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1

Understanding Key Concepts

Key arguments

- The environment consists of the physical surroundings in which humans, animals, plants, insects, bacteria, and other organisms exist.
- As a policy and political issue, the environment is hard to compartmentalize; it overlaps with almost all other policy issues.
- Politics and policy are different but related terms; one is a process of decision-making, the other is a course of action (or inaction).
- Environmental politics are distinguished from most other arenas of politics by varieties of scale, which range from the local community to the entire earth. The environment may be the only political issue that has truly global dimensions.
- Environmentalism seeks political and economic change, but there are competing views about how this can be achieved, ranging from change within the existing capitalist system to an entire rejection of that system.
- Environmentalism emerged in different places and for different reasons, was influenced at first by events and thinking in the West in the 1960s, and later included the concerns of poorer parts of the world.

Chapter overview

While concerns about the deteriorating relationship between humans and their environment date back at least to the Industrial Revolution, the political response was late arriving. The earliest efforts to change policy date back to the late 1800s, but the environment has been a regular feature of the public policy agenda only since the 1960s, and while we now understand much more about the sources and effects of environmental needs and problems, the record on addressing them has been mixed at best. They vary by time and place, there is disagreement on their implications, government and industry often

disagree on the best and most practical responses, the economic implications are not always clear, and the science behind many environmental problems is still debatable. The environment must also compete for public and political attention with other needs that most people regard as more immediate: climate change may be the greatest threat ever faced by humanity, but it has moved only slowly up the policy agenda, and the threats posed by terrorism, poverty, unemployment, and by war and civil conflict in many parts of the world can often seem more immediate.

The key to understanding any subject is to understand the concepts that form the foundation of that subject, so this opening chapter introduces some of the key concepts at the foundation of environmental politics and policy. Unfortunately, this is not always as easy as it might seem. Unlike the natural sciences, which are guided by laws and replicable experimentation, the social sciences – because they focus on the study of human society – revolve around concepts whose meanings are softer, are often a matter of interpretation, and are both debatable and widely debated. It is usual to see scholars and politicians defining the same terms differently, or using different terms to describe the same thing, or using terms without defining them on the assumption that their meaning is understood.

But we should not forget the admonition credited to Plato or Socrates that ‘the beginning of wisdom is the definition of terms’, and no analysis of environmental politics and policy can be either focused or complete unless the parameters of the topic are understood. The meanings of words are also important in legal terms, because of their role in establishing the scope of policy, law, and the work of political organizations. Sands et al. (2012: 16) quote the example of the failure of the 1946 Convention for the Regulation of Whaling to define a ‘whale’, leading – among other things – to a debate about whether or not the work of the International Whaling Commission should include dolphins.

This chapter begins with a discussion of the meaning of the terms *environment*, *politics*, and *policy*. Environmental matters are often difficult to clearly distinguish from other areas of politics and policy, and are made more complex by their multifaceted nature and by a scale that ranges from the local to the global. Environmentalists have long

been divided over the question of whether radical and fundamental change is needed, for example, or whether it is enough to reform existing political and economic structures through ideas such as sustainable development and ecological modernization. They must also address the doubts of anti-environmentalists, many of which are built on the challenges of reaching agreement on the science of environmental problems. The chapter ends with a brief review of the evolution of approaches to environmental policy, focusing on the formative events of the 1960s, the influence of the landmark 1972 Stockholm conference, the emergence of green politics, the competing views of industrialized and emerging countries, the rise of global perspectives, and the arguments of post-environmentalism.

Defining the environment

It is unwise to write a book about a particular subject without a clear definition of the terms involved, and yet much of the research in the social sciences suffers from just such a problem. It is usual to introduce a term, to comment on the many different ways in which it has been defined, to point out that definitions change by time and place, to quote multiple competing definitions, and then to avoid taking a particular stand on its meaning. The noun *environment* suffers from just such a problem, exacerbated by its relatively recent use as a political concept. It only began to appear in relation to nature and ecosystems in the 1960s, having until then been used only in the context of the home or work environment (Dauvergne, 2009: xii). It continues to be conditioned even today by multiple adjectives, such as *political*, *economic*, *social*, and *cultural*, but has been surprisingly rarely defined in its political and policy sense. As a result, it shares the problem that Caldwell (1990: 197) once ascribed to the term *development*: it has become ‘a term that everyone understands and no one is able satisfactorily to define’.

For our purposes, the term *environment* is defined simply as the physical surroundings in which humans, animals, plants, insects, bacteria, and other organisms exist. For the purposes of politics and policy, it comes in three main varieties:

- The *natural environment* consists of those parts of the earth – living or non-living – that are not a product of human activity. This includes living organisms, ecosystems, climate, weather, minerals, soil, air, and water. The implication, of course, is that humans are not part of the natural system, which is

clearly wrong; but it is reasonable to distinguish natural from man-made change. Such a distinction, however, is increasingly artificial; Wapner (2014) argues that humans and nature cannot be considered as two separate domains, while Purdy (2015) argues that the world in which we live is one we have made, and that we should think of it as a post-natural world.

