provide an overview of how the contributions in this book correspond to an emerging field of research that foregrounds the role of service inputs and service activities in green economic development and develops an environmental economic geographical perspective (cf. Soyez and Schulz 2008; Schulz and Bailey 2014). The latter has, to date, paid little attention to service industries but in developing it from a service-based perspective, we suggest there is considerable utility for better understanding the way in which different service industries and activities are contributing to a green economic transition both as providers of ‘green services’ and producers of service inputs to other actors engaged in the transition.

We expand these arguments in the remainder of this introductory chapter around a number of component issues. In the next section, we outline what is meant by a service perspective on environmental economic geography, identifying what we argue are the advantages this offers in developing both theoretical and empirical insight into the contribution of services in the contemporary green economic transition over some of the narrowly-focused frameworks for theorising service activity that have been developed in management and international business (Merchant and Gaur 2008). Our economic geographical approach seeks to develop a theoretically-pluralist perspective that makes use of insight from a range of interdisciplinary bodies of work engaged with the service economy. In so doing, it enables a fuller understanding of both the breadth and complexity of green service activity, including in ways that move beyond just considering firms or industry sectors to a wider range of public and private stakeholders and actors. The third section considers a key conceptual issue that continues to trouble the social scientific debate about the service economy: how services might be defined and categorised, and

where the boundaries of a service/non-service activity or product might be best understood. Here we seek to clarify the utility of conceptualising different types of services and argue that the concept has considerable value in epistemological terms, even if its broadness does present challenges. The following section addresses the other important definitional aspect to the topics of this book: the nature of what might be meant by the green economy. Again, we argue that a broad definition has considerable utility but also argue that a service perspective presents a series of potential ways in which the green economy might be reconceptualised and implemented. The final section of this chapter outlines the structure of the rest of the book, and provides some guidance to the reader as to how the different contributions from a wide variety of authors working on service industries or activities each contribute in different ways to our overall argument.

1.1 Environmental Economic Geography from a Service Perspective

The book is grounded in an approach that can be termed *environmental economic geography*, which focuses on a service perspective. This means it explores how services themselves can be sustainable whilst equally being concerned with how service industries provide a crucial contribution to other industries' shift towards a more sustainable form of economic activity. The premise shared by both the editors and chapter authors of this book is that service sector activity represents an unexplored and under-researched dimension to the development of the green economy that not only warrants attention, but which needs to be foregrounded in theoretical and policy discussions of a green economic transition. Much of the existing research undertaken on the green economy has operated within a conventional epistemological framing of the economy as a range of different industries that are faced with a challenge of shifting towards environmental sustainability. Firms within these industries are seen as agents of change or transition and the processes by which production, distribution and consumption systems are transformed as being contained within firms in terms of knowledge, innovation and decision making. What the

authors in this book share is a view that whilst there is obviously a need and merit in considering specific industry cases, the contribution of a whole variety of service activities to this process has been largely ignored and consigned to the background of these change processes. Our argument is that to more effectively understand the nature of change and whether or not it will be successful, the nature and role of these service contributions to the green economy need to be understood more deeply. We suggest that the success or failure of greener economic development is bound into the nature of the service sector contribution to firms and industries operating at a range of scales that are not easily captured by analyses that treat industry sectors as black boxes containing aspects of the green economy.

In this respect, a service-oriented approach to sustainable economic transition argues for a more integrated perspective based on the assumption that services are integrated into all types of industries, regardless of the industrial sector. Such arguments have been made using the theory of service-dominated logic (Vargo and Lusch 2008) and in discussions about the 'servitization' of economic activities (Toivonen and Tuominen 2009; Neely et al. 2011) as well as value creation logic (Ørberg Jensen and Petersen 2014). This is not to seek to subsume all industry categories into 'services' in some broad generalisation, but rather in line with the servitization argument that services may be conceived as a perspective rather than particular activities (Enquist et al. 2011). A service perspective means that the experiences of both clients and customers come into focus and the function of the economic activity in relation to outcomes becomes the important issue. This interconnectedness among sectors has also attracted an increasing interest in policy development in relation to economic integration and international competitiveness for firms (EU 2014).

