

A New Blueprint for a Green Economy

Edward B. Barbier and
Anil Markandya



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*Edward B. Barbier
and Anil Markandya*



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FOREWORD

When I became Britain's Environment Secretary in the late 1980s, there was a prevalent view among politicians, business people and policy makers that the environment was a peripheral issue that excited the interest of an active and rather tiresome minority, to whom an occasional morsel needed to be thrown in order to keep these environmentalists more or less quiet, albeit at some cost to the real economy.

So environmental policy was an expensive add-on to public policy, something to be tolerated when the pressure exerted by opinion became too great to withstand.

David Pearce was one of the first scholars to demonstrate with intellectual rigour that good economics should embrace and enfold environmental factors. This was both morally appropriate and commercially and fiscally smart. Economic policies that failed to price inputs were flawed; commercial policies that ignored environmental impacts were expensive for the community and bad business in the long term for the companies that practised them.

The notion of sustainable growth policies not only faces up to Herb Stein's First Law of Economics that things that can't go on for ever don't. It also has to recognize the damage to the environment of making policies that build up long-term cost and damage health as well as economic prospects. It is interesting that at least in theory, China's leaders appear to recognize this, though there is a considerable distance there between promise and policy. Whether a consensus on the subject in America is an early prospect seems doubtful.

Chairing the corporate social responsibility committee of a major multinational a few years ago, it was encouraging how good environmental policy had become part of the company's DNA. It not only helped to drive down marginal costs but enthused employees who wanted to work for a company that was regarded as a good global citizen.

As this interesting book shows, green economics has rapidly become sensible, mainstream economics. David Pearce would have been happy to see what his own insights helped to produce.

Lord Patten of Barnes CH

PREFACE

Blueprint for a Green Economy (BGE) was never intended to be a book. Rather, it was a report commissioned by the UK Department of Environment, to assist them in formulating a policy response to the 1987 World Commission on Environment and Development – the “Brundtland Commission.”¹ Specifically, the terms of reference for the report required us to “review the state of the art on the relationship between the sustainable development concept, national accounting, resource accounting, satellite accounting, and project appraisal procedures.”²

Within days of submitting our report to the UK government in August 1989, it was apparent that the topics covered had far-reaching appeal, not only to policy makers and our fellow economists but also to the media and even the general public. Requests for copies of the report exceeded our ability to reproduce them.

Fortunately, Neil Middleton of Earthscan Publications, which at that time was a subsidiary of the International Institute for Environment and Development (IIED), agreed to publish the complete report as a book. Richard Sandbrook, the President of IIED, sanctioned the project, and multiple print runs of the book ensued. The 1989 Earthscan publication became internationally renowned, and for some time afterwards was the top-selling book on environmental economics and policy. In 1991, BGE was awarded the Gambinus Giuseppe Mazzotti Special Jury’s Prize. In 2009, BGE was ranked as No. 14 in the top 50 sustainability books of all time.³

Often known as the “Pearce Report,” BGE also launched its lead author, David Pearce, as a top international and UK economics advisor on environmental policy. Among David’s many appointments since BGE were: from 1989 to 1992, Personal Advisor in Environmental Economics to the Secretary of State for the Environment, Chris Patten; from 1993 to 1995, Lead Author, Intergovernmental Panel on Climate Change (IPCC), Working Group III; from 1993 to 1997, Member, Advisory Group to Vice President for Environmentally Sustainable Development, World Bank; from 1995 to 1998, United Nations, High Level Advisory Board on Sustainable Development (Secretary General of the United Nations); and at the time of his death in 2005, Specialist Advisor, Economic Affairs Committee, House of Lords, and Member, Home Office Economics Advisory Panel. For his public service, David Pearce was made an Officer of the Order of the British Empire (OBE) in 2000.

BGE was also instrumental in both our careers as policy advisors and economists. Since its publication, we have acted as advisors in various capacities to several UN agencies and the World Bank, as well as to the governments of China, India, South Korea, the United Kingdom, and the United States.

BGE had one over-arching theme. Making economies more sustainable requires urgent progress in three key policy areas: valuing the environment, accounting for the environment and creating incentives for environmental improvement. This main message has not changed over time, but it has become critical. Today, with the threat of global warming, the decline in major ecosystems and their services, and fears over energy security, achieving these environmental policy goals is even more vital.

Twenty years on, *A New Blueprint for a Green Economy* revisits and updates the main messages of the original BGE by asking two questions: first, what has been achieved in the past two decades, and second, what more needs to be done to generate a truly “green economy” in the twenty-first century?

The book first summarizes the main messages from BGE and explains why, given rapid and widespread global environmental degradation, they are still relevant. We then examine the progress since BGE in implementing policies and other measures to improve environmental valuation, accounting and incentives. Although much has been accomplished, additional advances in policy are still required to green economies successfully. Thus, much of the book highlights the new policies and economic approaches needed for sustainable management of today’s environmental concerns.