- The *built environment* consists of everything constructed by humans, including buildings, towns, cities, roads, infrastructure, water and energy supply systems, and perhaps even cultivated forests, urban parks, botanic gardens, and reservoirs. The quality and density of construction has environmental effects (for example, dams disrupt rivers, fisheries, natural habitats, and groundwater levels – see Box 7.1), while indoor pollution has its own distinctive set of problems and policy needs.
- The *human environment* is a combination of the two, emphasizing the place of humans within their natural and built surroundings. It was significant that the landmark 1972 Stockholm conference (see later in this chapter) was titled the United Nations Conference on the Human Environment. The implication here is that understanding the environment means not just understanding its natural dimension but also its political, economic, and social dimensions.

In a sense, trying to outline the parameters of the environment as a policy matter is an exercise in futility, because environmental issues cannot be housed in neat boxes (Dryzek, 2013: 9). Almost every activity in which humans take part and for which governments have a policy responsibility has an environmental dimension, and it could be argued that there is almost no distinct area of public policy that is *not* linked in some way to the environment. Conversely, many environmental problems have multiple policy dimensions; in order to address climate change, for example, we must rethink our approaches to transport, energy, industry, agriculture, forestry, urban and rural planning, health care, and tourism, at a minimum. Furthermore, environmental problems are interdependent, often stemming from common roots; so when we address the problem of waste, we also need to address air and water pollution, and vice versa. Instead of thinking about environmental policy as a distinct field, then, we should perhaps be thinking about the environmental dimensions of all policy activities. The European Union has recognized this with its efforts to integrate environmental protection into the definition and implementation of its other policy areas (McCormick, 2001: 63).

Another way to define the environment as a political or policy matter is to consider the kinds of issues that are usually defined as ‘environmental’. Some – such as air and water pollution – might be

Table 1.1 Key environmental concerns

<i>Category</i>	<i>Problems</i>
Air quality	Urban pollution, industrial and vehicle emissions, acid pollution, threats to the ozone layer, climate change, and indoor air quality.
Water quality	Urban and agricultural run-off, algal growth (eutrophication), siltation, oil spills, management of fisheries, and water-based ecosystems. Also includes the management of water for recreation, transportation, and energy generation, and the overuse or contamination of groundwater.
Chemicals	Impact on air and water quality, ecosystems, and living organisms.
Waste	Production, shipment, disposal, and dumping. Distinctions must be made between human, domestic, municipal, agricultural, industrial, biomedical, and radioactive waste. The impact of disposal through landfill or incineration.
Natural resources	Forests, fisheries, soils (erosion, loss of fertility, contamination), crops and arable land (loss to urban spread, desertification, overgrazing, contamination by chemical fertilizers, herbicides, insecticides).
Energy	Different sources (fossil fuels vs. renewables), how energy is generated and used, nuclear power, fracking, energy efficiency, overuse of fuelwood and biomass.
Biodiversity	Nature and natural ecosystems, endangered/threatened species, trade in wildlife, protection of natural habitats (wetlands, forests, marshes, mangroves, and coral reefs), wild genetic resources, genetic modification, and invasive species.

thought of as ‘traditional’ elements of the environmental debate, but others overlap uneasily with other sectors of policy. For example, should we consider organic farming and genetically modified organisms as environmental issues, agricultural issues, health issues, or all three? Similarly, the European Union has expended a significant amount of political energy on drafting and agreeing laws and policies targeting noise pollution (encouraging the manufacture of quieter road vehicles, construction equipment, aircraft, and domestic appliances), but is noise an environmental issue? In the United States, meanwhile, environmental politics almost uniquely includes concerns for the management of public lands (land owned and managed by the federal government). And while the production of air pollution from the burning of fossil fuels is clearly an environmental issue, to what extent should energy policy be treated separately from environmental policy? In order to help provide some focus, Table 1.1 lists the kinds of concern that most often appear in debates about environmental policy.

A related concept that deserves mention is **ecology**. Developed by the German biologist Ernst Haeckel in the 1850s, it describes the branch of biology that studies the relationships among organisms

Figure 1.1 Commoner's four laws of ecology

Law	Meaning
Everything is connected to everything else.	All living organisms are connected to one another, and what affects one affects all.
Everything must go somewhere.	Matter is indestructible, and there is no waste in nature.
Nature knows best.	Natural systems work better than the technology fashioned by humans.
There is no such thing as a free lunch.	Every gain is won at some cost, and all actions have some cost.

Source: Commoner (1971)

and between organisms and their physical surroundings, and we will see in Chapter 2 that there is a close relationship between science and policy when dealing with environmental issues. Ecology has been co-opted by some as a synonym for *environment* (so that we sometimes see reference to the ecology movement rather than the environmental movement), and it has also been used in other senses. For example, **political ecology** (another term that has defied agreed definition) can be understood as an interdisciplinary field of study interested in the relationships among politics, economics, society, culture, and the environment (see Robbins, 2012). The overlap between ecology, politics, economics, and technology is succinctly illustrated in the four informal 'laws' of ecology developed by the American biologist Barry Commoner (see Figure 1.1).

Politics and policy

When it comes to understanding the term *politics*, it is relatively easy to identify examples of political activity, but less so to outline the boundaries of that activity. Politics can be broadly understood as the process by which people decide collectively how to manage and share the resources of the society in which they live. These resources include money, land, minerals, education, jobs, health care, and consumer goods. When citizens vote at elections, when national leaders negotiate with their counterparts in other countries, when corporations or interest groups lobby legislatures, or when masses of citizens hold public demonstrations for or against the actions of

government, there is political activity at play. But is politics simply about making and implementing decisions, does it also include efforts to reconcile differences, is it fundamentally about persuasion (see Goodin et al., 2006: 5–7), or is it a competitive struggle for power among people seeking to promote their own interests?