The second important issue we want to raise is how service activities may contribute to the transition of the society more generally towards sustainable processes. This leads the discussion towards service activities as mediators, developers and agents for knowledge dissemination, knowledge development and innovation that may lead to more sustainable. Economic activities of advanced producer services are important for future growth and sustainable development but the impact of services is still in need of further research (Beyers 2012; Daniels 2012;

Bryson et al. 2004). These include both technical firms (in engineering, information and communications technology (ICT) and architecture) and those in management, eco-service infrastructure (e.g., legal services, certification and auditing services, management consulting and environmental/engineering services), education and other relevant fields. The importance of advanced services for the innovation system is evident, as well as being creators of regional economic development in both mature and emerging markets (Park and Shin 2012; Jensen 2013). This connects to the growth of sustainable or green economies in the most rapidly growing emerging markets in Asia and Latin America. The combination of integrated service systems can enhance sustainability. The interconnectedness of the global economy through product trends, production networks or value-chains also highlights the difficulty of greening the economy in partial geographical areas, when, in the end, it has global repercussions. This calls for joint solutions and cooperation among players in the mature and emerging economies. Increased cooperation and upgrading of the value chains in emerging markets is seen as being of great value for future economic development (Hsu et al. 2013; Stark et al. 2014).

A key aspect is the role of consultancy services in a variety of forms. Consulting is often needed at different stages of infrastructure and construction processes and includes services such as product development, industrial design, legal advice, etc. Various chapters in this book address issues of how innovation and knowledge development for more eco-friendly technologies and systems are related to the societal and institutional context. The effects of environmental solutions also require an understanding of geographical scale. This means that what we find to be a sustainable technological solution on a local level can have a less positive impact on a larger scale. For example, the use of smart ICT solutions that reduce pollution and emissions in our cities might lead to harmful extraction of minerals if used elsewhere. This also suggests there is a need to pay attention to how services can be used to produce products with longer life cycles thus reducing overall consumption. Chapter 4 explores this issue in depth.

Finally, a third key element to our argument about the need for a service perspective in considering the greening of the economy is concerned

with the nature of policy and policy development. A range of commentators have argued that there is a need for a holistic approach to policy development if green economic development is to be successful, and that a reliance on industry, research and development institutions or government in isolation will not lead to a coherent approach (Ely et al. 2013; Atkinson and Klausen 2011). The Europe 2020 Smart Growth initiative is a good example of an attempt to develop a holistic approach to integrate the goals of ecological sustainability with goals for economic growth involving a wide range of stakeholders (Europe 2010). This programme involves the development of political initiatives with implications for economic activities. Initiatives take place at different geographic levels in the form of research and development programmes, arenas and platforms for meetings and information dissemination, networks, etc.. A variety of regulations, incentives and resources play a role in how economic activities transform the production or infrastructure to become more green and ecological sustainable. In that respect, we extend our service perspective on green development to a whole range of 'service-like' activities that are not conventionally classified as either services or pure economic activity. We suggest there is a need to include public bodies, third-sector activity and hybrid public-private entities in our service-based perspective on green development since non-commercial knowledge production, policy bodies, public sector funding and the constitutions of public-private partnerships are important frameworks for the development and implementations of 'green' solutions that cover the need of society of as a whole (Ely et al. 2013).

1.2 Defining the Service Economy: An Old Debate in 'Green' Clothing?

Having set out the case for a service-based perspective on green economic development thus far, and before going any further, it is important in terms of the goals of this book to consider in more depth some of the longstanding (and not unproblematic) debates about the nature of the service economy itself. Social scientific interest in the nature of the 'service' sector is longstanding, with work spanning a range of disciplines

emerging during the 1970s when it was recognised that a growing proportion of advanced industrial economies' GDP was accounted for by service industries rather than agriculture, mineral extractive or manufacturing industries (Hermelin and Rusten 2015). This service transition is well rehearsed in a literature spanning decades, but in the context of the second decade of the twenty-first century and the focus on this book a number of key features of the contemporary debate about what the service economy 'is', how it relates to the rest of the economy and the geographical and scalar dimensions to service industry activity are important.

First, it is clear that any definition of a service sector to national, regional or global economies needs to operate with a great degree of generality. Whilst national statistical agencies point to the fact that service industries account for 70–80 % of GDP in economies such as the UK, the USA or Sweden, and indeed increasingly account for more than 60 % of GDP of many emerging economies such as Brazil or China, the nature of the service industries within this classification varies enormously (Illeris 1996). The literature generally distinguishes service industries by market and by 'order'. The former enables an important distinction between producer and consumer services, with industries such as management consultancy or investment banking falling into the producer service category and hospitality, retail banking and leisure into the consumer service category. To complicate matters further, many service industries unevenly occupy both categories with, for example, financial and legal service industries comprising firms that provide services to both groups of customers. With regards to the concept of order, there is also a debate about the relative importance of different types of services for economic development and sustainability, wealth creation and the innovativeness of economies. Much of the literature places significance on the role of knowledge-intensive business services (KIBS) as 'higher-order services industries', which are argued to be the key to wealth generation and innovation in the contemporary global knowledge economy (Bryson and Daniels 2015). High-order services have thus been the focus of much research in relation to their capacity to transform the nature of economies (*ibid.*), and clearly this argument resonates through many of the chapters in this book. However, what we would highlight at the outset is that an over-emphasis on high-order service industries may present

