# Sufficiency Economy

Samuel Alexander

# SUFFICIENCY ECONOMY: ENOUGH, FOR EVERYONE, FOREVER

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### WHAT OTHERS ARE SAYING ABOUT SUFFICIENCY ECONOMY:

'With the vision of a prophet, the eloquence of a poet, the forensic detail of the scholar, and the engaged passion of an activist, Samuel Alexander offers critique, analysis and strategy for a post-growth society beyond carbon-fuelled, consumer capitalism. It is a truism that 'where there is no vision the people perish'. This book in its comprehensive scope presents a challenging, provocative and absolutely necessary vision, synthesising theoretical and practical considerations related to the current crisis of 'the human condition', and offering informed suggestions as to what comes after the unsustainable growth economy. They say knowledge is power, if so, arm yourself by reading and (re)acting to and on this book, notes from the 'front line' of our crisis-ridden but self-transforming present.'

# – John Barry, author of The Politics of Actually Existing Unsustainability

'Impressively researched, eloquently argued, and deeply engaging, Samuel Alexander's work sits at the forefront of the degrowth movement. More than just a powerful critique of the capitalist growth economy, this book highlights the promise – and the necessity – of localised, ecological economies as the only means of adequately confronting the crises that are converging upon us. At times his vision of the future may be challenging, but it is never despairing, and ultimately the reader comes away uplifted and inspired. Alexander convinces us that less can indeed be more.'

# - Helena Norberg-Hodge, author of Ancient Futures and producer of The Economics of Happiness

*Sufficiency Economy* is a fascinating and encompassing work that envisions an affirmative response to the descent of growthdriven societies. It prospects a way forward that is neither overly optimistic, nor bleak. The result is a strategy for transitioning to a steady-state yet vibrant existence that focuses as much on ensuring human dignity as on ending our planetary overconsumption.

### - Raymond De Young, co-author of *The Localization Reader: Adapting to the Coming Downshift*

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### Acknowledgements

These collected essays are an outgrowth of work initiated in 2006, when I began working on my doctoral thesis, 'Property Beyond Growth: Toward a Politics of Voluntary Simplicity'. Since then the ideas and perspectives they express have developed in the process of establishing and teaching a course called 'Consumerism and the Growth Economy: Interdisciplinary Perspectives', which forms part of the Masters of Environment at the University of Melbourne, Australia. Over this time, most of the essays have been published in peer-reviewed journals, book chapters, or other academic publications, as detailed below, with Chapter 1 being the only journalistic piece:

A version of Ch. 1 was published in *The Conversation* (2 October 2014); a version of Ch. 2 was published in Real-World Economics Review (2012) 61: 2-21; a version of Ch. 3, co-authored with Simon Ussher, was published in Journal for Consumer Culture (2012) 12(1): 66-86; a version of Ch. 4 was published as a Simplicity Institute Report (2012) 12s: 1-31; a version of Ch. 5, co-authored with Paul Yacoumis, was published as a Simplicity Institute Report (2015) 15d: 1-19; a version of Ch. 6 was published in David Humphreys and Spencer Stober, eds, Transitions to Sustainability: Theoretical Debates for a Changing Planet (2014) Ch. 19: 296-315; a version of Ch. 7 was published as a Simplicity Institute Report (2014) 14h: 1-24; a version of Ch. 8 was published in Environmental Values (2013) 22(2): 287-308; a version of Ch. 9 was published in Michelle Maloney and Peter Burdon, eds, Wild Law - In Practice (2014) Ch. 3: 31-44; a version of Ch. 10, coauthored with Johnny Rutherford, was published as a Simplicity Institute Report (2014) 14a: 1-24; a version of Ch. 11, co-authored with Esther Alloun, was published as a Simplicity Institute Report (2014) 14g: 1-24; a version of Ch. 12 was published in Earth Jurisprudence and Environmental Justice Journal (2011) 1: 26-59. I am grateful for the opportunity to reprint.

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Finally, to Helen and Laurie – whose love, support, and tolerance make all my efforts possible. Thank you, as always, for everything.