BGE successfully placed the economics of sustainable development on the policy agenda. Over 20 years later, *A New Blueprint for a Green Economy*

emphasizes practical policies for greening modern economies, and argues that such an economic roadmap to a greener future is essential. Modern economies have the opportunity to develop successfully and sustainably, as a means to ensuring the well-being of current and future generations.

EB & AM

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INTRODUCTION

Published in 1989, *Blueprint for a Green Economy* (henceforth BGE) presented, for the first time, practical policy measures for “greening” modern economies and putting them on a path to sustainable development.

BGE had one over-arching theme. Making economies more sustainable requires urgent progress in three key policy areas: valuing the environment, accounting for the environment, and creating incentives for environmental improvement. Today, with the threat of global warming, the decline in major ecosystems and their services, and fears over energy security, achieving these goals is even more vital. In fact, they are essential to economic welfare and the well-being of current and future generations. Chapter 2 discusses in more detail some of the key global environmental trends and initiatives that have occurred over the past 20 years, and explains why they make the main messages of BGE even more relevant today. Here, in this introductory chapter, we provide a brief summary of the key theme and messages of BGE.

Nature as capital

One of the important contributions of BGE was to argue that the natural environment should be viewed as a form of capital asset, or *natural capital*. Although we were not the first economists to adopt this perspective,¹ BGE sought to demonstrate that efficient management of an economy’s natural resource and environmental endowment is essential to achieving the overall goal of sustainable development.

2 Introduction

BGE maintained that it is important not to restrict the concept of natural capital just to those natural resources, such as minerals, fossil fuels, forests, agricultural land and fisheries, that supply the raw material and energy inputs to our economies. Nor should we consider the capacity of the natural environment to assimilate waste and pollution the only valuable “service” that it performs. Instead, natural capital is much broader, encompassing the whole range of goods and services that the environment provides. Many have long been considered beneficial to humans, such as nature-based recreation, eco-tourism, fishing and hunting, wildlife viewing, and enjoyment of nature’s beauty. However, a wide range of environmental benefits also arise through the natural functioning of *ecosystems*, which are distinct systems of living organisms and communities interacting with their physical environment. Examples of such ecosystem goods and services include water supply and its regulation, climate maintenance, nutrient cycling, enhanced biological productivity and, ultimately, overall life support.

Today, the term “natural capital” is frequently employed to define an economy’s environment and natural resource endowment – including ecosystems.² Humans depend on and use this natural capital for a whole range of important benefits, including health and sustenance. For all these reasons, our natural wealth is extremely valuable. But unlike skills, education, machines, tools and other types of human and physical capital, we do not have to manufacture and accumulate our endowment of natural assets. Nature has provided this endowment and its benefits to us as part of humankind’s common heritage; we have not had to create these assets ourselves.

Yet perhaps because this capital has been endowed to us, we humans have tended to view it as limitless, abundant and always available for our use. The result is that present-day economies have often ended up overexploiting natural capital in the pursuit of economic development, growth and progress. The unfortunate result is that generations today are leaving too little for future generations to use and benefit from. Over the long term, the consequence is to undermine economic growth and human well-being.

Sustainable development

The crucial relationship between the management of natural capital and “sustaining” economic development was an important theme in BGE. By the late 1980s, the concept of *sustainable development* had become popular,

and one could pick and choose from many interpretations. As noted at the beginning of BGE:

Definitions of sustainable development abound. There is some truth in the criticism that it has come to mean whatever suits the particular advocacy of the individual concerned. This is not surprising. It is difficult to be against “sustainable development.” It sounds like something we should all approve of, like “motherhood and apple pie.”³

Yet, by the late 1980s, there was also an emerging consensus definition of sustainable development, which was put forward by the World Commission on Environment and Development (WCED) – often referred to as the “Brundtland Commission” after its chairperson, former Norwegian prime minister Gro Harlem Brundtland. The WCED defined sustainable development as:

Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.⁴

As explained in Chapter 3, the Brundtland Commission’s definition especially appeals to economists as it is consistent with a *capital approach* to sustainable development. That is, it is the *total* stock of capital employed by the economic system, including natural capital, that determines the full range of economic opportunities, and thus well-being, available to both present and future generations. Society must decide how best to use its total capital stock today to increase current economic activities and welfare, and how much it needs to save or even accumulate for tomorrow and, ultimately, for the well-being of future generations.

However, it is not simply the aggregate stock of capital in the economy that may matter but also its composition. In particular, an important issue is whether present generations are running down one type of capital to meet today’s needs and accumulate other forms of wealth, and whether this change in the composition of capital will make future generations worse or better off.⁵

In particular, there is concern that current economic development may be leading to rapid accumulation of physical and human capital, but at the expense of excessive depletion and degradation of natural capital. By depleting the world’s stock of natural wealth irreversibly, development today could have detrimental implications for the well-being of future generations.