a narrow and unhelpful account of the role in which services are leading to the greening of economies. Taking the concept of an environmentally sustainable economy in its broadest sense, lower-order consumer services are important albeit in different ways from high-order producer services. Sectors such as waste management, construction and local public services are considered in various chapters in this book and represent a significant aspect of the way in which services are contributing to a green economic transition.

A second aspect to this debate is the validity of distinguishing a service at the level of industries or firms at all. A growing body of research has demonstrated that the purity of service provision by service firms in service industries is questionable. This even goes as far as the provision of a given service itself. In contemporary economies, a research emphasis on production as a process or practice has shown that many producer services are in effect co-produced across and between service firms and their clients (Ørberg Jensen and Petersen 2014; Bramklev and Ström 2011), and potentially with an array of multiple service providers collaborating and working together in delivering services via projects (Rusten and Bryson 2010). Obvious examples would be the delivery of foreign direct investments in different countries where a firm buying a foreign subsidiary would require a whole range of services (financial, legal, consultancy) from different external firms and enabled by internal employees in order to undertake the acquisition as a project. The pureness of any given service itself is therefore problematic to identify, and it has been argued that service-based research may be better focused around service-rich projects in these contexts (Jones and Ström 2012). Such an insight is highly pertinent to many of the industries and topics considered in this book in the process of economic 'greening', and the fact that a purely green service sector firm or service activity is hard to purify from non-green activity or agents is widely evident in many of the cases considered. We are not arguing in this book that the green service economy is easy to disentangle from the 'non-green' economy, and the binary division here is almost certainly an unhelpful one. Rather, the book is premised on a conception of the key contribution of service industries, firms and practices to spatially uneven 'greening' processes in the economy, in all the diverse and messy forms that currently exist.

This leads to the final aspect of the debate about the service economy that is important to understand in the context of this collection and that this book seeks to contribute to: the uneven nature of the globalisation of service firms and industries and the increasingly complex spatial form of service sector activity. This is leading to changing delivery of services and the development of services in different economies and regions across the planet. Debates about the nature of service sector in the global economy have, as with other sectors, been increasingly concerned with the rising significance of transnational firms (TNCs) in service industries and the globalisation of the market for services. TNCs have become increasingly dominating in many service industries such as banking, retail and hospitality, although the challenges faced by service firms to internationalise are in many cases greater than in manufacturing or extractive industries. Many services are embodied activities, delivered by skilled individuals, and are thus highly sensitive to different national and cultural contexts (EU 2014). Other service industries such as legal services are also shaped by national regulatory jurisdictions, which makes the development of standardised global service products more difficult for firms (cf. Jones 2005; Faulconbridge 2010). However, social science research has increasingly been concerned with examining the role of KIBS in transmitting industry and business practice norms across the planet, and in fostering innovation in different national economies. This trend has considerable significance for the theme of this book in seeking to understand how service TNCs are often central in delivering green services to firms in different national economic contexts that are propagating the greening of these economies. The particular complexities of how service TNCs, including smaller firms piggybacking on global manufacturing companies, are entangled in green economic development at a variety of scales in the global economy, and their relationship to the transmission of knowledge, technological innovation and business practices, is at the heart of our argument for the value of a geographical approach to green service development (cf. Faulconbridge 2013). Many of the contributions to this book explore this spatial dimension of the nature of services in green economic development through the lenses of local or regional industries, the interactions of TNCs with regional economies or the way in which global 'best practice' or innovation is adopted and implemented in specific ways in different local contexts.

1.3 Theorising the Green Economy

Thus far, we have set out our case for foregrounding the role of service industries in the greening of the global economy and considered how current theoretical debates about the nature of services themselves impact on that topic. However, a further key task of this introductory chapter is to consider the conceptual issues that exist around the concept of green economy itself.