You never change things by fighting the existing reality. To change something, build a new model that makes the existing model obsolete.

### – Buckminster Fuller

### INTRODUCTION

What is to be done? This is surely one of the central questions for those of us who are animated by what Charles Eisenstein calls 'the more beautiful world our hearts know is possible'; a central question for those of us with the fire of ecological democracy burning in our eves. Yet, it is a question that demands engagement with three preliminary questions, the answers to which provide the necessary guidance for effective practical action. First, we must adequately understand the nature and extent of the overlapping crises that confront us today. Secondly, we must envision the alternative world, or matrix of alternative worlds, that would adequately dissolve the current crises and provide the foundations for a flourishing human civilisation into the deep future. And thirdly, having provided an accurate critique and having envisioned an appropriate and effective alternative, we must meditate deeply on the question of strategy the question of how best to direct our energies and resources if we are to maximise our chances of building the new world we have imagined. Then, and only then, are we in a position to ask ourselves the ultimate question: what is to be done? If that question is asked prematurely, or if it is asked having answered any one of the preliminary questions inadequately, then there is a great risk that one's action, motivated by the best of intentions, is directed in ways that fail to effectively produce any positive effect and, indeed, may even be counter-productive to the cause.

The publication of my two volumes of collected essays – *PROSPEROUS DESCENT* and *SUFFICIENCY ECONOMY* – represents an attempt to engage these questions as directly and as clearly as possible. The primary motivation for doing so arises from my concern that much of the literature on 'sustainable development' fails to understand the magnitude of our overlapping crises, and for that reason, the envisioned alternatives or solutions widely proposed tend to be fundamentally misconceived. Furthermore, when the critique of the existing world is off target and when the envisioned alternatives are misconceived, it should come as no surprise that the strategies proposed for achieving the stated goals are similarly flawed. If our map is poorly drawn and our compass is broken, we are unlikely to arrive at where we need to go. Is it any wonder humanity seems so lost and directionless?

Over the years of writing these essays my ideas and perspectives have naturally evolved in a dialectical relationship with other people's ideas, and are constantly being refined further as my experience of the ever-changing world is digested and reflected upon. The human condition is such that the sands of thought forever shift beneath our feet. Nevertheless, having now spent the best part of a decade engaging the questions posed above, I notice that the evidential ground upon which I stand is firming up, providing me with confidence that the position I defend – radical though it may seem – is accurate, even if there may be matters of detail that will always be open to revision or refinement.

In this introduction I would like to state some of the fundamental tenets which shape the following essays, in the hope that this will guide the interpretation of those essays, especially at those times when these central ideas lie beneath the surface of a more focused discussion. As I am writing this introduction *after* having written the essays, there is also the luxury of having the full benefit of what I have learned throughout the writing process.

Here are twelve defining theses that shape my work:

1. Pursuing limitless growth on a finite planet is a recipe for ecological and humanitarian catastrophe. Despite the controversy that still surrounds the 'limits to growth' perspective, there is something strikingly obvious about the idea that if human population keeps growing, if our resource and energy demands on the natural environment continue expanding, and if our streams of waste and pollution keep growing, then eventually we will undermine the ecological foundations of our civilisation so violently that nature will fight back and bring things into balance. Let us face the fact, too, that 'bringing things into balance' is a euphemism for mass population die-off, signifying a prospective tragedy of unspeakable proportions. So the question is not so much *whether* there are limits to growth - of course there are limits to growth! - but rather *when* those limits will begin to impose themselves on our current ways of living and force us to live differently. It would be far better for people and planet that we anticipate these limits and begin working toward a post-growth economy now. Needless to say, this will not be easy. We have developed two centuries of industrial, growth-orientated momentum that will make it incredibly difficult to consciously redirect the economic trajectory so fundamentally. But transitioning 'beyond growth' is a transformation that is coming, one way or another. Better it be by design than disaster.