Taken literally, any relationship involving two or more people can be considered political, because it involves shared decision-making, even if one person dictates terms to the others. But the kind of politics that interests us is that of the broader communal kind, involving the making of decisions by those in positions of power (whether legitimately or illegitimately), and that involves significant numbers of people, ranging from local communities to the populations of cities and states, and – in some instances – the entire global population. This begs the question of the meaning of two more terms: power and authority.

Power is another one of those concepts that we think we understand but that we sometimes struggle to define, mainly because it comes in different forms, and can be defined according to different channels, such as the power *to do* something as distinct from the power *over* someone or something. In essence, power means the capacity to control in the sense of being able to bring about change or to resist pressures to change. If power is the capacity to act, then **authority** is the acknowledged right to act. A person pointing a loaded gun at someone else has the power to make the second person bend to their will, but only has authority if they have the right to own and use the gun as – for example – members of the police or the military engaged in their legitimate work.

In legal and constitutional terms, power and authority are more clearly delineated at the national level than at the international level. We live in a world of sovereign states, and in Chapter 4 we will look at the structure and powers of those states and at the dynamics of the authority they hold to take environmental decisions within their jurisdiction. In Chapter 5 we will look at how politics and policy function at the international level, and will find that the environment cannot be neatly delineated by state boundaries: the air and the oceans are both global resources, for example, while rivers often flow through multiple states, and pollution from one country can easily find its way to others. The result is that much environmental policy is made as a result of international cooperation and political pressure involving governments.

If we define **government** as the institutions and offices through which societies are governed, it exists in a meaningful form only at and below the level of states. There is no multinational or world government, so we must instead think of international administration as a process of **governance**, referring to the broader process by which public decisions are made, with or without the input of

formal institutions, and with or without formal mechanisms. At the international level, governance typically involves the development of policy via a mixture of governmental and non-governmental forces, and is reflected in the membership of international organizations and the agreement of declarations and treaties.

The politics of the environment are complex and multifaceted. Decisions must often be shaped by communities and economic sectors with conflicting interests and needs, and that might seek to protect their environmentally unfriendly habits out of fear that reform would be expensive. Addressing air pollution, for example, means potentially treading on the toes of the oil, mining, electricity-supply and vehicle manufacturing industries, all of which often have powerful political lobbies. Environmental politics are also distinguished from most other arenas of politics by the varieties of scale, which range from the local community to the entire earth. Indeed, the environment may be the only political issue that can be said to include truly global dimensions. There are many political activities that are common to large parts of the world's population, or even all of it (we almost all have a vested interest in trade, security, health, and economic growth, for example), but they are all an accumulation of multiple local, national, or regional interests. Of all the political challenges that we face, climate change is the most truly universal and fundamentally existential – everyone is impacted to some degree, no matter where they live, and nothing less than the continued welfare of all life on earth is at stake.

Politics, in turn, is the driving force behind **public policy**, which can be defined as whatever actions those in positions of authority take – or deliberately avoid taking – in order to achieve public goals (see Knill and Tosun, 2012: 3–7; Kraft and Furlong, 2015: 3–4). The details of policy can be found in the positions adopted by leaders, the speeches they make, the platforms they publish, the laws they support and pass, and the steps they take (or deliberately fail to take) as they seek to pursue their political objectives. Policies exist at almost every level of human activity, but those that interest us here are public policies, or those that impact large sectors of society. Politics is the lifeblood of policy in the sense that policies are defined, developed, and implemented through political competition, the review of alternative strategies, and the influence brought to bear by interested parties, of which there are often many. Environmental policy is shaped not just by elected officials, but by individual citizens, interest groups, corporations, international organizations, banks and other financial institutions, and economic sectors ranging from farming to transport, energy, and manufacturing. In poorer regions or states, it is poverty rather than wealth that forms the basis of the policy debates that surround most environmental issues.

It is important to make a distinction between policy decisions arising out of the harmful effects of human activity on the environment (placing us in a repair or cure mode), and policy decisions arising out of a need to more efficiently manage the environment and natural resources (placing us in a maintenance or prevention mode). The former are based on recognizing a problem only after it has emerged, a process that is all too often sparked by crisis and disaster: oil spills, the poisoning of water supplies, floods caused by soil erosion, industrial accidents, and so on. An emergency arises, news headlines are generated, governments must respond, and it is debatable how much is learned and how much is changed in order to prevent similar future crises. By contrast, being in a maintenance mode means taking a broader and longer-term approach, gathering accurate data, understanding natural processes, assessing demand for resources, identifying emerging threats, and managing sensibly. Prevention is always better than cure, but it also runs counter to the way that most humans intuitively think.

Policymakers must also wrestle with the different spatial dimensions of environmental problems. Where once such problems might have been seen as localized difficulties impacting relatively few people and demanding mainly local responses, many have become broader in scope, and demand either a cooperative multinational approach or – at the very least – a sharing of policy ideas and experience. They can be broadly placed in one of four types: global, shared, international, and local (see Table 1.2).