The starting point of this discussion is to highlight that the concept remains a contested and somewhat controversial one. We do not therefore seek to argue for a strong definition of the green economy, and many of the contributors in this book engage with (sometimes subtly) different perspectives on the idea. In broad terms, the concept has developed from political international discussions and it is about the interactions and integrations of ecological sustainability, economic growth and social inclusion. Environmental and climate challenges are important backdrops for this direction of political action and at its heart the idea of the green economy aims to develop more sustainable societies and resource solutions. The United Nations Environment Programme (UNEP) offers a recent definition that has been increasingly widely adopted:

In its simplest expression, a green economy is low-carbon, resource-efficient and socially inclusive. In a green economy, growth in income and employment are driven by public and private investments that reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services (UNEP 2011, p. 16)

Such a definition allows room for alternative development scenarios whereby economic activities bring the promise of a transformation in the way business is done as they dynamically engage with social relations (around the environment) (cf. Gibbs and O’Niell 2014). It moves beyond earlier definitions of the green economy through an ecological modernisation lens that represented ‘business as usual’, whereby ‘greening the economy’ was confined to new products and processes that used less energy and resource inputs, but without addressing issues of growing consumption or rebound effects (cf. Bina 2013; Lorek and Spangenberg 2014).

Recently, there has been an imperative to move beyond current economic thinking around a number of different theoretical directions. We highlight three here that we suggest are important current conceptual considerations in understanding what a green economy might be and how it might be achieved, all of which are addressed in different ways by the contributors to this book.

The first is what might be termed ‘transition management theories’ (cf. Elzen et al. 2004), which seek to understand the economic conditions under which economic systems innovate and change, leading to a transition to a more sustainable form of economy. Much of the growing literature has focused on how specific industries or production processes are evolving towards delivering more environmentally sustainable economic outcomes (e.g., Markard et al. 2012). Transition theory seeks to move to a green economy as co-constituted through the co-evolution of social, economic, political and scientific-technological subsystems (Smith et al. 2010; Foxon 2011; Farla et al. 2012). This ‘socio-technical’ approach (Geels 2010) does not see the economy as easily disentangled from society, politics, institutions or culture and therefore aims to adopt a holistic theoretical approach to how a green economy might develop. However, whilst we and many of the contributors to this collection find this a useful epistemological framing of how economic systems might change, it represents more an entry point rather than an approach we simply seek to apply. Transition management theories have been applied to a wider range of elements of the green development debate but despite much application to concepts of the green economy, the greening of firms, green technologies and green entrepreneurship, there has been little or no direct engagement with the role of service industries in the evolution of the green economy. We suggest that this is a surprising and significant absence in the debate about the nature of any transition to sustainable economic development. Furthermore, we would argue that a service-based perspective (incorporating services as products, servitization as a process and service-like activities) provides a new and potentially powerful way of understanding key elements of the socio-technical nature of a sustainable transition. Many of the contributions to this book use transition management theory as an entry point, which allows a reframing of the drivers and mechanisms of transition.

A second approach of considerable importance is the substantial (largely geographical) literature concerned with the development of sustainable urban and regional economies (cf. Altenburg and Pegels 2012; Cooke 2013), and in particular has focused on how urban sustainability might be achieved. This literature is not purely concerned with the economy of firms or industries either, seeking to take the city or region as the unit of analysis for environmental sustainability (cf. Bulkeley and Betsill 2005; Rutherford and Coutard 2014; Childers et al. 2014). Importantly, however, this literature shares much in common with work on service economies and the role of (global) city regions in the development of the service sector (e.g. Chang and Sheppard 2013). It is, we would argue, a useful conceptual context in which to think about how green service firms and industries are embedded in specific urban and institutional contexts that shape the capacity and direction of green service development. The urban sustainability literature also is helpful in framing the role of non-commercial institutions, labour markets and public sector actors in the constitution of green service activity since it seeks to adopt a place-bound and multi-actor perspective on how urban sustainability is achieved.

Finally, and related, a significant body of social scientific work has specifically examined the nature of green economic development through an institutional theory approach. Drawing on ‘new institutional theory’ in political science and other theories of governance (cf. Geels 2004; Zhu and Sarkis 2007; Bosselmann et al. 2012; Pinkse and Kolk 2012), a range of different disciplinary contributions have sought to understand how local, national and supranational institutional contexts shape the possibilities and capacities for economic development to become more environmentally sustainable. Examples are the negotiation activities linked to the development of international environmental standards (e.g., ISO certification schemes). Institutional theory permeates much of the current social scientific literature on green development and in particular links policy ideas and initiatives that seek to achieve environmental sustainability in the institutional and governance contexts. With regard to the objectives of this book, and in the case of many of the contributions, institutional theory provides an important basis for understanding how services are entwined in the transition to a green economy. It enables an understanding, for example, of how policy and regulatory contexts both