- 'Green growth' is a dangerous myth that entrenches 2. the status quo. When the limits to growth are raised in objection to the growth model of progress, many people seem comforted by the fantasy that science and technology will save the day. Current forms of growth may have ecological limits, these people acknowledge, but they then insist that the global economy can and should keep growing forever, if only we learn how to produce and consume more efficiently. This is nice in theory, perhaps, but it is biophysically naïve. It is of the utmost importance, of course, that we use the best of our technological knowledge to help us achieve a sustainable way of life through efficiency improvements. It would be foolish to argue otherwise. But efficiency alone cannot 'decouple' economic growth from ecological impact sufficiently to produce a sustainable way of life. The extent of decoupling required is simply too great. To be effective, the drive for efficiency must be shaped and limited by an ethics of sufficiency. That is to say, our aim should not be to do 'more with less' (which is the flawed paradigm of green growth), but to do 'enough with less' (which is the paradigm of sufficiency).
- 3. 'Degrowth' (i.e., planned contraction of resource and energy demands) is necessary in the developed nations in order to move toward a just and sustainable economy that operates within the sustainable carrying capacity of the planet. When the extent of ecological overshoot is understood, and bearing in mind the fact that ecological room must be left for poorest nations to attain a dignified existence, there is no escaping the fact that degrowth is required in the developed – or rather *over*developed – regions of the world. This is not a popular thesis, but it does reflect a biophysical reality.
- 4. Addressing poverty within a degrowth framework implies a redistribution of wealth and power on a much more egalitarian basis. Within the growth model it is assumed that poverty will be eliminated through continued growth of the global economy via some 'trickle down' effect. This is an ecologically unsupportable pathway to poverty elimination, because it relies on continued growth on an already overburdened planet. Once it is recognised that growth cannot solve the problem of poverty and in fact threatens to exacerbate it through climate change, continued ecological degradation, or economic collapse, it becomes clear that the only coherent pathway beyond poverty lies in a more

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egalitarian distribution of wealth and power within a degrowth model of progress. This is not the place to argue *how* that could be achieved – there are many options. The present point is simply to acknowledge that it is a *necessary* feature of any transition to a just and sustainable world.

- Degrowth implies radically reduced energy and 5. resource requirements compared to overdeveloped nations. Among other things, degrowth means giving up affluent, consumer lifestyles and embracing 'simpler ways' of living that provide for mostly local needs using mostly local resources. This is an implication of the environmental predicament that few dare to acknowledge, since most people seem resistant to giving up the comforts and conveniences of consumer affluence. But given the extent of ecological overshoot, there is no way that the consumer way of life could be universalised. Consumerism was an experiment that failed. It led civilisation down a dead end. We are now being called to reimagine the good life beyond consumer culture and explore new conceptions of progress and prosperity. This does not necessarily mean hardship. It means focusing on what is sufficient to live well – and pursuing that goal with all the wisdom, creativity, and compassion we can muster.
- 6. It is not enough merely to live more simply within existing structures and systems. While challenging ourselves to live more simply is necessary, the even greater challenge is to begin building new systems and structures that support and encourage 'simpler ways' of life. We cannot wait for governments to do this for us. First and foremost, we must organise and network at the grassroots level and begin building the new world within the shell of the world.
- 7. At some point, when the social movement becomes powerful enough, there will need to be some democratic social planning of the economy to ensure that the necessary degrowth transition does not collapse the economy. Accordingly, to advocate for degrowth is ultimately to embrace a reconceived form of ecosocialism. This means that the most fundamental questions about what is produced and how it is distributed cannot be left primarily to market forces. While there will inevitably be a place for forms of private property and market exchange, any successful transition to a degrowth economy is going to require democratic planning of the economy, preferably in highly

decentralised and localised ways. Many wasteful or damaging sectors of the existing economy – such as advertising, fossil fuel production, private motor vehicle production, and the finance industries – will need to be greatly reduced or repurposed. Other sectors – such as organic farming, renewable energy production, and public transport – will need to be ramped up.