Environmental policy is not only influenced by space, but also by time. One of the challenges to making good policy is that most

Table 1.2 Four dimensions of environmental problems

<i>Type</i>	<i>Features</i>	<i>Examples</i>
Global	Affect almost everyone (not necessarily equally), and demand a global response. Relatively rare, but also relatively serious.	Climate change, threats to the ozone layer.
Shared	Common to multiple parts of the world and often cross national borders, but may have different sources, affect people differently, and require international or national responses.	Air and water pollution, threats to biodiversity.
International	Involve two or more states, and best resolved by affected states working together.	Acid pollution, management of shared rivers, lakes, fisheries.
Local	Problems with local roots, demanding local responses. Similar problems may be found in multiple locations around the world, but they are the responsibility of local communities and authorities.	Waste removal and processing.

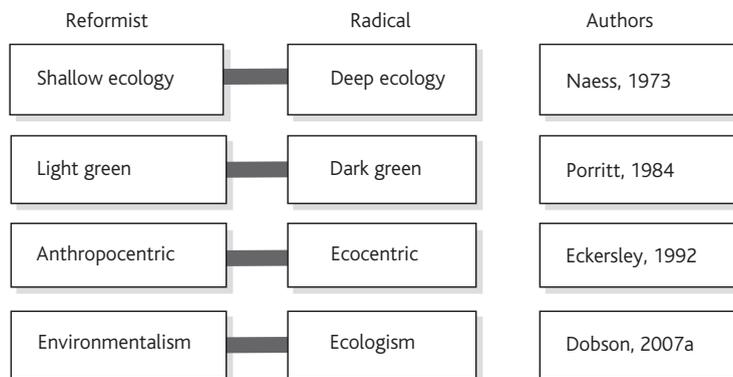
environmental problems take years or even decades to emerge, and remedial action can take many more years or decades to be felt. Thus, for example, it took about 40–50 years for science to identify the threat posed to the ozone layer by synthetic chemicals such as chlorofluorocarbons, and another 20 years for agreement to be reached on a solution. And even though the key international ozone layer agreement came into force in 1989, the ozone layer is not expected to recover until at least 2035, and possibly as late as 2050 (see Chapter 6). While effective environmental management demands a long-term view, the industries often involved in creating (and thus addressing) environmental problems are looking mainly to annual profit and loss statements, while elected officials are mainly planning ahead only as far as the next election. It does not help that many environmental problems are not directly observable, or – at best – that they take many years to become observable.

Environmentalism

Environmentalism is a term that is used interchangeably to describe a philosophy, a theory, or an ideology that promotes deeper understanding of the threats faced by the environment, and of the means to developing improved management and protection (see Peterson del Mar, 2012). Environmentalists support a view of the world shaped by the argument that the natural environment is threatened by human action, that humans are ethically responsible for earth's ecological integrity, and that efforts are needed to rebalance the relationship between humans and their environment. These efforts include changes in individual behaviour, but environmentalism is also an example of a social movement: one emerging from society and aimed at pursuing broad goals, by orthodox and/or unorthodox means, usually driven by traditional outsiders challenging existing elites, and seeking to change public policy without becoming part of government. In this sense, environmentalism is usually – if not entirely accurately – equated with activism. It has also been criticized (at least in industrialized Western societies) for portraying humans as somehow separate from nature, to which the counter-argument is made that humans should be seen as an integral part of nature (Foss, 2009).

As a social movement, environmentalism seeks political and economic change, but there are competing views about how this can be achieved, ranging from change within the existing capitalist system to an entire rejection of that system. Different authors have used different terms to distinguish a bifurcated movement (see Figure 1.2), but while they would argue that the terms they use have different meanings, it has become usual (see Young, 1993; Hayward, 1994) to distinguish between **reformist** and

Figure 1.2 Reformist and radical approaches to environmentalism



radical environmentalism. The former supports human-centred change within existing political, economic, and social structures, and argues that economic growth and environmental protection can be compatible. For its part, radical environmentalism – which emerged in the 1980s out of disillusion with the failures of reformism (Carter, 2007: 157–60) – argues that we face urgent dangers that cannot be resolved within existing structures, and that we need fundamental change and entirely new approaches to both economic growth and environmental protection. These perspectives are reflected in the distinction made by the Norwegian philosopher Arne Naess (1973) between shallow and **deep ecology**; where the former is an anthropocentric (human-centred) concern for the environment based on how environmental damage will impact humans, the latter is ecocentric (nature-centred) in that it is focused on a concern for the environment for its own sake (see Chapter 2).

Radicals argue that economic growth and material consumption are incompatible with sound environmental management, an argument that traces its heritage back to the publication in 1972 of *The Limits to Growth* (Meadows et al., 1972). This was a report sponsored by an informal association of scientists and politicians known as the Club of Rome, and that used computer modelling to predict future trends using variables such as population growth and resource demand. Given existing trends, the study concluded, the limits to growth on the planet would be reached within a century, although catastrophe could be averted by reductions in population growth and in industrial and agricultural investment. The pessimism of this argument was attacked from many quarters, as was the assumption that economic growth and environmental protection were incompatible, and that a focus on one would necessarily compromise the other.

Box 1.1 *The reaction against environmentalism*

Ranged against both reformist and radical environmentalism in its different forms is the phenomenon of **anti-environmentalism**, whose adherents argue that the problems we face are not as serious – nor the earth as fragile – as environmentalists suggest. At one end of the scale, the Danish scholar Bjørn Lomborg caused a stir with his book *The Sceptical Environmentalist* (2001) in which he questioned the view that environmental problems were becoming worse, charged that environmental activists used data selectively to make their case, and pointed to examples indicating that the state of the environment had improved. At the other end of the scale, we find more broad-based resistance to environmentalism as anti-growth and anti-development, and even suggestions that the problems we supposedly face are just part of an elaborate hoax – see Box 12.2.

In the wake of the rising number and influence of environmental groups, of the creation of government environment departments, and of the passage of environmental regulations, informal movements have arisen in several countries to challenge the arguments of environmentalists. Focused on promoting private property rights and the multiple use of resources, and on opposing environmental regulation, they include the Wise Use Movement in the United States and the Share Movement in Canada. Meanwhile, businesses opposed to environmental regulation – finding that they could no longer rely simply on trying to influence government – have instead worked to build internal alliances and coalitions, to fund research, and to launch advertising and public relations campaigns designed to improve their image and to promote their views (Rowell, 1996; Layzer, 2012). The deliberate effort to give the false impression that a company's products or aims are environmentally friendly is known as **greenwashing**. This phenomenon has generated efforts by interest groups and research bodies to offer fact-checking services designed to offer counter-points.

It is helpful here to understand the dynamics of a **paradigm**, meaning a widely shared pattern or set of values, beliefs, and ideas that guides action. Capitalism has been the dominant economic paradigm since the Industrial Revolution, based on the argument that the free market is the best way of maximizing social welfare, and that there is an infinite supply both of natural resources and of sinks into which to dispose of waste. But radical environmentalists in particular argue that this approach is unsustainable, and that it is time for a paradigm shift. The potential for such a shift lies in three related fields:

- Politics, involving a move away from power relations based on the control of resources towards the accessibility of knowledge and information outside conventional political institutions.
- Economics, involving a move way from large, industrial and bureaucratic organizations focused on the mass production of cheap products towards a new digital economy in which

products and services can be provided on a smaller and more human scale.

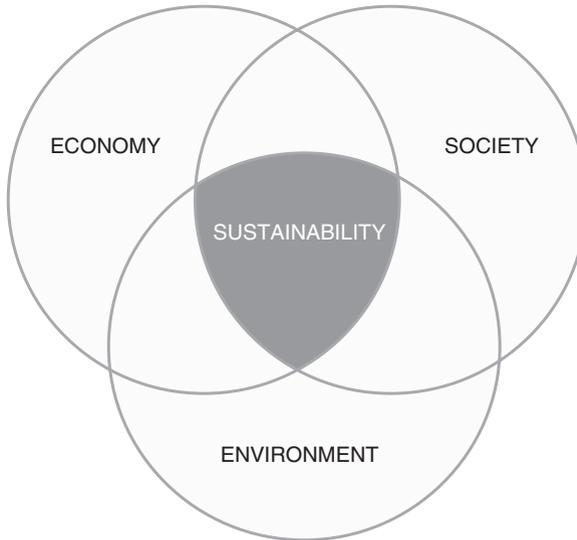
- Society, involving a move away from centralized and hierarchically controlled arrangements towards a more decentralized, bottom-up approach.

One alternative paradigm – which opposes the arguments of the radicals – is **sustainable development** (see Sachs, 2016), an idea associated with the report of the 1987 UN-sponsored World Commission on Environment and Development (often named the Brundtland report after the chair of the commission, Norwegian prime minister Gro Harlem Brundtland). The report defined sustainable development as ‘development that meets the needs of the present without compromising the ability of future generations to meet their own needs’ (Brundtland et al., 1987: 43). Like so much that is ‘new’ in the social sciences, it was not actually a new idea at all, having been reflected – for example – in the almost identical philosophy of **conservation** that was at the foundation of the creation in 1905 of the US Forest Service, and which was defined by its first chief (Gifford Pinchot) as ‘the greatest good of the greatest number for the longest time’ (Miller, 2013).

The argument underlying sustainable development is that the uncontrolled free market does not work, that resources are not unlimited, and that while they can be used and exploited, this should be done only in such a way as to ensure indefinite supply. While it has been at the heart of environmental debates since the late 1980s, it has been criticized as a concept on several fronts: it is so vague as to have different meanings for different people; some ask whether it applies only (or mainly) to environmental issues or whether it has broader applications; it has tended to be associated mainly with the debate over environment and development in poorer countries; and questions have been asked about how much it has gone beyond the stage of political discourse and been reflected in real change (Happaerts and Bruyninckx, 2014). The lack of such change has combined with the global economic downturn since 2007 and a widespread reaction against global governance (notably in the wake of the immigration crises in Europe and the United States) to reduce interest in the concept in recent years. (But some feel it still has much to offer; for example, see Sachs, 2016).

Sustainable development is related to two other concepts that often appear in discussions about environmental policy. The first of these is **green growth**, a process that builds on sustainable development by achieving growth based on economic, social, and environmental sustainability (see OECD, 2011), a relationship that is often illustrated in the kind of Venn diagram shown in Figure 1.3. The current reality is that the economic circle is bigger and given more emphasis, while the environmental circle is much smaller. The ideal

Figure 1.3 Circles of sustainability



is that all three circles should be the same size and should be given equal attention (see Adams, 2006). Meanwhile, a **green economy** is one that generates growth in a manner consistent with sustainable development, simultaneously advancing economic, social, and environmental well-being (Pearce et al., 1989). It stands in contrast to the conventional emphasis placed on growing gross domestic product at almost any cost. Although no country has yet achieved a green economy, there are many examples of green growth in contained areas, such as efforts in major cities to reduce congestion, and investments in renewable sources of energy.