Degrowth is thus incompatible with capitalism. 8. Admittedly, this is a realisation that I resisted for some time, hoping that the social, economic, and environmental crises that human beings face would not require such terrifyingly fundamental change. Couldn't we just reform capitalism? Eventually, however, I realised that there was no honour in deceiving myself and potentially others just because the challenge of replacing capitalism seemed, and still seems, like an impossible pipe dream. The first question to grapple with is whether capitalism *needs* to be replaced, not whether we will ever *succeed* in doing so, and the nature of capitalism is such that it is unable to deal with the crises we face. Capitalism has a 'grow or die' imperative built into its very structure. At every turn participants in the market economy are more or less compelled to pursue profit or else risk being destroyed by competitors running them out of business. The technologies and products that are developed under capitalism are the one's that promise the best return, not the one's that are most needed. Similarly, the distribution of resources is determined by who has the most money, not who needs the resources the most. The structures and incentives of capitalism also create constant pressure for individuals and businesses to externalise environmental and social costs, making it impossible to price commodities in a way that ensures 'optimal' consumption and production. The consequence is that the justifications of capitalism based on wealth-maximisation and efficiency are rarely if ever reflected in reality. Furthermore, the vast amounts of private and public debt that have been taken on in recent decades depend on continued growth for those debts to be repaid. For all these reasons, the idea of reforming capitalism in a way that deals with the crises of civilisation entails irresolvable contractions. Perhaps the most compelling reason for why capitalism cannot produce a just and sustainable world, however, is because capitalist economies would collapse if existing structures tried to deal with the necessary degrowth of resource and energy consumption. This is especially so in a globalised economy where it is becoming increasingly difficult for one capitalist economy to defy the neoliberal world order.

Localisation and contraction of national economies in such a context will require democratic planning of the economy.<sup>1</sup>

- **9.** A swift transition to renewable energy is necessary to respond to climate change and peak oil. Be that as it may, renewable energy will be unable to sustain a growth-orientated, consumerist society. A society based on renewable energy is a moderate energy society, which means energy-intensive societies must prepare for energy descent. Given the close connection between energy and economic activity, the required energy descent necessarily means economic contraction.
- **10. Climate change and peak oil are not the fundamental problems.** Rather, they are the symptoms of the cultures and systems of consumer capitalism. While it is absolutely necessary to work toward responding to climate change and peak oil as effectively as possible, we should not lose sight of the more fundamental challenge of replacing the cultures and systems that produce those problems. Otherwise we will find ourselves hacking at the branches of the problems, when we should be aiming for the roots. After all, a post-carbon capitalism would still be a growth economy that degraded the natural environment, alienated workers, and distributed wealth so unjustly.
- 11. Material sufficiency in a free society provides the conditions for an infinite variety of meaningful, happy, and fulfilling lives. Perhaps this thesis is the most fundamental, because any political or economic system is inevitably shaped by some conception of the good life.

<sup>&</sup>lt;sup>1</sup> But as John Holloway warns: 'Revolution is not about destroying capitalism, but about refusing to create it. To pose revolution as the destruction of capitalism is to reproduce the abstraction of time that is so central to the reproduction of capitalism: it is self-defeating. To think of destroying capitalism is to erect a great monster in front of us, so terrifying that we either give up in despair or else conclude that the only way in which we can slay the monster is by constructing a great party with heroic leaders who sacrifice themselves (and everyone around them) for the sake of the revolution... To pose revolution as the destruction of capitalism is to distance it from ourselves, to put it off into the future. The question of revolution is not in the future. It is here and now: how do we stop producing the system by which we are destroying humanity?' See John Holloway, *Crack Capitalism* (2010, London: Pluto Press), p. 254.

Currently, global capitalism conceives of human beings as consumers who can achieve happiness by purchasing goods and services in the market economy. On that basis, global growth is seen as the most direct pathway to human flourishing. By contrast, degrowth arises out of an alternative conception of what it means to be human. It poses the question, 'What is it that makes life worth living?' and answers that question by saying, 'Something *other* than the limitless consumption of material things.' Consumerism just does not satisfy the universal human craving for meaning, and the sooner the world realises this the better it will be for everyone and the planet. In short, I argue that the simple life can be a good life.

12. Chances of success do not look good. Despite the increasingly robust case for the necessity of a post-capitalist politics and economics - for the necessity of degrowth - we should not pretend that this revolutionary project shows many signs of achieving its ambitious goals. Although there are nascent movements based on notions of degrowth permaculture, Transition Towns, intentional community, and voluntary simplicity – in the greater scheme of things these subcultures, promising though they are, remain small. Furthermore, despite the increasing prominence environmental issues are given in the mainstream media, there is a pervasive techno-optimism that shapes the discussion of these issues, meaning that the reality of the crises are understated and the proposed solutions (typically market-based) are misconceived. Under these conditions, a mass movement for degrowth seems highly unlikely. But does this mean that we should throw our hands up in the air and distract ourselves with television and consumer trinkets while the curtain closes on our civilisation? Surely not. As Wendell Berry says, we should not focus on the question of whether we will succeed; we should focus on the question of what is the right thing to do. And that means doing everything in our power to resist the forces that are degrading people and planet by prefiguring ways of living that respect people and planet. We should do this irrespective of our chances of realising the ideal of a degrowth society. We should do this because it is the right thing to do. Fortunately, there are two silver linings to this approach. First, even if we fail to stop the growth economy from growing itself to death, we should still be trying to prefigure a 'simpler way' to live here and now, because if we are to face economic collapse, then the more systems and practices of sufficiency we can get in place today, the better prepared and more resilient we will be should the

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status quo be disrupted for one reason or another. Secondly, and most promising of all, working on building the new world promises, if not a life free from strife and hard work, at least a life full of meaning, passion, and love. And that is something we can cling to even if it transpires that the story of civilisation does not have a happy ending.<sup>2</sup>

#### **\* \* \***

Before outlining the content of the chapters to come, a few more words are required on the vocabularies of degrowth, steady state economy, and sufficiency economy, which I use throughout these chapters, sometimes interchangeably. To avoid confusion, let me offer some clarification here, although context should also generally assist with interpretation. Degrowth, as I use the term, refers primarily to a macroeconomic model that is defined by planned contraction of the resource and energy requirements of overdeveloped economies. Obviously, degrowth is a transitional phase, not an end-sate, because an economy could not and should not 'degrow' indefinitely. Accordingly, the basic vision of sustainability that I subscribe to and defend is one in which overgrown economies initiate a degrowth process of planned economic contraction, a process that would eventually stabilise in a steady state economy operating within the sustainable carrying capacity of the planet. I do not argue that this is likely, only that it is necessary. The poorest nations may need to increase their energy and resource demands to

<sup>&</sup>lt;sup>2</sup> To again draw on the words of John Holloway (2010: 253):

How I wish I could write a book with a happy ending. That I could offer all the answers. That the good would triumph over evil. That we could close the dialectic, end with a synthesis, arrive Home. That we could say with certainty that history is on our side. That, sure as eggs is eggs, communism will take the place of capitalism. That the darkest hour is just before dawn. That our cracks, for sure and certain, are the harbingers of a new society.

But no, it is not like that. There is no certainty. The dialectic is open, negative, full of danger. The hour is dark, but it may be followed by a darker one, and dawn may never come. And we, the fools who live in the cracks, may be just that: fools.

And yet, fools that we are, we think we can see something new emerging. We are standing in the dark shade of a threshold and trying to see and understand that which is opening in front of us. We do not understand it very well, but we can hear, especially in the previous theses, fragments of new melodies of struggle emerging, see glimpses of a new direction in the flow of revolt.

attain a dignified standard of living, but eventually they too would need to stop growing and also transition to a steady state economy. Within this broad framework, a 'sufficiency economy', as I use the term, is essentially a form of steady state economy, but I choose to employ the vocabulary of sufficiency to emphasise some issues that I find misleading or problematic in the work of most ecological economists, whom I otherwise admire greatly.