While sustainable development began as an effort to encourage developing states not to make the same environmental mistakes as industrialized states, the related concept of **ecological modernization** is based on the argument that reform is possible within existing economic systems, and that there is no need for a radical revision of conventional economic ideas. This term emerged in Western Europe in the 1980s, and was meant to suggest that the efficient use of natural resources – and the development of new clean technologies – could be a means to achieving economic growth, and even to addressing the environmental costs of globalization. It was at first based on the idea of changing technology, then evolved into an emphasis on the reform of institutions, and then focused on the transformation of patterns of consumption. The overall idea has been to produce a new form of ‘sustainable

capitalism, a goal that not everyone thinks is possible (for more details, see Mol et al., 2009).

Evolution of the environmental debate

Although the politicization of the environment dates back only a few decades, awareness of the effects of human activity on the environment date back centuries. Just how that awareness evolved into political action, though, is a matter of debate. Science has clearly played a critical role, providing us with new information about the quality of air and water, and about declines in the acreage of forests, the productivity of fisheries, and the numbers of endangered species. Our own eyes, noses, and taste buds have also told us a great deal; the evidence of environmental decline can often be seen, smelled, and tasted. Finally, awareness of environmental decline has grown alongside awareness of other political, social, and economic threats to the new-found affluence of the global middle classes, encouraging a change in values. While the poor and the marginalized often have neither the time nor the political influence always to protect their interests, and are more focused on material demands and subsistence, the middle classes and the wealthy – whose numbers have grown since the Industrial Revolution – have the time, the education, and the resources to identify threats and to organize responses.

The definition of environmental problems – and the underlying ideas behind the debate over those problems – is heavily influenced by Western ideas, in large part because developments in the West (primarily Europe) created many of those problems, and have since been behind the shaping of the responses. Many of these problems have a long history, as in the case of air pollution in London; the burning of coal there was already enough a problem in the 1600s as to encourage the naturalist and diarist John Evelyn to campaign for a response to the ‘Hellish and dismall Cloud’ which made the city resemble ‘the suburbs of hell’ (see Lodge, 1969). The scale of the damage accelerated and broadened with the Industrial Revolution, such that London became infamous for its smogs (a combination of smoke and fog), inspiring Charles Dickens to write in his 1841 novel *The Old Curiosity Shop* about factories and chimneys that ‘poured out their plague of smoke, obscured the light, and made foul the melancholy air’. One of the effects of urban pollution was to inspire the creation of an amenity movement in Britain that would give people respite from polluted cities in unspoiled countryside. It also inspired the passage of the 1863 Alkali Act (the world’s first national law aimed at controlling air pollution) and the creation of the Alkali Inspectorate (the world’s first national environmental agency).

In the United States, meanwhile, environmental thinking was influenced by a distinction between **preservation** and conservation. The former – exemplified by John Muir, founder in 1892 of the Sierra Club – was focused on protecting wilderness in the face of westward expansion (a movement that had led to the creation of the world's first national park at Yellowstone in 1872), while the latter was focused on efforts to manage resources sustainably, a view that was behind the creation in 1905 of the US Forest Service. In the 1930s, the problem of land mismanagement was exemplified by the Dust Bowl, when more than half a century of ill-advised agricultural practices produced a flurry of regional dust storms, eroding nearly 1.3 million square kilometres of land in 16 American states. The result was the development of more careful and informed approaches to land management, in the United States and elsewhere.

If there was a single event that could be identified as a turning point in environmental thinking it was the publication in 1962 of the book *Silent Spring* by Rachel Carson, an American marine biologist. The book warned of the effects of DDT and other pesticides and insecticides on agriculture, and more broadly called into question 'the paradigm of scientific progress that defined postwar American culture' (Lytle, 2007: 166–67). It became an international bestseller, and made the effect of chemicals on the environment a public issue for the first time.

Other and broader pressures were also at work that promoted changing habits and new levels of public and political awareness:

- The decades after World War II saw the burgeoning of international cooperation spearheaded by the United Nations (UN). Among the items on the new international agenda was how to improve the management and supply of food and water, with UN agencies such as the Food and Agriculture Organization and the UN Educational, Scientific and Cultural Organization (UNESCO) encouraging discussions, funding research, and hosting conferences.
- A series of major incidents and accidents drew wider public attention to environmental threats. These included smogs in London, the concerns over radioactive fallout from atmospheric nuclear tests that led to the signing in 1962 of the Partial Test Ban Treaty, news that the dumping of mercury in Minamata Bay in Japan was implicated in birth defects, and the first oil disaster to attract world headlines: the grounding of the tanker *Torrey Canyon* off the coast of England in 1967.
- Advances in scientific knowledge drew more attention to the state of the natural environment. The publication in 1966 of the first photographs of Earth taken from space showed the planet alone in space and made people more aware of the vulnerability of humanity.

- New levels of dissatisfaction with politics as usual were behind a counter-culture that spawned mass movements and demonstrations based around nuclear disarmament, feminism, civil rights, opposition to the war in Vietnam, and concerns about environmental problems.

There was also a brief and lively debate about the carrying capacity of the earth, and the relative threats of population growth and flawed technology. Even though the world's population stood at barely 4 billion in the late 1960s (it is today 7.5 billion, and projected to reach 9 billion by 2042), there was much worried talk of the 'population bomb', a phrase popularized by the title of a 1968 book by the American biologist Paul Ehrlich. Ehrlich warned that – unless action was taken to control growth – the limits of human capability to produce food by conventional means would be reached, millions faced the threat of starvation, and the only solution lay in a change in human attitudes.

His warnings harked back to those made in 1798 by the British classical economist Thomas Malthus, whose *Essay on the Principle Population* argued that the natural rate of population growth was exponential, while that of food production was arithmetical. Unless population growth was checked, the population would outstrip the available food supply and there would be widespread famine (Malthus, 1798). Ehrlich's arguments were quickly challenged and refuted by Barry Commoner (1971), who argued that the problem was not so much the growth in population and economic activity as the qualitative problem of 'flawed technology': it was not so much that more goods were being produced and consumed, but that their production and disposal was more costly in environmental terms, undermining 'the finely sculptured fit between life and its surroundings'.

The rising political pressure to address environmental problems was behind the convening in 1972 of the UN Conference on the Human Environment, otherwise known as the Stockholm conference, the first event at which governments (113 in all) had sat down and discussed the state of the environment and the potential political response. Where environmental problems had been discussed in the 1950s and 1960s mainly as a localized problem in rich countries, the perspective of poor countries now entered the debate, and there was a new emphasis on taking the global view. Stockholm encouraged the creation of new national environmental protection departments in countries around the world, and led to the founding in 1973 of the UN Environment Programme, headquartered in Nairobi. Citizen initiatives also played a key role, with the work of national environmental interest groups being reinforced by the work of new international groups,

including the World Wildlife Fund (founded 1961), Friends of the Earth (1969), and Greenpeace (1971).

For wealthy states, one of the underlying causes of a change in political and public attitudes was the shift towards new values. The term *post-materialism* was developed by the American social scientist Ronald Inglehart (1971) to make a distinction between the more traditional materialist interest in economic growth and security and a new focus on quality of life issues such as environmental protection, nuclear disarmament, and gender equality. His thesis was that Westerners born after World War II had grown up during a time of unprecedented prosperity and relative international peace, freed from many of the concerns about security and survival that had influenced earlier generations. This combination of affluence, peace, and security had led to a 'silent revolution' in Western political cultures, in which the priority given to economic achievement had given way to an increased emphasis on the quality of life: 'the disciplined, self-denying and achievement-oriented norms of industrial society are giving way to the choices over lifestyle which characterize post-industrial economies' (Inglehart, 1997: 28).

One of the consequences of post-materialism was the birth of **green politics** in countries feeling the long-term effects of industrialization. Although green views are most readily associated with a concern for the environment, they are much broader in their reach: Greens seek to build a sustainable society rooted in ecological wisdom, social justice, nonviolence, diversity, and grassroots democracy, their views overlapping with those of feminists and peace activists (see Dobson, 2007a). Green economics is critical of globalization and of business as usual, while green politics emphasizes the importance of decentralization and participatory democracy (for more details, see Chapter 4).

The world's first environmental political party was probably the Values Party, founded in New Zealand in 1972 and which contested the general election that year on a predominantly environmental platform (see McCormick, 1995, ch. 9). The first Green party in Europe was founded in Britain in 1973 under the name People, later becoming the Ecology Party and then – in 1985 – the Green Party. The Belgian greens were the first to win national legislative seats, in 1981, and they were followed by Green parties in Germany and most other Western European countries, followed later by similar parties in most Eastern European countries and in wealthier emerging countries such as Brazil and Mexico. The first greens to enter government as part of a governing coalition were those in Finland in 1995.

Meanwhile, the definition of environmental threats changed post-Stockholm as the focus on the problems of wealthy industrialized countries (often known collectively, if not entirely accurately, as the North) was joined by a new focus on the problems of

poor countries (collectively known as the South). In the former it was mainly a problem of unsustainable development, growing out of the industrialization that came earliest to Western Europe and North America, and then later to Russia and Japan. In the latter (most of Africa, Asia, and Latin America) the problems stemmed mainly from unplanned development of the kind that had been seen in the early decades of industrialization in the North; while environmental problems in wealthy countries tended to be a consequence of affluence, in poorer countries they tended to be a consequence of poverty. But the common view of governments in the South was that efforts to encourage improved environmental management would slow down their economic development, placing them at a disadvantage relative to wealthy countries. Why, they asked, should they have to tread more carefully when wealthy countries had not, and had clearly benefited in economic terms from uncontrolled exploitation of resources? But it was also clear that citizens of developing countries lived more closely with nature than was the case in wealthy countries, which had a larger stock of skills, capital resources, and technological capabilities, and that environmental degradation could have a more immediate and more rapid impact on economic development in poorer countries. The result was a redefinition of the causes of environmental problems and of the best responses.

Another of the effects of Stockholm was the emergence of a new global view of environmental problems. Until then, the only problem seen in global terms was the radioactive fallout created by several hundred atmospheric nuclear tests carried out during the late 1940s and 1950s. This was resolved by the 1962 ban on above-ground tests. The new post-Stockholm global sensitivity was soon illustrated by problems that had been decades in the making: the regional threats posed to the natural environment and human health by acid pollution, and the thinning of the earth's ozone layer as a consequence of the use of synthetic chemicals in aerosol propellants, refrigerants, coolants, sterilizers, and solvents. Both were the subject of intense international debate that resulted in international agreements that have since greatly reduced the emissions of the chemicals involved (see Chapter 6). But even as they ceased to draw less public attention, new concerns were generated by what is undoubtedly the greatest and most truly global of all environmental threats: climate change (see Chapter 12).