First of all, ecological economists rarely discuss the radical lifestyle implications of 'one planet' living. By employing the notion of a 'sufficiency economy', therefore, I hope to emphasise the fact that one planet living involves abandoning affluence in favour of a radically simpler way to live based on material sufficiency. Secondly, ecological economists have not always discussed the limits of renewable energy or the economic implications of energy descent in much detail, and in this regard I consider the 'biophysical economists' to have made an important contribution to the debate. A sufficiency economy is an economy based primarily or entirely on renewable energy, but due to the inability of renewable energy systems to replace fossil fuels entirely, this means significantly reducing energy consumption compared to the richest nations today. As noted above, given the close connection between energy and economy, significant energy descent has huge economic implications that have been insufficiently discussed by most ecological economists. Thirdly, most ecological economists, to my mind, tend to have too much faith in market mechanisms. As discussed above, if degrowth is truly what is required, then significant social control over the economy will be needed if economic contraction is to avoid an unstable descent into economic and social chaos. Primarily for these three reasons I use the term 'sufficiency economy' to refer to a degrowth economy that culminates in a steady state economy - but a steady state economy that is shaped by the three points of difference just outlined.

#### **\* \* \***

As with the first volume of collected essays, I will provide a brief outline of the chapters to come. These chapters have been ordered roughly to reflect steps in an argument, however they all stand alone well enough, so there is no need, necessarily, to read them in order. To provide context, certain lines of argument, in places, are repeated or summarised, as are certain turns of phrase, but I hope this serves primarily to emphasise key points and weave the essays together into a coherent whole. Readers are encouraged to skim over summary paragraphs if the point being made is sufficiently well understood. **Chapter 1** provides a short, accessible summary of the central themes of this book. A slightly abridged version of this chapter was originally published in the *The Conversation*, under the title 'Life in a "degrowth" economy, and why you might actually enjoy it'. The article received a significant amount of attention – it was viewed more than 50,000 times – making it one of the most widely read pieces on degrowth. I include this journalistic piece as a means of introducing questions that are explored in more depth throughout the book. Readers familiar with growth skepticism, degrowth, and voluntary simplicity, may wish to begin at Chapter 2.

**Chapter 2** begins by reviewing the empirical studies that have examined the correlation between income and self-reported happiness. While the scholarly debate is not conclusively settled, the weight of evidence suggests that once people have their basic material needs adequately met, the correlation between income and happiness begins to fade. Put otherwise, there comes a point where rises in income become less important as means of increasing wellbeing, and other features of life, such as more meaningful employment, more leisure time, and more social engagement, become increasingly important. This has been called the 'incomehappiness paradox', because it contradicts the widely held assumption that more income and more economic growth will always contribute positively to human wellbeing. After reviewing the empirical literature, the analysis proceeds to consider the various explanations for this apparent 'paradox', and I also consider what implications this paradox might have for people and nations that are overconsuming. The chapter concludes by outlining what I call an 'economics of sufficiency', drawing on the perspectives of degrowth and steady state economics.

**Chapter 3** analyses the results of the most extensive multinational survey of the Voluntary Simplicity Movement, conducted by the Simplicity Institute. The Voluntary Simplicity Movement can be understood broadly as a diverse social movement made up of people who are resisting high consumption lifestyles and who are seeking, in various ways, a lower consumption but higher quality of life alternative. If it is true that post-consumerist lifestyles of reduced and restrained consumption are a necessary part of any transition to a just, sustainable, and flourishing human civilisation, then gaining extensive empirical insight into this movement is a matter of some importance. The results of the survey are preceded by a summary of the 'limits to growth' perspective, which serves to contextualise the analysis.

**Chapter 4** is probably the key chapter of the book, for it attempts to envision in some detail the contours of a 'sufficiency economy'. The fundamental aim of a sufficiency economy, as I