The debate about environmental politics and policy – particularly at the international level – was given additional focus by the convening of the 1992 UN Conference on Environment and Development, held in Rio de Janeiro and usually known as the Rio Earth Summit. The goal was to give new momentum to the changes sparked 20 years earlier at Stockholm, but while the conference resulted in the publication of the Rio Declaration on Environment

Box 1.2 *The environment and globalization*

At the heart of recent debates about the authority of states and the changing nature of the international system – as well as debates about the definition and perhaps even the creation of environmental problems – has been **globalization**. This describes the process by which the links between people, corporations, and governments in different states have become integrated through trade, investment, and technology. The effect has been to move us away from a world of sovereign states towards political, economic, and social pressures and networks that transcend state boundaries. This process of integration has long been under way, but has reached new levels in recent years as its effects have made themselves felt on the decisions taken by governments, the opportunities pursued by corporations, changes in the workplace, and the choices made by consumers.

Critics of globalization charge that poorer countries have suffered further from economic competition and exploitation, that corporate interests in rich countries have profited, that jobs have been lost in rich countries, and that the environment has suffered as facilities are closed in industrialized countries and moved to those with weaker regulations and cheaper labour. They also point to the creation of resource shortages in poorer countries as a result of demands from consumers in wealthier countries. But supporters argue that globalization has helped promote democracy and free markets, helped promote economic and social equality, contributed to increases in life expectancy, helped promote technological innovation, encouraged modernization, and has promoted higher environmental standards as consumers in wealthy countries demand better quality products from factories in poorer countries (see, for example, Goklany, 2007; Christoff and Eckersley, 2013)

and Development, and the signature of the Convention on Climate Change and the Convention on Biological Diversity, the tangible effects were limited. Two later conferences – the 2002 Johannesburg Earth Summit (otherwise known as Rio+10) and the 2012 Rio Earth Summit (Rio+20) – seemed to achieve even less and seemed indicative of declining levels of attention to environmental problems, although opinions differ on their significance.

One line of thinking that has recently attracted interest (as well as criticism) is that of **post-environmentalism**. The idea derives from a self-published pamphlet titled *The Death of Environmentalism* by Michael Shellenberger and Ted Nordhaus (2004), which argues that mainstream environmentalism is guilty of perpetuating the idea of limits to growth, of using scare tactics to draw attention to climate change, and of arguing that individuals must make personal sacrifices. It also suggests that environmentalists are still fighting the battles of the 1960s without realizing that values have changed, and still sees modernization and technology as the source of environmental problems rather than the solution. Rather than the inevitable hopelessness and despair that will arise from this logic, post-environmentalism calls for new approaches and strategies that

would define wealth not in gross economic terms but in terms of overall well-being (Nordhaus and Shellenberger, 2007: 270).

Two notable trends have helped redefine the place of the environment on the policy agenda in recent years. First, the global financial crisis of 2007–10 resulted in a broad economic downturn from which most countries took years to recover, changing the policy priorities of national governments. One of the effects was to place economic matters back at the core of the environmental debate, with a new focus on the green economy. Another of the effects has been to decrease the willingness of national governments to make the changes required under the terms of international agreements, such as the climate change convention. Second, and looking at the international level, the rise of concerns about international terrorism and about immigration in the wake of war and civil unrest has diminished the level of faith in international cooperation, strengthening the appeal of political parties and movements that campaign to strengthen borders and put national interests first.

Discussion questions

- Is it possible or desirable to inject environmental concerns into all other areas of public policy?
- Can environmental problems be addressed through a reform of existing political, economic, and social structures, or are more radical changes needed?
- What kinds of changes would need to be made to bring about the creation of a green economy?
- On balance, has globalization been good or bad for the environment?

Key concepts

Anti-environmentalism	Environmentalism
Authority	Globalization
Conservation	Governance
Deep ecology	Government
Ecological modernization	Green economy
Ecology	Green growth
Environment	Green politics

Greenwashing	Preservation
Paradigm	Public policy
Political ecology	Radical environmentalism
Politics	Reformist environmentalism
Post-environmentalism	Sustainable development
Post-materialism	
Power	

Further reading

Armiero, Marco, and Lise Sedrez (eds) (2014) *A History of Environmentalism: Local Struggles, Global Histories* (Bloomsbury). An edited collection with chapters on the development of environmentalism in different parts of the world.

Dobson, Andrew, and Robyn Eckersley (eds) (2006) *Political Theory and the Ecological Challenge* (Cambridge University Press). An edited collection of studies of the links between environmentalism and key political ideologies and concepts.

Haq, Gary, and Alistair Paul (2011) *Environmentalism since 1945* (Routledge). Offers both a short history of environmentalism and an assessment of the links between the environment and politics, science, economics, and popular culture.

Peterson del Mar, David (2006) *Environmentalism* (Routledge). A history of environmental ideas, with an emphasis on developments since 1945.

Sachs, Jeffrey D. (2016) *The Age of Sustainable Development* (Columbia University Press). An analysis of the way in which sustainable development can help us address environmental problems as well as persistent poverty and political and economic injustice.

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