define it, is to create an economy that provides 'enough, for everyone, forever'. In other words, economies should seek to universalise a material standard of living that is sufficient for a good life but which is ecologically sustainable into the deep future. Once that is achieved, further growth in material wealth would not be an economic priority and, indeed, would need to be deliberately restrained. For individuals and economies that are already overconsuming, the attainment of sufficiency implies not merely resisting further growth, but first entering a phase of planned economic contraction. Once sustainable sufficiency has been attained, prosperity should be sought in various low-impact, nonmaterialistic forms of wellbeing, such as enjoying social relationships, experiencing connection with nature, engaging in meaningful work or spiritual practice, or exploring various forms of peaceful, creative activity. There are no limits to the scale or diversity of qualitative improvement of life in a sufficiency economy, but to achieve sustainability in a world of seven billion people (and counting), material standards of living must not aim for consumer affluence but only for what is minimally sufficient for a good life. How would we feed ourselves? What clothes would we wear? What forms of transport and technology would we use? How much and what types of energy would we require? And what material standard of living would we have if we were to successfully decarbonise the economy? Most importantly, perhaps, what would the quality of daily life be like? These are some of the concrete questions to which this chapter offers some tentative answers.

**Chapter 5** presents an energy analysis and review of various alternative technologies. Energy is often called the 'lifeblood' of civilisation, and yet the overconsumption of fossil energy lies at the heart of two of the greatest challenges facing humanity today: climate change and peak oil. While transitioning to renewable energy systems is an essential 'supply side' strategy in response to climate change and peak oil, the extent of the problems and the speed at which decarbonisation must occur means that there must also be a 'demand side' response. This means consuming much less energy not just 'greening' supply, at least in the most developed regions of the world. In that context, this chapter provides an energy analysis of various 'low tech' options - such as solar shower bags, solar ovens, washing lines, and cycling – and considers the extent to which these types of 'simple living' practices could reduce energy consumption if widely embraced. It is demonstrated that low-tech options provide a very promising means of significantly reducing energy (and water) consumption. While the focus of this chapter is on the direct energy and water savings of low-tech living, the subtext of the analysis is that prefiguring a simpler way to live has deeper significance too, in that it helps create the cultural conditions needed for a post-capitalist politics and economics to emerge, which I maintain is a necessary part of the decarbonisation project. Lifestyle change is far from enough.

**Chapter 6** reviews some of the most promising social movements that have the potential to change the current trajectory of industrial civilisation acutely in the direction of a low-carbon world. If there is any hope for rapid decarbonisation today, it surely lies, at this late stage, in movements, innovations, or technologies that do not seek to produce change through a smooth series of increments, but through an ability to somehow 'disrupt' the status quo and fundamentally redirect the world's trajectory toward a low-carbon, post-growth future. This chapter considers movements based on such things as fossil fuel divestment, Transition Towns, collaborative consumption, the sharing economy, voluntary simplicity, and direct democracy.

Chapter 7 considers the economic implications of carbon budget analysis. Building on the work of climate scientists Kevin Anderson and Alice Bows, it is argued that the logic of the carbon budget numbers leads to conclusions that most people, including most climate policy makers, refuse to accept, acknowledge, or understand. Most significantly, the carbon budget arithmetic indicates that rapid decarbonisation may well be incompatible with continuation of current global economic growth trends and paradigms. Even more challengingly, carbon budget analysis seems to imply that in the most highly developed regions of the world, keeping within the carbon budget will require 'degrowth' strategies of significantly reduced energy and resource consumption. In the final sections of this chapter an attempt is made to outline the main elements of an integrated socio-economic and political strategy consistent with keeping emissions within the confines of the carbon budget. The aim is not to present something that is politically or culturally palatable, but to explore what needs to be done to adequately respond to the challenge of climate change.

**Chapter 8** explores what role social or cultural evolution may need to play in providing the necessary *preconditions* for fundamental structural change of society. The central argument of this chapter is that the Voluntary Simplicity Movement (or something like it) will almost certainly need to expand, organise, radicalise, and politicise, if anything resembling a degrowth or steady state economy is to emerge through democratic processes. In a sentence, that is the 'grassroots' or 'bottom-up' theory of structural transformation that will be expounded and defended in this chapter. The essential reasoning here is that legal, political, and economic structures will never reflect a post-growth ethics of macroeconomic sufficiency until a post-consumerist ethics of sufficiency is embraced and mainstreamed at the cultural level. Conversely, a microeconomics of 'more' will always generate, or try to generate, a macroeconomics of 'growth'. Only by changing consumerist cultures of consumption, I conclude, is there any hope of transcending and socially reconstructing the structures of growth.

Chapter 9 examines what I call the 'anarchist challenge' to the promising new legal movement, Earth Jurisprudence. This new movement seeks to reconceive law in a way that treats ecological sustainability as a fundamental legal principle of governance, focusing attention on what the legislature and judiciary could do to achieve that noble end. The central issue this chapter seeks to raise for Earth jurists, and for oppositional thinkers and activists more generally, is the question of 'strategy'. That is, the chapter raises the question of how best to direct our limited energies and resources, for if transformative change is truly what we desire, our energies and resources must be used to their fullest practical effect. To do justice to the 'ends' for which we struggle, surely we must take care that the 'means' we employ are the best we have available. It is not enough to have good intentions. We must also be as effective as possible. This chapter considers whether 'top-down' change is where we should be directing our energies or whether we should be directing most of our energies toward building the new society at a grassroots level; building it beneath the legal structures of the existing society with the aim that one day new societal structures will emerge 'from below' to replace the outdated forms we know today.

**Chapter 10** analyses the most prominent strategies that have been put forth to bring the sufficiency economy into existence. In other words, the vision of a deep green alternative society is taken for granted, focusing instead on how such an alternative may be realised. The chapter begins by outlining the alternative society – a sufficiency economy – with a very broad brush, in order to give the more critical and substantive sections some context. It seems that there is some interesting and heartening overlap with respect to the envisioned 'end state' of the deep green school, and yet there is fierce debate over how to get there. The primary purpose of this chapter, therefore, is to examine these various theories of transition or transformation – ranging from parliamentarianism to socialism to anarchism – in order to highlight the most important factors at play, and hopefully shed some further light on the question of 'strategy'.

**Chapter 11** presents a sympathetic critique of the Transition Towns Movement. The fundamental aims of this movement are to respond to the twin challenges of peak oil and climate change by

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decarbonising and relocalising the economy through a communityled model of change based on permaculture principles. As promising as the movement may be, there are crucial questions it needs to confront and reflect on if it wants to fully realise its potential for deep societal transformation. The Transition Towns Movement is ostensibly 'inclusive'; this chapter examines this selfimage in order to assess whether it is as inclusive and as diverse as it claims to be, and what this might mean for the movement's prospects. The chapter also considers the issue of whether a grassroots, community-led movement can change the macroeconomic and political structures of global capitalism 'from below' through (re)localisation, or whether the movement may need to engage more directly in political activity if it is to have any chance of achieving its ambitious goals. Finally, we raise the question of whether the movement is sufficiently radical in its vision. Does it need to engage more critically with the broader paradigm of consumer capitalism, its growth imperative, and social norms and values? Is building local resilience within this paradigm an adequate strategy? And does the movement recognise that decarbonisation almost certainly means giving up many aspects of affluent, consumer lifestyles? The chapter does not expect to be able to offer complete answers to these probing questions, but by engaging critically with these issues one hopes to advance the debate around a movement that may indeed hold some of the keys to transitioning to a just and sustainable world.

**Chapter 12**, the final chapter, tells a story of the future, a possible future that was conceived of in between the poles of pessimism and optimism but which is ultimately based upon a faith in the human spirit to meet the challenges of creating an Ecozoic era. The chapter looks back on the 21st century from the vantage point of the year 2099. It takes the form of an essay, entitled 'The Path to Entropia', written for the journal *Possibility* by Lennox Kingston, a 90-year-old retired Professor of Legal and Political History. The essay reviews how attitudes toward consumption and economic growth underwent a radical shift over the course of the 21st century and how this affected, through legal transformation, the social, political, and economic order of late capitalism. Particular attention is given to the evolution of property rights and the cultural movements that made this evolution possible.

I close this introduction, as I closed the introduction to *PROSPEROUS DESCENT*, by acknowledging that the essays in this book do not answer all questions and, in fact, may raise as many questions as they answer. The first volume of essays, I hope, fills some of the gaps (as summarised in the Appendix to this volume).